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Co-Produced Translation and Transformation of Knowledge and Policy: Context-Adaptive Mobility of Compact City Ideals

ABSTRACT

The compact city is an ideal model for sustainability, transferred between cities as ‘best practices’. This article investigates how context-adaptive transfer of compact city ideals can take place, using Barcelona, Rotterdam and Gothenburg as examples. The objectives are to 1) summarize urban qualities discussed by stakeholders in the three cities; 2) uncover dominant urban challenges and strategies among Barcelona, Rotterdam and Gothenburg stakeholders; and 3) present how Barcelona/Rotterdam ‘best practices’ are translated and transformed by Gothenburg stakeholders into situated ‘good practices’. The data were collected through semi-structured interviews with 82 stakeholders in Barcelona and Rotterdam and a workshop with 17 stakeholders in Gothenburg. The article shows that any meaningful and consequential mobility of knowledge through best practices requires stakeholder-enabled translation involving social learning and co-production of locally relevant knowledge. This means that a wide range of stakeholders needs to be engaged, including affected citizens, to secure representation and transparency. To succeed, best practices need embellishment with sufficient contextual information in formats possible to understand and process by these stakeholders. Strengthened involvement of stakeholders in transfer, translation and transformation of ‘best practices’ into ‘good practices’ requires improved models for stakeholder engagement, moving away from prevalent top-down attitudes of many city governments.

RESUMEN

Interpretación (coproducida) y transformación de conocimientos y políticas: una transferencia de los ideales relativos a las ciudades compactas adaptada al contexto.— La ciudad compacta es un modelo ideal de sostenibilidad, transferido entre ciudades como “mejores prácticas”. Este artículo investiga cómo puede tener lugar una transferencia adaptativa al contexto de los ideales de ciudad compacta, utilizando Barcelona, Rotterdam y Gotemburgo como ejemplos. Los objetivos son: 1) resumir las cualidades urbanas discutidas por las partes interesadas en las tres ciudades; 2) descubrir los desafíos y estrategias urbanos dominantes entre

las partes interesadas de Barcelona, Rotterdam y Gotemburgo; y 3) presentar cómo las partes interesadas de Gotemburgo traducen y transforman las “mejores prácticas” de Barcelona/Rotterdam en “buenas prácticas” propias. Los datos se recopilaron a través de entrevistas semiestructuradas con 82 partes interesadas en Barcelona y Rotterdam y un taller con 17 partes interesadas en Gotemburgo. El artículo muestra que cualquier transferencia significativa y consecuente de conocimiento a través de mejores prácticas requiere una traducción habilitada por las partes interesadas que implique aprendizaje social y coproducción de conocimiento localmente relevante. Esto significa que es necesario involucrar a una amplia gama de partes interesadas, incluidos los ciudadanos afectados, para garantizar la representación y la transparencia. Para tener éxito, las mejores prácticas deben enriquecerse con suficiente información contextual en formatos que estas partes interesadas puedan comprender y procesar. Una mayor participación de las partes interesadas en la transferencia, traducción y transformación de “mejores prácticas” en “buenas prácticas” requiere mejores modelos para la participación de las partes interesadas, alejándose de las actitudes verticalistas predominantes en muchos gobiernos municipales.

RÉSUMÉ

Traduction et transformation coproduites des connaissances et des politiques : mobilité adaptée au contexte des idéaux de la ville compacte.— La ville compacte est un modèle idéal de durabilité, transféré entre les villes en tant que « bonnes pratiques ». Cet article étudie comment un transfert adapté au contexte des idéaux de villes compactes peut avoir lieu, en prenant comme exemples Barcelone, Rotterdam et Göteborg. Les objectifs sont de 1) résumer les qualités urbaines discutées par les acteurs des trois villes ; 2) découvrir les défis et stratégies urbains dominants parmi les parties prenantes de Barcelone, Rotterdam et Göteborg ; et 3) présenter comment les « meilleures pratiques » de Barcelone/Rotterdam sont traduites et transformées par les parties prenantes de Göteborg en « bonnes pratiques » situées. Les données ont été collectées au moyen d’entretiens semi-structurés avec 82 parties prenantes à Barcelone et Rotterdam et d’un atelier avec 17 parties prenantes à Göteborg.

L'article montre que toute mobilité significative et conséquente des connaissances à travers les meilleures pratiques nécessite une traduction rendue possible par les parties prenantes, impliquant l'apprentissage social et la coproduction de connaissances pertinentes au niveau local. Cela signifie qu'un large éventail de parties prenantes doivent être impliquées, y compris les citoyens concernés, pour garantir la représentation et la transparence. Pour réussir, les meilleures pratiques doivent être agrémentées d'informations contextuelles suffisantes dans des formats pouvant être compris et traités par ces parties prenantes. Une implication renforcée des parties prenantes dans le transfert, la traduction et la transformation des « meilleures pratiques » en « bonnes pratiques » nécessite de

meilleurs modèles d'engagement des parties prenantes, en s'éloignant des attitudes descendantes dominantes de nombreuses administrations municipales.

KEYWORDS/PALABRAS CLAVE/MOTS CLÉ

Compact cities, best practices, good practices, circuits of knowledge, stakeholder collaboration.

Ciudades compactas, mejores prácticas, buenas prácticas, circuitos de conocimiento, gobernanza participativa.

Villes compactes, meilleures pratiques, bonnes pratiques, circuits de la connaissance, gouvernance participative.

I. INTRODUCTION

The aim of this article is to contribute to the academic debate on circulation, mobility and localization of knowledge in urban design and planning, focusing on what happens when such knowledge is locally translated after reaching its context-destination. While this debate can take a more theoretical or conceptual perspective (Healey, 2013), an empirical focus on local stakeholder processes can provide more actionable knowledge (Kelly & Cordeiro, 2020).

In particular, the article engages with the compact city model as an example of an idealized and globally circulating urban paradigm (Adelfio et al. 2022), often communicated in the form of best practices to be dogmatically taken as exemplars. By applying an empirical point of view, it seeks to uncover the process and results of transferring compact city urban ideals from one locality to another, particularly focusing on what happens after the transfer takes place (McCann & Ward, 2012) and the destination context translates the original ideas into something new.

This process of translation entails a shift from embracing idealized best practices, which are supposed to work independently from the context where they are produced, towards a more context-sensitive approach to the circulation, mobility and localization of knowledge in the form of locally-adapted "good practices" (Adelfio et al., 2022), where such good practices involve a translation of urban concepts into their new and different contexts.

By analyzing a concrete and specific process of translation through the engagement of local stakeholders in Gothenburg, Sweden, the article pro-

vides a more empirical and pragmatic approach to the debate around the circulation of urban knowledge. In particular, it draws on Barcelona (Spain) and Rotterdam (The Netherlands) as the origins of diverse compact city best practices and Gothenburg (Sweden) as the site into which these best practices potentially are to be transferred, translated and/or transformed (McCann, 2011). The objectives are:

- 1) to summarize the urban qualities (both positive and negative) stakeholders in the three cities discuss in relation to compact city development;
- 2) to uncover what urban challenges are the most dominant among Barcelona and Rotterdam stakeholders, reveal the main strategies (here seen as best practices) stakeholders in Barcelona and Rotterdam highlight as responses to these challenges, and analyse what they are seen to deliver in relation to different types of compact city qualities; and
- 3) to present the main urban challenges highlighted by stakeholders in Gothenburg, how Barcelona/Rotterdam best practices are selected for transfer by these stakeholders, and how they subsequently are translated and/or transformed to be situated as 'good practices' suitable for Gothenburg conditions.

1. CIRCULATION, MOBILITY AND LOCALIZATION OF KNOWLEDGE IN URBAN DESIGN AND PLANNING

The circulation of knowledge characterizing contemporary urban design and planning concepts

(Harris & Moore, 2013) has been studied through a variety of theoretical lenses, such as urban assemblages (McFarlane, 2009; Allen & Cochrane 2010), interpretive policy analysis (Healey, 2013), circuits of knowledge (McCann, 2011; Healey, 2013), actor-network theory (Tait & Jensen, 2007; Rydin, 2012), geographies of mobilities (Cresswell & Merriam, 2011), policy mobility (McCann, 2011), and mobilities of knowledge (Jöns et al., 2017). A common denominator is that knowledge mobility is never about any simple transfer of concept and policies since they are always translated to fit new local situations (Mukhtarov, 2014) and thus “mutate in the course of movement” (Hamedinger, 2014, p. 25).

Accordingly, the “post-transfer” (McCann & Ward, 2012, p. 328) moment is key in such a process since this is where a concept, practice or policy (and their related knowledge) is translated and transformed when transplanted into a different location. It is in this moment that local “communities of practice” (Amin & Roberts, 2008, p. 353) enact the translation through “locally embedded tacit systems of knowledge, developed by and unique to spatially proximate actors and institutions in specific ‘learning regions’ or ‘clusters’” (McCann, 2011, p. 112). Here, an empirical gaze offers much needed insights with strong “analytical significance” (Secord, 2004, p. 655) into how best practices are actually translated into local settings by local stakeholders, supporting the “production of actionable knowledge (...) ensuring that research is contextually relevant” (Kelly & Cordeiro, 2020, p. 1).

2. COMPACT CITIES IN THE CONTEXT OF GLOBALLY CIRCULATING BEST PRACTICES

In recent decades, urban development has been characterised by an “urbanisation” (Muñoz, 2010, p. 78) resulting from an accelerating (Tait & Jensen, 2007) and globalised circulation of ideas (Harris & Moore, 2013) that simply replicates configurations for building our cities. Oftentimes, “urban projects are marketed as (...) best-practice examples” representative of “leading paradigms” (Rosol et al., 2017, p. 1710) or institutionalized (Górgolas, 2018)

conceptions of urban development. Even with insufficient proof of their virtues, such ideas influence the visions and actions of urban practitioners globally (Rosol et al., 2017).

Still, the use of best practices in urban development has a long-standing tradition, not least since the EU for decades has promoted the exchange of best practices and policy models and learning between cities and regions for decades (Hamedinger, 2014). Yet, while such policy transfer should involve a “prudent selection of proven models and policy protocols”, it frequently ends up being about a direct implementation of best practices found at the “global marketplace of policy solutions” (Theodore, 2019). This approach to urban development based on a superficial circulation of best practices has been opposed by advocates of a more critical approach to design and planning (Marcuse, 2009). A unidimensional acceptance of any urban development paradigm through the diffusion of best practices risks reducing urban development into an unsophisticated enactment of “a formalistic, even ritualistic, set of norms, practices and policies” (Moore, 2013, p. 2382). It can even be seen as a form of neoliberal urbanism (Peck et al., 2013) dealing with urban development through replicable models as a marketing strategy.

II. ANALYTICAL APPROACH

1. STRUCTURING PURPORTED COMPACT CITY QUALITIES

The compact city is an obvious example of a globalized urban best practice that has circulated as an idealized paradigm and institutionalized concept. The compact city can broadly be described as “dense and proximate development patterns, built-up areas linked by public transport systems, and accessibility to local services and jobs” (OECD 2012, 19). From its emergence as ideal urban form in the 1970s (Dantzig & Saaty 1973), it has been widely acclaimed by scholars (e.g. Jenks et al., 1996; Churchman, 1999; Dieleman & Wegener, 2004; Boyko & Cooper, 2011; Moreno et al. 2021)

TABLE 1. *Categories and example of attributes and indicators of compact city qualities used for structuring and analysis of data. Adapted from Kain et al. (2020; 2021)*

Categories of urban qualities	Examples of attributes and indicators
People	Population density, population size, population growth or decline, population mix
Built Structures A: Buildings and Functions Density	Density in general, building density, site coverage, residential density, building heights, number of public facilities
Built Structures B: Buildings and Functions Mix	Land use in general, mixed land use, intensification of activities, land consumption for urbanisation, efficient land use
Built Structures C: Connectivity, Morphology	Urban form in general (monocentric, polycentric, etc.), urban morphology, reduction of urban sprawl, network density
Built Structures D: Access, Transport	Mobility, accessibility, short distances (walkability, bikeability), access to green space, efficient public transport
Nature	Green/blue areas in general, green roofs/walls, ecological footprint, habitat fragmentation, ecosystem services
Health, Environment	Health in general, active commuting, traffic fatalities, environment in general, energy efficiency, resource use, air and noise pollution, heat island effects, mitigation of climate change
Quality of Life	Quality of life in general, pedestrian friendly and attractive public spaces, human-oriented street life, look and feel of place, and security,
Socioculture	Social aspects in general, social capital, vibrant communities, social control, community integration, social cohesion, social diversity
Justice	Equality, equity, social housing, affordable housing, equal access to mobility (affordable public transport)
Economy	Vibrancy (revitalize the local economy), income levels, employment and workplace density, expenditures on infrastructure and services, land and property values (and rents)
Adaptability	Resilience, form as outcome of micro-behaviour, salient features of informality and micro-behaviour, flexible use

and institutions (e.g. EU Ministers, 2007; European Commission, 2011; OECD, 2012; UN-Habitat, 2012; UN Climate Change, 2021). Following such a universal acclamation and idealization, the compact city has been considered “the preferred response to the goal of sustainable development” (Hofstad, 2012, p. 2). Despite a lack of convergence on what a compact city exactly entails (Kain et al., 2020), its idealization has led to an overgeneralized (Healey, 2013) use of the concept. This has been legitimated by an “institutional embedding” (Neuman, 2005, p. 21) and “the profession’s deference to the compact city ideal” (Campbell, 2016, p. 393) that has contributed to its emergence as a standardized practice.

The literature on compact city qualities is both extensive and contradictory (e.g. Breheny, 1996; Frey, 1999; Cheshire, 2006; Boyko & Cooper, 2011; Arbaci & Rae, 2012; Holman et al. 2015; Ahlfeldt & Pietrostefani, 2017; Kain et al., 2021). In particular, “it is difficult to ascertain to what extent its theorized positive outcomes can be substantiated by evidence” (Ahlfeldt and Pietrostefani 2017) and a successful application of compact city as a model seems to depend more on the characteristics of local contexts than on the exclusive quality of the model itself (Adelfio et al. 2021). Additionally, the use of market-driven approaches in its application may lead to “unequal and piecemeal outcomes” (Grodach & Limb 2020, p. 289). The compact city

model has also been critically described as “treating symptoms” of unsustainability without really changing “existing patterns of uneven social geographies” (Herburger 2023, p. 1).

All in all, it is crucial to take the compact city concept critically and really understand how it may be translated and interpreted in the local context. In particular, it seems essential to avoid a reductionist approach based on cherry-picking of supporting evidence and the discarding of conflicting data. We have therefore chosen to apply a comprehensive analytical framework to the structuring and analysis of stakeholder statements, based on previous literature reviews and research by the research team (Kain et al., 2020; see also Kain et al., 2021, for further elaboration). This framework subdivides the wide array of compact city qualities (both positive and negative) into twelve main categories (Table 1).

2. THE POST TRANSFER APPROACH TO THE ANALYSIS OF TRANSLATION

Drawing on the wide body of research outlined in Section 1, this article understands translation as “the process of modification of policy ideas and creation of new meanings” (Mukhtarov, 2014, p. 76), in this case enabled by Gothenburg stakeholders. This process includes both the circulation of knowledge and the subsequent localization of this knowledge through active choice by the stakeholders (Moity-Maïzi, 2011). Translation can occur in the form of loops, with “successive rounds of multi-stakeholder interaction which design, adjust, materialize and contest policies” (Albrecht et al., 2017, p. 76) and involves a combination of downloading (absorbing knowledge) and uploading (providing knowledge) through which compact city policy and knowledge would mutate and be shaped into something new, something that is locally relevant. This notion of translation and mutation puts the stress on the “post-transfer” (McCann and Ward, 2012, p. 328) phase of the circulation of knowledge and policy, i.e. when these arrive at the destination and is processed (localised) by stakeholders. By doing so, it evades “the rational-formalist tradition of

work on policy *transfer*” (Peck, 2011) by means of a more social-constructivist focus which stems from literature on policy mobilities and mutation.

III. METHODS

This study is based on two instances of data collection. In the first, stakeholder perceptions of compact city qualities, urban challenges and best practice strategies were identified through field studies in Barcelona and Rotterdam, cities that can be seen as two different types of forerunner compact cities (e.g. Busquets, 2005; Tillie et al., 2012). The second part of the study focused on how local stakeholders translate and transform compact city best practices from Barcelona and Rotterdam into Gothenburg’s compact city policies and planning.

Barcelona is enclosed by the sea, mountains and two rivers and it is often this confined city (the municipality of Barcelona) that is referred to when speaking of Barcelona as a compact city. The city itself has around 1.6 million inhabitants but counting the metropolitan area with 36 municipalities the population reaches 3.2 million and the larger contiguous built-up area around Barcelona has just over 4.8 million inhabitants (Barcelona City Council, 2021; Demographia, 2023). While the city is very densely populated (15,747 inhabitants per km² and even reaching 28,500 inhabitants per km² if the harbour area and the large Montjuic park is excluded), the wider urban region is much less dense (4,500 inhabitants per km²). Barcelona’s compact city policies seek to develop a Mediterranean version of the compact city (Rueda, 2007), “improving the quality of life of the neighbourhoods through the adaptation of the housing stock to conditions appropriate for a socially advanced city” (Ajuntament de Barcelona, 2012, p. 15, translation from Catalan).

While Rotterdam only has 664,000 inhabitants, the larger metropolitan region (Rotterdam–The Hague) has a combined population of 2.4 million (Wikipedia, 2024b). Since The Netherlands is a rather small and densely populated country, where many inhabitants live in one city but commute to work in another, it is also worth mentioning that

the so-called Randstad includes the four largest Dutch cities (Rotterdam, The Hague, Amsterdam and Utrecht) with a joint population of more than 8.3 million (Wikipedia, 2024b). The population density in Rotterdam is much less than in Barcelona (2,995 inhabitants per km²) but note that a large part of Rotterdam consists of its port, the largest in Europe and that housing areas such as Carnisse and Oude Westen are significantly denser (20,136 inhabitants per km² and 17,061 inhabitants per km² respectively) (Wikipedia, 2018; Wikipedia, 2024a). Urban policy in Rotterdam aims to densify the inner city to create “a strong and attractive downtown urban residential environment” (Gemeente Rotterdam 2007, p. 34, translation from Dutch).

Gothenburg has slightly over 608,000 inhabitants and its metropolitan region slightly over one million inhabitants (SCB, 2024). It suffers from a rather dispersed urban structure leading to an overall population density of 1,350 inhabitants per km². City of Gothenburg has explicitly adopted densification and urban compaction as paradigm for urban development and branding, with a declared inspiration from other cities. The city architect stated that “in Vancouver, for example, the built environment has been heavily densified in the inner city and old industrial areas have been turned into residential areas – just as we are doing here” (City of Gothenburg, 2018, translation from Swedish). In the policy document *Development Strategy 2035* the compact city is acclaimed as a model that “provides a number of opportunities for social interaction, better access to services and efficient use of public transport and infrastructure” (City of Gothenburg 2014a, 15). To summarize, compactness is seen “as a step towards simpler easy life” (City of Gothenburg 2014a, 6). In order to support compact city development, the prevailing strategy has entailed a “mix of ‘planning by design’ and ‘planning by developmental control’” (Lim & Kain 2016, 95).

Evidently, the three cities are quite different in terms of sizes, geographies, climate, policy environments, etc. For a comparative study, this would entail significant methodological challenges. For the present study, however, these differences are seen as beneficial as they represent a clear case of trans-

fer, translation and transformation of best practices from distinct urban contexts into policy options suitable for a quite different urban environment.

To uncover urban qualities, challenges and strategies in Barcelona and Rotterdam, a broad range of urban stakeholders were interviewed, 44 in Barcelona (in 2014-2015) and 38 in Rotterdam (in 2015-2016) (Table 2), following an in-depth, semi-structured interview format (Kvale, 1996), encouraging the interviewees to approach the topic from both their professional and personal experiences. Open-ended questions included: How will more compact cities help to address challenges, such as climate change, pollutions, resource scarcity, economic development, social cohesion, equity and quality of life in general? What important qualities may be reached? In what way will they not do so? What are the main disadvantages of more compact cities? What is missing in the compact city discussion? Do your organization (or other that you know of) have programs or projects aiming at a more compact city? What areas in the city would be especially interesting to look at from this perspective?

Each interview lasted approximately one hour. The interviews were complemented by studies of policies, plans and programs, as well as by on-site observation, to further secure the relevance of the identified compact city qualities, urban challenges and best practice strategies. As a whole, the study collected data regarding compact city qualities (Kain et al., 2021), compact city driving forces (Adelfio et al., 2018) and compact city strategies (reported in the present article). The interviews were audio recorded and the data was coded directly from the recordings following the framework described in Section 2.1.

Although the findings linked to compact city qualities are summarized in Section 4, this article focuses on urban challenges and strategies from the two cities. Different types of challenges mentioned by the interviewees were sifted out from the data through content analysis and were then grouped into a second-order aggregate themes to identify principal urban challenges in the two cities.

In a similar fashion, compact city initiatives mentioned by interviewees as responding to those

TABLE 2. Category and number of interviewed stakeholders in Barcelona and Rotterdam

Main category	Sub-category	Number	
		Barcelona	Rotterdam
Social sector	Residents, associations, civil/social movements	6	1
	NGOs	1	1
Institutional sector	Planning officers	2	4
	Public administration from other sectorial departments	2	1
	Other professionals working for public administration	5	2
	Public agencies or foundations	5	7
Urban professionals sector	Development consultants	1	2
	Architects, planning consultants	4	5
Economic sector	Representative of association of entrepreneurs	2	1
	Local business/shop managers	1	-
Policy	Politicians	1	-
Research/academy sector	Researchers/experts on case studies	14	14
	TOTAL	44	38

challenges were identified and again grouped into a second-order aggregate themes to identify compact city strategies with best practice character. These strategies were then further analysed by way of qualitative content analysis of how interviewees discussed the expected or potential outcomes of them, structured according to the same 12 categories of compact city qualities as above. The final step of this part of the study was to map the best practice strategies on top of the identified main challenges in the two cities.

For the Gothenburg segment of the study, a workshop format was deemed to be well suited to capture moments of stakeholder translation and transformation of compact city best practices. The second instance of data collection was hence carried out as a stakeholder dialogue in the form of a full day World Café workshop in Gothenburg in 2018. Workshop participants were a mix of different types of urban stakeholders (Table 3). In the same vein as the interviews, the also workshop was conducted in a semi-structured manner. First, the findings from the case studies in Barcelona and Rotterdam were presented to the participants, including compact city qualities and driving forces, but with more emphasis on urban challenges and strategies. The stake-

holders were then divided into three mixed groups for two breakout sessions. In the first session they were asked to bring the experiences reported from Barcelona and Rotterdam with them, and reflect on what the experiences reported from Barcelona and Rotterdam could signify for Gothenburg: What urban qualities do we want in Gothenburg? What are the driving forces? What barriers exist? The second session focused on discussing challenges and strategies in Gothenburg: What local challenges are the most pressing and prevalent? What strategies are the most relevant and effective for dealing with those challenges? After each session, the groups reported back to the whole workshop with a resulting discussion in plenum to further process the insights. The workshop was audio recorded and the data was coded directly from these recordings.

The perception of the Gothenburg workshop participants regarding urban qualities linked to compact city development were captured from the groups discussions to facilitate a comparison with Barcelona and Rotterdam. To provide an additional policy background, the four main policy documents linked to urban development in Gothenburg were also analysed with a focus on different types of compact city qualities. This means that the inter-

TABLE 3. *Number and type of stakeholders participating in the Gothenburg workshop*

Main category	Sub-category	Number
Social sector	NGOs, associations, social movements	4
	City planning officers	2
Institutional sector	Public officers from other sectorial departments	6
	Other professionals working for public administration	1
	Public agencies or foundations	1
Urban professionals sector	Planning consultant	1
Economic sector	Corporate business	1
Research/academy sector	Researcher	1
	TOTAL	17

views in Barcelona and Rotterdam, the stakeholder workshop in Gothenburg, the policy documents from the City of Gothenburg and the research literature have all been analyzed in the same manner regarding the incidence of different terms used to describe compact city qualities. This was done to facilitate aggregated results but note that each occurrence of such terms may represent a compact city quality mentioned briefly as well as more extensive elaborations on such qualities. This means that the material visualized in Figures 1, 2 and 3 does not signify a quantitative representation of the data. Also, in these figures, the data from the different data sources are aligned to a common reference scale to facilitate comparison. The rings of those diagrams are hence not to be understood as representing numerical values.

The responses to, alterations of and additions to the best practice strategies from Barcelona and Rotterdam made by the participating stakeholders were again grouped into second-order aggregate themes. This facilitated an analysis of to what extent and in what way best practices from Barcelona and Rotterdam were translated (Mukhtarov, 2014; Albrecht et al., 2017) into locally adapted “good practices” (Adelfio et al., 2022) and strategies by the Gothenburg stakeholders.

The selection of stakeholders to be interviewed or take part in the workshop aimed to cover a broad range of stakeholders, urban professionals and researchers representing different perspectives on

urban transformation. As such, the potential bias and validity of the study have to be assessed by the reader by taking its contextual conditions into account, i.e. as being a qualitative study providing a rich but not necessarily complete understanding of the topic under study. Or put differently, the knowledge that may be possible to circulate from this study always needs to be localized (Moity-Maizi, 2011) by the reader.

IV. COMPACT CITY QUALITIES IN BARCELONA, ROTTERDAM AND GOTHENBURG

Although being two quite distinct cities, the two groups of interviewed stakeholders in Barcelona and Rotterdam emphasized similar urban qualities (Figure 1) (see also Kain et al., 2021), i.e. especially quality of life, socioculture, economy and adaptability. In contrast, the stakeholders at the workshop in Gothenburg stressed a somewhat different set of urban qualities, bringing out urban nature and economy, but with a particular and strong focus on urban justice. For reference, we also compared this data with results from a parallel review and analysis of scientific articles regarding what compact city qualities were brought forward in the academic literature in 2014 and 2015 (Kain et al., 2020). This comparison indicates that while urban research had a strong focus on built structures, urban stakeholders in Barcelona, Rotterdam and Gothenburg, by

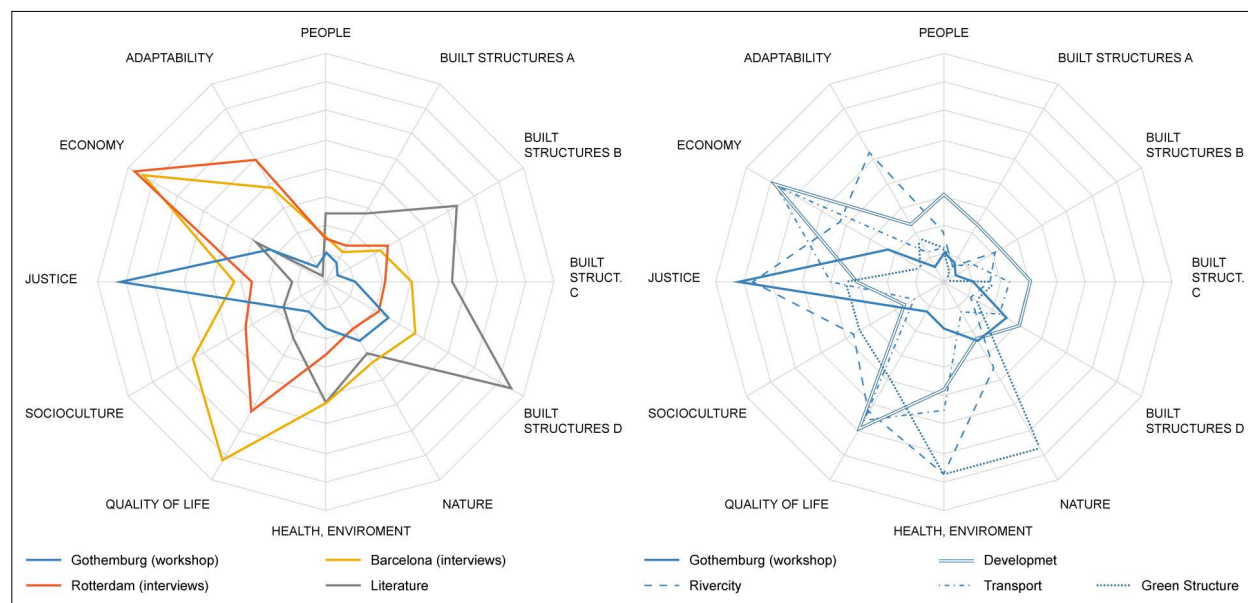


FIG. 1. Stakeholder perceptions of compact city qualities. On the left, results obtained in Barcelona, Rotterdam and Gothenburg, with data from literature review added for reference. On the right, comparison stakeholder perceptions in Gothenburg with urban qualities highlighted in four Gothenburg policy documents: *Rivercity Gothenburg: Vision*, *Development Strategy Gothenburg 2035*, *Gothenburg 2035: Transport Strategy for a Close-Knit City*, and *Gothenburg: Green Strategy for a Dense and Green City*. Own elaboration based on interviews, workshop and review of compact city literature (Kain et al., 2020); and documents of the City of Gothenburg (2012 and 2014) developed by the City Council, the Planning and Building Authority, the Urban Transport Administration and the Parks and Nature Administration, respectively.

highlighting a rather different set of urban qualities, seemed to have other priorities.

Furthermore, also a comparison between priorities of Gothenburg stakeholders and four of the city's main policy documents revealed discrepancies. While the *Rivercity Gothenburg Vision* (City of Gothenburg, 2012) shared a strong focus on urban justice, the other policy documents for development planning (City of Gothenburg, 2014a), transport planning (City of Gothenburg, 2014b) and green structure planning (City of Gothenburg, 2014c) had other priorities. Interestingly though, like the stakeholders in the three cities, the policy documents did not emphasize compact city qualities linked to built structures.

Even if urban stakeholders, especially in Barcelona and Rotterdam, stressed similar compact city qualities, the content of this emphasis differed between the two cities (Table 4). Looking at the data in more detail, there was agreement among stakeholders in the three cities regarding the value of

diversity, mixed use, proximity, walking/biking, good public transport, green space, more jobs and quality of urban space, as well as challenges linked to noise, air quality and prevailing segregation. Still, while Barcelona and Rotterdam stakeholders highlighted quality housing as an important aspect, Gothenburg stakeholder brought forward affordable housing as a critical issue. Whereas the extent of tourism was seen as problematic in Barcelona and potentially soon in Gothenburg, Rotterdam seemed to embrace tourists for bringing quality of life to the city. Also, Barcelona and Gothenburg seemed to share that their cities need targeted policies to ensure empowerment and inclusion of excluded and disenfranchised residents whilst stakeholders in Rotterdam seem to have more faith in the benefits of an urban market economy driven by a strong and innovative/creative middle class. Most stakeholders in Barcelona and Gothenburg both see gentrification as something problematic generating inequalities while Rotterdam stakeholders often see gen-

TABLE 4. Selection of main compact city qualities emphasized by stakeholders in Barcelona, Rotterdam and Gothenburg

	Barcelona	Rotterdam	Gothenburg
<i>People</i>	Too many tourists Diversity of people	Too few inhabitants Diversity of people	Soon too many tourists? Diversity of people
<i>Built structures</i>	Mixed functions Proximity to everything Walking and biking Public transport Urban region perspective	Mixed functions Walking and biking Public transport	Proximity to everything Walking and biking Public transport Link the city districts
<i>Nature</i>	Amount of green space (Threat to) large parks and green inner yards	Amount of green space Large parks and green inner yards Green roofs, urban farming Water	Amount of green space Amount of blue space (water)
<i>Socioculture</i>	Local social life, vibrancy	Freshness and diversity Social innovation	Local identities Historic values
<i>Environment</i>	Noise Air quality	Noise Air quality	Noise Air quality Climate change adaptability
<i>Economy</i>	Economic development, jobs Tourist/event economy City branding	Education -> jobs Zero-carbon innovation City branding	Local economic development vs. poverty
<i>Health</i>	Consequences of air pollution, lack of greenery and overcrowding	Accidents with electric bikes	Benefits of active mobility
<i>Quality of life</i>	Quality of housing Quality of urban spaces	Tourists bring QoL Quality of housing Quality of urban spaces	Streets as public space A city for all seasons (weather)
<i>Justice</i>	Poverty Corruption Empowerment Associations Segregation and gentrification (partly due to tourism); more diversity Smart city for public participation Closeness to power	Gentrification: Less segregation and more diversity Innovative “middle class power” Balance with the market	Just resource allocation Affordable housing A city for all Equal access to public space Silos + lack of coordination + weak governance: unwillingness to change Empowerment Associations
<i>Adaptability</i>	Complexity Flexibility Space for bottom-up innovation	Flexibility Space for bottom-up innovation Creative residents (larger middle class)	The enabling city: from management to innovation Locally adapted governance, e.g. participatory budgets

trification as an effective tool for vitalising the city and counteract segregation. Although one might think that Rotterdam and Gothenburg would share perspectives – both being harbour cities towards the north of Europe – Barcelona and Gothenburg thus seem to have quite a lot in common. Still, the agreement among the Gothenburg stakeholders regarding a prevailing weak, uncoordinated and change-resistant urban management and governance was not present in Barcelona and Rotterdam.

V. URBAN CHALLENGES AND BEST PRACTICE STRATEGIES IN BARCELONA AND ROTTERDAM

1. MAIN URBAN CHALLENGES IN BARCELONA AND ROTTERDAM

The analysis of stakeholder interviews and documents from Barcelona and Rotterdam identified six main challenges that were common to both cities, but with contextual differences.

1. *Urban poverty* was mentioned as a key challenge. In Barcelona this was a universal issue due to the economic crisis lingering since 2008 but also something affecting certain neighbourhoods throughout the city. Rotterdam's history as a labour-intensive harbour city is mirrored in the large share of social housing now accommodating less affluent residents. A particular economic divide was seen to exist between the wealthy parts of the city north of the river and the poorer neighbourhoods to the south.
2. A looming *deficit in democracy and participation* was mentioned in both cities, affecting different groups of residents, with representative democracy and top-down programmes being challenged by way of more diverse forms of citizen engagement (or non-engagement), not least linked to emerging digital technologies.
3. The risk of being left *outside the global urban (knowledge) economy*, where both cities saw it to be essential to be an active part of this economy through the means – at times potential means – available locally.
4. Managing the pros and cons of *tourism and the tourism economy*, with Barcelona having a longer history of intensive tourism bringing benefits in terms of investments and jobs but also experiencing many downsides with mass tourism degrading local urban liveability. Rotterdam has more recently emerged as a 'cool' tourist destination.
5. Barcelona, in particular, suffers from a *scarce and/or low-quality urban nature*, impeding residents' access to greenery and aggravating urban heat incidences. Although the situation is less critical in Rotterdam, the intensity of urbanisation means little space for urban greenery in parts of the city.
6. Persisting *poor and/or unfair mobility* for different transport modes and/or user groups. Although Barcelona is a very walkable city, it is still very much a car city with high levels of noise and air pollution. While Rotterdam is well provided with bicycle infrastructure,

Barcelona is largely lacking a functional bicycle network. In Rotterdam, the abovementioned socioeconomic divide between North and South is also a mobility challenge in how the river can be better 'bridged' through different modes of transport.

2. BEST PRACTICE COMPACT CITY STRATEGIES

The main challenges were addressed through different types of policy and planning strategies in Barcelona and Rotterdam – or 'best practices' as they are framed in this article. Below, these best practices are described as they were explained by the interviewees, including an analysis in the form of radar charts over how the different strategies were seen to correspond with the twelve categories of compact city qualities. The first eight strategies are from Barcelona (Figure 2) while the following nine strategies are from Rotterdam (Figure 3). The figures provide graphic summaries of each subsection in a similar fashion as Figure 1 above.

Super blocks (Barcelona: BCN1)

'Super Blocks' (Superilles) are urban units larger than a block but smaller than a neighbourhood. They typically comprise nine blocks, with internal streets that favour slow and pedestrian-friendly traffic. Many neighbourhoods in Barcelona have strong local identities, with local markets, shops, banks, squares, cultural institutions, civic centres, lively associations, etc. The Super Blocks complement these identities, especially in the Eixample area where such local identity is lacking. Super Blocks support a new biking infrastructure, turning car lanes into bike paths and they function as a unifying idea for urban development (see public transport below).

@22 – the smart city (Barcelona: BCN2)

Barcelona has invested heavily in building its brand as a global city, e.g. through the Olympic Games and the Universal Forum of Cultures, and now as a Smart City realised through global IT fairs,

and through the @22 urban development project. In @22, innovation is supported by linking urban transformation with economic and social development in a cluster of companies, universities, social housing and societal functions to attract international business interests as well as provide affordable housing. As with the Super Blocks, @22 has worked as a unifying idea for urban development, but now challenged in favour of more social investments.

Restrict tourism and fight gentrification (Barcelona: BCN3)

Barcelona's success in becoming a global city has attracted crowds of tourists contributing to the urban economy but the consequences for the inhabitants are not all positive. Tourism has become a significant problem disturbing everyday life, pushing out residents from housing and reducing liveability in many districts. This links to a strong resistance to gentrification, a political mobilisation partly induced by the tourism economy. There is also a strong movement fighting the many evictions enforced by the banks following the economic crisis 2008. Current policies strive to balance Barcelona as a global city and tourist destination with increased investments benefitting the inhabitants and promoting more inclusive processes.

Increase the share of social housing (Barcelona: BCN4)

The share of social housing in Barcelona is very low ($\approx 1\%$). In new developments 10% social housing is stipulated, to be integrated among more expensive housing, with an ambition to push this up to 30%. It is also required that 30-50% of new apartments should be for middle income households. These regulations seek to ensure a mix of affordable and more exclusive housing in new housing projects to maintain a diverse mix of people also in centrally located districts.

Improve public transport (Barcelona: BCN5)

A radically new bus system has been implemented by structuring a fine-grain, frequent and rapid

public transport in the streets dividing the (future) Super Blocks. All lines are oriented horizontally, vertically or diagonally for an easy understanding of the bus lines, and you know where you will end up without having to consult a route map. The system is linked to an app with arrival times and showing your position in the city. The recent tram lines are designed in a way to not create barriers for walking and biking.

Greening the city (Barcelona: BCN6)

There is an ambitious plan for green structure development in Barcelona, considering the city is very densely built and with a scarcity of urban nature. Recovery of green inner court yards is promoted in the Eixample district and are opened up to the public as parks. Green corridors are created across the city along main arteries by turning car lanes into pedestrian use. Trees and bushes are planted in these spaces and surrounding impermeable surfaces are opened up for ground vegetation, which is also done along tram rails.

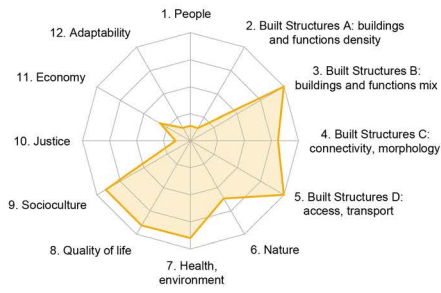
Temporary use of urban spaces (Barcelona: BCN7)

'Pla Buits' (urban voids) is a programme to encourage temporary use of empty spaces, especially during economic downturns when planned developments are halted. It invites residents to compete for using empty lots for a restricted time, by proposing e.g. playgrounds, green spaces or urban farming. Compared to Rotterdam (see below), public promotion of Pla Buits is quite weak. Still, temporary use (including of unused buildings) is widespread due to activism and occupations, more or less in open conflict with the government.

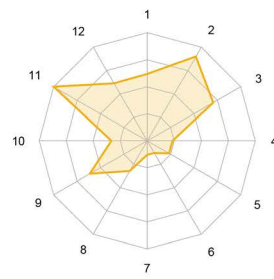
Open government (Barcelona: BCN8)

From tradition, civil servants in Barcelona are very positive towards public participation, civic engagement and political activism. Governance is built on transparency, public participation and open data, and is active in four areas of public engagement: 1) via conventional and weekly face-to-face

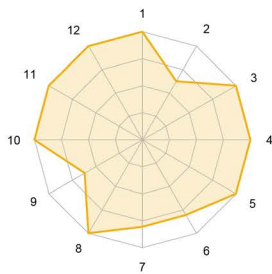
Super blocks



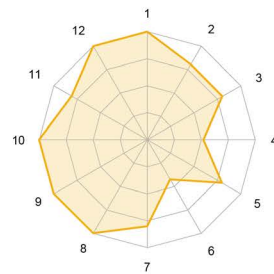
@22 - the smart city



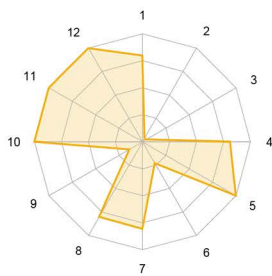
Restrict tourism and fight gentrification



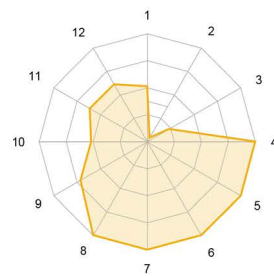
Increase the share of social housing



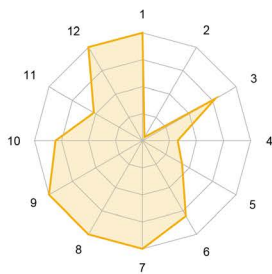
Improve public transport



Greening the city



Temporary use of urban spaces



Open government

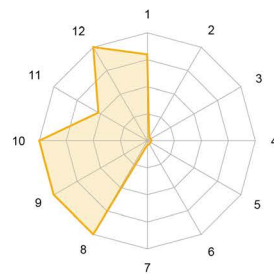


FIG. 2. Complementary properties of best practice strategies from Barcelona in relation to the complex whole of compact city qualities. Own elaboration based on interviews with stakeholders.

meetings in local political and administrative offices; 2) through communication with the many associations in Barcelona, where many are locally anchored in neighbourhoods; 3) by expanding digital participation, e.g. through the Internet and mobile phones; and 4) by bridging “digital fractures” and reach those who do not participate in the three previous modes – typically the old or the poor – by visiting them and actively making sure they have a voice.

*Branding the city for tourism and conferences
(Rotterdam: ROT1)*

As in Barcelona, Rotterdam has invested and, maybe more importantly, experimented its way out of economic crisis and being Amsterdam’s lacklustre sibling. Unique and iconic buildings and bridges have been actively promoted across the city to place the city on the map and draw more interest, investments, activities and visitors to the city. Another component of the city brand is the encouragement of an entrepreneurial and a bottom-up spirit of innovation (see below). The sum of all this is a new image of the city as “Cool Rotterdam”.

Adapt to the new economy (Rotterdam: ROT2)

Rotterdam was a shrinking and declining city due to the transformation of the harbour economy into a less labour-intensive format. By changing city government from top-down to network governance, the city has changed into a growing and prosperous city with an international vibe. The city is rebuilt through strong public-private partnerships but the openness towards small-scale innovation and entrepreneurship also plays a key role in the urban economy.

*Less social housing and welcome gentrification
(Rotterdam: ROT3)*

In 1985, Rotterdam had 85% social housing and a target was set to reach 50%. In 1995 there was 70% social housing and in 2015 60%. In this pro-

cess, planned gentrification of social housing areas is seen as an effective tool to shift demographics. A ‘do it yourself-houses’ programme allows smaller social housing apartments to be joined to create larger apartments, by selling them to individuals promising to refurbish them and live there. Combined workshops/apartments are supported for creative professionals, especially in areas with social housing. Individually built urban villas and infills are encouraged, especially in housing areas attracting little commercial housing interests. This strategy presupposes that municipalities around Rotterdam increase their share of social housing.

Attract the middle class (Rotterdam: ROT4)

Rotterdam seeks to change its trajectory as a working-class city in decline towards attracting a larger share of a middle-class population. Attractive housing options are supported, including striking high-rises on the river piers to attract high-income residents to central parts of the city, but there is also different type of support of individual housing projects across the city (see below). Effective public transport and cycling routes have been promoted and the city has strong design programmes for streets and public spaces (e.g. City Lounge), taking precedence over technical installations to deliver quality outdoor urban space. As in Barcelona, there is a strong commitment and interaction across the administration sectors to coordinate and achieve joint policy goals.

*Close the ‘gap’ between north and south
(Rotterdam: ROT5)*

There have been several policy initiatives to close the gap between the (wealthier) North and the (poorer) South of Rotterdam. The frequent and fast boat connections over the river play a key role. The Erasmus bridge was completed in 1996 linking across the river (including trams). Kop van Zuid and the Wilhelminapier has been extensively developed in ambition to fill the void between North and South, including a walking/biking bridge to Katendrecht.

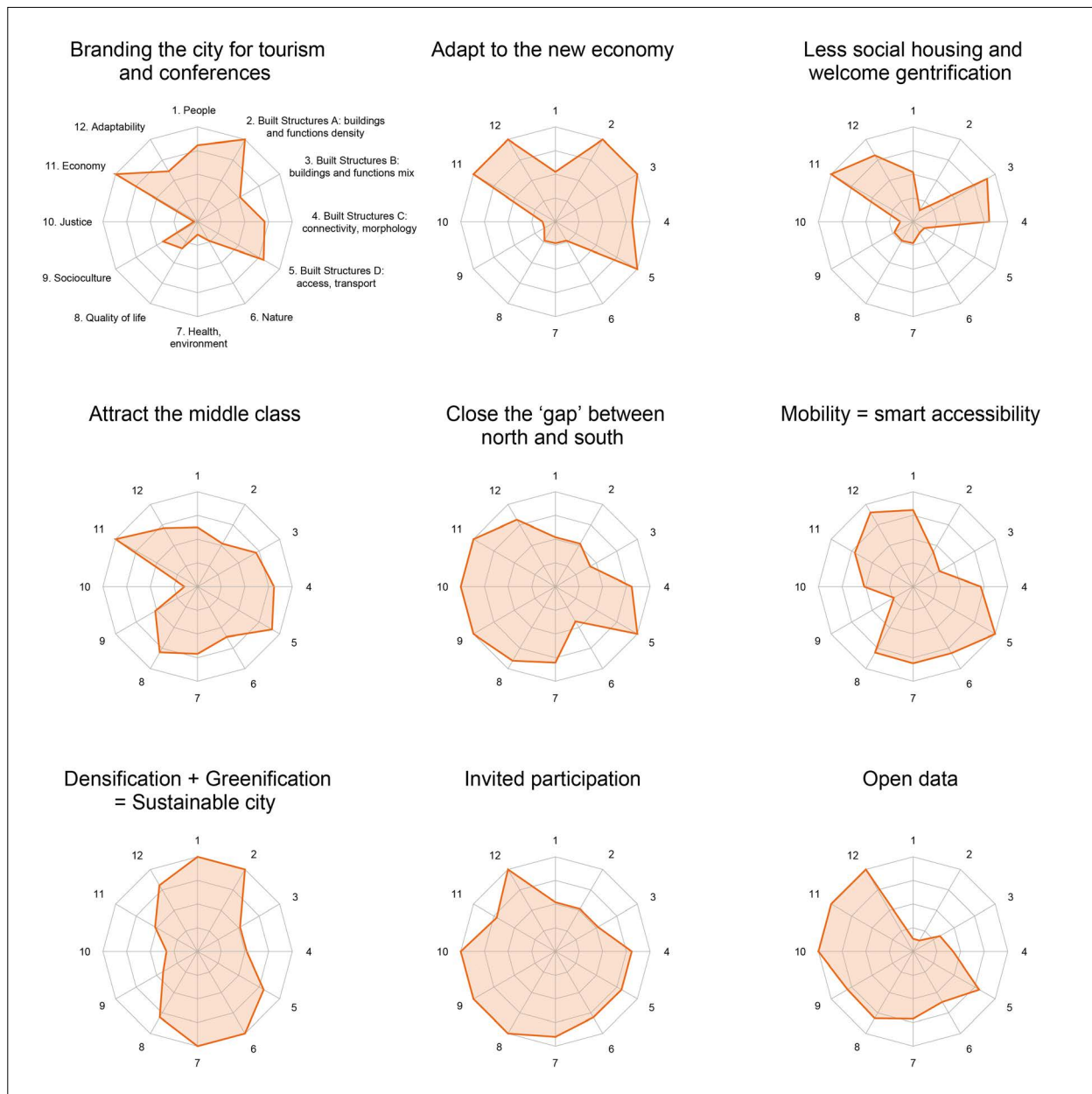


FIG. 3. Complementary properties of best practice strategies from Rotterdam in relation to the complex whole of compact city qualities. Own elaboration based on interviews with stakeholders.

Mobility = smart accessibility (Rotterdam: ROT6)

The biking paths in Rotterdam are consistently planned, designed and built, reducing confusion and conflicts between pedestrians, bikes and cars. This is about applying existing knowledge rather

than spending money. As in Barcelona, tram lines are designed to not create barriers for walking and biking. The waterways are for transports and there are water taxis and a variety of ferries for short and long-distance commuting, often quite high speed.

TABLE 5. How the different best practice strategies respond to urban challenges

Urban challenges: Barcelona + Rotterdam	Best practice strategies in Barcelona	Best practice strategies in Rotterdam
Urban poverty in the city as a whole, as well as in particular neighbourhoods	Restrict tourism and fight gentrification Increase the share of social housing	Less social housing and welcome gentrification Attract the middle class Close the 'gap' between north and south
Deficit in democracy and participation	Open government Temporary use of urban spaces	Open data Invited participation
To be left outside the global urban (knowledge) economy	@22 – the smart city	Adapt to the new economy
Pros and cons of tourism and the tourism economy	Restrict tourism and fight gentrification	Branding the city for tourism and conferences
Scarce and low quality urban nature	Super Blocks Greening the city	Densification + Greenification = Sustainable city
Poor or unfair mobility for different transport modes and/or user groups	Super Blocks Improve public transport	Mobility = smart accessibility

*Densification + Greenification = Sustainable city
(Rotterdam: ROT7)*

Rotterdam has a combined strategy for densification and greenification. While infills and vertical densification are promoted, the same goes for adding small green spaces wherever possible, including on rooftops, tram rails, and as pop-up parks. Urban farming is seen as providing values in terms of experiences, income generation and food security. Climate change adaptation includes water squares for temporary storage of storm water.

Invited participation (Rotterdam: ROT8)

Funding is set aside in the city budget where inhabitants are invited to submit proposals and one of these is funded each year after a selection process. One example is the yellow pedestrian bridge, linking two districts separated by the railway. The yellow bridge also continues through buildings with small entrepreneurs, exemplifying another initiative: to encourage bottom-up (social) entrepreneurial initiatives and pop-ups by providing space in unused industrial buildings. Another example of invited participation is the Fenix Factory, a hub for local food produce in an old harbour warehouse.

Compared to Barcelona, Rotterdam participation relies less on political activism and more on bottom-up (but often social) entrepreneurship.

Open data (Rotterdam: ROT9)

In 2015, Rotterdam had recently started its open data programme aiming to make data easily accessible for inhabitants and other actors, to be used for the development of the city. Even if many data sets were available in principle, access was not self-evident if not being an urban professional. A particular feature was the ambitions to do it the 'Rotterdam way', i.e. through a networked approach involving many different parties.

The interview data indicate that there is one main strategy in each city, 'Super Blocks' in Barcelona and 'Branding the city for tourism and conferences' in Rotterdam. Still, according to the interviewees' deliberations, 'Super Blocks' are mainly seen to address two of Barcelona's urban challenges and 'Branding the city for tourism and conferences' only one of Rotterdam's main challenges (Table 5). In fact, of the 17 strategies, 15 are seen to address only one challenge, the exception being 'Super Blocks' and 'Restrict tourism and fight gentrification' in Barcelona. Conversely, in Barcelona, four out of six

challenges are seen to be addressed through more than one best practice strategy, while in Rotterdam, only two of the challenges are seen to be targeted by more than one strategy.

It is feasible to assume that an urban strategy needs to engage with a certain set of urban qualities to be effective in addressing a particular urban challenge. However, the data indicate that the potential of the best practice strategies goes beyond ‘one strategy will address just one or two urban challenges’ since most strategies seem to be effective across multiple categories of urban qualities. For example, the strategies ‘Restrict tourism and fight gentrification’ and ‘Greening the city’ in Barcelona and ‘Attract the middle class’ and ‘Invited participation’ in Rotterdam are all quite comprehensive in terms of urban qualities covered. They would thus presumably respond to (or have the potential to respond to) multiple urban challenges, i.e. not just ‘their’ urban challenge. In contrast, ‘Less social housing and welcome gentrification’ in Rotterdam appears quite ‘slim’ in the number of urban qualities it affects, especially when compared with ‘Restrict tourism and fight gentrification’ and ‘Increase the share of social housing’ in Barcelona, even though all three strategies are targeted towards urban poverty. Furthermore, some of the strategies appear to live separate lives by being mirror images when it comes to urban qualities affected, for example ‘Super blocks’ versus ‘@22 – the smart city’ in Barcelona and ‘Less social housing and welcome gentrification’ versus ‘Close the “gap” between north and south’ in Rotterdam, where these pairs of strategies seem to address opposite spectrums of urban qualities.

An overlay of all the various strategies may suggest that they are highly complementary if the ambition is to cover as many compact city quality categories as possible. Still, a closer look reveals that qualities such as ‘Building and functions density’ and ‘Nature’ in Barcelona and ‘Justice’ and ‘Socioculture’ in Rotterdam are less represented in the strategies. For other urban qualities there are much stronger synergies between the strategies, such as ‘Buildings and functions mix’, ‘Quality of life’ and ‘Justice’ in Barcelona and ‘Connectivity, morphology’, ‘Access, transport’, ‘Economy’ and ‘Adapt-

ability’ in Rotterdam. All in all, there seems to exist a lot of potential in making urban strategies more effective by engaging in urban design and planning that consciously identify and take advantage of such synergies.

VI. URBAN CHALLENGES IN GOTHENBURG AND THE TRANSFER AND TRANSLATION OF ‘BEST PRACTICES’ INTO ‘GOOD PRACTICES’

This section introduces six main challenges identified by the stakeholders in Gothenburg, as well as their tentative reinterpretation and translation of ‘best practices’ from Barcelona and Rotterdam into ‘good practices’ for Gothenburg. The influencing Barcelona and Rotterdam best practices are indicated by the codes found in Section 5 (BCN1, ROT1, etc.).

1. SPARSENESS AND BARRIERS

Urban challenge: Gothenburg is a sparse and scattered city with many barriers (the river, topography, roads, railways, but also social barriers) – a city that works best for cars. It will not be possible to mend this sparseness into a dense mixed-use city in a foreseeable future, not even if the focus is set on main avenues and corridors between distant city districts.

Potential Gothenburg compact city strategies: *Link the city*, rather than densifying the wide in-between spaces:

1. *Public transport* is a way to link; to transport people and goods fast and sustainably. A dense, smart city is a city where many use public transport and where public transport is efficient. Promote electrification to counteract noise and air pollution (BCN5, ROT5, ROT6).
2. Significantly develop possibilities to *walk and bike*. An important aspect is to separate slow and fast transports. All basic services and goods are to be found within walking distance. Aim for slowness where people dwell

and walk. Aim for speed where people and goods need to arrive with more efficiency (BCN1, ROT6).

3. Public transport and a walkable/bikeable city will not be sufficient to link the city. Create *strong local identities* to attract people and increase movement patterns between city districts. Fight the ongoing erosion of local centres. Difference is a strength; variation is positive. Strong local centres (shopping, businesses, activities, culture, etc.) support linking districts. And develop new cores where needed (see also Challenge 2). This is about things that are visible in the physical environment, but also social processes play a very important part (see also Challenge 6). It is about process thinking rather than focusing on immediate results. (BCN1, BCN7, ROT2, ROT8).

2. INJUSTICE AND LACK OF HOUSING

Urban challenge: Gothenburg is a segregated and unjust city. Poverty is linked to an unjust distribution of resources.

The spatial segregation of different ‘classes’ is strong. Affordable housing is located far from the city centre. People from different social groups seldom meet. The organisation of the school system reinforces this situation.

Lack of housing is a big problem in itself. But the high pressure on housing also means that sites get developed that are unsuitable or have important values for other urban functions. Along the way, much of the services needed for an increasing population is left behind. Pre-schools, playgrounds, etc are included far too late in the planning when most of the land has already been set aside for housing, leading to lack of space or poor locations.

The moment 22 of renovation: There is a huge need of renovation in mass housing areas where the poorer parts of the population live (in the so called Million Programme areas), but if you renovate in ways this is normally done, then people are forced out through increased rents. But where should they go?

Potential Gothenburg compact city strategies: Seek to achieve justice by decreasing *differences in living conditions*:

1. There should be *affordable housing* across the whole city. Build inexpensively, everywhere. Build rental apartments, everywhere. (BCN4)
2. There should be a *fair access* to services and goods in the city. Basic functions everywhere (see also Challenge 1), also for the impoverished. Scale up green areas (see also Challenge 3) and culture; we are becoming increasingly more people in the city. (BCN1, BCN6, BCN7, ROT7)
3. Start from local conditions when development plans are produced. Investigate (with the help of those living and working in the area, see also Challenges 5 and 6) *important local values* (people, culture, meeting places, creative livelihoods, environmental values, etc.) that exist and should be preserved or strengthened. The city and the citizens should process this first, before involving economic interests (see also Challenge 6) (BCN3, BCN7, BCN8, ROT8)

3. URBAN GREENERY AND CLIMATE ADAPTATION

Urban challenge: We have a green city but this is threatened, and especially green areas of high quality go down first.

The market economy, the lack of housing (see also Challenge 2) and the weak governance (see also Challenge 5) in combination bring about a continuous chipping away of natural areas. This is unfortunate, since we are becoming increasingly more inhabitants, and the need for green areas is growing. Green areas can also counteract problems linked to noise and air pollution, an offset that can make room for densification. Also climate adaptation (e.g. for storm water management or counteracting heat islands) take up an increasing part of green areas. Furthermore, in the long run there may be a lack of food globally due to population increase and climate change.

Potential Gothenburg compact city strategies: Change how the city's planning of green areas is carried out and implemented:

1. Promote green area planning (and also cultural planning) *alongside* other types of planning. (BCN6, ROT7)
2. Densify where the ground is already disturbed or destroyed by humans, or on green areas with *low values* (natural, social, cultural values). Protect green areas and wild nature. Assume that locally produced food will increase, including urban farming. (ROT7)

4. LACK OF RESOURCES?

Urban challenge: There appear to be fewer and fewer resources for societal and long-term efforts.

Lack of resources amplifies (and is amplified by) the silos in the city administration, since everyone is preoccupied with solving their own tasks within tight budgets. Lack of coordination in the street space leads to a shortage of both room and resources; a shortcoming that leads to poor and dysfunctional urban environments. Lack of resources leads to (or is brought forward as an argument for) commercial interests taking over parts of the city and arrange those for consumption (such as Gothenburg's 'event city'), based on the model that the wishes and consumption by the middle class create the city. Also the housing market bears the same stamp of the same focus (see also Challenge 2), but the interest of private developers is starting to cool off.

Potential Gothenburg compact city strategies: Develop a *new perspective* regarding what resources are and how they can be generated:

1. Remove the *gap* between investment budget and management budget. (ROT4)
2. Bring all sectorial visions and plans together into common and integrated *design programmes*. (BCN1, BCN2, ROT2, ROT4 regarding cross-sectoral integration and pooling of resources)

3. Be permissive and supportive towards *bottom-up initiatives*. The companies need information to develop services and products that serves the inhabitants. This means that the *knowledge and interests of the inhabitants* are a resource both for themselves, for the city, and for the companies. (BCN8, ROT8)
4. Ask yourselves: What does *tourism* (and the event-city economy) bring for the tourist and the inhabitant, respectively? What kind of tourism do we want to have in the city? What do we want to offer? What do we want to create? (BCN3, ROT1)

5. POLITICS AND PUBLIC ADMINISTRATION

Urban challenge: Gothenburg has weak political steering and there is seldom time for strategic conversations.

Because of that, there is no common target image across city boards and administration units. There are too many unspecific strategy documents, with many conflicting goals. Additionally, preference is given to some municipal administration units over others, leading to suboptimized management of common land resources. There are many nice words but poor steering of implementation. We are unable to deal with the prevailing complexity of Gothenburg's urban challenges. We are stuck in a management structure that is inhibiting innovation, is slow to change and draws out decisions.

Potential Gothenburg compact city strategies: *Remove Gothenburg's slowness to change:*

1. Build stronger policy and resolute management turning visions and target documents into joint and concrete programmes and plans with *implementable content*. These should then guide and steer all municipal activities. (BCN1, BCN2, ROT2, ROT4 regarding cross-sectoral commitment and implementation)
2. Based on these programmes and plans: *Abolish silo thinking*. Municipal administration units need to *cooperate with joint resources* (see also Challenge 4). (BCN1, BCN2, ROT2,

ROT4 regarding cross-sectoral collaboration and pooling of resources)

3. Strengthen and develop *cooperation with citizens and the business sector* (but with a strong citizen voice) (see also Challenges 2, 4 and 6). (BCN2, BCN8, ROT1, ROT2, ROT8)

6. DEMOCRACY AND MEETINGS BETWEEN PEOPLE

Urban challenge: There is a lack of democracy in Gothenburg. The city fumbles with public participation issues, and dialogues are often run without any clear objectives for why having them.

The local knowledge and perspectives of the inhabitants are not incorporated into planning. Knowledge about local conditions and values is lost (see also Challenge 2). There is a lack of trust from the inhabitants; both from rich and poor. And the climate and weather of Gothenburg do not favour social meetings all year round.

Potential Gothenburg compact city strategies: Transformative policy and management (see also Challenge 5) need to be paired with qualified civic participation. Gothenburg should actively promote *empowerment*:

1. Shift responsibility from municipal administration units to residents in order to create value (see also Challenge 4). Work with the chain *influence, responsibility, trust*. (BCN7, BCN8, ROT2, ROT8)
2. Change the task of the municipality to *guiding citizens* through the urban development process: What qualities do people really want? Seek knowledge and facilitate change of perspectives. Create broad visions encompassed by many regarding where to go. And how we can build this, together. (BCN8)
3. Therefore: develop the *role of public officials* and work cross sectoral between municipal administration units, citizens, civil society, business sector, etc. Balance power. (BCN8)
4. Develop new *effective tools*, such as a thoroughly improved Gothenburg (citizen) Proposal 2.0 (and make it a determining factor

for decisions) and local participatory budgets (e.g. at city district level). (BCN8)

5. An active citizen involvement requires *spaces in the city*. People need to meet, confront, learn. Build *rooms, playing fields* and *organisations* where we can carry out these conversations. (BCN7, BCN8)
6. Public common spaces are important sites for this., including outdoor urban life. But this is difficult in the Gothenburg climate. Create *new types of common outdoor and indoor rooms*. Build on the already existing outdoor recreational life and peoples need of nature to create preconditions for outdoor life inside the city in the form of new *green activities*. Take Gothenburg's climate into account and create a lively *outdoor life indoors* (glazed-in rooms, alive ground floors with community spaces). *Prioritize such shared spaces* before privatized spaces for commercial consumption. (BCN3)

VIII. DISCUSSION: TRANSFER, TRANSLATION AND TRANSFORMATION OF BEST PRACTICES INTO GOOD PRACTICES

By applying a “post-transfer” logic (McCann & Ward 2012, p. 328) this study has analyzed how compact city concepts and practices have been translated by way of a stakeholder workshop, and how they (potentially) would work at their destination in Gothenburg. It has shown how more contextualized ‘good practices’ have been attained by the stakeholders, instead of resorting to any standard decontextualised transfer of ‘best practices’ (Adelfio et al., 2022).

1. URBAN JUSTICE

Among the specific categories discussed during the workshop showing how the translation/transformation process took place in practice, the ‘justice’ category of compact city qualities (Kain et al., 2020) was clearly brought to the forefront by the Gothenburg stakeholders. They then swiftly and deftly translated (McCann, 2011) the various best

practice strategies from Barcelona and Rotterdam linking to urban justice in different ways – e.g. those touching on segregation, gentrification, mobility, accessibility, and local identities and innovation – into good practice strategies of high local relevance (especially those covered in Sections 6.1. and 6.2.). For example, due to the general and severe housing shortage in the city (Lundin, 2017), the integration of affordable housing (drawing on the best practice strategy BCN4, see Section 5.2.) emerged to be highly relevant for local Gothenburg translation. This corresponds with previous compact city research, bringing up justice as an essential element of compact city development (Burton, 2000), linked to urban spatial justice and segregation both at the city level (Cavicchia, 2021; Musterd et al., 2017) and the neighbourhood level (Bibby et al., 2021). Here, the stakeholders translated the Barcelona best practice (BCN4) into the policy argument that there should be affordable housing across all of Gothenburg to decrease differences in living conditions, subsequently transformed into the locally relevant good practice to build inexpensive rental apartments everywhere in the city (see Section 6.2.). This was also linked to the concept of gentrification, prone to be translated locally through interpretations oscillating between more positive and more negative viewpoints, as it is embroiled in “contradictory narratives that have been employed to interpret transformations” in cities (Huning & Schuster, 2015, p. 738). From the Gothenburg stakeholders’ perspective, gentrification ended up carrying a rather negative connotation (as in BCN3), reflecting an ongoing debate about whether it is possible to achieve “revitalization without gentrification” (Olshammar, 2019, p. 53).

2. CONTEXTUALIZING URBAN DENSITY

A particularly delicate question when it comes to the compact city ideal is related to densification in itself, a key concept in the compact city debate recently relativized as different types of densities and thresholds (Kain et al., 2021; Boyko & Cooper, 2011). The Gothenburg Development Strategy

2035 assumes the densification of built structures as a key policy (City of Gothenburg, 2014a). The translation and transformation taking place during the workshop revealed how challenging (and even unrealistic) it would be to try to implement such a pure (best practice) densification of buildings in a spatially fragmented and highly dispersed urban fabric, such as Gothenburg. Instead, the participants connected several best practices in Barcelona and Rotterdam (for example BCN5, ROT5, ROT6) and shifted (or translated) the focus towards linking the different parts of the city across the wide gaps between neighbourhoods by enhancing the public transport network and facilities. Such an emphasis on transport resembles in part the concept of transit-oriented development widely used in the academic literature (Curtis, 2012). Yet another good practice for Gothenburg was translated from the strong local identities of Barcelona neighbourhoods (BCN1), and then skilfully transformed into a policy argument that strong and unique local identities would function as attraction points that may further bridge both spatial and socioeconomic chasms of the city; a take on sociocultural values in the compact city less frequent in the compact city literature (e.g. Rao, 2007). Moreover, a need to greenify (Tillie et al., 2012) urban areas alongside the policy drive for building densification emerged as crucial in the workshop discussions, mainly drawing on Rotterdam’s policy to closely link greenification and densification (ROT7), but here transformed into fitting the particular policy context of Gothenburg with its particular urban planning and management structure (see Sections 6.4. and 6.5.).

3. INCREASED STAKEHOLDER PARTICIPATION PAVES THE WAY FOR INNOVATION IN URBAN GOVERNANCE

Another of the developed good practice strategies for Gothenburg – translated from several best practices from Barcelona and Rotterdam (BCN7, BCN8, ROT2, ROT8) – emphasized the value of local knowledge and perspectives of the inhabitants and how this value can be embraced in the dysfunctional participatory context of Gothenburg (see Section 6.6.), where

local policy ambiguously oscillates between citizen participation and neoliberalism (Soneryd & Lindh, 2019). By extension, this would include a wider inclusion of civil society actors and residents both in the shaping of localised good practices (Adelfio et al., 2022 and in their appropriate implementation (Laugen & Boer, 2007; Adelfio et al., 2022). By assuming such a perspective, the residents emerge as an integrated and fundamental part of the “local community of practice” (Adelfio et al., 2022, p. 191) becoming themselves “policy mobilizers” (McCann, 2011, p. 114) and local translators of a concept, here the ‘compact city’, that originally stems from globally established “wider constellations of practice” (Faulconbridge, 2010, p. 2855). Such an inclusion of residents shows how “policy has to be socially and spatially embedded in the target audience by connecting it to particular problems or opportunities within each locality” (Albrecht & Rytteri, 2017, p. 74), challenging prevailing “unilinear, top-down notions of policy implementation” (Adelfio et al. 2022, p. 19). Moreover, drawing on multiple best practices (BCN1, BCN2, ROT2, ROT4), the workshop participants again highlighted the silo culture (Verhagen, 2014) of the local authority and its inability to turn policy into action as key obstacles to implementing change through the proposed locally tailored remedies (see Section 6.4). Although implementation failures are not a new topic (Pülzl & Treib, 2017) the multiple stakeholder perspectives at the workshop shined new light on such shortcomings, as well as the potential of comprehensive stakeholder involvement for overcoming fossilised implementation barriers.

4. TURNING BEST PRACTICES INTO ACTIONABLE GOOD PRACTICES

Understanding best practice transfer, translation and transformation is a clear case of “who learns what from whom” (Dolowitz & Marsh, 1996; von Schönfeld et al., 2020); of how urban planning integrates both content and process (Faludi, 1973). The systemic breaking down of compact city practices into their essential constituents, i.e. into the urban qualities and challenges underpinning them, pro-

vided stakeholders with complex information in an accessible way (the ‘what’). By bringing together a diverse mix of local stakeholders (the ‘who’), the workshop provided an environment where city ideals collaboratively (the ‘how’) could be translated from one locality to another by jointly contextualising such knowledge.

From that perspective, the stakeholder workshop served as a context-sensitive “coordination encounter”, where the participants collaboratively enacted policy mobility and a local translation of compact city ideals, and where the workshop materials functioned as “enrolled artefacts” (Adelfio et al. 2022, 5). Best practice knowledge was not only “co-produced in the process of circulation” (Östling et al. 2018: 27) and translated, but was also localized and made actionable when the stakeholders first selected, appropriated and reformulated knowledge into good practices, and also started to promote and instrumentalize these good practices (Moity-Maïzi, 2011). The stakeholders’ strong connection with the local context made it possible to move beyond a theoretical debate on urban best practices and their potential value towards the concrete circulation of context-adaptive and “actionable knowledge” (Kelly & Cordeiro 2020, 1). This represents a step forward compared to theory-focused approaches to circulation of knowledge and also provides a methodological contribution regarding how to work with circulation and translation processes. The study confirms that a practice-oriented and collaborative focus – i.e. working on concrete compact city practices with real stakeholders – is an essential element in the creation of an “analytical framework that supports the generation of actionable knowledge for practice and policy actors” (Hölscher et al., 2023).

5. MERGING MULTIPLE BEST PRACTICES INTO SYNERGISTIC AND CONTEXTUALISED GOOD PRACTICES

Furthermore, the study highlights social learning and co-production of knowledge as another key aspect the post-transfer moment. The stakeholder interaction around the different best practices from

Barcelona and Rotterdam illustrated how localization of such knowledge is not only about active choice (Moity-Maïzi, 2011), but also about collaborative agreement, confirming how “knowledge is essentially a communicative phenomenon, of which circulation is one constitutive feature” (Östling et al., 2018, p. 18). The study clearly shows that for urban knowledge to become mobile in any meaningful way, any best practice would need to pass through some sort of stakeholder-enabled translation process involving both social learning (Kemp et al., 2007) and co-production of knowledge (Watson, 2014; Frantzeskaki & Kabisch, 2016). Since stakeholder interaction stands out as key for any consequential circulation of knowledge, it appears crucial to include of a wide range of stakeholders (Kemp & Rotmans, 2009; Frantzeskaki & Kabisch, 2016) and not least citizens (Watson, 2014) to secure broad representation and transparency.

The stakeholder workshop was a clear example for how group learning allows “opportunities to develop new skills and knowledge” (London et al., 2005, p. 114). The workshop format allowed for visualization of data and insights by both researchers and stakeholders, where such visualization assisted stakeholders to negotiate their production of new knowledge (Elwood, 2006) in a collaborative environment (Burkhard, 2005). This underlines the shaping of good practices intrinsically is about “the active, voluntary aspect of human activity, which makes it possible to generate knowledge that can be qualified as local” (Moity-Maïzi, 2011, p. 4). This also links back to the opportunities for synergetic planning discussed in Section 5.2, where it may be argued that the diversity among stakeholders in Gothenburg did provide better prospects for understanding how synergies best can be created when localizing global best practice knowledge into particular urban environments with their specific challenges.

6. GOOD PRACTICES AS FOCAL POINTS FOR URBAN COALITION BUILDING

Furthermore, towards the end of the workshop, the stakeholder interaction started to shift into

shaping coalitions and strategies for further elaboration and potential implementation of the developed good practices. Accordingly, one should also be prepared for knowledge co-production to go beyond a mere learning process since it provides “an exploratory space and a generative process that leads to different, and sometimes unexpected, forms of knowledge, values, and social relations” (Filipe et al., p. 1).

All in all, through the localised translation and transformation process during the stakeholder workshop, each compact city practice from Barcelona and Rotterdam no longer remained “a fixity that is merely ‘implemented’ or rendered ‘concrete’” (Adelfio et al., 2022, p. 19). The group learning process occurring among stakeholders resulted in co-produced knowledge (Adelfio et al., 2019) specifying a number of context-adapted good practices (Adelfio et al., 2022). In this way, the co-produced outcome of the workshop is an example of what Jessop et al. call an innovative “intellectual commons organized around collective, problem-oriented learning” (2014, p. 119).

VIII. CONCLUSIONS

This article presents the findings from a collaborative learning exercise with a diversity of urban stakeholders regarding if and how compact city qualities, challenges and best practice strategies from two quite different cities (Barcelona and Rotterdam) can be turned into relevant and contextualised good practices in a new entirely setting (Gothenburg). Even if this was not a case of real policy/planning, the study provides an illustration of how transfer, translation and transformation of ‘best practices’ into contextualised and locally adapted ‘good practices’ can take place. In this way, it brings forward an empirical contribution to the scientific debate on circulation of knowledge.

Based on this experience, a few observations can be made. First, knowledge mobility in the form of idealized compact city best practices appear to have a value for other local contexts.

Still, any meaningful and consequential mobility of urban knowledge requires stakeholder-enabled translation involving both social learning and co-production of locally relevant knowledge. By necessity, this means that a wide range of stakeholders need to be engaged, not least affected citizens, to secure broad representation, transparency and a decidedly localised and critical perspective. Second, to facilitate such a perspective, transferred best practices need to be embellished with sufficient contextual information to make it possible to understand what local conditions were necessary for them to function in their place of origin. Third, best practices still have to be communicated in a format that makes such a complexity understandable and possible to process for all involved stakeholders. In the present study, this was provided through a rich and systemic, but still accessible content (the ‘transfer’ of best practices), subsequently processed and elaborated through an inclusive stakeholder process of social learning and co-production of localized knowledge (the ‘translation’ and ‘transformation’ into applicable good practices). Fourth, the strengthened involvement of diverse stakeholders in the transfer, translation and transformation of ‘best practices’ requires profoundly improved models for stakeholder engagement, moving away from the presumptuous top-down attitudes prevalent in many city governments.

A final reflection regarding the choice of case cities. During the design of the study, Barcelona was seen as a historical ideal type compact city that cities such as Gothenburg could have as a role model. In contrast, we saw Rotterdam being more like Gothenburg in many ways but with a more developed approach to its development towards urban compactness. Still, also Barcelona has undergone (and is still undergoing) quite significant and extensive urban renewal, such as along the waterfront, in the @22 area and around Glòries. Even if the urban challenges of Barcelona and Rotterdam in many ways are different both from each other and from those of Gothenburg, their urban strategies still proved to be valuable and possible to translate into ‘good practices’ in Gothenburg.

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