Journal of Transport Geography 70 (2018) 1–10

Contents lists available at ScienceDirect

Journal of Transport Geography

journal homepage: www.elsevier.com/locate/jtrangeo

Understanding sustainable accessibility in urban planning: Themes of consensus, themes of tension

Ana Gil Solá*, Bertil Vilhelmson, Anders Larsson

Department of Economy and Society, School of Business, Economics and Law, University of Gothenburg, 40530 Göteborg, Sweden

ARTICLE INFO

Keywords:
Sustainable accessibility
Accessibility
Planning
Tension
Sweden

ABSTRACT

Current urban planning for sustainability is gradually shifting from car-based to proximity ideals. However, when concretized in regular planning thinking and practice, the latter ideal becomes contested and complex. This paper explores *sustainable accessibility* and how urban planners understand, seek to operationalize, and integrate the concept in their planning practices; we consider what planners hope to achieve in this process and the tensions they experience in doing so. The data, collected through semi-structured, focus-group interviews (workshops) with 35 planners in three Swedish municipalities, were subjected to thematic qualitative analysis. Urban planners' interpretations of sustainable accessibility form five recurrent themes: the importance of cross-sectoral approaches in planning; the need for urban land-use densification; measures to shift the transport mode balance in favour of walking, cycling, and public transit; facilitating proximity to everyday activities; and planning in accordance with citizens' rights to access basic services. Although there is overall agreement on these themes, discussing how the related policies should be implemented reveals several tensions, for example: city centre densification could reinforce gentrification, resulting in displacement and increased travel; tension regarding to what extent and where car use should be reduced; trade-offs between the needs of different groups; and accounting for quality and functionality factors when stressing the importance of proximity to services. In conclusion, disagreements arising when implementing sustainable accessibility goals relate in many ways to social considerations and to the socio–spatial distribution of resources.

1. Introduction

Sustainability calls for a paradigm shift in urban planning from mobility-enhancing to accessibility-enhancing strategies (Cervero, 2005; Handy, 2002), from viewing car transport as the ultimate means by which citizens can reach activities distributed in urban space to policies enabling local living – locating housing, services, and activities near one another – and supporting environmentally friendly transport modes such as public transit, cycling, and walking (e.g., Banister, 2008; Curtis, 2008). Nearness, densification, mixed land uses, integration, and slow transport modes are key notions in such redefined planning, encapsulated by the *sustainable accessibility* concept (Bertolini et al., 2005; Curtis, 2008; Johansson et al., 2016). This concept challenges traditional urban development and design, which are largely associated with speed, energy-consuming transport, urban sprawl, and areal differentiation.

The concepts of accessibility and sustainability – synthesized in the notion of proximity – are increasingly espoused as principal policy goals of urban development in many countries, including Sweden. In urban planning, the resulting notion of proximity is prevalent in visions and policies. Among the largest Swedish cities, Gothenburg, for example, is branded a close-knit city in a traffic strategy promoting slower transport modes and local living (City of Gothenburg, 2014b). Stockholm pitches its vision of future urban development in terms of a compact city (Stockholmsregionen, 2015), and Malmö labels itself “a city with short distances – an accessible city” (Malmö City, 2016:13), developing a normative index for sustainable accessibility as a basis for further planning (Trivector, 2014). Inspired by new urbanism ideals (e.g., Grant, 2009), smart city growth principles (e.g., Albino et al., 2015), and sustainable urban mobility planning (e.g., the SUMP guidelines, European Union, 2014), many cities in Sweden have adopted policies and visions that endorse nearness and density, intensification, mixed land use, transit-oriented development, and walkability.

Attention is easily diverted from car-based mobility to proximity ideals in abstract visions and city branding jargon. However, when confronted with the need to realize these ideals, to define measures and implementation, the concept of broad sustainable accessibility becomes contested. Several essential matters come to the fore. These include

* Corresponding author.
E-mail address: ana.gilsola@geography.gu.se (A. Gil Solá).

https://doi.org/10.1016/j.jtrangeo.2018.05.010
Received 17 January 2017; Received in revised form 7 May 2018; Accepted 7 May 2018

what citizens need proximity to in their everyday lives and whose needs should be prioritized, as well as what modes of travel should be favoured, and how, for accessibility to be considered socially and environmentally sustainable. Overall, in terms of implementation, what does sustainable accessibility really mean when translated into real planning and action? This fundamental research question guides our study.

Relying on contemporary Swedish experience, we investigate how one important group of actors, i.e., professional planners at the local level, understand and put into practice the concept of accessibility from a sustainability perspective. We concentrate on two interrelated questions: 1) What topics, or *themes*, do planners envision when establishing policy goals emphasizing sustainability and access? 2) What issues are agreed upon and what tensions loom when priorities shift from car-based to proximity-based thinking and mobility solutions?

Addressing the transformative role of planners is crucial in a shift that involves the mediation of new perspectives and fields of expertise within negotiations between various interests and powers (e.g., Hysing, 2009). In particular, the quest for sustainability puts new demands on planning processes in terms of a need to move from forecast-driven ("business as usual") planning to planning led by goals, visions, and hopes for trend breaks, such as curbing car use in urban environments (Frändberg and Vilhelmson, 2014; Johansson et al., 2016). It also concerns the need for improved methodologies and information systems that quickly map relevant bases of evaluation and decision-making (Cheng et al., 2007; Curtis and Scheurer, 2010). These demands require reflection on what is important for people to have nearby in their daily lives. The shift to an accessibility-enhancing strategy puts people's quality of life and a wide range of locally situated amenities and activities – ranging from healthcare facilities, preschools, schools, social services, commercial services, as well as leisure, culture, and entertainment activities to parks and nature – at the centre of planning, extending it far beyond the conventional domain of transport planning and thinking (e.g., Cervero, 1997; Handy, 2002; van Wee, 2016).

In addressing these issues, the paper is organized as follows. The next section elaborates on the theoretical understanding of accessibility in relation to sustainability and the so-far-dominant mobility-enhancing understanding of it. The third section explains the method and data, outlining the practice-based approach and workshops used here. The fourth section presents the results and examines what planners consider dominant themes in the understanding of sustainable accessibility, what is agreed upon, and the tension further planning can engender. A discussion and conclusions are presented in the final section.

2. The changing understanding of accessibility

2.1. From mobility-enhancing to accessibility-enhancing planning strategies

Accessibility is a word loaded with many meanings.[1] Simply stated, it is about people's ability to reach geographically dispersed activities, attractions, and amenities of all sorts. It concerns individuals' ability to organize well-functioning everyday lives performed at various locations throughout the day. People's own movement capacities, their access to transport systems, and the land-use or localization patterns of their living region are therefore fundamental dimensions of accessibility. It is no coincidence that the leading solution to various accessibility problems – such as difficulties reaching jobs, services, and leisure activities – was for a long time greater mobility by car along with an emphasis on speed. The car's attractiveness as a space-transcending and time-saving machine is obvious. However, as is widely acknowledged, the ever-increasing use of cars has led to unacceptable environmental problems, urban congestion and sprawl, and socio–spatial differentiation between car users and non-users (e.g., Brown, 2017; Gärling and Steg, 2007; Preston and Rajé, 2007). Increased attention is therefore being paid to other, less detrimental, ways to make the urban environment accessible to all citizens. Accessibility must then be redefined in sustainable terms, ultimately by placing more weight on proximity issues rather than speed.

It is in light of this reinterpretation that combining the concepts of accessibility and sustainability has become central to urban policy and planning (Banister, 2008; Curtis, 2008; Farrington, 2007; Gärling et al., 2014). Sustainable accessibility accordingly denotes ways to facilitate daily living without dependency on long-distance, fast, and energy-intensive transportation by car. Handy (2002) has discussed this change in planning focus as a shift from mobility-enhancing to accessibility-enhancing strategies, the latter comprising measures to bring activities closer to home, enhance options for reaching those activities, and expand the range of available activities. Banister (2008) addressed this paradigm shift by emphasizing that there are three ways (besides technological fixes such as electric cars) to achieve sustainable mobility: reducing the need for transportation; supporting shifts to slower modes (e.g., walking and cycling) and public transit; and implementing land-use measures intended to reduce distances travelled. This implies a wider planning scope and new methods to redefine traffic planning and integrate it with land-use and social planning or, as Handy has critically (2002:4) remarked: "To plan for mobility is to focus on the means without direct concern for the ends … To plan for accessibility, in contrast, is to focus on the ends rather than the means". In addition to its environmental aspects, sustainable accessibility addresses behavioural change and adaptation, bringing critical human and social dimensions into accessibility planning (e.g., Cervero, 1997; Preston and Rajé, 2007; Pyrialakoua et al., 2016; van Wee, 2016). As regards comprehensive urban planning, the quest for sustainable accessibility also relates to the much-debated principles of new urbanism (e.g., Calthorpe and Fulton, 2001; Grant, 2009), "smart" city thinking (e.g., Albino et al., 2015), and the compact city (e.g., Newman and Kenworthy, 1999), and to the guidance these principles offer planners calling for urban densification, mixed land use, connected street patterns, walkable communities, transit-oriented development, etc. Yet sustainable accessibility not only concerns built environments and structures, spatial patterns of location, land use, distances, and transportation nodes and networks; it is also about the conditions that constitute local living and welfare and, in the end, the extent to which people actually use the opportunities afforded by closer proximity, or continue to use their cars to travel farther away.[2] This means that sustainable accessibility is a complex subject comprising diverse structural and behavioural aspects that are important to clarify, especially when visions are translated into policy, planning, and practice.

2.2. Planners' perceptions

Compared with established mobility-oriented traffic planning – for decades relying on increasingly sophisticated methods, data, and models – sustainable accessibility planning methodology is in its infancy (e.g., van Wee, 2016). Cervero (1997:17) has argued that an "important step in operationalizing accessibility as a performance measure will be a clearer articulation of objectives framed not only in terms of movement efficiencies but with regards to sustainability and social equity". How sustainable accessibility should be clarified and measured remains in many respects to be determined in detail (Curl et al., 2011; Straatemeier and Bertolini, 2008), and the integration of transport and land-use planning practices is still very limited (Bertolini

[1] In transportation research, the theorizing, modelling, and quantitative assessment of accessibility has traditionally focused on the role of rapid transit and cars as the prime modes; for overviews see, for example, Geurs and van Wee (2004) and Páez et al. (2012).

[2] Handy (2002) pointed out that increased proximity must be combined with "mobility-limiting strategies" to have a reducing effect on the unsustainable transport; see also Vilhelmson (2007) on the rebound implications of time savings for spatial mobility.