Putting accessibility in place: A relational reading of accessibility in policies for transit-oriented development

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Abstract

In order to facilitate sustainable development, a shift from mobility-based to accessibility-based planning has been suggested. However, if we rely on the modern conceptualisation of accessibility, such a shift would have limited results. As an alternative, this paper proposes a relational reading of accessibility, which questions the divide between mobility and place upon which the modern definition is based. It argues that the accessibility of a place is characterised by a specific coordination of presences and absences that depends as much on boundaries and exclusions as on mobility. If accessibility changes, so does the place. This interpretation makes accessibility a matter of priorities and provides a critical perspective on arguments for time-space compressions and progress. This is illustrated here using the example of a regional strategy for transit-oriented development in Sweden (Region Scania). For that case, the discourse on accessibility revealed simplified arguments for densification, progress and metropolitan ideals, contradicting the initial inclusive intentions of the strategy. Thus, there is a need to put accessibility in place so that a shift to accessibility-based planning facilitates a move towards social and environmental sustainability.

Introduction

In recent decades, planning conducted in the second half of the 20th century has been heavily criticised, not least for its functional land use divides, car dependency, focus on constant progress and dual agenda concerning natural resources and landscape amenities. The discourse on transit-oriented development (TOD), which promotes densely built urban enclaves within walking distance of public transport nodes, illustrates the desire amongst contemporary planners to move beyond modern (and modernist) planning principles (Calthorpe, 1993). A crucial element for the proposed move towards sustainable development is a shift from mobility-based to accessibility-based planning (e.g. Bertolini, 1999; Curtis and Scheurer, 2010; Ratner and Goetz, 2013). However, with modern ideas of time and space deeply embedded in models, cartographic representations, planning practice and administration, such a shift would require much work and could not be achieved overnight. Graham and Healey (1999) argue that the dependency of Euclidean space within modern planning, anchored with “bedrock concepts” which shift very slowly despite criticism, is a major obstacle to change. Therefore, they urge “new conceptions of place and the city, based fundamentally on relational views of time and space” (1999: 629), in order revise these fundamental concepts. This has in fact been the aim within the last decade of ‘turns’ within post-structuralist geography towards relational interpretations of, for instance, scale, space, mobility, nature and planning practice (e.g. Amin and Thrift, 2002; Massey, 2005; Murdoch, 2006; Sheller and Urry, 2006; Farias and Bender, 2010; McCann and Ward, 2010; Jones et al., 2013). However one key concept, accessibility, which is of particular importance since it captures the troubled relationship between mobility and place within modernity, has yet to be scrutinised from a relational point of view. In order for a shift from mobility-based to accessibility-based planning to be meaningful (and to be part of a greater shift towards sustainability), the idea of accessibility and its dependence on modern (or Euclidean) conceptions of space and time need to be examined.

Following the actor-network-theory-related discourse on portable knowledge and relational thinking (e.g. Latour, 1999, 2005; Murdoch, 2006) and calls for relationality of place (Ingold, 2007, 2011; Malpas 2012a), the first part of this paper proposes a relational reading of accessibility. This is followed by a case study of regional planning policy in which TOD plays a central role.
accessibility. In the concluding part of the paper, the need to put accessibility in place in order for a shift towards accessibility planning to be meaningful is discussed.

### Accessibility and place

This section discusses the definition of accessibility used in contemporary geography, its dependency on Euclidean space, and the need for a relational reading of the concept.

Euclidean space describes an infinite, homogeneous and non-temporal grid with the cardinal points as its cornerstones. Irrespective of their ambiguous or multiple character, phenomena are treated as bounded and inclusive objects that can never affect space as such. Rather, people and places are inserted into this matrix, like pieces on a chess board (Massey, 2005; Olwig, 2008). While its advocates consider Euclidean space an a-historical matter of fact, it nevertheless had to be assembled in order to work. Without instruments and incentives to map, measure and materialise Euclidean space, it would have remained an elusive idea (Livingstone, 2003; Latour, 2005; Metzger, 2013). Studying the gathering of Euclidean space reveals its dependence on a very particular idea of transportation, namely the ability of knowledge and goods to leave place and be transported without alterations, as “immutable mobiles” (Murdoch, 1998; see Latour, 1999, 2005).

Making something travel as an immutable mobile requires much work. First, it needs to be ‘cut loose’ from its place-specific entanglements. Second, it requires established infrastructure for smooth travel. Therefore, in the process of abstracting knowledge to make it capable of travelling, its relation to place is replaced by a position, and the work invested in abstracting and moving the knowledge (or thing) from one place to another is reduced to a trajectory or a reference (Latour, 1999; see also Ingold, 2007). Disregard of the importance of place and the focus on black-boxed travel has far-reaching implications for knowledge that moves in other ways:

“Significant knowledge comes to be defined as information that can be circulated on technological systems [as immutable mobiles], as opposed to that which can be communicated only face-to-face. Types of discourse that do not fit the information model became devalued as “emotional” and “feminine.” Truth becomes identified with information that is mobile, universal, contextless.” (Williams, 1993: 396).

Thus, based on its ability to travel, knowledge is classified as subjective or objective (c.f. Latour, 1993, 2005). Within modernity, the disregard of the place-specificity is not a regrettable side-effect, but an actual aim; by overcoming the isolation of place and providing universal knowledge, the modern idea of progress and enlightenment could be accomplished (Williams, 1993). This idea of progress is in turn closely related to that of time–space compression, which is dependent on the same kind of conduits of transportation allowing black-boxed travel; if the goods or message are lost or transformed during travel, the distant place will not have come closer.

Ingold (2007, 2011) contrasts the modern idea of mobility and time–space compressions (where mobility is conceptualised separately from the work, infrastructure and places required to make it happen) with a relational, enacted and place-related concept of wayfaring (where mobility and place-making are understood as interdependent). This distinction is of key importance in the present analysis, since the idea of time-spatial shrinkage has sometimes been labelled relational space, as though it were not based on the idea of absolute space, which it is intended to ‘shrink’. To separate these two discourses on relationality, Malpas (2012a) offers a useful distinction between the relationality of mere positions (e.g. studies of time–space compressions, i.e. based on abstract space) and the relationality of place. The latter, in which place and place-making is part and parcel of the understanding of mobility, is the relational understanding of place employed in this paper. It is used below to examine accessibility.

### Accessibility

Despite its importance within geography and planning, the concept of accessibility is rarely scrutinised. Seminal papers and reviews on accessibility provide only vague comments on the definition, as though discussing increasingly advanced measures and models could replace a definition of what is being measured (e.g. Hansen, 1959; Handy and Niemeier, 1997; Geurs and van Wee, 2004; Ferreira and Baty, 2007; Gutiérrez, 2009; Curtis and Scheurer, 2010; Páez et al., 2012). This is problematic, not the least since the concept as such (i.e. independently of measures and mapping exercises) plays an important role within planning. With only a marginal discourse on the concept, it is hardly surprising that definitions vary to some degree, but these differences are primarily due to whether the author has chosen a site, activity or network as the prime object of study. The shared assumptions about accessibility are apparent in the fact that the different perspectives (or measures) are regarded as complementing each other (e.g. Ferreira and Baty, 2007; Curtis and Scheurer, 2010) and in shared references to classics (such as Hansen, 1959). Therefore, rather than listing similar definitions, Handy and Niemeier’s well-cited description is used as an entry point for the following analysis of the concept itself. Those authors describe accessibility as:

“... the spatial distribution of potential destinations, the ease of reaching each destination, and the magnitude, quality, and character of the activities found there. Travel cost is central: the less time and money spent in travel, the more places that can be reached within a certain budget and the greater the accessibility. Destination choice is also crucial: the more destinations, and the greater the variety, the higher the level of accessibility. Travel choice is equally important: the wider the variety of models for getting to a particular destination, the greater the choice and the greater the accessibility. Accessibility is thus determined both by the patterns of land use and the nature of the transportation system...” (Handy and Niemeier (1997: 1175).

In short, the lower the friction of distance (counted in time, space and/or money), the greater the potential for interaction and the higher the accessibility. Consequently, mobility is a prime feature of the concept, so much so that mobility and accessibility are generally confused, according to Hodge (1997). In order to differentiate them, he suggests that mobility be regarded as an empirical fact and accessibility as a theoretical concept. In a similar manner, Hansen (1959: 73) views accessibility as “the intensity of the possibility of interaction rather than just a measure of the ease of interaction”. Ferreira et al. (2012) describe mobility as “a way to achieve accessibility”. What remains unresolved, however, is whether there is a qualitative difference between mobility and accessibility or, put differently, whether accessibility requires anything else but mobility. One answer would be that accessibility concerns spatial distribution. For example, with plenty of restaurants within a limited area, mobility can be low and accessibility to restaurants still high. Yet, following the definition of accessibility provided above, mobility is still the key factor: increased mobility could collapse time–space and compensate for a scattered pattern of restaurants, and thus provide equally high accessibility.

The definition above describes points in space with trajectories of black-boxed travel in between, so the travel itself does not contribute or change anything, but is only a means to bridge distances. This clearly illustrates what Malpas (2012a) defines as the relationality of mere positions. By definition, points and trajectories do not have spatial extensions and therefore there is no limit to how close
the locations can become, or how much distance could shrink, before everything is regarded as being at the same site. This abstraction facilitates a representation of time–space compression (and densification) as being free from conflicts concerning the inevitable transformations of places and reallocation of resources. It is therefore hardly surprising that the definition, and its use within planning, are closely related to the idea of progress (e.g. Hansen, 1959), where the highest possible accessibility is the ideal and a person or place with comparatively low accessibility is interpreted as being ‘insufficiently developed’, rather than different (see Massey, 2005). Thus, increased accessibility as a social and individual goal is usually taken for granted in the literature, with critical studies arguing for a more equitable distribution of accessibility rather than questioning the progressive idea as such (e.g. Farrington and Farrington, 2005). Consequently, behaviour which leads to decreased accessibility (such as moving to a peri-urban house with long commuting hours) is described as a “sacrifice” made in order to obtain other qualities of life (Ferreira and Batey, 2007: 442).

Discussions on time budgets, time–space constraints and competition measures of accessibility make the potential for a time–space collapse less straightforward. Such measures imply there is a limit to what can be accessed in everyday life and question the value of too many similar companies or activities within near reach (Van Wee et al., 2001; Schwanen et al., 2008; Curtis and Scheurer, 2010). Although based on abstract notions of time and space, such measurements could open the way for fruitful discussions on the role of place-based features and how they affect the potential for accessibility. Since the spatial conceptualisation of accessibility (rather than measures) is the focus in this paper, closer examination of these models is omitted. However, a related study should be mentioned; Bertolini’s proposal to take place into consideration in accessibility studies. Bertolini stresses the importance of viewing transport centres as a node and a place, and argues that the limited space of the centre can cause conflicts or “stress” if too many activities are located there (e.g. Bertolini and Spit, 1998; Bertolini, 1999). This leads on to a discussion concerning imbalances between the qualities of a centre as node and place, implying that a place could have too much accessibility (see also Ferreira and Batey, 2007). Yet, the idea of place remains vague and ambiguous in relation to space. For instance, Bertolini (1999: 11) argues:

“place is a physical environment and a synonym of ‘space’, or the physical surroundings and a synonymous of ‘atmosphere’.”

Bertolini’s dualistic place-node model hints at the difficulties in integrating a discussion on place into the current accessibility discourse. Tensions between place- and accessibility-based approaches can also be found in other literature on TOD. For instance, Kamruzzaman et al. (2014, p. 69) criticises the “subjective and anecdotal” evaluation of potential places for TOD, calling for more “advanced” analysis based entirely on accessibility and density measures of land use (focusing on nodes, connectivity and measures of diversity). Thus they demonstrate the need to reduce place to space in order to measure and map accessibility (c.f. so called ‘place-based’ measures of accessibility, where place is a synonym for abstract site or position, e.g. Horner and Downs, 2014). The incommensurability of studies of abstract flows and concrete places facilitates double-speak in which the benefits of increased accessibility (e.g. increased speed, flow, exchange and saved time) are expressed using different terminology and expertise and segregated from documents or calculations capturing the concrete results of such investments (e.g. noise, barriers, environmental devastation). Benefits and impacts are separated into (inferior) space and (secondary) place.

Putting accessibility in place

A relationality of place offers an alternative approach to examination of accessibility. With place in focus, it becomes evident that a ‘spatially distributed opportunity’, such as employment, recreation or social interaction, takes place and makes place (cf. Ingold, 2007, 2011; Malpas, 2012b). This circumstance was emphasised by Torsten Hägerstrand, whose focus on place has frequently been misunderstood, partly due to a shift in focus in his theories over time, and partly due to the insufficient translation of the Swedish concept ‘tidrum’ as ‘time–space’ (Olwig, 2002; Schwanen, 2007). Although Hägerstrand’s time–space graphs facilitated a reductionist approach to mobility and place, his later philosophical writings in particular emphasise the importance of place and materiality as actants (Hägerstrand, 1996, 2009). This is perhaps most obvious in his use of the double meaning of the expression “att åka rum” (‘to take place’ and ‘to own place’) to argue for a symmetrical treatment of materiality, mobility and power in determining the complex interplays shaping the world (Hägerstrand, 1996, 2009).

Mobility and place-making can thus be described as entwined (cf. Schwanen, 2007; who notices Hägerstrand’s focus on materiality but not on place, suggesting a time-spatial interpretation). When searching for common denominators for any activity and event (from the pollination of a plant to the construction of a ship), Hägerstrand notes the importance of coordination of absences and presences, arguing that activities:

“need room at their disposal over a sufficiently long duration. And for this duration they need a minimum of ‘entourage’ for support and they must be left in peace by entities and forces which threaten their existence. In other words, some fellow-beings must be present and others must be absent.” (Hägerstrand, 1984/1991: 91).

The description of the role of absences is noteworthy: Hägerstrand does not only pay attention to how an activity is restricted due to absences, but he also acknowledges the creativity allowed due to absences, or due to the act of keeping something out of making a boundary (see also Casey, 2011, on generative edges). While performative notions of space, place and mobility are granted a central position in relational studies, the discussion on boundaries (or absences, in Hägerstrand’s terminology) has been less well pronounced (Malpas, 2012b). It appears as though a desire to challenge the static and definite conceptualisation of limits and borders of Euclidean geography and modern planning (where boundaries are as firm and static as mobility is abstract and fluid) has led to a general disregard of boundaries, which is equally problematic (e.g. Ingold, 2011; see Massey, 2005, for a discussion, but also the critique by Malpas, 2012b). A relational understanding of place, on the contrary, implies that boundaries and mobilities develop in tandem, that boundaries are created as part of a project (rather than only being regarded as a container for it), that there is a variety of different kinds of boundaries (and a manifold of boundaries constituting a place) and that boundaries have a history (c.f. Casey, 2011).

Drawing on Hägerstrand, a specific coordination (or assemblage) of absences and presences constitutes the accessibility of a place. This definition requires a shift in accessibility studies to focus on how changes in mobility require new boundaries. Boundary should be understood in a broad sense, including edges and borders, but also techniques for time-spatial coordination, such as timetables, schedules, traffic rules and social conventions on when and where something is out of place. For example, smooth transportation on a motorway requires maintenance of restricted access to the road, e.g. by fencing off wildlife, displacing bicyclists and tractors, speed regulations, traffic rules and surveillance, etc. Furthermore, safe traffic flow requires intense management to counter the effects of seasonal changes, such as snow or ice.
Following a relational reading of place, such restrictions aiming to safeguard absences are not unfortunate side-effects, but an intrinsic part of the creation of a particular kind of access.

To summarise, the crucial argument here concerning accessibility is that if mobility changes, so does the place. Moreover, if the place changes, the accessibility is likely to change too. There is no such thing as increased mobility to a static place, as if two places were magically moved closer without other alterations. There is therefore a need to acknowledge the maintenance of boundaries, co-ordinations, regulations of everyday rhythms, etc. as an integral part of studying the accessibility of a place. This conceptualisation can inform studies of specific places, while the case study below examines whether it is equally useful in studying the more general discussion on accessibility which prevails on regional and national level. The difficulty in examining specific boundaries, changes in rhythms etc. on this level is compensated for by studying the time-spatial strategy itself.

The case of Scania

Planning policies developed by Region Scania were chosen for closer scrutiny due to this region’s ambitious and information-rich investigations and planning documents and its explicit focus on sustainable local and regional development based on a transit-oriented strategy. This section examines its use of accessibility.

Scania has 1.2 million inhabitants within its 11,000 km² area, making it the third most populated region in Sweden. The western part in particular (with Malmö, Helsingborg and Lund as major cities) is densely settled with small municipalities, expanding cities, an open landscape dominated by large-scale agriculture, scattered villages and dense transport infrastructure. With a landscape shaped by farming, agricultural, biodiversity, cultural heritage and recreation values frequently overlap (Region Skåne, 2010). Furthermore, there are imbalances with the less-populated eastern part of the region, e.g. regarding transport infrastructure. The region is therefore in need of collaboration and coordination of municipally-based spatial planning.

The most recent attempt at collaboration was initiated in 2005, when the Scania region and the 33 municipalities within the region sought to develop a joint vision for spatial development. From an early stage, the strategy came to focus on TOD on local and regional scale (e.g. Länsstyrelsen i Skåne län et al., 2010). The project did not seek to include a formal regional plan for spatial development, which had previously proven difficult to implement due to the independence of the municipalities and the weak framework for regional planning (see Lundström et al., 2013, on Swedish planning and Metzger, 2013, on contemporary attempts at regional planning). Instead, the current strategy is based on various means of governance: it provides information to frame the understanding of the region, models for how to study or calculate the potential of TOD, good examples and forums for dialogue and collaboration with the municipalities, since it is primarily through local planning that the vision can be realised. The strategic work resulted in a series of investigations, backed up by seminars and workshops to embed and disseminate the results and the general conceptualisation of the region. As part of the thrust to embed the strategy, some publications were issued by the County Administration Board of Scania and other government bodies. Considering the number of authors and the frequent involvement of reference groups, the language and representations of the region are surprisingly hegemonic; alternative perspectives surfaces occasionally, but are downplayed or omitted in summaries or conclusions, or mediated by using more inclusive language. The leading arguments and main conceptualisation of regional development expressed in the documents are summarised below.

After an initial study of the documents on which the strategy is based, key reports concerning spatial development and the TOD strategy were selected for closer scrutiny of arguments, representations and measurements of (physical) accessibility in relation to place. In order to uncover the role of the concept for the rationale of the (time-) spatial strategy, dependencies on other spatial concepts were traced. The alliance between accessibility, density and urbanity is examined in particular in the following analysis. In order to get a wider understanding of the strategic work, the analysis was combined with participation in seminars organised by Region Scania. Finally, although principles were examined, rather than the treatment of particular places, local knowledge of the region (based on the author’s previous research and many years as a resident in the Malmö-Lund area) proved helpful when interpreting the reports and its silences.

TOD on a regional level: a polynuclear strategy

The interpretation of Scania as polynuclear is pivotal for the regional strategy. If only one representation were to be used to sum up the regional strategy, it would be a map of Scania peppered with 250 green circles covering large parts of the region (Fig. 1). The green circles indicate “densely populated areas’, and thus the ‘nuclei’ in the polynuclear pattern. Combined with maps of the dense network of railways, the conceptualisation of the region’s geography emerges (Region Skåne, 2011, 2013). A stylised image of the contours of Scania, with green patches loosely connected by lines (illustrating the high accessibility or mobility of the region), is used as the logo for the regional policy.

Following an interpretation of Scania as polynuclear, five main strategies for a sustainable and competitive development were devised: (1) Increased physical accessibility (primarily with public transportation), internally to “bind” the region together; and (2)

![Fig. 1. Map of densely populated areas (the green circles) in Scania. The blue dots represent settlements which do not fully meet the definition of densely populated areas. Note that the large cities of the region are not singled out as a category of their own: it is the impressive number of settlements which is being stressed, not least their proximity, which is overemphasised by the disproportionate size of the circles (Copyright Region Skåne). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.) Source: Region Skåne (2011: 24).](image-url)
externally to expand or strengthen the region; (3) development of polynuclear structure, with special attention to cities acting as the growth engines for the region; which would be done with (4) a call for “sustainable and efficient growth” of all settlements; and (5) which should be socially attractive (Region Skåne, 2013: 56). This strategy was intended to protect farmland, facilitate urban growth (not only in the main cities but also in the smaller nuclei) and nurture business. The aim was to combine progress with sustainability by focusing on accessibility and the polynuclear structure, in particular its transit-oriented nuclei (c.f. Calthorpe, 1993, for a similar approach).

The concept ‘polynuclear’ is illustrated in a model with homogeneous and seemingly impenetrable spheres of different colours connected with arrows, while the background (the countryside) is white and empty (Region Skåne, 2011) (Fig. 2). When emphasizing nuclei, a distinction is made between city and countryside and the focus is on urban centres, although with a seemingly inclusive approach: 250 settlements are assembled as the region.

The definition “densely settled areas” refers to settlements with 200 inhabitants where the houses are no more than 200 metres apart. In the reports cited above, this statistical unit substitutes for the lack of specific statistics concerning cities in Sweden. The national statistics focus primarily on the municipal level, which almost always includes both urban and rural areas. The substitution within the documents from Region Scania was pursued to the extent that one report stated that the concept “city” would be used as a synonym for “densely populated areas” (Region Skåne, 2010: 12). The wide definition provided a picture of a densely populated Scania sprinkled with nuclei for polynuclear development. However, an examination of the illustrations provided in the reports tells another story of urbanity. These are dominated by pictures of bustling city streets framed by early 20th century multi-storey houses, drawings of city centres with cafés, pubs, shops, cycle paths and railway stations, and illustrations from internationally renowned metropolitan centres such as Barcelona and New York. Photographs from particular events, such as street festivals and farmers’ markets, are frequently used, thus portraying a city with crammed streets and festive activities. The only report in which photos from small towns in the region are frequently used is that by Länsstyrelsen i Skåne län et al. (2010), but these illustrations are only used to illustrate problems; empty car parking spaces, derelict land and brownfield areas. These problems are contrasted with the region’s potential: urban qualities exemplified by the density and character of the inner city of Malmö, the largest city in the region (pop. 300000).

The explicit focus on inner-city environments is further emphasised by the few illustrations capturing the counterpart of the urban-centred vision: the countryside or ‘green’ areas. In illustrations of lush parks and the open countryside no settlements are to be seen, and neither the illustrations nor the accompanying text depicts suburban neighbourhoods, the city edge or urban sprawl. The illustrations capture a division between city and country, silencing the majority of the 250 settlements and the countryside. This rhetorical drift from an inclusive regional approach to a focus on cities is of crucial importance for how the strategy is being developed.

**Binding the cores together**

“The accessibility [within the region] facilitates movements between the settlements, but there is also a need for urban qualities in the cores to lure people to go there.” (Region Skåne, 2011: 40).

According to the strategy, increased physical accessibility, i.e. improved transport infrastructure, will “bind the region together” and thereby enable progress (Region Skåne, 2013: 49). However, accessibility requires attractions, not only infrastructure. The reports argue the need for towns to specialise based on their unique (rather than place-specific) qualities in order to develop such attractions. Yet the urban focus, and the need for expansion, is not questioned. Whether large or small, one report states, urban qualities can be developed in any municipality (Region Skåne, 2011).

According to a report commissioned by Region Scania from a consultancy bureau (WSP, 2013), even small towns need to compete with high density (to create a proper “nucleus”) and high accessibility traits in order to attract business. Furthermore, the need for *urbanity* and measures of this are discussed at length (e.g. Gehl Architects, 2010; WSP, 2013), whereas specific qualities of the small town or village (or, for that matter, the countryside) are rarely discussed and only expressed in very generic terms, without further elaboration (e.g. Region Skåne, 2013). With such generic descriptions of the qualities of small settlements, on the one hand, and with the reports stressing the need for high density and high accessibility to be successful, on the other, the incentive for a municipality *not* to aim for as much urban expansion as possible remains unclear.

Despite the polynuclear claims, the urban hierarchy in Region Scania is clearly pronounced, with the distinction of the three major cities as “growth engines” (viewed as competing on international level), eight regional cores (which are pivotal on regional level), with the remaining settlements comprising the local level. The engines (a metaphor of mobility, not accessibility) are intended to make the wheels turn faster. In order to achieve this, the region has joint responsibility for supporting the growth engines: the main cities are where universities, specialist retail outlets etc. should be located (Region Skåne, 2013). The strong focus on the wellbeing of the engines is captured in the paradoxical phrase “few cores provide [the base for] polynuclearity” (Region Skåne, 2013:17). Furthermore, the importance of the “distribution of the development” is emphasised: it is stated that every part of the region needs to be “tied” to a regional core in order to take part in the development – and only if the seven regional cores are thoroughly connected will it be possible to use the full potential of the region (Region Skåne, 2013:27). This is described as a one-way process, with creativity and development trickling down through the hierarchy from large cities to small. The closer the ties, the more will trickle down through the network (Region Skåne, 2011: WSP, 2012, 2013).

Although mobility is the glue that binds the region together, travel, transportation and movements are rarely discussed or

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**Fig. 2.** ‘Complementary polycentrism’. The different colours represent different functions of the cores. Note the white background. (Copyright Henell Grafisk Form AB). (For interpretation of the references to colour in this figure legend, the reader is referred to the web version of this article.) Source: Region Skåne (2011: 11)
portrayed, except by bicycle in the inner city core, railway stations and abstract flows between the cores. Thus although increased connectivity or interaction between towns is described as a driving force for development, travel itself and its impact on everyday life or the environment are rarely mentioned. This is illustrated by the argument for “time densification”, i.e. faster or more frequent trips or more robust infrastructure for public transport, in order to “strengthen regional accessibility” and turn it into one region for the labour market (Region Skåne, 2013). Examinations of timetables and investments in infrastructure should reveal differentiated accessibility with the focus on certain places (the growth engines and regional cores) which such time densifications inevitably require. Instead, examples of friction-free travels are brought forward in the report apparent. For instance Region Skåne (2013:36) predicts that increased accessibility by 2030 will have collapsed the time–space of the region into a city, functionally and mentally, transforming remote pastoral areas to the equivalent of New York’s Central Park.

From such an understanding of accessibility as friction (and conflict) free and as a marker of progress, it follows that the greater and denser the region, the better. Consequently large, internationally iconic regions are used as references (e.g. inside cover of Region Skåne, 2013), rather than sustainable regions of the same size. More importantly, the 30 regions included for comparison all have a much higher population density, which is why time–space compression plays such an important role in the strategy. The underlying message is that if the distances within the region (and to cities in its vicinity) are shortened, then Scania will be in the same league as the iconic metropolitan regions.

The modern conceptualisation of accessibility is pervasive in the documents studied. The accessibility measures may sometimes seem random (see especially Monell et al., 2007) or difficult to use in practice, but they nevertheless provide an important rhetorical basis for general arguments for the strategy, since the modern idea of accessibility lurks behind the discussion on nodes, density, time densification and the conceptualisation of urbanity. Even discussions on how to create attractions and innovative environments are reliant on ideas of accessibility rather than place.

Measuring the potential for TOD

Measures and parameters used to analyse the potential for TOD reveal the importance of a modern conceptualisation of accessibility (and basic accessibility measures) for the regional strategy. Two reports in particular (Länsstyrelsen i Skåne län et al., 2010; WSP, 2013) elaborate upon such measurements.

Länsstyrelsen i Skåne län et al. (2010) provides compelling and detailed maps of the land use and accessibility of nine existing TODs in the region, focusing on a one-kilometre radius from railway stations. These mapping exercises are presented as a model for further investigations, but simultaneously market the potential for TOD in the region. The most prominent contribution to the debate by the report is that it estimates the potential for densification in transit-oriented locations (up to one kilometre from regional train stations), arguing that 80% of the land is available for development and that housing for the entire population of Scania could easily be offered within these locations. Key to the measurement is a slippery definition of “non-developed land”, which includes everything except water, the safety distance to the railway and the footprints of houses. The rest (including roads, gardens, parking lots, farmland, churchyards etc.) is defined as “non-developed”. Adding to what is left out, the importance of the spatial pattern of houses, roads etc. is not considered. The silencing of road infrastructure is particularly problematic considering the key role of transportation and mobility for the report.

The report provides a decisive urban perspective, arguing the potential for densification; use an overlay of recommended maps, it argues, and available sites for densification will reveal themselves. However, information provided by the last map in the report poses a major obstacle to such development in at least six of the nine towns studied: the map displays the existence of industrial activities close to the railway and their required safety distances. Due to the strong focus on densification in the report, rather than on the importance of industry for the economy, identity and history of the cities and thus their future development, industrial activities are treated as anomalies in relation to the idea of the dense town. The report argues that local planners should “carefully consider the priorities”, i.e. examine whether industries could be relocated in order to make way for residential areas and businesses (c.f. the exclusion of industries from TOD in Calthorpe, 1993). The need for new locations for industries is not discussed, nor is the risk that they would choose a location next to a major road rather than the railway.

In order to understand the relationship between density and accessibility, but also why industries are regarded as an anomaly, the report commissioned by Region Scania and produced by WSP (2013) is informative. It devises tools for measuring the potential for densification and tests these in three existing transit-oriented locations, arguing that: “Accessibility and urbanity are two concepts, or phenomena, which are central for densification and for the advantages with densification on the local level” (WSP, 2013: 13) and that: “Accessibility and density interact to a high degree, and accessibility is, like density, a good measure of urbanity.” (Ibid: 16).

The three phenomena are even described as being mutually dependent (i.e. reinforcing each other) and therefore the analysis of accessibility and urbanity plays a key role in the report’s discussions on densification. The report is unyielding in its depiction of density and urbanity as positive, and as necessary, for instance for economic growth and creativity. Problems and conflicts are rarely mentioned and then only as “challenges”. For example, one of the conflicts discussed is how to deal with: “spokespersons for the small scale, a settlement which cannot offer “everything” from the urban mix”, in a municipality where planners and politicians “aim to embrace densification” (WSP, 2013: 38).

The quote follows a discussion arguing that some people are incapable of considering the inevitable “dynamic” of their village or town. The solution to this “challenge”, according to the report, is to provide sufficient information during the planning process. The modern idea of progress, which according to Massey (2005) denies strategies for difference, is thus embedded in the conceptualisation of densification.

The merging of urbanity/density/accessibility illustrates the conception of a node. The higher the density, the more mobile and ‘dynamic’ the node becomes and, following the modern conception of accessibility, there is no upper limit mentioned for how dense (or urban) it could become. The more dense/urban/accessible, the more progress. Interestingly, it remains unclear whether accessibility is regarded as a means to an end or the end itself, illustrating how entangled arguments concerning accessibility are in the modern idea of progress.

With the merging of urbanity/density/accessibility, the intensity and mobility (or circulation) sought for is the highest possible. An alternative conceptualisation of a city would be a place which can harbour a large variety of rhythms.

The density/urbanity/accessibility alliance is dependent on an idea of accessibility as distance in time or space to a point, whereas a relational definition would not have merged so easily with urbanity and density and would not have facilitated a one-sided idea of density that disregards the place-taking of activities. This
explains why two elements which require substantial space (green space and industry) do not fit the model used in the report.

The treatment of industries in both reports discussed above illustrates the difficulties in handling activities which require large areas, and where it is obvious that this place-taking is an intrinsic part of the activity. It is significant that the industries are not even considered urban, but as “usually fenced areas with a total lack of urban qualities” (WSP, 2013: 60). Consequently, industries are excluded from the analysis of towns and their potentials. Furthermore, despite their obvious importance for urban development, the risk zones for industries mapped in Länsstyrelsen i Skåne län et al. (2010) are not considered when summing up the land available for densification. Thus the place-taking of industries is made invisible, while abstract ideas of business, innovation and the economy characterise the arguments for urban development. In a similar manner, for green space it is stated that it is not the area but the qualities and the accessibility which are important. Thus, the number of square metres available for residential housing or business is regarded as a positive feature, but this is not true for green space. Accordingly, the green structure plan of the region offers a parallel discourse on regional development (focusing on land use mapping in the countryside), rather than exploring ways to integrate green structure and TOD, thus contributing to the divide between city and country (Region Skåne, 2012).

Conclusions

This analysis illustrates the importance of a relational reading of how planning strategies striving for sustainable development depend on bedrock concepts such as accessibility, inherited from the modern planning they aim to transcend. Thus, in order for accessibility-based planning to actually differ from mobility-based planning, careful conceptualisation of accessibility is required.

The case study of Region Scania demonstrates how easily arguments for accessibility team up with, and enable, a thrust for progress and time-spatial collapse, regionally and in discussions on densification. This is due to a shared Euclidean conception of space and mobility, where accessibility and mobility are treated as synonyms. The reduction of place to a point in space and the disregard of the need to bind these places makes the contemporary definition of accessibility highly problematic and opens the way for double-speak, in which progress (viewed as increased mobility) and the destruction of particular places or values are treated as separate events. The discussion on densification in the case study offers a crucial example; if the importance of sites for activities to take place and the need for absences (or boundaries) is ignored, the potential for densification is largely overestimated, power relations are silenced and conflicts regarding the process of densification are underestimated.

Although Region Scania is aiming for an inclusive approach for its entire population, the accessibility/density/urbanity triumvirate has led to an exclusive urban focus, emphasising the modern divide between cities viewed as in need of development and a countryside in need of protection. The countryside is left with the argument that farmland will be safeguarded by making cities more compact. This conceptualisation of accessibility excludes social and environmental qualities which are not based on high density/urbanity. The internal differences needed for developing a polynuclear region will therefore be difficult to foster; the regional strategy is squeezed into a model of progress and urbanisation that does not fit large parts of its towns, townsships and inhabitants, which is likely to cause conflicts with sustainability goals.

A relational definition would facilitate symmetrical treatment of ‘rural’ and ‘urban’ activities, so that accessibility for farming, leisure, small-scale alternative production enterprises etc. can be acknowledged. Furthermore, it would allow studies which take the specific place as the basis for discussion; how much mobility and what kind of rhythms would benefit the development of this place? Mobility for whom and for what kind of activity?

Finally, a relational reading would facilitate studies of the ordering effect of mobility, i.e. tracing the place-making and social exclusions of mobility. Crucially, such studies could differentiate the accessibility offered by highways and railway investments based on their place-making. Environmental impact assessments already clearly illustrate the difference, but are marginalised by a parallel discussion on the economic and societal gain of increased accessibility. If mobility were put in place, these two worlds could be combined within a single study.

Acknowledgements

The research was funded by FORMAS, the Swedish Council for Environment, Agricultural Sciences, and Spatial Planning. Greet De Block, Vera Vicenzotti and Emma Paulsson provided helpful comments on the manuscript. Illustrations are published with kind permission of Region Skåne (Fig. 1) and Ingrid Henell (Fig. 2).

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