



**AALBORG UNIVERSITY**  
DENMARK

**Aalborg Universitet**

## **Urban design for mobilities**

*Towards material pragmatism*

Jensen, Ole B.

*Published in:*  
Urban Development Issues

*DOI (link to publication from Publisher):*  
[10.2478/udi-2018-0012](https://doi.org/10.2478/udi-2018-0012)

*Creative Commons License*  
CC BY-NC-ND 3.0

*Publication date:*  
2017

*Document Version*  
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*  
Jensen, O. B. (2017). Urban design for mobilities: Towards material pragmatism. *Urban Development Issues*, 56, 5-11. <https://doi.org/10.2478/udi-2018-0012>

### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal -

### **Take down policy**

If you believe that this document breaches copyright please contact us at [vbn@aub.aau.dk](mailto:vbn@aub.aau.dk) providing details, and we will remove access to the work immediately and investigate your claim.

**How to cite:**

Jensen O. B. (2017) *Urban design for mobilities – towards material pragmatism*, *Urban Development Issues*, vol. 56, pp. 5–11  
DOI: 10.2478/udi-2018-0012

**URBAN ISSUES**

---

5

#urban design  
#mobilities design  
#material pragmatism

## Urban design for mobilities – towards material pragmatism

---

**Ole B. Jensen**

Department of Architecture, Design and Media Technology  
Aalborg University, Denmark  
obje@create.aau.dk

**Abstract**

The aim of this paper is twofold: firstly, to present a critique of mainstream transport thinking based on the so-called ‘mobilities turn’, and secondly to connect this to a design perspective. The aim is thus to establish this reflection based upon a theoretically informed discussion. In this paper, we shall explore the potential for a better understanding of contemporary urban challenges through the cross-disciplinary approach of ‘mobilities design’. The paper investigates how this notion is based on an understanding of materialities and social action that is framed under the heading of ‘material pragmatism’. The paper critically discusses transport versus mobilities and uses the combination of urban design and mobilities not just to argue for a pragmatic approach to urban transformation, but also to illustrate how such a different frame of understanding is better suitable for the ‘kind of a problem a city is’ to paraphrase the well-known urban scholar Jane Jacobs.

submitted: September 2017

reviewed: January 2018

accepted: March 2018

© 2017 Ole B. Jensen. This is an open access article licensed under the Creative Commons Attribution-NonCommercial-NoDerivs License (<http://creativecommons.org/licenses/by-nc-nd/3.0/>).



## Introduction

The aim of this paper is twofold: firstly, to present a critique of mainstream transport thinking based on the so-called ‘mobilities turn’, and secondly to connect this to a design perspective. The aim is thus to establish this reflection based upon a theoretically informed discussion.

Contemporary urbanism is marked by radical transformations across scales, institutions, and disciplines. So-called ‘grand challenges’ related to climate change, resilience, radical demographic shifts, refugees, and the radicalisation of global competitiveness between nations, cities, and regions are furthermore looming on the horizon. In the midst of such multi-scalar and geopolitical turmoil, we find a very old model of cohabitation, namely the city! Granted in the light of the thus described transformation, cities are not what they used to be. For one thing, they are relational and interdependent socio-technical nodes in networks blurring the fixed notion of global and local, here and there. New inequalities, growth forms, and cultures emerge from the transformed habitats of the contemporary urban dweller – often determined and defined by things and technologies defying human centrality and control. The contemporary networked and digitally connected landscapes of infrastructure, urban fabric, and mobility are the habitats of the 21st century urban dweller. Still, on the background of such grand challenges, changes, and transformations we are living relatively localised everyday lives, where the provision of housing, schools, workspaces, and goods needs to be provided in functionally effective urban settings. So on the one hand we see scales being blurred by global transformation processes and yet we find ourselves utterly localised in places of appropriation and territorialisation.

Few (if any) theories and academic frames may describe, analyse, and ‘solve’ the above-mentioned challenges. In fact, some of them may not need to be ‘solved’ in accordance with a Modernist dream of rational urban policy making and planning. Some of these transformations require rather that we ‘learn to stay with the trouble’ (Haraway 2016). Even though the smoke has long cleared from the battlefields of the post-modern critique of rational city planning we still need to orient our urban policies and planning framework towards unknown futures (Urry 2016). However, the dream of human control, social engineering, and rational master planning may have been surpassed by a messy reality calling for new visions of scales, human agencies (and any agency for that matter), and steering.

In this paper, we shall explore the potential for dealing with a smaller corner of this contemporary urban complexity by taking the point of departure in a critique of

the notion of ‘transport’. Rather, we would argue here, the so-called ‘mobilities turn’ with its critique of instrumental transport planning and policy-making offers new perspectives and opportunities for dealing with contemporary urban challenges. In the light of the latest development of the ‘mobilities turn’ towards architecture and design we furthermore argue that the emergent perspective of ‘mobilities design’ offers an even finer grained and seismographic analytical raster. The emergence of ‘mobilities design’ brings more sensitivity to materialities, non-human entities, spaces, and sites. Furthermore, it grounds our analysis in concrete situations of everyday life mobilities. This then takes place on a theoretical and philosophical backcloth of what elsewhere has been termed ‘material pragmatism’ (Jensen 2016; Jensen & Lannig 2017). The key argument in this paper is therefore that exploring concrete mobile situations in the light of mobilities design opens up a different way of engaging with one of the key dimensions of the contemporary city; making sense of the increasing flow of people, goods, vehicles, and information.

The structure of the paper is the following. After the introduction, we move shortly to the debate about transport versus mobilities and identify the ‘mobilities turn’ against this background. In section Three, the specific situational focus is presented leading on to an exploration of the emergent position of ‘mobilities design’ in section Four. The discussion is then elevated to a more general reflection upon the notion of materialities and how to re-think urban mobilities and mobilities in-situ. This is done with a frame of reference that increases its sensitivity to materials, surface, volumes, colours, voids, spaces and other material markers of mobilities design. The paper ends in section Six with some concluding reflections and some pointers for future research in the light thereof.

## From transport to Mobilities

The critique of transport geography and transport planning from the 1960’s and 1970’s has predominantly focused on it being predominantly quantitative, positivist and law seeking (Cresswell & Merriman 2011: 2). The intellectual framework of ‘rational agency’ and ‘instrumental travel’ led to a methodological preference for quantitative modelling. One problem with such an approach is obviously that only that which may be quantified may ‘enter the model’. However, another problematic issue is the tendency to focus transport models on isolated individuals. Other research in the everyday life complexity associated with household decision-making dynamics suggests that this is a simplified understanding of what shapes urban mobilities: ‘One person’s mobility patterns

may have a direct impact on another's capacity to be mobile, so, we must consider mobile subjects as clusters of interacting agents, not simply singular and individuated actors. Even within households, if one member changes his or her means of mobility, for example by deciding to ride a bicycle to work one day or to take the only car available another day, then the other household members must adjust to this choice' (Jensen, Sheller & Wind et al. 2014: 4).

The transport paradigm of 'predict and provide' with its reliance on the 'rational mobile individual' as the predominant 'subject position' is part of the problem of 'not understanding urban mobilities' (Jensen 2015: 480). J. Larsen, J. Urry & K. Axhausen et al. argue more firmly that transport planning and modelling 'mostly ignore the social dimensions of travel' (Larsen, Urry & Axhausen et al. 2006: 3). The problem is caused, in part, by the basic assumptions within the transport paradigm, according to which 'travel is a derived demand' and furthermore that people minimise their 'generalised costs of travel' (Bannister 2008: 73). Put differently, travel (or mobility) is a secondary (derived) activity and the mobile subject is a rational agent. Such understanding spills into the aggregated analysis of urban mobilities within metropolitan areas and conurbations. In particular, quantitative transport modelling seems to live with this blind spot: 'For the economically modelled passenger (travelling in the course of work) nothing happens en route, everything happens before and after' (Watts & Lyons 2011: 106). It is probably timely here to pause and clarify that this paper is not a crusade against quantitative approaches or models. As argued elsewhere (Jensen 2015) these may have their virtue. However, if underlying assumptions of rational agency, travel as a state where 'nothing really happens', and general under-appreciation of the prevalence of the phenomenon of mobilities are left to stand, we only partially understand the multiple and complex patterns of urban mobilities in the contemporary city.

As mentioned in the introduction the so-called 'Mobilities Turn' has for more than a decade been exactly a response to the social and cultural blind spots of the 'transport gaze'. In this short article we can only partially give justice to this and the reader is therefore urged to consult the key works as for example J. Urry (2000; 2007) or T. Cresswell (2006). Elsewhere J. Urry and M. Grieco point to the problem of transport perception neglecting to grasp the importance of 'social synchronisation in organising travel and transport' (Grieco & Urry 2011: 1). It is often said, that if one was to describe the key difference between a transport perception and a mobilities perception, the former is about the movement of people, vehicles and goods between 'A and B' and

the latter is about this, as well as the fact that mobilities are 'more than A to B' movements. The social and cultural repercussions of intensified mobilities need a more fine-grained analytical raster than the one of transport research. It needs a broad and cross-disciplinary grounding that mirrors the studied complexity. Or in the words of P. Adey et al.: 'Mobilities research is at the forefront of developing new ways of thinking about the politics of matter. Whilst people are mobile, the equally differentiated mobilities of information, capital, goods, and services that are essential for contemporary life are a sustained feature of mobilities research. Indeed one of the defining characteristics of mobilities research is its attention to the mobilities of multiple materialities, both human and non-human' (Adey et al. 2014: 265)

Much more could be said about the 'mobilities turn' but here we shall now follow the next step of the line of arguments in this paper and 'zoom in' on the actual mobile situation.

### Mobilities in Situ

One dimension of the mobilities turn is to 'put the situation first'. In other words it has been devoted not to studies of grand systems and abstract structures, but to the understanding of the practical, situated, everyday life mobilities 'on the ground' so to speak (e.g. Jensen 2013, 2014, 2015; Jensen & Lanng 2017). Putting situations first does not mean to be ignorant of large systems, structures of economies or global and geopolitical background. It rather means starting and ending the analysis in situated practices but always in the contexts of larger systems and structures. Much debate in the social sciences has been devoted to 'settling' this dispute between structure and agency, between micro and macro. This, we believe, is rather futile and a more constructive approach is to set the situation first and try to make sense of it in very concrete, material, and pragmatic terms. Part of this may utilise a heuristic of different 'levels' such as O. B. Jensen who discriminates between what is in the situation defined and shaped by the human and what is from 'outside' the situation so to speak (Jensen 2013). Through a theoretical scaffolding based upon a further development of E. Goffman's dramaturgical understanding of social interaction (Goffman 1959) Jensen speaks of a 'staging' of mobilities in which the 'mobile situation' becomes a pivotal point (Jensen 2013). In particular the situational understanding of the 'staging of mobilities' points to the fact that mobile practices are staged 'from above' through planning, design, and policy making. However, mobile practices are equally important acted out 'from below' as it were by social agents in concrete situations. The situational understanding of mobilities suggests a much more con-

crete and real-life perspective than established transport research. Furthermore, the close attention to material spaces, social interaction and embodied performances of mobile subjects lends itself very well to ways of thinking that we find within architecture and (urban) design. The staging mobilities perspective is an approach that asks the pragmatic question ‘what makes this specific mobile situation possible?’ By answering this with a reference to materiality, sociality, and the embodiment of the social situation, mobilities in situ is seen to be staged ‘from above’ through planning, design, and policies as well as ‘from below’ through the normative, affective, and embodied choices made by the mobile subject in the situation. This may seem to be the previously-mentioned dichotomy, but it is not. The pragmatic focus on the situation and its unpacking into different dimensions is only an analytical necessity and not an ontological claim. The situation is more complex and multi-scalar than any structure/agency model could account for. The pragmatic understanding of the multi-dimensionality of the mobile situation is rather a form of ‘situational holism’ whose reach is a process of creative exploration.

### Mobilities Design

With a point of departure in the situational approach to mobilities, and with a strong interest in how people feel, sense, and experience actual mobilities, the research field of ‘mobilities design’ is now emerging. The first phase of critical potential emanating from the mobilities turn drew its energy from social science in general, and sociology in particular (Urry 2007). However, looking towards architects and designers has been identified as the next important step in progressing even further into the ‘meaning of mobilities’ (Jensen & Lanng 2017). Before we reach for the inspiration from design and architecture let us, however, dwell upon a now classic text within transport and planning. Sir C. Buchanan’s report ‘Traffic in Towns’ identified the tension and importance of the relationship between design/architecture and transport. In this report, the situation of separated realms for architecture and transport is criticised and a proposal for a more holistic understanding under the name of ‘traffic architecture’ is proposed: ‘There is a new and largely unexplored field of design here, but it involves abandoning the idea that urban areas must consist of buildings set alongside vehicular streets, with one design for the buildings and another for the streets. This is only a convention. If buildings and access ways are thought of *together*, as constituting the basic material of cities, then they can be moulded and combined in a variety of ways many of which are more advantageous than the conventional street. A useful term to describe

this process is ‘traffic architecture’ ... (Buchanan 1964: 67–68, italics in original).

Regretfully this sound piece of advice to create a new discipline of ‘traffic architecture’ consistently seemed to fall on deaf ears. C. Buchanan, as a figure in history, will not be remembered for this, but rather for so much else of relevance to transport and planning. This, however, does not mean that he did not have a point, on the contrary. Therefore, it is with a strong sense of historical consciousness that the articulation of ‘mobilities design’ draws a line back to C. Buchanan’s call for ‘traffic architecture’. However, for reasons already explained, the notion of ‘traffic’ is too limited and without the sociological sensitivity of the notion of mobilities. Equally the notion of ‘architecture’ is too restricting as a frame for understanding the materiality of mobility. Rather one should look to the more general notion of ‘design’ as this will be much better aligned with the pragmatic agenda of understanding ‘what enables this situation’. At times, this may be a road, a building, and a terminal where the architectural vocabulary may serve one well. However, at other times it may be an algorithm coding the traffic light, an app on a smart phone, or a real-time travel data feedback. In such cases (and many, many more), the wider notion of design is much more agile and operational.

As the title of this paper suggests the field of urban design combined with the ‘mobilities turn’ is the outset from where the critique of mainstream transport research is launched. The notion of ‘urban design’ is on its own a contested term and an open field. From its inception at the Harvard Graduate of Design conference organised in 1956 (Krieger & Saunders 2009) until today the term has taken on many meanings. In the early definitions of urban design, the bridging between architecture and planning was a particularly important dimension. Citizen’s involvement and their experiences of public urban spaces was furthermore a cornerstone of the emerging discipline. However, later into the profession’s evolution process urban design also at times became associated with developer-led processes and urban growth regimes. In the context of this paper the notion of urban design that is considered to be relevant to a grounding of mobilities design is inspired by critical and participatory positions such as ‘Everyday Urbanism’ (Chase, Crawford & Kaliski 1999), and the different examples of urban design working on public space design (Gehl 2010; Jacobs 1961; Hajer & Reijndorp 2001; Lynch 1981; Whyte 1988). What these positions all have in common is an articulate concern for the city’s public spaces and the citizen’s progressive appropriations thereof. So the critical positions within urban

design that are concerned with citizen's involvement and social inclusion as well as human flourishing are the 'kinds of urban design' that would work for a grounding of mobilities design (see Jensen 2013: 46–64 and 175–193; and Jensen & Lanng 2017: 11–24 for a specific discussion of the urban design/mobilities nexus). Furthermore, the spatial literacies and design vocabularies of urban design with its detailed understanding of e.g. physical materials, colours, smell, surfaces, volumes, voids, and ambiances are important elements of a spatially sensitive mobilities design approach.

In mobilities design, two steps are possible. First, the focus on design enables a more fine-grained material understanding of the mobile situation. But the research agenda of mobilities design also enables engagement with 'designerly ways of thinking', in other words, the creative capacities to think differently about the status thus far taken-for-granted and the meaning of, for example, mundane and inconspicuous transport infrastructures and landscapes. Such sites are often deemed to be 'non-places' (Augé 1995). However, the creative and pragmatic capacity of mobilities design enables a sidestepping of such 'moral geographies' (Cresswell 2006) and thus at the end a much more clear-headed and sobering understanding of the mobilities landscapes and infrastructural systems as 'habitats of the contemporary urban dweller'. These landscapes are where we live our mobile lives. Furthermore, nothing (except analytical prejudice) suggests that 'nothing happens' and that we are 'switched off' as we move through contemporary urban mobility systems.

To illustrate the transformative capacity of mobilities design, D. B. Lanng, S. Wind & O. B. Jensen. (2015) refer to a workshop in the Danish Municipality of Vejle. The city had a centrally located railway station whose aesthetic and functional appearance were more signs of the past than the future. By engaging in a mobilities design workshop, it was proposed to renew the area through a planning process. However, in this context the interesting thing to notice was that the framing of mobilities rather than just transport, and the connection to design and designerly ways of thinking, meant that the traffic engineers, architects, and city planners all came together 'on the neutral ground' of this new cross-disciplinary notion (Jensen, Wind & Lanng 2015; Lanng, Wind & Jensen 2015).

The notion of mobilities design thus partly derives its potential from the critique of transport and its advocacy for designerly ways of thinking. However, the inspiration drawn from architecture and urban design also points towards an increased sensibility towards the materialities of actor networks.

## The Materialities of Actor Networks

So far, the argument has been one of criticising the instrumental and cost-oriented understanding of human movement as mere 'transport'. Rather the 'mobilities turn' seems to suggest a sensitivity to the social and cultural effects of the increasing levels of connectivity and mobilities and, furthermore, that designerly ways of understanding the city and its infrastructural landscapes not only invite a creative and critical perspective on the 'moral geographies of non-places', but also open up to a more vivid and pragmatic understanding of the actual materialities at play. Here the mobilities design perspective leans on positions from actor-network-theory (Latour 2005), ideas of 'vibrant materialities' (Bennett 2010), design as environmental affordance (Yaneva 2009), and a holistic understanding of humans and their habitats as entangled and twisted (Ingold 2011) rather than as subjects standing before objects. The critical potential of these theories dealing with new materialities or 'other materialities' (Jensen 2016) is that they promise to move beyond human exceptionalism, to break with representative forms of Cartesianism, and invite a more multi-sensorial and affect-oriented understanding of humans in their entangled relationships with things, artefacts, spaces, technologies, and infrastructures. It is a way of thinking that thinks of design as a form of 'enacting the social': 'Design [is] a way of producing additional attachments that make a variety of actors congregate, forming different groupings and assembling social diversity. Tracing networks with wood, steel, polished surfaces and blinking signals, bip-bing doors and blinking elevator buttons, design connects us differently, linking disparate heterogeneous elements and effects, thus entering a game of producing, adjusting and enacting the social' (Yaneva 2009: 282).

It is a position that acknowledges 'thing-power' as a critical corrective leading us to see objects and artefacts as having a 'vibrant materiality' beyond human command and control (Bennett 2010). It is a material and pragmatic position that acknowledges B. Latour's point about the multi-valence of 'actors'. In Latour's understanding 'anything that does modify a state of affairs by making a difference is an actor' (Latour 2005: 71). To Latour the key question is if the thing, event, or phenomenon makes any difference in the course of some other agent's action or not. What we are exploring with a notion of mobilities design based on a strong sense of materialities is a form of 'situational holism' that takes us beyond subject and object, the social and the material as opposites. According to O. B. Jensen, we are facing: '... a new 'material turn' within the already established field of mobilities research. There is a need for research

targeting the material, physical and design-oriented dimensions of the multiple mobilities from the local to the global. Despite its cross-disciplinary identity, the ‘mobilities turn’ has not capitalised the potential in exploring issues of material design and physical form. The exchange value with design is twofold; first this means getting closer to the ‘material’ which is needed if mobilities research can claim to have understood contemporary mobilities. Second it means that the creative, explorative and experimental approaches of the design world become within reach of mobilities research, offering new potential for innovative research. Design research, on the other hand, might enter into a fruitful relationship with mobilities research by taking in a ‘mobile’ perspective on design objects and issues, including methodological insights, concepts of space and place, and relations between fixities and flows’ (Jensen 2014: 239).

In such a context of new materialism T. Ingold is right in pointing to the context-dependency of all actions, and that the notion of ‘the social’ and ‘the material’ may in fact not help understanding the pragmatic situation at hand if these words work as abstractions detaching the materialities and the human values invested into the situation (Ingold 1996: 187). His solution is to discharge the two notions all together, substituting them with the holistic notion of ‘ecology’. This is in strong accordance with P. Vannini when he states that ‘materials are their doings and it is through their qualities, movements, and force that they exert their life’ (Vannini 2015: 5). So from the material sensitivity of mobilities design we start seeing a new mobile ontology setting textures, materialities, ambiances, and processes much more centrally (Anderson & Wylie 2009: 326).

The potential of an analytical framework of mobilities design based upon the mobilities turn, new theories of materialities, and a connection to urban design and designerly ways of thinking is multi-dimensional. In this paper we shall argue that there are at least five key insights that need to be factored in. We shall now turn to these in the concluding remarks.

### Concluding remarks

There are five key insights coming out of the critical re-organisation of mobilities, urban design and materialities that carry repercussions for the understanding and analysis of urban mobility.

Firstly, we need to understand that mobilities are ‘more than A to B’. Mobilities cannot be reduced to secondary activities, to derived demands, to instrumental acts of physical displacement, or to costs alone. Rather, the mobilities turn suggests that we are alive as we move and increasingly the way we move must be understood

to have profound repercussions for the ways we think of ourselves, of social others, and of the material world. Not being switched off as we move, we need an analytical vocabulary that accepts the multi-sensorial, affectual, and emotional relationship to the world.

Secondly, we need to understand this mobile complexity through a framework of multiple disciplines. Mobilities design lends itself to a cross-disciplinary re-thinking of the ‘meaning of moving’, in particular the designerly ways of thinking with their immanent problematisation of the ‘taken-for-granted’ and their capacity to challenge this through a constant probing and entertaining of ‘what if?’ questions.

Thirdly, the concrete and specific focus of the mobilities perspective that comes with the mobilities design approach works as an important supplement (and at times corrective) to the generic predict-and-provide transport surveys that tend to only frame the world through quantitative and model-based investigations. The situational perspective of the material and concrete mobilities of the everyday life world comes much closer to ‘real life’ and ‘how it actually feels to be moved’ within the complex mobilities landscapes and transport infrastructures of the contemporary city.

Fourthly, the mobilities design approach carries a much more spatially and materially sensitive understanding of urban mobilities than any other transport approach. The inclusion of affect, multi-sensorial experience and the body coupled to a vocabulary of materials, surfaces, voids, volumes, and colours means that we are standing with an analytical raster that is much more fine-grained and well-equipped to understand the complex relationships between moving, sensing and feeling bodies, and material spaces and design.

Fifthly, all this comes together in a perspective and a position that we may term ‘material pragmatism’. The analytical position of material pragmatism points to the actual effects and situations and not some abstract and generalised perspective. Material pragmatism asks ‘what enables this particular mobile situation?’ and in answering it seeks to move beyond subjects standing before objects, humans before spaces, people before infrastructures. Rather, material pragmatism argues for a situated, holistic, materially sensitive understanding of Mobilities. Such a position asks the pragmatic question of how design decisions and interventions stage mobilities? Moreover, it is an attempt to answer such an enquiry through a realisation of the importance of a new sensitivity to the ‘material surfaces, the tactile engagements with technologies, the spatial volumes shaped by architectural intervention, the socio-technical geographies of complex networks and so on’ (Jensen & Lanng 2017: 40).

The understanding of everyday mobilities through the perspective of material pragmatism and mobilities design means rendering the well-known open to radically new interpretations and understandings. It means connecting fields of enquiry and thought that normally stay separated in academic disciplines or administrative insular domains. It means seeing mobilities as much more than simple acts of movements, and rather to start appreciating the profound mobile dimension of humanity. It means connecting across mental barriers separating

‘stuff and things’ from people. It means creating publics and creating critical discussions about matters of concern that need new perspectives to be appreciated. And it means opening up to a deep and profound understanding of the limits to human agency, human exceptionalism, and human omnipotence. Working within the frames of mobilities design based upon material pragmatism means being sensitive to the need to ‘stay with the trouble’ (Haraway 2016) rather than aiming for rational planning procedures and a fixing of pre-defined puzzles.

## REFERENCES

- Adey, P., Bissell, D., Hannam, K., Merriman, P. & Sheller, M., eds., (2014) *The Routledge Handbook of Mobilities*, Routledge, London.
- Anderson, B. & Wylie, J. (2009) *On geography and materiality*, Environment & Planning A, 41, 318–335.
- Augé, M. (1995) *Non-places: Introduction to an Anthropology of Supermodernity*, Verso, London.
- Bannister, D. (2008) The Sustainable mobility paradigm, Transport Policy, 15, 73–80.
- Bennett, J. (2010) *Vibrant Matter. A political Ecology of Things*, Duke University Press, Durham.
- Buchanan, C. (1964) *Traffic in Towns*, Penguin, Harmondsworth.
- Chase, J., Crawford, M. & Kaliski, J., eds., (1999) *Everyday Urbanism*, The Monacelli Press, New York.
- Cresswell, T. & Merriman, P., eds., (2011) *Geographies of Mobilities: Practices, Spaces, Subjects*, Ashgate, Aldershot.
- Cresswell, T. (2006) *On the move: mobility in the modern western world*, Routledge, London.
- Gehl, J. (2010) *Cities for People*, Island Press, Washington DC.
- Goffman, E. (1959) *The Presentation of Self in Everyday Life*, Penguin, New York.
- Greico, M. & Urry, J., eds., (2011) *Mobilities: New Perspectives on Transport and Society*, Ashgate, Farnham.
- Hajer, M. & Reijndorp, A. (2001) *In Search of New Public Domain*, NAI Publishers, Rotterdam.
- Haraway, D. (2016) *Staying With the Trouble. Making Kin in the Chthulucene*, Duke University Press, Durham.
- Ingold, T. (1996) *Situating Action VI: A Comment on the Distinction between the Material and the Social*, Ecological Psychology, 8(2), 183–187.
- Ingold, T. (2011) *Being Alive. Essays on Movement, Knowledge and Description*, Routledge, London.
- Jacobs, J. (1961) *The Death and Life of Great American Cities*, Random House, New York.
- Jensen, O. B. (2013) *Staging Mobilities*, Routledge, London.
- Jensen, O. B. (2014) *Designing Mobilities*, Aalborg University Press, Aalborg.
- Jensen, O. B. (2015) *More than A to B: Cultures of mobilities and travel*, [in:] R. Hickman, M. Givoni, D. Bonilla & D. Banister, eds., *Handbook on Transportation and Development*, Edgar Elgar, Cheltenham, 479–490.
- Jensen, O. B. (2016) *Of ‘other’ materialities: why (mobilities) design is central to the future of mobilities research*, Mobilities, 11 (4), 587–597. DOI: <http://dx.doi.org/10.1080/17450101.2016.1211826>.
- Jensen, O. B., M. Sheller & S. Wind (2014) *Together and Apart: Ambiences and Negotiation in Families’ Everyday Life and Mobility*, Mobilities 10(3) 2015 [paper published online 21.01.2014], 363–382. DOI: 10.1080/17450101.2013.868158.
- Jensen, O. B., S. Wind & D. B. Lanng (2015) *Mobilitetsforskning. Byen, bevægelsen og planlægning*, BYPLAN, 4/15, 34–39 [in Danish].
- Jensen, O.B. & Lanng, D.B. (2017) *Mobilities Design: Urban designs for mobile situations*, Routledge, New York.
- Krieger, A. & Saunders, W., eds., (2009) *Urban Design*, University of Minnesota Press, Minneapolis.
- Lanng, D. B., Wind, S. & Jensen, O. B. (2015) *Meget mere end et parkeringshus. Mobilitetsdesign i praksis – et eksempel fra Vejle stationsområde*, BYPLAN, 4/15, 40–46 [in Danish].
- Larsen, J., Urry, J. & Axhausen, K. (2006) *Mobilities, Networks, Geographies*, Ashgate, Aldershot.
- Latour, B. (2005) *Reassembling the social*, Oxford University Press, Oxford.
- Lynch, K. (1981) *Good City Form*, MIT Press, Cambridge Mass.
- Urry, J. (2000) *Sociology Beyond Societies. Mobilities for the Twenty-First Century*, Routledge, London.
- Urry, J. (2007) *Mobilities*, Polity Press, Oxford.
- Urry, J. (2016) *What is the Future?*, Polity Press, Cambridge.
- Vannini, P. (ed.) (2015) *Non-representational methodologies: Re-envisioning research*, Routledge, London.
- Whyte, W.H. (1988) *City: Rediscovering the Centre*, University of Pennsylvania Press, Philadelphia.
- Yaneva, A. (2009) *Border Crossings. Making the Social Hold: Towards an Actor-Network Theory of Design*, Design and Culture, 1(3), 273–288.



Ministry of Science  
and Higher Education  
Republic of Poland