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## Open access: flexible notions of property for concepts of public space

Tom Bieling is Designer and researcher at the Design Research Lab, *Technische Universität Berlin*, Germany, he studies the impact and relevance of demographic and sociocultural categories on design processes.

Marc Bieling is Business economist and Ph.D. in Marketing, he studies the internationalization of consumer brands, contributions of location-specific design of street furniture, and advertising in public spaces.

### Abstract

This paper discusses how notions of public space as well as concepts for its production and use can be addressed, based on the assumption that design research plays an important role not only in gaining knowledge about societal processes, but also in providing scenarios to influence or change them.

The paper further discusses positions of different groups of interest and stakeholders, including private people, public or governmental institutions, and commercial businesses influencing cityscapes.

Challenging predominant concepts of 'access' and 'property', it uses different theoretical and practical perspectives on the relation of design and public space, and although partly abstract, generates critical insights into existing approaches.

Aim is to reflect the diversity of open development and distribution strategies and to explore interventionist potential for the urban passenger arising from the complex of urban planning, commercial interest, political decision processes, architecture, technology and people.

This obviously requires a closer look on the actual relationship between spaces and behaviour, especially regarding processes of interaction and communication. Practical value is increased by linking theoretical foundations of this broad field to applied design project work, arguing that cross-fertilizing potential can be gained here.

**Keywords:** Private/Public Space, Access, Property, Hybrid Spatialities, Design Infrastructure.

## Introduction

In parallel with the rise of concepts evolving in the digital context, such as Open Source, User generated Content, Social Software, Free- and Shareware, Creative Commons and general licensing and distribution philosophies, various disciplines have pioneered the notion of "open culture systems to create works that take free access as both strategy and ethic" (Kovats et al., 2011, p.158).

In this context, Rifkin refers to a paradigm shift from a concept of property to a concept of access (Rifkin, 2000). The proceeding fusion (or also differentiation) of digital-virtual, analogue-material, private and public spaces, create potentials for different transfers of principles of potential and factual patterns of production, use and behaviour.

Aspects of use in private or public space generally lead to questions of access settlement (Kantzow and Oswald, 2004). The discourse on intellectual property in the context of ongoing technological change and new media might here be taken as a source of inspiration for changing perspectives on the idea of spatial property.

In light of a nomadic behaviour of the economy, the ongoing technological improvement as well as phenomena of cultural vanity, the mobility of the individual could be seen as a mass phenomenon. Does this mean that traditional function and theory of (public urban) space as stable, permanent and historic locality has become obsolete? Kyong Park (2004) formulates the question: Are Cities already "moving"? Or shall we start to imagine and design mobile, flexible cities?

This notion refers to the idea of a shift towards fluid spaces. Given various concepts evolving in the digital context, above cited such as Open Source and Social Software, Rifkin refers to a paradigm shift from a concept of property to a concept of "access"-infrastructures (Rifkin, 2000). Virtual worlds e.g. of sales and distribution turn closer to the user (or non-user). Services that used to be accessible through "real" spaces (e.g. Train Stations or Bus-Stops) technically migrate closer to the user, e.g. via mobile Devices. As Maertins and Schäfer (2008) claim the material components initially maintain "untouched": Buses and trains still operate in specific times, at specific spaces. However everything else, everything "immaterial" shall be kept under direction of the individual. Which basically means (in Maertins and Schäfer's case): Traffic stays public and collective, its access becomes private and individual.

The necessity of a different (than the "traditional") understanding of space becomes also obvious when we link it to Massey's (1984) thoughts on places in terms of networks, movements and interaction. Castells (1998) describes space in this context as increasingly being expressed through "flows", rather than through the physical "place". An important phenomenon can be identified here, as Pachenkov and Voronkova enunciate in their observation on aestheticization and mobility in the context of urban public space:

'Probably, the gatherings of the numerous citizens for discussing public concerns in the city squares particularly designed for this purpose are

out of time? Probably flash mob or one-time performances could be considered more convenient spatial forms of public gatherings in contemporary cities? Just because they can take place in any site of the city, because they are more mobile and flexible – this does not make them less public though'. (Pachenkov and Voronkova, 2010, p.2)

Consequently both refer their assumptions to the discourse about "Non-Places" (Augé, 1995) and Cresswell's consideration that these require new mobile ways of thinking: "Not only does the world appear to be more mobile but our ways of knowing the world have also become more fluid" (Cresswell, 2003, p.17).

In the following we will discuss different perspectives, mainly represented by the three terms 'Producer Citizen', 'Public Realm and Space' and 'Designing Infrastructures for flows'. All point towards a deeper understanding of future challenges and concepts for public space. Being aware, that already these different perspectives probably need deeper discussion than this paper can provide, our aim is to at least open and intensify a discourse here.

## **Producer Citizens**

Taking into account the concept of *produsage* (Bruns, 2010), "a neologism describing an ongoing, never finished process of content development by a vast community of users and producers who apply remixing practises in pursuit of new possibilities, whose artefacts are digital objects" (Sonvilla-Weiss, 2010, p.19), it is worth taking a look onto analogies between real and virtual spaces in an *open* source sense. Tracing the "emergence and development of cultural memes" (Sonvilla-Weiss, 2010, p.19) requires to acknowledge the influence of design as practice (congruent to architecture, urban planning, politics, media, film industries etc.) on the complex phenomenon of "spatial use".

As Bruns argues, *produsage* is about "establishing a kind of organisational structure for community-driven, collaborative content creation [...] leading to significant new creative and informational resources that are challenging [...] through a number of key universal principles" (Bruns, 2010, p.19).

Some of these principles are being defined by means of fluid heterarchy, ad hoc meritocracy; open participation, communal evaluation; unfinished artefacts, continuing process; or common property and individual rewards (Bruns, 2010, p.26).

Any of these are both linked to the production as well as to the use of space, and therefore to the *produsage* of space. This allows various thoughts on interventional potential:

Since spatial intelligence and intervention is strongly connected to "production of space, its conditions and its ecological and political parameters, which determine the composition of architecture and urban development" (Boettger and Von Borries, 2009), different practices and potential for "resistance to domination" (Sennett, 1994, p.26) become possible. For instance any form of street art, outdoor-festivals, performances or public interventions might be used as "tools and means of the alternative aestheticization of the city public life and space

(Pachenkov and Voronkova, 2010, p.5). Such "tactical resistance" (Certeau, 1984), based on decoding, re-interpretation or re-appropriation, are obviously not limited to "real" spaces, e.g. "resistance against roads (through seeking to 'reclaim the streets'); [...] the resistance of advertising space (through anti-advertising)" (Desmond, McDonagh and O'Donohoe, 2001, p.258), but can occupy other fields, such as the "'reclamation' of the body through tattooing or piercing" or virtual spaces, as in the "resistance through the creation of web-spaces via the development of new 'communities'" (Desmond, McDonagh and O'Donohoe, 2001, p.258).

Here, we can obviously identify a link to collaborative mashups, in terms of community efforts and content creation. Not least technological support for independent activities enables both individuals and communities to perform these activities either still separately or in aggregation. This means, that "groups of participants can pool their resources, coordinate their efforts, and develop central platforms from which their outcomes can be disseminated to the wider world" (Bruns, 2010, p.24).

Inspired e.g. by the practice of online-sharing, different scenarios for a hybrid peer-to-peer system become possible. Joint use of resources as an economic and cultural concept has experienced a renaissance in the virtual realm of the internet: Distributed computing, the open source movement and peer-2-peer file sharing have been identified as potential sources of social innovation (Manzini, 2006). Göllner, Le, Conradie and Lindenberg (2010), identify the main differentiation of these developments from the traditional approaches of resource allocation: "The underlying structural and processual mechanisms that are characterised by distributed systems, bottom-up principles and many-to-many communication. Unlike traditional systems that are centralised and hierarchically organised, these online sharing developments offer a conceptual approach that is highly flexible and dynamic" (Göllner, Le, Conradie and Lindenberg, 2010, p.485). Especially in the context of local neighbourhood settings, such participatory characteristics could possibly transferred to apply new or alternative opportunities for bottom-up, peer-2-peer sharing practices in the local context.

An important input here is constituted through the interaction of human beings with and in their environment: In their theory about *Non-Intentional Design* Brandes and Erlhoff describe the human behaviour and different ways of (re)use with public objects, that often do not satisfy individual demands of emotional, functional or aesthetic demands (Brandes, 2009; and Brandes and Erlhoff, 2005). Official or unofficial public design is, however, being developed by different stakeholders, mainly represented by three groups of interest: a) public or governmental institutions, that also coordinate the urban planning. b) commercial businesses, influencing cityscapes e.g. by advertising their goods through print-advertisement, shop-windows or other brand-presence. c) People, bringing their private life into public space simply by them being present alone or by using public objects in an intended or non-intended way. The latter, the "urban passengers" (Brandes, 2009) temporarily intervene in the design of public space, by adding an own, unplanned, usage to an existing infrastructure.

In her political theory, Hannah Arendt points out the importance of Publicity to a society. She states, that public space enables community and (their) identity, by simply separating and connecting people (Brandes, Stich and Wender, 2008, p.157). The same function that publicity has in whole, needs also to be achieved by any of its objects: The objects in public space help people to step out of their subjective private sphere, since the objects function as areas of projection for peoples' diverse perceptions. Objects in public space make room for interaction, by creating diverse perspectives of view and use. In this context it is unimportant, whether the actual use of the objects is intended by the designer/architect or not.

## **Public Realm and Space**

Historically general understandings of public space have been the one of "gathering". Fundamental definitions of public sphere from that perspective are most of all found in the works of Jürgen Habermas (1989, 1999) or Hannah Arendt (1958, 1967), which are both associated to the "ideals of citizens meeting each other in order to discuss the public issues, to produce an open and free public debate and to formulate public concern" (Pachenkov and Voronkova, 2010, p.1). In recent years such single focus on the "gathering" aspect has been put into question by various social philosophers, Ethnologists and Thinkers on Urban Public Space who criticize a missing aspect of "moving through" (Pachenkov and Voronkova, 2010, p.1) among the general discourse on public realm and space.

Richard Sennett seeming to consider anonymity as a central element, simply describes public realm as "a place where strangers meet", a rather culturally concerned approach of putting the "sociability" aspect into the centre of investigation (Sennett, 2010), including also aspects of performativity (e.g. Goffmann, 1959). By the way, from an Actor-Network perspective (Latour) it could be considered to lay a further focus on socio-material assemblies here.

Independently from these several perspectives on Public realm, it seems to be striking common sense to define the "public" as oppositional to the "private", as Weintraub, et al. (1997) discuss in their "theory and politics of the public/private distinction".

Against the background of growing global discourses on privatization, private space seems to have partly become a synonym for "property", whereas "public space" often is to be defended as something to be related to general open "accessibility".

In light of advancing urbanization the marketing and positioning of cities towards different target groups has increasingly entered the cultural and administrative (governmental) spotlight. So too have discussions about public design, in addition to streets, squares, buildings or transportation.

Decisions about public design as in the design of e.g. street furniture follow criteria that apply to public space design in general and raise different questions: Who does the city really belong

to? In what form do decision-making processes about the city's design and the immediate environment of its residents and visitors take place?

Major parts of the "current anxiety [...] about vanishing public spaces", as Pachenkov and Voronkova claim, seem to be rooted in the "very fact of blurring and disappearance of these two key characteristics of the urban public space – the notion of *gathering* and the notion of *public-ness*" (Pachenkov and Voronkova, 2010, p.2).

In light of the digital evolution on the one hand and the growing interplay between digital media and public space (Koch, 2004; Law and Mol, 2001) on the other hand, resulting in hybrid spaces with a variety of actors involved, we might ask two basic questions: 1) How do digital-virtual use practices and those of analogue-material space occupancy relate to each other? 2) (How) are principles from the one world being transferred to the other? Or rather: (what) could the analogue world learn from the digital here?

## **Designing infrastructures for flows**

With the proliferation of advertising spaces on public ground to the private sector, the process of privatization of public space is enhanced. On the one hand, private investors will seek to defend 'their' territory against competitors or acts of vandalism. On the contrary citizen will try to defend 'their' city against commercial interest.

This surely challenges the public (administrative/governmental) planning and decision-making processes with the unique roles and interrelations of the respective public and private individuals and institutions involved.

In consideration of a public-private decision-making process, various stakeholders are involved: People and organizations – including, among others, pedestrians, drivers, businesses, public transportation services, tourists, administration offices (Klemp, 2004, p.112), municipal officers, urban planners, designers, architects, and institutions – seek to participate in the decision-making processes involved in public spatial design. The responsibility for designing public space is usually given to communal institutions. While the administration prepares and structures the design process, in democratic societies elected municipal officers assume the final decision. State authorities use private companies by awarding commissions for public design within the framework of permissible practices. Various models of cooperation are possible. As in every economic process, one must assume that the "furnishing" of cities is a lucrative business model. This does not only apply to commercially-financed street furniture. With the announcement of a design competition for, say, a square with benches, flower tubes, and wastebaskets, municipal institutions begin a process of deliberation regarding combinations of designs and costs for the acquisition and maintenance. For those who offer the products, there must be economic advantage; otherwise the market has failed in some way. Counted among the providers are not only the manufactures and

delivery services but also the designers and architects, both of whom accept the result-oriented market process.

In the democratic decision-making process, the subjective opinion of each person is legitimized through the formation of majorities and majority decisions. It is very unlikely that each person will be able to identify specifically, say, with the design of a square, a bus shelter color, or the proper number and height of advertising columns. An efficient organization of the decision-making process is hence necessary, not least in order to limit the related commitment of tax money.

However the question concerning the "ownership" is still not being solved. The question for a "Design" potential raised here is concerning the possibility to plan public space not for occupation, but for flows, for moving: A public space for mobility?

From a city-competition point-of-view (Bieling and Bieling, 2008) the positioning of a city in all levels of competition is the result of a complex interplay of economic, geographic and socio-cultural conditions, which are also locally determined. At the same time, a city's position is influenced by its development strategies as a specific aspect of urban governance. General trends and changes in economic, social and institutional differences make cities more similar in their conditions.

This trend enhances the importance of local characteristics, providing comparative advantages in the competition for increasingly mobile people and capital. Correspondingly, cities are enforced to improve their very specific urban profile. Facing this trend, urban competitiveness and corresponding strategic approaches with specific goals and modified instruments have become important efforts of urban politics.

This competition reinforces the historically-evolved differences between countries, regions, cities, districts, even individual streets. The increase in city marketing activities or rankings of cities (e.g. Welfare, Touristic Attractions, Demographic Change, Scientific Community) testifies to this trend of differentiation and distinction (Ebert, 2004, p.2).

The proceeding fusion (or also differentiation) of digital-virtual, analogue-material, private and public spaces, create potentials for different transfers of principles of potential and factual patterns of use and behaviour. Approaches and concepts for goods without ownership or for common property have been highly relevant for instance in the case of Linux software system.

Rifkin refers back to the political scientist Crawford MacPherson, who claims that the individual right, to exclude others from advantage and benefit, is no longer appropriate to constitute economic relationships between people. In a complex world with mutual and multifaceted dependences, the 'inclusive form of property' becomes more important (Rifkin, 2000; MacPherson, 1973; Kantzow and Oswald, 2004, p.698): The personal right, not to be excluded from use or advantage of the whole society's accumulated resources (MacPherson, 1973). In this regard Kantzow and Oswald (2004, p.699) highlight the aspect of a world of

communication and information, which is “decoupled from physical materiality”, since information can be made accessible without material effort.

Rifkin comes to the conclusion: as long as exclusive property rights were the dominating paradigm for the organisation of human social action, freedom would be put on a level with autonomy and autonomy with property. In an economy of networks of providers and users, freedom means something different. Not autonomy and property, but inclusion and access become guiding criteria for the degree of individual freedom – “in geographic space as well as in cyberspace” (Rifkin, 2000, p.233).

Not least in the context of design for social sustainability such way of thinking becomes relevant: the sharing of resources and mutual help, in the context of neighbourhoods, is a practice common across different cultures that possesses great potential for reducing the environmental impact of consumption (Jégou, Liberman and Wallenborn, 2009).

Approaches of joint use and mutual exchange are especially promising in dense urban environments, where a high concentration of diverse goods and services exists amongst inhabitants. However, Göllner, Le, Conradie and Lindenberg (2010, p.484) indicate urban neighbourhoods to be also “characterized by a high fluctuation of inhabitants, missing inter-generational bonds and social homogeneity of inhabitants, which are factors correlating with a decrease in sharing activities”.

Based on the experiences of the project *StreetLab*, described in the last V!RUS issue (Bieling, et al., 2010) the Design Research Lab of Deutsche Telekom Laboratories (Technical University Berlin, University of the Arts Berlin) has been conducting an ongoing research project, called *Networked Neighbourhoods*<sup>1</sup> (2011). The project, set in several local neighbourhoods in Berlin, mainly focuses on shared resources and the role of elderly people in their local neighbourhoods and homes. Enforcing and cultivating social sustainability through enabling members of urban neighbourhoods to share resources, and building as well as using sharing systems is one of the major aims of this mentioned project.

Claiming that “the network is the enterprise” (Castells, 2001, p.67), Castells refers to the lateral organization of business in which different stakeholders are linked together in a cooperative network. It become obvious the structures of social life of the “network society”, maintained, as William J Mitchell points out, “through a complex mix of local face-to-face interactions, travel, mail systems, synchronous electronic contact through telephones and video links, and asynchronous electronic contact through email and similar media” (Mitchell, 2003, p.17). As Shaw sums it up: “The geography of informatics also describes the dispersed and delocalized nature of communities in the network society” (Shaw, 2008, p.31).

In regard to transferring such notions to the Design of public space, we must however keep in mind, that public space’s appearance does not only refer to architecture, urban planning or

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<sup>1</sup>Available at: <<http://networkedneighbourhoods.com/>>.



advertisement, but also by the public itself: On the border of private and public space, the “private people, assembled to a public” (Habermas, 1999) actively take part on the design of public space (Erlhoff and Marshall, 2007, p.332) – whether consciously or not.

## **Conclusion and Outlook**

In light of hybrid spatialities, the growing-together of “real” and virtual spaces and therefore not least in the context of urban spatial design it becomes necessary to broaden and deepen the discourse on concepts for property and the definitions and forms of access-rights and -responsibilities.

An interdisciplinary perspective for design research, and related disciplines seems to consist of process-related approaches in order to deal with behaviours of interaction that are relevant for public space.

An open process of infrastructuring design may challenge here the established categories of research, whereas one central aspect of infrastructuring design in the social field is to create or imagine platforms that allow or support emancipated action by the people concerned.

With this framing the challenge for professional design to participate in public controversial discourses is considered.

In relation to the concept of *produsage* (Bruns, 2010), we introduced the term *Producer Citizen* as a phenomenon of different actors that concern to both the production as well as the use – and therefore to the *produsage* of space. In a further step, concerning public realm (as the way shared space concept explains the role of public space), we discussed digital-virtual use practices and those of analogue-material space occupancy and how they relate to each other. These perspectives are to be regarded as a basis for future challenges of *designing infrastructures for flows*. Especially combined with the idea of participating ‘communities of practice’ (Wenger, 1998; Lave and Wenger, 1991), empowering citizens as stakeholders of the public space is one fundamental approach for a future-oriented and sustainable development of society. Thus the both metaphorical and practical notion of open access can be regarded as crucial element for designing intelligent infrastructures for public space.

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## **References**

- Arendt, H., 1958. *The human condition*. Chicago: University of Chicago Press.
- Arendt, H., 1967. *Vita activa: oder vom tätigen Leben*. München: Piper.
- Augé, M., 1995. *Non-places: introduction to an anthropology of super-modernity*. London: Verso.
- Bieling, M. and Bieling, T., 2008. Competition of cities: contributions of location-specific design of street furniture. In: *Proceedings of Marketing Cities: Place Branding in Perspective*. Berlin.
- Bieling, T., Joost, G. and Müller, A., 2010. Collaborative potential: designing coexistence in urban context, *VIRUS*, [online] 4. Available at: <<http://www.nomads.usp.br/virus/virus04/?sec=4&item=2&lang=en>> [Accessed 14 April 2011].
- Boettger, M. and Von Borries, F., 2009. *Raumtaktik: office from a better future*. Available at: <<http://www.raumtaktik.de>> [Accessed 14 April 2011].
- Brandes, U., 2009. *Design durch gebrauch*. Basel: Birkhäuser.
- Brandes, U. and Erlhoff, M., 2005. *Non-intentional design*. Köln: daab.
- Brandes, U., Stich, S. and Wender, M., 2008. *Design by use*. Basel: Birkhäuser.
- Bruns, A., 2010. Distributed creativity: filesharing and produsage. In: S. Sonvilla-Weiss, *Mashup cultures*. New York: Springer, Wien, pp.24-38.
- Castells, M., 1998. *The information age: economy, society and culture*. Vol. 3. End of Millennium. Oxford: Blackwell.
- Castells, M., 2001. *Die Internet galaxie: Internet, Wirtschaft und Gesellschaft*. Wiesbaden: VS Verlag.
- Cresswell, T., 2003. Introduction: theorizing place. In: Verstraete, G., Cresswell, T. (Ed.), ed. 2002. *Mobilizing place, placing mobility: the politics of representation in a globalized world*. Amsterdam: Editions Rodopi B.V.
- Certeau, M. de, 1984. *The practice of everyday life*. Translated by Steven Rendall. Berkeley: University of California Press.
- Design Research Lab. [online] Available at <<http://www.design-research-lab.org>>.
- Desmond, J., McDonagh, P. and O'Donohoe, S., 2001. Counter-culture and consumer society, *Consumption, markets & culture*, 4 (3), pp.241-280.
- Ebert, C., 2004. *Identitätsorientiertes stadtmaking: ein beitrag zur koordination und steuerung des stadtmaking*. Frankfurt a.M.: Lang.
- Erlhoff, M. and Marshall, T., 2007. *Design dictionary: perspectives on design terminology*. Basel: Birkhäuser.
- Goffman, E., 1959. *The presentation of self in everyday life*. New York: Penguin.
- Göllner, S., Le, J., Conradie, J. and Lindenberg, J., 2010. Networked neighbourhood: exploring the potential of threshold interfaces to support peer-to-peer sharing in urban neighbourhoods. In: Ceschin, F., Vezzoli, C. and Zhang, J. (ed.), 2010. Sustainability in design: Now!: challenges and opportunities for design research, education and practice in the XXI century. In: *Proceedings of the LeNS Conference*, vol. 1. Bangalore, India, 29 September - 1st October 2010. Sheffield: Greenleaf Publishing, pp.484-492.

- Habermas, J., 1989. *The structural transformation of the public sphere: an inquiry into a category of bourgeois society*. Cambridge Massachusetts: The MIT Press.
- Habermas, J., 1999. *Strukturwandel der Öffentlichkeit*. Frankfurt a. M.: Suhrkamp.
- Jégou, F., Liberman, J. and Wallenborn, G., 2009. Collaborative design sessions of objects proposing energy-saving practices. In: *Energy Efficiency & Behaviours conference*. Maastrich, Holland 20-21 October 2009. Available at: <[http://issuu.com/sustainable-everyday/docs/iseu\\_lighting\\_en](http://issuu.com/sustainable-everyday/docs/iseu_lighting_en)> [Accessed 14 April 2011].
- Kantzow, W. and Oswalt, P., 2004. Eigentum: wem gehört die Stadt. In: *Schrumpfende Städte*, Band 1 Internationale Untersuchung, HatjeCantz, Osterfildern Ruit, pp.693-699.
- Klemp, K., 2004. *Papierkorb trifft hochhaus: essays zum öffentlichen raum*. Frankfurt a. M.: VS Verlag.
- Koch, A., 2004. 'Nowhere and now here': the hybrid nature of communities and spaces, *Networks and communication studies*, Netcom, 18 (3-4), pp.171-179.
- Kovats, S., et al., 2011. Transmediale.11: response: ability. In: *Festival/Exhibition Catalogue*, Berlin.
- Latour, B., 2001. *Das parlament der dinge: für eine politische ökologie*. Berlin: Suhrkamp.
- Lave, J. and Wenger, E., 1991. *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Law, J. and Mol, A., 2001. Situating technoscience: an inquiry into spatialities. *Environment and planning D: society and space*, 19, pp.609-621.
- MacPherson, C., 1973. *Democratic theory: essays in retrieval*. Oxford: Oxford University Press, p.122.
- MacPherson, C., 1978. *Property, mainstream and critical positions*. Toronto: University of Toronto Press.
- Manzini, E., 2006. *Design, ethics and sustainability: guidelines for a transition phase*. Study text. Milan: DISIndaco, Politecnico di Milano, pp.1-8.
- Massey, D., 1984. *Spatial divisions of labor: social structures and the geography of production*. London and Basingstoke: Macmillan.
- Maertins, Ch. and Schäfer, K., 2008. Digitalisierung und Hybridisierung von Raum und Infrastruktur: Mobiles Ticketing im öffentlichen Verkehr. Discussion Paper. Code: SP III 2008-105. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Mitchell, W. J., 2003. *Me++: the cyborg self and the networked city*. Cambridge: MIT Press.
- Next Neighbourhood, 2011. [online] Available at <[www.next-neighbourhood.net](http://www.next-neighbourhood.net)>.
- Pachenkov, O. and Voronkova, L., 2010. Urban public space in the context of mobility and aestheticization: setting the problem. In: *Workshop Introductory Speech*, Institute for European Ethnology, Humboldt University, Berlin.
- Park, K., 2004. Moving cities. In: Oswalt, P., et al. *Schrumpfende Städte*. Ostfildern-Ruit: Hatje Cantz Verlag, 184 f.
- Rifkin, J., 2000. *Access: das verschwinden des eigentums*. Frankfurt a.M.: Campus.

- Sennett, R., 1994. *Flesh and stone: the body and the city in western civilization*. New York / London: Norton.
- Sennett, R., 2010. The public realm. In: Bridge, G., Watson, S. (Eds.), ed. 2010. *The Blackwell City reader*. London: Blackwell Publishers, pp.261-272.
- Shaw, D.B., 2008. *Technoculture*. Oxford: Berg.
- Sonvilla-Weiss, S. (Ed.), 2010. *Mashup Cultures*. New York: Springer, Wien.
- Weintraub, J., et al., 1997. The theory and politics of the public/private distinction. In: J. Weintraub and K. Kumar (Eds.), 1997. *Public and private in thought and practice*. Chicago: The University of Chicago Press.
- Wenger, E., 1998. *Communities of practice: learning, meaning and identity*. Cambridge: Cambridge University Press.