# The Infrastructures of Diversity: Materiality and Culture in Urban Space – An Introduction

by MARIAN BURCHARDT (Max Planck Institute for the Study of Religious and Ethnic Diversity, Göttingen) and STEFAN HÖHNE (Technische Universität Berlin)

#### Introduction

In August 2013, several hundred Muslims gathered at the *plaça major* in the center of the small town Mollét del Valles, located about 20 minutes by train outside Barcelona. Since the beginning of Ramadan, the Al-Huda community had begun assembling right beside the municipal administration to carry out their five daily prayers. They did so in order to call public attention to their lack of a place of worship and to protest the city administration's decision that interdicted their use of a locale as a mosque. However, behind the presence of Muslims in public space was no anti-mosque campaign, but instead planning directives, building codes, and use regulations. In other words, the city administration mobilized elements that formed an infrastructural regime that was premised on making the existing built environment collectively inhabitable for diverse populations. Yet while infrastructures became central to the visibility and dynamics of religious diversity, they did not become less political (Burchardt 2016).

Arguably, most scholars would agree that cities are made up of material assemblages and diverse human populations – of "stone" and "flesh" in Sennett's (1996) famous rendition. However, in contemporary scholarship both aspects – materiality and human diversity – constitute two largely disconnected ways of thinking about urban space. Scholars interested in materiality are loosely connected and inspired by the "infrastructural turn" while those focusing on human diversity work within the "diversity turn". Contrary to that, this special issue is based on the premise that materiality and diversity are entangled, mutually shape one another and should thus be studied in conjunction. Therefore, we argue that bringing research on urban infrastructures and on urban diversity into dialogue opens up new avenues for thinking about the politics and meanings of space. Spanning distances between Rio de Janeiro, London, Manila and Ankara, the contributions to this special issue ask how socio-material assemblages shape encounters with diversity in urban life in relation to concrete social problems.

We begin with the observation that the key processes that organize difference in urban life (social polarization; ethnic and cultural segregation; functional differentiation; subjective fragmentation) are always articulated with particular spatial expressions and regimes. These spatializations of difference are facilitated, shaped, and, to some extent, produced by material infrastructural formations. Transport infrastructures - roads, sideways, railways, buses - connect certain urban populations and simultaneously disconnect others. They sometimes come to be seen as belonging to particular groups that may actually even own these systems and monopolize management and use (Angelo and Calhoun 2013). How do these infrastructures enable, circumscribe or constrain interactions between specific ethnic groups across the often invisible boundaries that crisscross contemporary megacities? How do they enable practices of ethnic or religious commuting that create networks of people spanning different spaces? In urban India, access to water and sanitation systems are often

mediated by caste membership and ethnic or religious affiliation. What Björkman (2015) calls "pipe politics" is thus largely inseparable from the politics of ethnic and religious diversity. In addition, religious buildings and architectures are commonly subject to complex infrastructural norms such as buildings codes and zoning laws that contribute to distributing religion in urban space and spatializing religious differences (Becci, Burchardt and Giorda 2016). But they also constitute infrastructures in their own right in that they facilitate particular practices and exchanges and are material symbols meant to speak to diverse urban audiences.

In Western cities, the use of infrastructures of urban policing and surveillance is sometimes concentrated in high-density neighborhoods with high levels of migration-driven diversity and operates through racial and other kinds of profiling. How do such infrastructures realize the visibilization of particular groups of migrants as delinquents, suspects, etc.? How do other technologies and practices of cultural categorization of diverse classes of people interact as assemblages that have particular effects on perceptions and realities of hierarchy and difference?

These examples illustrate the need to explore the multiple ways in which urban diversities unfold and are performed and governed in relation to sociotechnical systems, ranging from infrastructures of mobility, the provision of energy, water and sanitation, to communication technologies, architectural formations, and many more. As these infrastructures consist of much more than just cables, tubes or built environments, they have to be addressed as sociomaterial assemblages, linking administrative practices, knowledge, resources and policies, thereby incorporating normative ideas, ideal subject formations and specific modes of placemaking. In doing so, they shape both the urban environment as well as the everyday practices of its dwellers. Among others, they mediate participation, formality and informality as well as inclusion and exclusion, predominantly along the lines of race, gender, class, religion and ethnicity.

It is thus clear that studying infrastructures of diversity in terms of the mediations of technology, materiality and culture calls attention to particular penetrations of things and humans and to unexpected ethnographic constellations. But it also entails new theoretical engagements and confrontations. Most scholars studying urban infrastructures are committed to post-humanist epistemologies that come together under the label of "New Materialism". Students of urban diversity, by contrast, are mostly inspired by phenomenological, cultural sociological and poststructuralist theories. Therefore, our concern goes beyond identifying a new range of empirical phenomena and involves theoretical questions as to what conceptualizations of human agency are actually adequate for the phenomena under scrutiny.

This introduction is organized as follows: we begin by outlining key features of the "infrastructural turn" and the "diversity turn" and highlight the theoretical advantages and challenges of bringing both literatures into conversation. We then develop elements for a theorization of infrastructures of diversity and explicate how the articles in this special issue contribute to this agenda.

#### The Infrastructural Turn

During the last decade, we witnessed a growing literature that addresses urban space from the viewpoint of the technological organization of the material environment. Here, the urban space is seen as constituted by technologies and infrastructures, framed as physical matter that serves particular urban functions. This fruitful approach has been pursued, amongst others, by scholars such as Ash Amin and Nigel Thrift (2002), AbdouMaliq Simone (2004 and 2006), Filip de Boeck (2011), Ignacio Farias (2010), Stephen Graham and Colin McFarlane (2015) and many more.

All these studies explicitly or implicitly draw inspiration from social-philosophical thought that began with Durkheim's proposal of "social morphology" and was continued by Gilbert Simondon, Ernst Kapp, Deleuze and Guattari, and Donna Haraway. From the 1980s onwards and with the rise of Laboratory Studies and Science and Technology Studies, Bruno Latour, Madeleine Akrich and others, under the label of "Actor-Network-Theory", became highly influential in many fields, including Urban Studies. Moreover, thinkers such as Manuel DeLanda (2006) and Jane Bennett (2010) developed an approach called "Assemblage Theory". Others pursued similar endeavors under the label of Material Semiotics or New Materialism. Despite conceptual and methodological differences, we suggest the umbrella term "Infrastructural Turn" for these approaches, as they all aim to rethink the role of materiality and technology in social life. In doing so, they aim to overcome the established notion of materialities as mere expressions or representations of social orders (Höhne 2012). Instead, these studies emphasize the constitutive role of technologies in society, especially in the urban realm.

#### What is Infrastructure?

The term infrastructure is more imprecise and ambiguous than it may seem. In many cases it is, for example, difficult to distinguish between urban architecture, technology, and infrastructure. Classical perspectives in sociology, history or cultural studies lack a strong theoretical and methodological approach on infrastructure in the urban sphere – a circumstance perpetuated in contemporary urban studies. The problems already started with the history of the term infrastructure itself. As the German historian Dirk van Laak (2001) pointed out, the concept harkens back to the implementation of the railways in the nineteenth century. First verifiable in France in 1875, it was used to describe railroad beds and later also other immobile components that allowed mobility. From the 1950s onwards, it was used by NATO in the context of military logistics and economic integration. Later its use expanded into the field of development aid. Following that, it became part of the vocabulary of political economy and found academic application in economy, political studies and urban

planning. Moreover, it sometimes also refers to social services like hospitals and schools, while in other cases the term "symbolic infrastructures" is applied to memorials or museums. Therefore, as many scholars wearily state, no comprehensive definition of the term can be given.

For our context here, however, we suggest an understanding of infrastructures as socio-technical apparatuses and material artifacts that structure, enable and govern circulation – specifically the circulation of energy, information, goods and capital but also of people, practices and images in the urban realm and beyond. Therefore, infrastructures mediate both integration and disruption. We further suggest that these technologies are constitutive of many elements of "the social", such as subject formations, modes of production and consumption as well as the many routines of everyday life and the ways people encounter and interact with each other. As a consequence, infrastructures mediate social relations.

Understanding infrastructure in this way demonstrates that socio-technical networks are hardly neutral. While they often appear depoliticized, they carry highly political or normative ideas of their ideal users and their transformative power to improve cities, communities and so on. As urban historian Thomas Bender once quipped: "There are democratic and there are republican sewage systems." Understanding these political functions of urban material forms is also central to the analysis of urban diversity and to questions of how infrastructures help to discipline, exclude or include segments of urban populations. Scholars have observed how infrastructures are becoming increasingly militarized or privatized in the ways in which they participate in the making and unmaking of public realms and social struggles (Graham and Marvin 2001; Graham 2011). Along these lines, there is also a growing interest in how, and to what extent, infrastructures shape urban practices, bodies and encounters.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See for example the inspirational contributions in the Special Feature: Interactions with Infrastructure as Windows into Social Worlds: A Method for Critical

While analyzing urban socio-technical systems allows us to address everyday relationships in new ways, they also allow us to relate these dimensions to changing modes of production and global accumulation regimes. These connections have been pursued rather sparsely und definitely need more attention. This holds especially true for question how infrastructural systems are used to "manage" the development of built and social environments "elsewhere". Also, these studies have rarely engaged the cultural dynamics of cities as nodes of transnational social processes.

Post-Marxist theory and the critical urban scholarship of David Harvey (2009), Neil Brenner (2004), Ernesto Laclau and Chantal Mouffee (1985) has the potential to address these blind spots. These approaches supply a salutary broadside against the dangers of the aesthetization, black-boxing and fetishization of technologies and infrastructures. Socio-technical assemblages are not only powerful actors and institutions in the context of urban diversities, but they are also the product of human labor. Therefore, addressing working conditions, modes of exploitation and self-organization should also be a central focus of our inquiries. Incorporating these perspectives improves our understanding of urban infrastructures as sites of struggle over resources and recognition.

Furthermore, especially in the studies following Latour and his colleagues, the notion of a radical symmetry of human and non-human actors has led to a somewhat simplified understanding of agency (Höhne and Umlauf 2015). Scholars have objected that the way objects are treated in Actor Network Theory is too abstract and historically vacuous. In fact, objects never circulate in unqualified ways in social life. As Navaro-Yashin (2009: 9) has argued, "objects are not involved in relations with humans in a symbolically or linguistically neutral arena. Objects are, rather, qualified through language." This observation directly runs up against the anti-deconstructionist and anti-poststructuralist spirit of these theories. It also matters to us, since most cultural sociologists of urban diversity many of whom are committed to poststructuralist notions of meaning and practice probably find new materialist descriptions of humans wanting. We now turn to these perspectives on urban diversities.

#### The "Diversity Turn"

There is a rich literature on diversity and urban space that is interested in space as both premise and outcome of situated encounters and urban interactions of ordinary people (Berg and Sigona 2013: 348). In contemporary cities, because of their nature as hubs of migration and cultural differentiation, these encounters involve people of different kinds. Simmel (2010 [1903]) offered the classical definition of the city as a place where different people can live together. Today, however, because of planetary urbanization on the one hand, and massively increasing transnational migration on the other, diversities have multiplied and intensified. Differences refer to economic or class status, ethnicity, religion, country of origin, legal status, first language, and gender identities. The complex interactions between these differences are what Steve Vertovec (2007) called super-diversity.

Encounters between people whose subjectivities are organized along these axes of difference can acquire different kinds of intensity and routine. Susanne Wessendorf (2013) talks about "common-place diversity" to refer to difference as a taken-for-granted feature in social life in a London borough, a kind of diversity that characterizes places that belong to no one and to all. Diversity is a feature of urban space understood here as the terrain of the micro-politics of everyday life that rework notions of solidarity, connectedness, and competition. Importantly, diversity is an aspect of urban experience - the experience of difference in routine urban socialities - but also a condition, as Meissner and Vertovec (2015) underline. In more paradigmatic perspec-

Urban Studies of the journal *City – analysis of urban trends, culture, theory, policy, action*, Volume 19, Issue 2-3, 2015.

tive, we note with Berg and Sigona (2013) that the job done by "intersectionality" in feminist research has been done by "diversity" in Migration Studies.

In addition to the "diversity turn" in the study of migration, we note the increasing interest in diversity in the study of religion, and of late, articulations of religious diversity in urban space (Becci, Burchardt and Casanova 2013; Eade 2012; Gomez and van Herck 2012) . Scholars explored how religious diversity is deployed as a key category for ordinary social classifications in urban encounters, how religious diversity is spatialized, and how religious diversity materializes through places of worship.

However, there is still a lack of attention to the material mediations of diversity in most studies as scholars hesitate to explore larger material formations such as infrastructures. Contrary to that, we suggest that the "new materialist" perspectives in urban studies provide potential for doing precisely this by focusing on how material objects, or networks of objects, assemble collectives.

At the same time, we note that while diversity is a social reality tangible for people in multiple social contexts and on diverse social scales, it has also developed a life of its own through its transformation from an academic into a political and administrative concept. Diversity has been adopted as a term by law makers, policy-makers and planners, and to the extent it has come to shape law and policy it also contributes to creating the very reality it aimed to describe. We thus gesture towards an understanding of diversity as a form of governmentality that contributes to rendering populations legible for administrative purposes. As a consequence, diversity makes its appearance on multiple sites within the research field and is a prime example of the double hermeneutics of social science categories (Giddens 1987).

In the literatures on urban diversity, only very few studies explicitly address the way the diversity of populations is actually taken into account when infrastructures are conceived, planned, and designed. Nevertheless, one can witness a growing importance of diversity in the realm of the built urban environment. In the following, we describe some of these uses of diversity in relation to (1) public space, (2) urban planning and design, and (3) urban economies, capital and bureaucracies with a view towards developing ideas and elements for a theorization of "infrastructures of diversity".

# *Diversity and Public Space: Difference "from below"*

First, as mentioned, diversity is a feature in everyday life interactions between groups of all sorts. Infrastructures can connect or disconnect social groups; they enable and, in fact, largely structure access of different social groups to particular urban spaces. They make possible and probable that certain people can meet, or will never meet. But urban infrastructures can also be owned and managed by particular ethnic groups who monopolize the resources of control and thus set in motion particular patterns of interethnic or interreligious contact (Burchardt 2013). All these aspects point to a notion of diversity "on the ground", of diversity emerging "from below". Being the prime reserve of social anthropologists and cultural sociologists, studies interested in "difference from below" constitute what we call the paradigm of "diversity in public space". These studies are often organized around a focus on meaning, knowledge and practice. From this perspective, material urban space and artifacts are seen as collectively produced by human beings, or else, as chiefly to matter for scholars only inasmuch as they are interpreted and thus become meaningful to social actors through processes of signification and negotiation. However, the very objectness of objects and thingliness of things that mediate formations of diversity is not often taken very seriously or is seen as peripheral. However, if we agree that infrastructural assemblages are central to the formation of urban subjectivities and that urban subjectivities are shaped by diversity as condition and experience, then it seems crucial to better understand

how material assemblages, made up of artifacts, nature and humans facilitate the emergence of such "conditions of diversity".

Kim Knott's article on Walls and other unremarkable boundaries in South London is an exemplary contribution in this regard. Her article discusses sites such as a boundary wall separating a Cathedral from a market or a disused development ground behind a local Islamic center "in order to assess how spatial phenomena enable or disable encounters with difference" (Knott 2015: 15-34). Paying close attention to otherwise unremarkable uses and human movements, Knott shows how material edges and boundaries inadvertently provide opportunities for new socialities and visibilities in each of the sites she studied. For instance, consumers of the market cross the open gate of the Cathedral to have lunch in churchyard. When the Islamic community residing next to the disused development ground wished to extend their building, it was obliged to financially support to archeological excavations that urban authorities had commissioned. They did so by drawing on volunteer labor whereby local Muslims actually recast the archeological excavations as a citizens' project. Drawing inspiration from Simmel as well as from DeLanda's theory of assemblages, Knott demonstrates how the built environment becomes the site for reworking, negotiating and enacting everyday urban diversities, especially through practices that breach existing ideas about separation and openness.

Similarly, the contribution of Suzanne Hall, Julia King and Robin Finlay engage with everyday habitations of the built environment of the city by looking at how the street, in particular. Stapleton Road in the British city of Bristol functions as an infrastructure in two ways: first, they observe how "the street appeared as a loose cohesion of bodies and spaces, coalescing into what we might call a 'collective urban infrastructure'" (Hall, King and Finlay 2015: 59-72); second, they project the street as a particular kind of "'migrant infrastructure'; as a shared urban resource for lively economic and social transactions across

residents from many countries of origin" (Hall, King and Finlay 2016). Through a hugely innovative methodological intervention, the authors combine this analysis with an exercise in drawing. Drawing the street and the migratory routes of its inhabitants allows them to visualize and "depict diversity" (Vertovec 2010). It also allows them to visualize how migrant infrastructures emerge in relation to complex urban sorting mechanisms that rank racial and ethnic identities in relation and distribute them in urban space according to economic hierarchies and values. Importantly, while migrant infrastructures emerge "from below", this does not mean that they are only locally embedded. Instead, as Hall and her collaborators greatly show, they are also embedded in global geopolitics, both past and present, and the ways in which global politics affect migratory patterns, trajectories and contributions to infrastructures as collective resources.

These complex entanglements also become apparent in Anderson Blanton's compelling analysis of the iconographies of the Jeepney, a central mode of informal public transport in the megacity of Metro Manila. Originally left behind by American troops after World War II, Jeepneys in the Philippines were not only modified to serve as important public transportation vehicles used by thousands of residents every day, but they also became canvasses of a huge variety of images and symbols ranging from Filipino folk art to American popular culture and Christian iconography. Especially in the last three decades, the motifs and vernacular styles on the Jeepneys have been heavily influenced by new evangelical and charismatic Christian movements. In analyzing these opulent religious representations, Blanton vividly shows how Jeepneys function as infrastructural proliferations of pious visual culture within urban public spaces. Furthermore, these informal infrastructures of public transportation become productive apparatuses of urban belief as well as media of how visual and religious diversity is inscribed into the urban landscape.

#### Planning and Designing for Diversity

Parallel to these "diversities from below", in recent years urban planners and designers have begun to pay attention to the technical and architectural dimension of urban diversity (for example, Talen 2008; Wood and Laundry 2007; Tarbatt 2012). In exploring ways of "designing for diversity", or "planning for diversity", they aim to reformulate these phenomena as "problems" solvable via designs, plans and technologies, thereby neglecting the political and often conflict-laden ways diversity is enacted in urban everyday life.

However, when taking a closer look on the proposed strategies of these books, one finds surprisingly traditional ideas. On the one hand, there are small-scale approaches aiming to foster mixed uses of indoor and outdoor spaces. On the other hand, the proposals still basically propagate the ideal of "social mixing". In this line of reasoning, the central problem is the spatial concentration of underprivileged groups and their lack of contact with established and successful households. In dispersing these so-called *problematic* groups or problem neighborhoods, diversity planning and design aims to foster social cohesion, integration and an upward mobility. However, as many critical urban sociologists have pointed out, there seems to be no (or very little) evidence that this strategy of social mixing actually improves the living conditions of these groups (Arthurson 2012; Holm 2009). Instead, studies suggest that this strategy of "social mixing", now revamped as "diversity planning", mainly results in the erosion of social connections and rising poverty due to growing rents.

Stephen Read's compelling analysis demonstrates that it is often the urban spaces spared by these administrative planning efforts that potentially foster heterogeneous, welcoming and liveable neighbourhoods. For Read, the built environments of cities can themselves be understood as infrastructures for diversifying or homogenizing urban populations. This becomes especially apparent when looking into patterns of urban migration and the ways in which newcomers become urban dwellers. Drawing from a variety of historical cases in which urban environments have fostered diversification, from medieval Paris to New York in the 20<sup>th</sup> century and Shenzhen in the last decades, Read demonstrates that the ways in which streets, public spaces and neighbourhoods are built and organized play a crucial role in constituting interactions, mixings and partitions of social groups in the city. Furthermore, urban spaces can also be understood as infrastructures of the political, organising and framing interactions, actions and relations between people and communities. As Read also shows, as soon as urban spaces come into the focus of large scale planning from above, such as in the cases of the Haussmannisation of 19th century Paris and the notorious renewal by Robert Moses in 1950s New York City, urban diversities tend to give way to homogenisation.

Emily Bereskin's essay powerfully shows that the impact of infrastructures on everyday life interactions of heterogeneous people and communities becomes especially apparent when looking into divided cities. In her in-depth- analysis of Nicosia, Cyprus, and Belfast in Northern Ireland, Bereskin shows that the ethnic, national and religious divisions in these cities are constituted by a plurality of division infrastructures: from barriers, fortifications and watchtowers to surveillance technologies and checkpoints. These materialities not only create landscapes of fear and anxiety, but their maintenance and operation in many cases relies on cooperation between otherwise uncooperative groups. Furthermore, contrary to common belief, Bereskin shows that separation barriers can incite conflict and, at the same time, play an active part in fostering social mixing and community organizing as well as activate of peace-building. Serving as contact zones and targets of socio-material interventions, these barriers and walls are sites of aesthetic and regeneration activities as well as catalysts for group interactions and spaces for negotiations as well as shared use. In critically discussing the limits and possibilities of

these dynamics, she makes a compelling point that that urban infrastructures might best foster diversity-building and encounters in cities beset by social divisions. Furthermore, she demonstrates that in many cases, "barriers serve as a material catalyst through which the people, policies, mindsets, attitudes, and regulations that uphold division can be challenged and contested" (Bereskin 2015: 35-58).

Along these lines, Jeremy Walton's contribution draws attention to the ways in which "planning for diversity" plays out in the development of architectural infrastructures meant to showcase and promote religious tolerance and pluralism. With his comparative analysis of the public discourses surrounding the construction of the New Mosque in the Croatian port city of Rijeka and the mosque-cem house project in the Turkish capital of Ankara, he explores how these infrastructures of religious diversity serve to envision particular types of depoliticized and deracinated tolerance. Interestingly, while these two places are conceptually different - the Croatian mosque housing one religious community and the mosque-cem house being a multi-faith site bringing together Sunnis and the religious minority of Alevis - they present very similar, if not identical, discourses on religious pluralism, which have served to legitimate both spaces as exemplars of multiculturalist places. At the same time, these discourses achieve their infrastructural ends by deploying different types of spatial practices: the spatial separation of Islam in the case of Rijeka's mosque, and the spatial mixing of religious communities in the mosque-cem house. Walton's article creatively draws on crucial insights from the infrastructural turn while remaining committed to a cultural sociological perspective, seeking as he does to show how discourses fix the meanings of infrastructural sites.

Stephan Lanz' article too centers on the complex intersections between religious diversity and infrastructure by focusing on the spatial politics in the Brazilian city of Rio de Janeiro and especially the *favelas* as its particular type of shantytown. Building his study on the dynamics in four favelas, Lanz describes how favelas historically emerged as marginalized urban spaces. As they were mostly subjected to the twin pressures of forced assimilation and far-reaching exclusion from regular infrastructural provision, favela inhabitants crafted what Lanz describes as a self-made urbanism, that is, a series of practices geared towards making urban ends meet that are based improvisation and informal solutions. Lanz then shows how the power relations both between city officials and favela elites as well as within the favela itself are related to the changing panorama of religious diversity characterized by the rise of Pentecostalism and the decline of Afro-Brazilian religion forced upon them by the former. Pentecostalism's rise resonates with the broader infrastructural dynamics in that its gospel of prosperity was perceived as a way out of economic and infrastructural crisis that left people to depend on themselves. Moreover, the very material basis of independent Pentecostal churches - the recycled, cheaply bought or found wood and corrugated iron out of which these churches are built - itself resonates with the self-made urbanism developed before. "The new religious diversity", he concludes, "with its break from the dominance of the Catholic Church, is thus as much an expression of emancipation from the paternalism of authoritarian apparatuses as it is an expression of the evermore precarious social-economic situation of the favela residents, who are increasingly forced to eke out a living as self-entrepreneurs" (Lanz 2015: 103-117). Lanz creatively deploys the term infrastructure to analyze authoritarian top-down projects and the favela's improvisatory practices of collaboration just as to religion as belief, practice and belonging.

### Diversity and Capital

Another way in which concepts of diversity are mobilized in the urban sphere is in relation to capital: With the growing importance of cities as nodes of economic innovation and the ineradicable belief that cities are in competition with each other, diversity has increasingly become a factor in urban economic development strategies. This holds especially true in the context of the so called "creative industry". Notoriously, Richard Florida put this belief into a nutshell stating that: "Diversity and creativity work together to power innovation and economic growth" (Florida 2002, p. 262). The core belief is that diversity will bring potential benefits such as better decision making, improved problem solving, and greater creativity and innovation, which leads to better urban development and prosperity for all.

Contrary to this widespread assumption, Boris Vormann's essay vividly demonstrates that ideas about the mutual enforcement of cultural and economic notions of diversity are in fact flawed. In situating the ideology of diversity in the historical genealogy of liberal thought, from Smith and Alfred Marshall to Jane Jacobs and Robert Fishman, Vormann not only demonstrates how diversity has become a dominant paradigm in urban planning and city branding, especially in "post-industrial" cities of the global north, but he also shows that these notions of diversity have reinforced a normative understanding of urban cultural and economic diversity as a unified and unquestioned development goal. In short: diversity has become a cipher for marketization. This new paradigm actually tends to work against fostering an inclusive and heterogeneous urban population and becomes especially apparent when focusing on urban infrastructures. Under the neoliberal paradigm, the modes of urban infrastructural provisions actually enforce social inequality and therefore act against the creation of diverse and inclusive cities. As Vormann demonstrates, the shift to the language of diversity could thus be understood in market terms: diversity has commercial value and can be used as a way not only of marketing cities but of making every aspect of urban live into a potential economic resource. At the same time, this term has the potential of obscuring notions of class under the identity paradigm of diversity.

# Governing through Infrastructure and Diversity: Theory and Agenda

This last point – the channeling of diversity into the workings of urban administrations and economic development programs - leads us to our final part. We note here that in many studies, diversity is construed as a feature of people and social life happening "on the ground" and emerging "from below" that apparatuses of power-the capitalist economy, state bureaucracies, courts of law - seek to control and order. They do so in order to create citizen-subjects that conform to uniform notions of citizenship and uniform understandings of hegemonic, homogenized national culture. But as we have briefly demonstrated, diversity operates in more complex ways, at least since the last two decades, and has itself become a premise of government, management, urban planning, etc. (Fainstein 2005).

In fact, all large organizations – from companies to universities – are today enjoined to tackle, promote and govern diversity, and as we suggest: to govern through diversity.<sup>2</sup> The concept of diversity recognizes the huge variety of cultural features of populations and thus their chaotic make-up, and simultaneously renders them legible to power by organizing this chaos into discrete, meaningful, and intelligible categories. Diversity is at once the problem as well as its own solution. It is this rendition of diversity that has turned it into a major category within the vocabularies of political rule in contemporary neoliberalism.

The intricacies of diversity as a concept that draws together recognition and rule, emancipation and enforced alterity had already been noted in debates around multiculturalism, a term which diversity has partially displaced. In a well-known critique, Slavoj Žižek (1997) argued that multiculturalism was the ideal form of ideology of global capitalism. He saw multiculturalism as the "attitude which, from a kind of empty global position, treats each local culture the

<sup>&</sup>lt;sup>2</sup> For a similar approach see Matejskova and Antonsich (2015).

way the colonizer treats colonized people – as 'natives' whose mores are to be carefully studied and 'respected'." He went on to say that "in the same way that global capitalism involves the paradox of colonization without the colonizing Nation-State metropole, multiculturalism involves patronizing Eurocentrist distance and/or respect for local cultures without roots in one's own culture" (Žižek 1997: 44).

In a related critique, Bauman (2011: 46) observed that multiculturalism as the theory of cultural pluralism that postulates the support of liberal tolerance for identities is a conservative force.

"Its achievement is the transformation of social inequality, a phenomenon highly unlikely to win general approval, into the guise of 'cultural diversity', that is to say, a phenomenon deserving of universal respect and careful cultivation. Through this linguistic measure, the moral ugliness of poverty turns, as if by the touch of a fairy's wand, into the aesthetic appeal of 'cultural diversity'. The fact that any struggle for recognition is doomed to failure so long as it is not supported by the practice of redistribution gets lost from view along the way."

As states and cities recognize cultural diversity, they increasingly address people on the basis of their membership in groups, organized as categories of allegiance. They thereby increasingly incite people to view themselves and their own form of being on these same terms. There has been a trenchant critique of the essentialisms that come with these ways of governing people. Other scholars, in turn, have defended multiculturalism against these critiques (Kymlicka 2013). Yet as a regime that handles the effects of transnational mobility, diversity is clearly linked to the operations of multinational capital, as Žižek showed. While remaining agnostic in regard to causal directions, we note here the parallelisms between the rise of neoliberalism, the rise of multiculturalism, and the subsequent rise of the diversity regime and the ways in which they are premised on the idea that people have identities.

Intervening in this debate, we suggest that diversity may be profitably approached in Foucauldian terms as a regime of governmentality. In other words, we suggest to look at diversity in urban space as a form of governing populations through practices of classifying, categorizing and naming, in a word: of 'making up people' (Hacking 2006). This perspective is also central to our understanding of urban infrastructures. As a way of mediating between power and the everyday, addressing infrastructural regimes allows us to focus on both governing *as a* technology and governing *through* technology.

In fact, there is an interesting way to look at infrastructures in terms of the ideal consumer or user they envisage or consider the ways which they function. It may seem that the very existence of such images of "ideal users" homogenizes populations according to standards, subjecting them to processes of normalization. Infrastructures thus contribute to the graduated regimes of urban inclusion that articulate one's abilities to enjoy and be in urban space with economic resources and class status. The outcomes of these articulations may even fashion graduated regimes of infrastructural urban citizenship - a form of citizenship that occludes many of the categories of people with which it operates. There are today many attempts to counter such unwarranted homogenizations and envision infrastructures in more democratic ways. Participation in infrastructural planning has recently become a major concern for cities across globe - albeit realized to divergent degrees. Infrastructures are key issues for urban activists.

Conversely, diversity is also a key issue in terms of participation in this activism, in terms of the imaginaries of populations on whose behalf they mobilize. We suggest that in the same way that the recognition of diversity disrupted homogenized images of the nation-state it also disrupts homogenized images of the "ideal user" of urban infrastructures. As a consequence, among other things we propose to explore how the organization of urban space and urban infrastructures function as particular instantiations and materialization of projects of state-formation and nationbuilding and how diversity reconfigures this nexus between infrastructure and nation-states. Against this broader backdrop, we will sum up by stating that we are chiefly intrigued by these two research questions: How do infrastructures mediate the working and formation of diversity? And what are the processes that turn infrastructures into sites of contestation around diversity?

Along these lines, in his reflective commentary on this special issues on infrastructures of diversity, AbdouMalig Simone starts from the observations that, in many places of the so-called "Global South", political statements on issues of diversity, such as gender roles and religious identity, have themselves a kind of infrastructural quality. They inscribe boundaries as well as mobilizing and materializing forms of propriety, inclusion and exclusion. These functions are also attributed to material infrastructures in a more narrow sense, as they can be understood as normative embodiments of social orders and materializations of political accords. Furthermore, these urban material assemblages not only allow for the movement and passing along of things, capital flows or people. They themselves can be addressed as forms of movement, as they are a result of past dynamics of territorialization, creating path dependencies while also allowing for open trajectories into the uncertain future of urban daily life. For Simone, bringing these complex temporalities of often capital-driven urban development into focus means that one has to incorporate an infrastructural perspective in order to address urban spaces as decentered, shifting and multiple. While these assemblages have a sense of definitiveness, they point towards turbulence, openness and ephemeral transformations. Or, as Simone puts it: "Infrastructure is never complete-either in its closure to further articulations or in its process of immediate decay. It may be repaired, expanded, and updated and, as such, it constantly shows the evidence of not only what it bears and extracts, or the force that it imparts, but of the limits of its anticipation. It never fully (or only) does what it says it will do" (Simone 2015: 151-162).

#### References

- AMIN, A. and N. THRIFT. 2002. *Cities: Reimagining the Urban*. Cambridge: Polity Press.
- ANGELO, H. and C. CALHOUN. 2013. "Infrastructures of the Social: An Invitation to Infrastructural Sociology". *Unpublished Manuscript*.
- ARTHURSON, K. 2012. Social Mix and the City: Challenging the Mixed Communities Consensus in Housing and Urban Planning Policies. Collingwood: Csiro Publishing.
- BAUMAN, Z. 2011. *Culture in a Liquid Modern World*. Cambridge: Polity Press.
- BECCI, I., M. BURCHARDT and M. GIORDA. 2016. "Religious super-diversity and spatial strategies in two European cities". *Current Sociology*". Online-First, doi: 0011392116632030.
- BECCI, I., M. BURCHARDT and J. CASANOVA. 2013. *Topographies of Faith: Religion in Urban Spaces*. Boston and Leiden: Brill.
- BENNETT, J. 2010. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press Books.
- BERESKIN, E. 2015. "Infrastructures of Partition, Infrastructures of Juncture: Separation Barriers and Intercommunal Contact in Belfast and Nicosia". *New Diversities* 17 (2): 35-58.
- BERG, M. L. and N. SIGONA. 2013. "Ethnography, diversity and urban space". *Identities* 20(4): 347-360.
- BJORKMAN, L. 2015. *Pipe Politics, Contested Waters: Embedded Infrastructures of Millennial Mumbai*. Durham: Duke University Press.
- BRENNER, N. 2004. *New State Spaces: Urban Governance and the Rescaling of Statehood.* Oxford and New York: Oxford University Press.
- BURCHARDT, M. 2016. "Infrastrutture del religioso: materialià e regime d'ordine urbani". *Historia Religionum* 8: 67-77.
- ——. 2013. "Belonging and success: religious vitality and the politics of urban space in Cape Town". In: I. Becci, M. Burchardt and J. Casanova. *Topographies of Faith: Religion in Urban Spaces*. Boston and Leiden: Brill, 167-189.
- BOECK, F. D. 2011. "Inhabiting Ocular Ground: Kinshasa's Future in the Light of Congo's Spectral Urban Politics". *Cultural Anthropology* 26 (2): 263-286.
- DELANDA, M. 2006. *A New Philosophy of Society: Assemblage Theory and Social Complexity*. London und New York: Continuum.

- EADE, J. 2012. "Religion, home-making and migration across a globalising city: Responding to mobility in London". *Culture and Religion* 13 (4): 469-483.
- FAINSTEIN, S. 2005. "Cities and Diversity. Should We Want It? Can We Plan For It?" *Urban Affairs Review* 41 (1): 3-19.
- FARIAS, I. 2010. "Introduction: Decentering the Object of Urban Studies". In: I. Farias and T. Bender, eds., Urban Assemblages: How Actor-Network Theory Changes Urban Studies. New York und London: Routledge, 1-24.
- FLORIDA, R. 2002. *The Rise of the Creative Class*. New York, NY: Basic Books.
- GIDDENS, A. 2005. *Social Theory and Modern Sociology.* Cambridge: Polity Press.
- GOMEZ, L. and W. VAN HERCK. 2012. *The Sacred in the City*, London: Continuum.
- GRAHAM, S. 2011. *Cities Under Siege: The New Military Urbanism*. London and New York: Verso.
- GRAHAM, S. and C. MCFARLANE (eds.). 2014. Infrastructural Lives: Urban Infrastructure in Context. New York and London: Routledge.
- GRAHAM, S. and S. MARVIN. 2001. Splintering Urbanism: Networked Infrastructures. Technological Mobilities and the Urban Condition. New York and London: Routledge.
- HACKING, I. 2006. "Making Up People". London Review of Books, August 17, 23-26.
- HALL, S., J. KING and R. FINLAY. 2016. "Migrant Infrastructure: Transaction Economies in Birmingham and Leicester, UK." *Urban Studies*, Online-First, doi: 0042098016634586.
- ———. 2015. "Envisioning Migration: Drawing the Infrastructure of Stapleton Road, Bristol". New Diversities 17 (2): 59-72.
- HARVEY, D. 2009. *Social Justice and the City*. Athens: University of Georgia Press.
- HÖHNE, S. and R. UMLAUF. 2015. "Die Akteur-Netzwerk Theorie. Zur Vernetzung und Entgrenzung des Sozialen". In: J. Ossenbrügge and A. Vogelpohl, eds., *Theorien in der Raum- und Stadtforschung – Eine Einführung.* Münster: Westfälisches Dampfboot, 195-214.
- HÖHNE, S. 2012. "An Endless Flow of Machines to Serve the City Infrastructural Assemblages and the Quest for the Machinic Metropolis". In:
  D. Brantz, S. Disko and G. Wagner-Kyora, eds., *Thick Space: Approaches to Metropolitanism.* Transcript: Bielefeld, 141-164.

- HOLM, A. 2009. "Soziale Mischung. Zur Entstehung und Funktion eines Mythos". In: Forum Wissenschaft 26 (1): 23-26.
- KNOTT, K. 2015. "Walls and Other Unremarkable Boundaries in South London: Impenetrable Infrastructure or Portals of Time, Space and Cultural Difference?" *New Diversities* 17 (2): 15-34.
- KYMLICKA, W. 2013. "Neoliberal Multiculturalism?" In: P. A. Hall and M. Lamont, eds., Social Resilience in the Neoliberal Era. Cambridge: Cambridge University Press, 99-124.
- LACLAU, E. and C. MOUFFE. 1985. *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics*. London: Verso.
- LANZ, S. 2015. "Large-scale Urbanization and the Infrastructure of Religious Diversity in the Favelas of Rio de Janeiro". *New Diversities* 17 (2): 103-117.
- MATEJSKOVA, T. and M. ANTONSICH. 2015. Introduction: Governing through Diversity. In: T. Matejskova and M. Antonsich, eds., *Governing through Diversity. Migration Societies in Post-Multiculturalist Times.* Basingstoke: Palgrave Macmillan, 1-18.
- MEISSNER, F. and S. VERTOVEC. 2015. "Comparing Super-Diversity". *Ethnic and Racial Studies* 38 (4): 541-555.
- SENNETT, R. 1996. *Flesh and Stone: The Body and the City in Western Civilization.* New York und London: W. W. Norton.
- SIMMEL, G. 2010. "The Metropolis and Mental Life". In: G. Bridhe and S. Watson, eds., *The Blackwell City Reader*, Chichester: Blackwell, 11-19.
- SIMONE, A. 2006. "Pirate Towns: Reworking Social and Symbolic Infrastructures in Johannesburg and Douala". *Urban Studies* 43 (2): 357-370.
- —. 2004. "People as Infrastructure: Intersecting Fragments in Johannesburg". *Public culture* 16 (3): 407-429.
- TALEN, E. 2008. Design for Diversity: Exploring Socially Mixed Neighborhoods. New York City: Architectural Press.
- TARBATT, J. 2012. *The Plot: Designing Diversity in the Built Environment: A Manual for Architects and Urban Designers.* London: RIBA Publishing.
- VAN LAAK, D. 2001. "Infra-Strukturgeschichte". In: *Geschichte und Gesellschaft* 3: 367-393.

- VERTOVEC, S. 2007. "Super-diversity and its implications". *Ethnic and Racial Studies* 30 (6): 1024-1054.
- — 2010. "Introduction: Depicting Diversities".
   *Diversities* 12 (1): 1-3.
- WESSENDORF, S. 2013. Commonplace diversity and the 'ethos of mixing': perceptions of difference in a London neighbourhood. *Identities* 20 (4): 407-422.
- WOOD, P. and C. LANDRY. 2007. *The Intercultural City: Planning for Diversity Advantage*. London ; Sterling, VA: Routledge.
- NAVARO-YASHIN, Y. 2009. "Affective spaces, melancholic objects: ruination and the production of anthropological knowledge\*". *Journal of the Royal Anthropological Institute* 15 (1): 1-18.
- ZIZEK, S. 1997. "Multiculturalism, or, the Cultural Logic of Multinational Capitalism". *New Left Review*, September-October, 28-51.

## Note on the Authors

MARIAN BURCHARDT is a researcher at the Max Planck Institute for the Study of Religious and Ethnic Diversity in Göttingen, Germany. His research is chiefly concerned with the links between diversity, power and subjectivity in the age of globalization, and especially with how they play out through spatial practices. He is the author of *Faith in the Time of AIDS: Religion, Biopolitics and Modernity in South Africa* (Basingstoke: Palgrave, 2015).

STEFAN HÖHNE is a researcher and lecturer at the Center for Metropolitan Studies at Technische Universität Berlin. His research fields include critical urban history, historical anthropology of machines as well as cultural and social theory of the 20th and 21st century. Currently, he is preparing a publication on the relations of luddism, technology and revolt during the cold war.