

International Journal of the Commons
Vol. 8, no 2 August 2014, pp. 513–530
Publisher: Igitur publishing
URL: <http://www.thecommonsjournal.org>
URN:NBN:NL:UI:10-1-116424
Copyright: content is licensed under a Creative Commons Attribution 3.0 License
ISSN: 1875-0281

Struggling for the use of urban streets: preliminary (historical) comparison between European and Indian cities

Angela Jain

Nexus Institute for Cooperation Management and Interdisciplinary Research, Germany
jain@nexusinstitut.de

Massimo Moraglio

Technische Universitaet Berlin, Germany
massimo.moraglio@tu-berlin.de

Abstract: Urban streets – as part of public space – can be defined as limited and valuable resources dedicated to public use. Using speed and scale as major spatial categories, and history as a methodological approach, we argue that the physical use and representation of urban streets reflect the array of uses and users and their understanding of governing the resource. We argue that by analysing the spatial subdivisions of urban streets it is possible to draw conclusions about the type of societal governance applied to them: a highly formalized and regulated or a less formalized and *ad hoc* type of governance. In this respect, space matters, and so do culture and geography: a comparative analysis among German and Indian cities shows how a similar urban model – mixed use, short distances and growing motor-vehicle dominance – can drive different outcomes. Due to different urban scales, speeds of urbanisation as well as institutional and cultural backgrounds, those two examples show remarkable divergences, especially when we discuss issues of inclusion and exclusion.

Keywords: Public space, spatial layers, speed, urban commons, urban street

Acknowledgement: We would like to thank the funding organizations who made the research work possible: The European perspective (Massimo Moraglio's contribution): The research leading to these results has received funding from the People Programme (Marie Curie Actions) of the European Union's Seventh Framework Programme (FP7/2007-2013) under REA grant

agreement n° 252489. The Indian perspective (Angela Jain's contribution): The Indo-German research project "Climate and Energy in a Complex Transition Process towards Sustainable Hyderabad" was funded by the German Federal Ministry for Education and Research (BMBF). More information can be found on the website www.sustainable-hyderabad.de. Further, we would like to thank our anonymous reviewers for their helpful comments and the editors for their support and patience.

1. Introduction

In this essay, urban streets are considered as a resource that is (at least potentially) accessible to all members of society and can be used publically. Streets, here, are not considered as "public goods" which "yield non-subtractive benefits that can be enjoyed jointly by many people" (Ostrom and Ostrom 1977, 12). Nor do urban streets explicitly exclude parts of society e.g. by the requirement of paying a fee for their use (except tolled motorways). Therefore, urban streets are considered as a non-excludable but rivalrous good, a common pool resource. That means "each person's use [... somehow] subtracts units of that resource" (*ibid*). Putting this in the context of urban streets: every different use and every user makes demands on space and they also make efforts to occupy space – at least for a short time. Hence, we consider the space available for streets as finite and not endless (see Samuelson 1955).

Accounting urban streets as "commons" can be largely debatable or even refused as such, being too far from actual use, perception and real practises. However, we would like to investigate some elements concerning the common understanding of the use of public space and therefore of roads and streets as it has changed over time. As a starting point, we notice how in Europe, historically, increased speed and mobility have affected the time-space ratio in European cities and have transformed the urban form dramatically. In particular, the rise of motorized traffic and its related social, cultural and political shifts have reshaped the use of street spaces. In the emerging megacities of countries like India, a comparable evolution can be observed, inviting a comparative analysis. As population, real estate prices and the need for mobility are growing, the pressure on the urban resource 'space' increases.

1.1. Methodological approach

The essay is based on reflections on the link of mobility, behaviour of people in urban open spaces and urban development in history. It relates these findings a) to the outcomes of a European study conducted by Massimo Moraglio "The light rail renaissance as a crossover. Public participation, city revitalization and the political arena in the European context" and b) to the outcomes of action research studies which were conducted by Angela Jain within the Indo-German research project "Climate and Energy in a Complex Transition Process towards

Sustainable Hyderabad” which focused on mitigation and adaptation strategies by changing institutions, governance structures, lifestyles and consumption patterns.

Using speed and time, rigidity and suppleness as major spatial categories, and history as a methodological approach, we suggest that the physical use and representation of urban streets reflect the array of uses and users and their understanding of governing the resource. By analysing the spatial subdivisions of urban streets, we argue, we can see if this understanding refers more to formalized regulations or to more informal rules of use.

In this respect, space matters, and so do culture and geography: a comparative analysis among Germany and some Indian cities shows how a similar urban model – mixed use, short distances and growing motor-vehicle dominance – can drive different outcomes. Due to different urban scales, speeds of urbanisation and institutional and cultural backgrounds, those two examples have remarkable divergences, especially when we approach the issues of inclusion and exclusion.

1.2. Aim and structure the paper

The aim of this essay is to investigate the urban streets under those assumptions, focusing on their spatiality. We claim that when we speak of urban streets, space matters: actually space analysis offers a lot of inspiration as well as a fruitful angle to understand the emerging discussion about the importance of space for open, citizen-centric societies.

Additionally, the way in which urban streets are spatially organized and used every day can tell us a lot about the social order behind them. The practical organization of urban streets is not just a way to organize (mainly according to speed desires) a shared arena. “The opportunities and constraints individuals face [...], the information they obtain, the benefits they obtain or are excluded from, and how they reason about the situation” (Ostrom 2005, 3) also reveal, in visual and material ways, the dominant values of social and institutional agents. We see this in “the rules or absence of rules that structure the situation.” (ibid.)

Just to give an example from Europe, in the first years of the 20th century, motorists largely benefitted of impunity for reckless driving. First because of their speed: they simply drove away. Secondly because of the lack of visibility of car plate; thirdly because of social asymmetry of victims and perpetrators: the victims, mainly in the lower social ranks, had a lot of trouble to convince policemen to bother upper class motorists: not to mention class solidarity by judges and their lack of trust in the statement of lower classes members (Moraglio 2014).

But another example can be traced in how the urban streets display physical evidence (paved carriageways, traffic lights and sidewalks just to cite a few) which have solid material presence *and* strong symbolic value. We thus follow Lefebvre (1991) and Harvey (2008) and their idea of “the right to the city” which applies to urban governance and therefore also to urban space. Harvey describes this as a “common rather than an individual right since this transformation [of the

city] inevitably depends upon the exercise of a collective power to reshape the processes of urbanization” (Harvey 2008, 23).

To deepen this argumentation, in the next section of the essay we explain our idea of classification of street use in relation to speed, suppleness and rigidity. Then we take a look on the historical development of mobility and urbanity in European Cities. In the third section we examine the process of urbanization and the idea of public space and commonness in India. Next, we relate these very unequal situations to each other and carve out differences as well as similarities and lastly, we draw conclusions on how valuable the look on urban space through the glasses of the commons can be for future planning.

2. Urban streets: speed, suppleness and rigidity

If we put urban streets in a long-term perspective, they have always been used simultaneously by different moving actors (pedestrians, horse-carts, and then streetcars, bicycles, and motor-cars) as well as by static, non-moving actions and actors. Also today, in the everyday experience, anecdotal evidence and a large corpus of literature show that urban streets contain, even in the most automobile-friendly city, activities which go beyond transport purposes. Those “other” activities represent a significant part of urban life, transforming the streets into a stage for the Sunday promenade, a playground for children, activities correlated to street cafés, (illegal) shelters for the homeless, commercial places for street vendors etc. (e.g. Jacobs 1961).

In undertaking the study, however, one treats the exogenous variables as fixed – at least for the purpose of the analysis. “When the interactions’ yielding outcomes are productive for those involved, the participants may increase their commitment to maintaining the structure of the situation as it is, so as to continue to receive positive outcomes. When participants view interactions as unfair or otherwise inappropriate, they may change their strategies [...]” (Ostrom 2005, 14). This becomes obvious in urban spaces where, for instance, cars are not allowed, but still can be found parking. Thus, in “action arenas” (ibid.) like urban streets, the co-habitation of mobility and non-moving actors has always been far from peaceful and fair, and it has witnessed competitions and struggles, which encompasses political battles, cultural clashes and social discussions. However, if compared to today, urban streets in the past had a “slower” pace of exploitation (Passalacqua 2010). The quest of speed and motorized (individual and collective) mobility has transformed the former time-space ratio considerably. Especially in the 20th century, new mobility patterns have been developed to the point to claim – through institutions, lobbies and other actors – larger and larger space-consuming arenas.

We think that the concept of “dromology” – the logic of speed – as proposed by Virilio (1977), can be very useful in understanding urban streets and their spatiality. Speed *in se* encompasses space and time. Reaching higher speed was not only a “must” of the modern times; it was claimed as modernity itself,

therefore discarding any slow movement as obsolete, inadequate and inefficient (Kern 1986). Under the motto of “time is money”, reducing the time spent to cover a given distance has been the main aim of economic and political agendas. Achieving this goal – also in urban development – not only impacted the time dimension, but put space violently under pressure (Lefebvre 1968). In particular, in modern times, some (dominant) groups reframed the very concept of space. Urban streets had thus a conceptual and physical shift: speed requires space where it can be performed, like a road, well paved, without obstructions and therefore excluding standing or slow moving users. Those facilities are better displayed in motorways or flight routes, speed arenas *par excellence*, with no interferences. Moving back to ordinary roads and urban streets, the use of fast moving vehicles (the ones able to offer speed, like motor-vehicles), with their corollaries of political and social values, clashed with other uses of space, due to their use of streets, their speed and rigidity, and the limited space available in the city. As a general statement, we can say that streets in European cities experienced a transformation from mixed to specialized uses, or, better, a trend from mixed to particular use (Norton 2008). The same trend is followed in the political agenda of many emerging economies, however realized differently. Once speed became the dominant value, or has been claimed – by some groups – to be the dominant value, a struggle started to (re-) organize the streets according to the categories of velocity. Such a process was a radical reinterpretation of the very concept of urban spaces, and there is little surprise in noticing how it was not an easy task for its supporters, although they were mainly part of the ruling classes. The process of car conquest of urban streets was not smooth, nor short, but troubled and long, and even though the “wheeled” predecessors of motor-cars (horse-cart, street-cars, and bicycles) had already challenged traditional use of urban streets (Passalacqua 2010). Once successful, the motor-car model tended to strengthen the spatial set of urban streets, as developed in an embryonic form in the 19th century: each group of users being assigned a specific lane of the street. Before, different groups used the same space at different times; or – according to the actual situation – used more or less street space, leading to a conception of *layers of uses*.

In order to frame the above, we aim to utilize the concepts of *flexibility* (dynamic use) and *rigidity* (spatial segregation), which can help to understand the changes that have occurred in the use of streets as urban commons.

In other words, the former fluid, supple and even instable multi-functional, multi-layered use of the streets was claimed as inadequate by specific groups, which successfully, although not easily, developed a new framework. The previous ambiguity and fluidity in uses and users was blamed as inefficient, leading to more rigorous definition.

The above-mentioned *layers of uses* have thus (coherently) been transformed by a coalition of social and political pressure lobbies – through social and legal pressure – into *spatial slices* of urban streets. Those slices, though, were not proportional to the actual number of users, but to their social status (the first motor-

drivers used their cars mostly for recreational and status reasons) and institutional power, which was and is (in a self-referential way) mainly driven by speed.

This leads us back to the concept of speed as one (hidden) regulator of the governance of public space. Obviously, once motorization had reached a mass level, even car drivers referred to the different layers of use, making it impossible to debunk the system. Understanding this, the oxymoron of the urban street becomes evident: on the one hand streets are shared spaces, open to everyone; on the other hand, they produce exclusion and segregation or even barriers for those who cannot attain a certain speed level. The way of governing the street space – cutting it into slices, a lane for each speed level – clearly manifested inequalities.

It is worthwhile noting that the struggle played out on the streets was part of a broader phenomenon. As the 1963 Buchanan report briefly claims, “many people are discovering possibilities in the interior design of buildings – sheer convenience, colour, relationship of space and levels – of which they had no previous inkling” (Buchanan 1963, 32). It was, in other words, the discovery of privacy, a general trend in Western countries (Perrot 1990). The shape of the city and the reduction of public, traditional, face-to-face interactions were therefore a “push and pull” phenomenon, a spiral path leading to larger and more comfortable houses, to a more precise division of work and pleasure. The social innovations of radio, telephone and white appliances pulled people to stay home longer, while the disruption of social spaces by car traffic pushed people away from the streets.

However, this trend of exploitation of urban space as commons has been neither linear nor consistent. We detect similarities and differences between the European and the Indian contexts. We also notice in the North-Atlantic debate after the 1960s a backlash in the cultural, social and political perception of the city as an automobile carousel. Additionally, today in India the mainstream goes with the tide, but we can also detect vibrant complaints and actions against the transformation of streets into mere traffic lanes.

3. European cities, mobility and urban development

It is well documented that, in the past, the distinction between private and public spaces was more “fluid” than it is today. It was common and socially accepted to use the streets as a social arena (e.g. the Sunday promenade), commercial area (street markets), children’s playgrounds and for meeting and socialising. Walking on the whole area of the streets was taken for granted. As Clay McShane (1994) reported on a survey of 1890s London, “the ‘poor’ gathered in the streets on Sunday afternoon to drink, play cards, dance and promenade.” Beyond that, it was a space hosting illegal or reprehensible activities, from prostitution to begging, from armed robbery to urination.

As elsewhere, the arrival of new mobility devices such as velocipedes and motor-cars in Europe largely affected street use, developing new forms of governmental intervention, politically driven in order to accomplish motorists’ desires. Speed and progress were rallying cries of the European bourgeoisie,

consuming more and more open space. The automobile's success (soon at a mass level) embodied, more so than did the bicycle, speed and freedom, creating a mechanical extension of the body. However, this new use of space was often violent and unpunished, the price being paid by other street users, to the point that according to Möser (2003) driving a motor-car openly expressed the violent attitude of the European ruling classes. We have little need to add that the urban space was thus a political battle field, in which the transport purpose was not neutral among others. Rather, mobility in the city was embedded in political and cultural attitudes. In this context it is "important to recognize that rules need not be written. Nor do they need to result from formal legal procedures" (Ostrom 2005, 18). Often they are formed by the structure of repetitive situations or by powerful actors "in an attempt to improve the outcomes that they achieve" (Ibid).

In addition to riding bicycles and driving automobiles, the upper and middle classes were still playing another "social game" on the urban streets: the "promenade" for self-representation and identity building. It is not surprising to notice the clash between the need of space for the motor-cars and the urban design of Wilhelmina Germany (1870–1918) with broad sidewalks (*Bürgersteige*) as symbols of power and confidence. The Prussian highway code dated 1905 clearly rules about the (universal) right of use of the street, stating a particular protection for pedestrians, to whom sidewalks were devoted: "Streets may be used by everybody for walking, riding, cycling, driving and driving cattle; cycle ways may be used only for cycling; footpaths may be used, without prejudice to the authorization to ulterior use by private law, only for walking." (Province West Prussia 1905).

This has been confirmed by Josef Stübgen (1924) (one of the most prominent German planners of his time), who in the mid-1920s aimed to reserve not less than half of the street space for pedestrians only, with one quarter on each side, in order to offer enough room for the promenades.

Torn between using streets for moving by velocipede and motor-car versus walking and promenading, we should assume that the (legal) protection of bystanders – as stated in the Prussian Highway Code – was a consequence of bicycles and motor-cars invading sidewalks, thus forcing the creation of a definition that had not been necessary in the past. Recognizing the special and exclusive designation of sidewalks for pedestrians introduced the concept of "fixed" space. Until then, one of the main characteristics of streets was the "fluidity" of uses and destination. What was used for a running horse-drawn cart could become two seconds later a chatting spot or a children's game field. What was one day devoted to a street market was, the next day a traffic lane or a robbery spot. Not even the arrival of horse-carts on the urban arena and, later, streetcars created such a fixed space. Photographic representations of European cities at the end of the 19th century show people standing a few centimetres from running streetcars, in a situation we see as very dangerous, but which was not so conceived by the contemporaries (although accidents happened!). It was the automobile and the political and social values attached to it which led, in a time frame of twenty

years, and in the whole urban context, to the political “invention” of specialized and segregated areas.

While the right to move in the public space was considered as granted (Norton 2008), soon the street managers (state or local authorities) were facing more crowded spaces daily, as a consequence of some faster users requiring more space. Policy-makers thus had to compromise between the resilience of “old” use of urban street, their support of the promenade as a way to display the hierarchical social fabric and their additional desire to let motorists drive.

It is easy to track this new, different attitude in the 1934 new German Highway Code (*Reichs-Straßenverordnung*). It was the first unitary regulation of street traffic for the entire territory of Germany, stating exclusive traffic modes (footpath, cycle way, bridle path) in such a way that each transport mode was confined to the street section designed for it, in which all other traffic modes were excluded. Motor-cars had the lion’s share of public space, benefitting from a large array of supporters, mainly belonging to the ruling classes, which exactly in those decades were reframing their experience of the city, losing interest in promenading, and turned to other status symbols, like motor-cars. Focusing on Europe, this trend toward motor-car ownership and use was – generally speaking – soon desired by the middle class and, after World War II, by other groups, changing the perception of public space and the use of urban arenas (Wollen and Kerr 2002).

What is even more remarkable is that, at its end, the process of splitting users and uses on the street (done in order to save the users’ rights) had unexpected consequences for the use of the streets. In other words, traffic segregation and the idea of useful exploitation of the urban streets, in the end, destroyed the right which it intended to protect. The highway codes all around the world tried to regulate the access and the use of streets – by segregating users – but in this way some users won a larger slice of the cake, while others were simply denied access, unless they confined themselves to the remote fringes of the mainstream. This representation of urban streets was often even more complex than we describe it, and even in the most automobile-friendly city, other users access “forbidden” areas. However, in the long run the use for mobility purposes became dominant, eclipsing (also in the common sense and the social investigation) any other narrative (Flonneau ed. 2010).

So the first, timid, separation of the different modes of transport as developed in the 1900s became a more coherent and strict (social and legal) rule in the 1930s and more so in the 1950s, which led to the fragmentation of street space, and pushed social life away from the streets to other spaces, to the fringes or into the private sphere (Flonneau ed. 2010).

3.1. Re-building the city?

Due to its physical and social obduracy, the city was difficult to arrange according to the *desiderata* of the automobile drivers and stakeholders unless, obviously, the city itself was completely re-built. This was, indeed, envisioned by many planners

and policy-makers, in order to offer a higher degree of mobility. The latter was, together with mass transit, a catalyser for urban growth, which drove the garden city utopia to show its dark side, comprised of isolation, car dependence, social exclusion and lack of interaction (Ladd 2008). Within this framework, it is very notable that “traffic infrastructure was seen as the main culprit of the urban space reorganisation, destroying all the social and communitarian uses” (Capuzzo 2004, 88). Increasingly time-consuming trips by car marked a shift, in the mass motorization era, from individual mobility to collective immobility. In other words, congestion was the first, and self-perpetuating, negative effect of mass motorisation. The contradiction became visible, and the (Western) cities, facing at that point a major crisis, were the battlefield of this challenge.

This led to a societal shift in the late 1960s, when we track a general feeling that public space was disappearing and it had to be defended in order to have a vibrant urban environment. The following growing criticism was expressed first by new social movements, struggling against new urban motorway projects (Mohl 2004) as well as communities of artists and intellectuals. The milestone of the wave of critique is Jane Jacobs’ book, in which she states how “streets and their sidewalks, the main public places of a city, are its most vital organs” (Jacobs 1961, 29). Even more, she pointed out how streets have been utilised for many other purposes than transport and, therefore, assume functions of public space. “Streets in cities serve many purposes besides carrying vehicles, and city sidewalks – the pedestrian parts of the streets – serve many purposes besides carrying pedestrians” (*ibid.*).

One of the outcomes of that discussion was indeed the sudden discovery that “regulated” spaces were rather dangerous, also because some users were stronger (and protected by an “armour”), while others were weaker, socially “marginal” and easily assaulted. The question became, for many urban planners, pedestrian advocates and policy-makers, how to dismantle a system which was inefficient, dangerous and was killing (not just metaphorically) social life.

The main exit strategy was the separation of “fast spaces” and “slow spaces”. This concept was not new, as proposed by the “Radburn layout” in 1929 by Clarence Stein and repeated in the Buchanan (1963) report. According to this planning trend, the city should create a few traffic corridors, with high speed devoted to automobiles; but this was balanced with more pedestrian rights in the inner streets, including fully pedestrianized areas, strict speed limits and well-designed intersections. Buchanan himself was both proposing a new system for public space as well as reporting a new trend occurring in Europe, shown by the creation in 1953 in Rotterdam of a pedestrian area in the shopping zone Lijnbaan, the same in Kassel in 1953, as well as the banning of motor-cars downtown in 1961 in Klagenfurt, or Siena and Split in 1964. Beyond pedestrian areas, mainly devoted to shopping areas or highly relevant historical centres, other, “ordinary”, streets were pedestrianized or transformed into pedestrian-friendly areas.

Following the idea of common use of street space and equal access for all users, once again the space available was cut into different slices: one for cars

(the biggest one), one for cyclists, one for pedestrians, another one for shops or street cafés here and there. This spatial partitioning seems to reflect the European societies' claim of granting the same rights to different groups, including the enforcement of those rights.

4. From Village to the City: Commons and urbanization in India

In order to understand the way of governing commons in India, we take a brief look into history: One of the most important sources for today's legal framework is the English common law. It was introduced during the century of British colonial rule and has largely persisted in the Indian constitution and legislation. The second component is the *Panchayat*, a form of local self-government which has deep historical roots, but was officially institutionalized only recently, within the past century.

Compared to Europe, where regulatory frameworks and governance innovations mostly emerged in the urban context, rural society in India has had a larger influence on the formation of structures for governing infrastructure and commons. Prior to the arrival of the East India Company and the establishment of the British Raj, the use of commons was mainly regulated by customary law and access to it was based on membership in the (rural) community (Chakravarty-Kaul 1992a, 9). With the colonial government common property was no longer devised by self-organized local bodies, but recorded and legally established by the British authorities as part of their revenue collecting activities (ibid, 12f.). Forests and grazing lands were demarcated and existent common property was considered to be "waste land". Villages did not own this land, but were entitled to its use by the State, which was the actual proprietor. Generally speaking, this system of governing the commons eroded the cohesion of the village community and, thus, the idea of common property (Prasad 1995, 3).

The national independence of 1947 did not substantially change the situation. On the contrary, as Chakravarty-Kaul put it, "we in India got rid of colonial rule and with it the commons, the community and customary law," (1992b, 3).

Although local self-governance was included in the Preamble of the Indian Constitution of 1949, it was not until the mid-1990s that substantial powers were transferred to local bodies by binding state and federal legislation. It was only at this point that a system of elected *Panchayats* was established at the level of villages and – in urban areas – on quarters and districts. This system was intended to administer issues concerning agriculture, use and preservation of natural resources, maintenance and building of local transport infrastructure or public distribution systems. Through the *Panchayat Raj Institutions*, communities have potentially regained the ability to establish and manage local commons. However, these efforts are still hampered by the incomplete transfer of power, undermining agencies, corruption and/or lack of governance skills (Sivaramakrishnan and John 2008). Nowadays, the implementation of decentralized structures has been

partly successful in rural areas, but is still lacking in urban areas (on political, administrative and fiscal level) (TERI 2010).

So, the image of commons changes when the focus is shifted away from the rural context, perhaps the most studied area, and onto to the city. Urban commons and public space in particular are hardly recognized as such. This may be due to the lack of traditional examples of commons in cities or the more difficult implementation of community participation law in urban areas. As there is not such sense of community in cities and as hence street space is not regarded as a community affair, no negotiation process takes place in order to find a way to govern the commons.

In consequence, similar to past trends in Europe, the attempts of those in power to define speed (symbolic for unlimited mobility) as top priority in urban development and to apply the same system of segregation can be observed. However, the informal mode of (self-) governing street space gives a more dynamic picture and resembles the “layers of uses” which can cope with the vast variety of users and uses much better. By contrast, formal transport planning attempts to divide street space into slices and separate them with insurmountable walls, making a dynamic use of the available space almost impossible.

4.1. Patterns of speed and usage

In Indian cities, high economic growth rates and urbanization have been mutually dependent for the last decades. Towns and cities have expanded rapidly as growing numbers of migrants, mostly from the rural areas, come in search of opportunities. The increasing demand for both mobility and real estate has also affected the situation on streets and in public spaces. For instance, once car ownership concentrated among the political and economic elite in India, but it increasingly spread to the middle classes as well, as the car is a hugely popular consumer item and a symbol of prestige (Pucher et al. 2007, 389). Rising incomes among the Indian middle and upper classes have made car and motorcycle ownership more and more affordable. Following the forecasts of almost all leading management consulting firms, the Indian passenger car market is one of uphill projections, with every major auto manufacturer setting an eye on it. Hence, the vehicle population has multiplied within a short time and cars (moving or standing) pushed aside other uses and users due to lack of space. The sharply rising transportation demands have overwhelmed the existing Indian infrastructure and transport systems.

However, compared to the canonical description of specialized flows on streets in Europe, the traffic situation in India looks different. According to a wide range of mobility behaviours (from walking to private motor-car), street traffic comprises a wide range of vehicle types and, in addition, the streets are home to many other uses besides transportation. There are traditional means such as walking, bullock carts and horse carriages, bicycles and hand-pulled rickshaws, as well as cycle rickshaws. The motorisation of households increasingly shapes the urban landscape: Heavy traffic is the norm and includes overloaded trucks

and buses, scooters, pedestrians, bicycles, camel, horse or elephant riders, and free-roaming livestock (cf. ACS 2010). In local public transport and intermediate transport, buses and auto-rickshaws are predominant, but modern commuter rail services and metro systems can also be found in metropolitan areas (Jain 2011).

Traditionally, besides transportation, streets in Indian cities and the majority of public spaces always facilitated a setting for large low-income classes to earn a livelihood and simultaneously to satisfy their demand for basic necessities. Due to the accelerated urbanisation process in recent decades and the subsequently increasing density in the inner city, as well as longer travel distances through spatial expansion, the mobility patterns of the urban middle-class have changed particularly. The following increase of individual motorised vehicles is displacing the established local provisions. Today, there is “stiff competition” between various users of public spaces with very different assertiveness (Reimann 2012, 61). Although it is evident that walking, public transport and non-motorised vehicles are still the major means of transportation (Tiwari 2002), in the recent past the planning focus has shifted to meet the requirements of individual motorised vehicles. Certainly fly-overs, road-widening, ring roads and radial roads temporarily improve the situation on the roads, but neither enhances the non-motorised and public transport means nor assuages the problem in the long run, particularly for the dense city centre.

It is easy, even too easy, to claim a sort of common trend between modern-day India and yesterday’s Europe. The claim of a “universal grammar” in mass motorization and its (progressive and linear) development is widespread in the everyday debate (Conover 2010).

But, on the contrary, in the existing fluidity of uses in India and in the (political) failure to enforce segregation of users, we can detect a major difference between India and Europe. In Europe, where formal rules are enforced quite strictly and a segregated street system is in place, a lot of users have disappeared from the streets (street vendors, pedestrians etc.). In India, where in most places the formal rules count less-than ad-hoc self-governance, the streets are still able to deal with the variety of claims.

According to this “chaotic” use of public space, with an emerging dominance of private means (like motorbikes or cars), streets in India experienced an increased number of fatalities. However, this has not led to safety actions, and behind this lack of action we can detect a political and cultural mindset of “do not disturb the mass motorisation”, as it is considered one of the most evident and welcome outcomes of economic growth and symbols of a globalized society (Kamat 2011). Neglecting the idea that walking is “by far the most important means for achieving urbanity in public spaces” (Rode 2013) the requirements of pedestrians are not recognised as part of urban transport infrastructure. In consequence, a large share of the population not only faces significant disadvantages for daily routines, but also experiences the abandonment of liveable public spaces.

It is not coincidental that huge efforts are being undertaken to build massive infrastructures such as flyovers, motorways and metro-rails which *de facto*

privilege fast, motorized transport and exclude slower modes. As a result, the traditional uses and functions of streets as part of public space have been encroached, replaced, marginalised. In fact, walking has been made even slower as pedestrians need to overcome massive barriers on their way, e.g. by climbing so-called foot-over-bridges, or they even have to go a long way round. The situation of street vendors is another aspect that appeared decisively during our investigations. Although they are an essential part of the city's supply system and especially indispensable for the urban poor they are – like pedestrians and cyclists – marginalised by motorised transportation.

5. Street space and commonness

One could assume that the primacy of motorisation and the simultaneous neglect of non-motorised transport modes are uncontrolled and occasional processes in the context of economic growth and urbanisation. Instead, they are part of political as well as societal factors that influence the urban social environment to a high degree. Notwithstanding the official abolition of the caste system as a part of India's constitution, the thinking and acting in social classes is still common. However, today the social standing combines class affiliation with economic success, leading to a general "rule of the rich and mighty". This so-called "politics of forgetting" (Fernandes 2004) is a process of exclusion and purification whereby the new urban middle-class "represents a visible embodiment of globalisation [while] forgetting the urban poor and working classes" (Fernandes 2004, 2428).

According to Indian authors, the idea of the public is a "particular configuration of commonness that emerged in the capitalist-democratic West in the course of the eighteenth century". The idea is linked to concepts, such as universal access and "*Öffentlichkeit* (openness)" (Kaviraj 1997, 86), and, correspondingly sense of common responsibility.

The notion of community cohesion and distribution of common responsibilities among the members of a community is rooted in the Indian tradition, though not comparable to "Western" countries in respect to practical application. Whereas the European idea of public space is inclusive, accessible to all and part of public life, the same idea of public space does not necessarily apply in India. Rather, the public sphere is invisibly fragmented as it considers social layers used by distinct social groups in defined ways at defined times. These different groups indeed come across each other, but they hardly really meet in the sense that they communicate or even take notice. The sense of common responsibility, therefore, only relates to distinct social settings and hence to closely defined spatial units. Implicit or explicit prohibitions serve to communicate the sense of a hierarchically governed space. According to Kaviraj, this type of governance has been pursued by the emerging elites who imposed rules and regulations following colonial rule (Kaviraj 1997, 85f).

The stability of rule-ordered relationships, however, is also dependent upon enforcement (Ostrom 2005, 20). According to Commons ([1924] 1968, 138)

rules “simply say what individuals must, must not, may, can, and cannot do, if the authoritative agency that decides disputes brings the collective power of the community to bear upon the said individuals.” In the streets of Indian cities unclear responsibilities and lack of regulation and enforcement are dominant, in regards to spatial planning, building of infrastructure or traffic management. Before the liberalisation of the 1990s, the development of infrastructure was mainly in the hands of the public sector, which led to inefficiency as a result of bureaucracy and corruption, maintaining the existing power structures. In addition, transport planning and the management of streets, railways and airports have been mostly uncoordinated. Many agencies (central, state and city level) are involved with urban transport, but none assumes overall responsibility (World Bank 2002, 18). As a result, formal rules to govern street spaces hardly exist or are not properly enforced. For street users, in consequence, “breaking rules is an option” (Ostrom 2005, 21). As the risk of being monitored and sanctioned when breaking the rules is relatively low street, users follow their own understanding of the rules and park their cars on sidewalks or walk on the traffic lanes. Without defined rules, however, the commonly known rule of social hierarchy is applied to street space with the dominance of car owners as they represent the social elite and trucks as they represent physical power. But “if the risk [of being sanctioned] is low, the predictability and stability of a situation are reduced. And instability can grow over time,” (Ostrom 2005, 21). Transferred to the context of public or street space it can be observed that without proper rules and rights, mainly inequality grows because the slower and unprotected street users (without vehicles) are not considered equal partners in the process of negotiating the rules practiced.

Summing up, streets (as part of the public sphere) are used in a multilayered manner, reflecting the hierarchical, informally self-governed, system of society. Nevertheless and especially because of these unregulated dynamics and their tendency to marginalise the socially and economically deprived, re-negotiation and re-organisation of public spaces becomes necessary. However, this does not automatically mean that copying the European way of governing the streets, cutting them into slices – with a separate lane for every kind of use, will bring the solution. On the contrary, a more dynamic way of ad-hoc negotiation fits to the variety of users much better. Still, formal rules (and their enforcement) are needed in order to empower and protect pedestrians and street hawkers and give them equal rights.

6. Conclusion

While the main trend of (increasing) motor-vehicle dominance seems to be similar in Europe and India, we note considerable differences. European users are able to shift from one use (slice) of the street to another quite easily: from walking to car or bicycle. Once on the street, they are considerably respectful of – or are forced to respect – the spatial boundaries, e.g. the lanes, defined by a legal framework.

India experiences the opposite: difficult or insuperable hurdles in changing layers of street uses (vertical social mobility within the hierarchy), but huge suppleness of the spatial divisions. Although India is following a western-style mobility path, it has not (yet) reached the mass motorisation stage. This leads people to think about a similar trend from chaos (dynamic overlapping of the spatial layers) to order (spatially segregated slices) in the everyday use of urban streets once motorization will reach a critical mass. Although appealing, this approach seems to be a “copy and paste” interpretation, which gives a dominating role to a single user group: motor vehicles in this case, estimating other elements as ancillary or marginal (Offner 1993).

In conclusion, it has become clear that public space needs to be re-negotiated by the inhabitants of the city in order to develop a common set of values and rules according to society’s understanding of common use of space. “When all participants share a common set of values and interact with one another in a multiplex set of arrangements within a small community, the probabilities of their developing adequate rules and norms to govern repetitive relationships are much greater” (Taylor 1987, 31f). This would give the different groups of people a chance to claim and reframe “their” space, although this is a quite challenging aim as city communities are not small. In Europe, this kind of negotiation has happened at the expert level (transport planners and engineers) and was enshrined by legal instruments like land use plans in a top-down manner. As for a long time cars dominated thinking, there was hardly any protest. Today, however, activists’ movements like *Reclaim the street* or *Critical mass* are developing, claiming a different use of public spaces not only linked to movement or to transport. Here, informal groups of cyclists or pedestrians worldwide gather together in an open space or even at crossroads until a critical mass is reached which is able to occupy whole streets. In this way they demonstrate for more respect among different street users and for more liveable open spaces. Once accused of stopping the traffic, they replied with the motto “We don’t stop the traffic, we are the traffic”.

We could argue that this shift in European countries is a result of a long urban tradition where only today, slowly, a sense of an “urban community” is re-emerging. The “urban culture” in India is not quite distinctive. However, in a more traditional way of governing the commons, the picture of street use there is much more like European activists would want it to be. Still, the communities that have been working in villages for centuries today need to be introduced into city-communities. Therefore also a stronger political will for more decentralized urban governance is needed. It is remarkable how in India the practical everyday experience of use of streets accepts *de facto* the (unequal) rights of different user groups and integrates shared use of streets in a quite dynamic pattern. Transport experts with a “Western” perspective may claim this is inefficient or unsafe on account of valid “technical” arguments and statistical data. But taking into account that the so-called “industrialized” countries are moving back to a shared or mixed use of urban streets, it should be re-negotiated among the urban communities how

to combine the idea of *layers* and *slices* of uses in order to create rules for equal access and user rights of streets as commons.

Literature cited

- ACS – US-State Department’s Office of American Citizens Services and Crisis Management. 2010. *India – Country Specific Information*. Online: http://travel.state.gov/travel/cis_pa_tw/cis/cis_1139.html (accessed January 29 2010).
- Buchanan, C. 1963. *Traffic in Towns. A Study of the Long Term Problems of Traffic in Urban Areas*. Reports of the Steering Group and Working Group Appointed by the Minister of Transport [Buchanan Report]. London: Her Majesty’s Stationery Office.
- Capuzzo, P. 2004. *Dalla città all’automobile e ritorno: un percorso del Novecento [From the City to the Automobile and back. A 20th Century Path]*. *Parolechiave* 32:79–92.
- Chakravarty-Kaul, M. 1992a. *Legal Traditions and Inequality: Customs, Law, and the Commons*. Paper presented at the International Association for the Study of Common Property Conference. Washington, D.C., September 17–20, 1992.
- Chakravarty-Kaul, M. 1992b. *Commons, Community and Customary Law. A Rule of Law*. Paper presented at the Participatory Development Forum, East-West Center, Burns Hall, Honolulu, Hawaii, U.S.A. December 17, 1992.
- Commons, J. [1924] 1968. *Legal Foundations of Capitalism*. Madison: University of Wisconsin Press.
- Conover, T. 2010. *The Routes of Man: Travels in the Paved World*. New York: Vintage.
- Fernandes, L. 2004. *The Politics of Forgetting: Class Politics, State Power and the Restructuring of Urban Space in India*. *Urban Studies*, Vol. 41, No. 12, 2415–2430, November 2004.
- Flonneau, M. ed. 2010. *Automobile: les cartes du désamour. Généalogies de l’anti-automobilisme*. Paris, Descartes & Cie.
- Harvey, D. 2008. The Right to the City. *New Left Review* 53:23–40.
- Jacobs, J. 1961. *The Death and Life of Great American Cities*. New York: Random House.
- Jain, A. 2011. The Indian Transport and Carrier Market at a Glance. In *Indien Tourismus*, eds. T. Thimm, and W. Freyer. Oldenbourg Verlag.
- Kamat, S. 2011. Neoliberalism, Urbanism and the Education Economy: Producing Hyderabad as a ‘Global City’. *Discourse: Studies in the Cultural Politics of Education* 32.2:187–202.
- Kaviraj, S. 1997. Filth and the Public Sphere: Concepts and Practices about Space in Calcutta. *Public Culture* 10 (1):83–113.
- Kern, S. 1986. *The Culture of Time and Space 1880 – 1918*. Cambridge, Mass: Harvard University Press.
- Ladd, B. 2008. *Autophobia. Love and Hate in the Automotive Age*. Chicago: The University of Chicago Press.

- Lefebvre, H. 1968. *Le Droit à la ville*. Paris: Anthropos (2nd ed.); Paris: Ed. du Seuil, Collection "Points".
- Lefebvre, H. 1991. *The Production of Space*. Donald Nicholson-Smith trans., Oxford: Basil Blackwell. Originally published 1974.
- McShane, C. 1994. *Down the Asphalt Path. The Automobile and the American City*. New York: Columbia University Press.
- Mohl, R. 2004. Stop the Road: Freeway Revolts in American Cities. *A Journal of Urban History* 30:674 SAGE – Jul 1, 2004
- Moraglio, M. 2014. Knights of Death: Introducing Bicycles and Motor Vehicles to Turin, 1890–1907. *Technology & Culture* (forthcoming)
- Möser, K. 2003. The dark side of 'automobilism'. 1900–1930. Violence, War and the Motor Car. *Journal of Transport History* 24:238–258.
- Norton, P. 2008. *Fighting Traffic: The Dawn of the Motor Age in the American City*. Cambridge, Ma/London: MIT Press.
- Offner, J. -M. 1993. *Les Effets Structurants Du Transport: Mythe Politique, Mystification Politique*, Espace géographique, 3/1993.
- Ostrom, E. 2005. *Understanding Institutional Diversity*. Princeton University Press.
- Ostrom, V. and Ostrom, E. 1977. Public Goods and Public Choices. In *Alternatives for Delivering Public Services: Towards Improved Performance*, eds. E. S. Savas, 7–49. Boulder: Westview Press.
- Passalacqua, A. 2010. *La bataille de la route*. Paris: Descartes & Cie.
- Perrot, M. ed. 1990. *A History Of Private Life. IV. From the Fires of Revolution to the Great War*. Cambridge, Ma: The Belknap Press.
- Prasad, A. 1995. *Inventing the Colonial Commons. Forest Lands and Enclosure in Central India, 1860–1935*. Conference paper presented at the International Association for the Study of Common Property, Bodoe, Norway, May 24–28, 1995. Online: http://dlc.dlib.indiana.edu/archive/00003999/01/Inventing_the_Colonial_Commons_Forest_Lands_and_Enclosures_in_Central_India_1860-1935.pdf
- Pucher, J., Z-R. Peng, N. Mittal, Y. Zhu and N. Korattyswaroopam. 2007. Urban Transport Trends and Policies in China and India: Impacts of Rapid Economic Growth. *Transport Reviews* 27:379–410.
- Province West Prussia 1905. *Wegeordnung für die Provinz Westpreußen vom 27. September 1905*, In: Gesetz-Sammlung für die Königlich-Preußischen-Staaten, Bd. VII, 1900-1906, S. 682.
- Reimann, Julian. 2012. *Public Spaces in Transition – Field Studies in Hyderabad and Istanbul in the Context of the European City*. Masterarbeit, Europa-Universität Viadrina Frankfurt (Oder) Kulturwissenschaftliche Fakultät, 27. August 2012.
- Rode, P. 2013. Trends and challenges: global urbanisation and urban mobility. In *Megacity Mobility Culture: How Cities Move on in a Diverse World. Lecture notes in mobility*, p. 3–21. Frankfurt am Main: Springer. ISBN 9783642347344.
- Samuelson, Paul A. (1955). Diagrammatic Exposition of a Theory of Public Expenditure. *Review of Economics and Statistics* 37:350–356. JSTOR 1925849.

- Sivaramakrishnan, A. and J. John. 2008. *Natural Resource Management by Panchayati Raj Institutions. Issues and Opportunities*. Paper presented at IASC Conference, University of Worcestershire.
- Stübben, J. 1924. *Der Städtebau*, Leipzig: Gebhardt.
- Taylor, M. ed. 1987. *The Possibility of Cooperation*. New York: Cambridge University Press.
- TERI – The Energy and Resources Institute. 2010. *Enhancing public participation through effective functioning of Area Sabhas*. Project Report No. 2009UD04, prepared for Ministry of Urban Development Government of India, New Delhi.
- Tiwari, G. 2002. Returning Streets to the People. *In BMJ* 324:1164.
- Virilio, P. 1977. *Vitesse et Politique. Essai de dromologie*. Paris: Galilée.
- Wollen, P. and J. Kerr. 2002. *Autopia. Cars and Culture*. London: Reaktion Books.
- World Bank Group, 2002. *India's Transport Sector: The Challenges Ahead. Volume 1: Main Report*. Washington/New Delhi: World Bank Group.