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# **URBAN INFORMATICS IN CHINA**

## **Exploring the Emergence of the Chinese City 2.0**

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## **Abstract**

This chapter examines the development of information and communication technologies (ICTs) in urban China, focusing mainly on their impact on social life. The key question raised by this study is how the internet and mobile technologies are affecting the way people make use of urban space. The chapter begins with some background to China's emergence as a connected nation. It then looks at common uses of web-based and mobile phone technologies, particularly bulletin boards, SMS and instant messaging. The chapter then presents findings of recent research that illustrates communitarian relationships that are enabled by mobility and the use of technologies. Finally, these findings are contextualized in the idea of the City 2.0 in China.

## **Introduction**

Urbanization in mainland China has increased dramatically during the past two decades. The urbanized population of China spiraled from 215 million in 1982 to 410 million in 2000, increasing to 32 percent of the total population (Friedmann 2005: 133 n17; see also Donald and Benewick 2005, 27). According to one authoritative source, by 2014 an estimated 40.2 percent of the Chinese population will be urbanized (Garner et al 2005, 67). New cities have emerged and many existing towns and regions have been reclassified as cities. According to Mars and Hornsby (2008), twenty new cities are constructed per year, a phenomenon that is likely to continue until the year 2020.

Urbanization has brought with it great social change. The last two decades of the twentieth century were characterized by widespread economic reforms and population shifts to cities, in part due to the reclassification of many non-urban household registrations (*hukou*) to urban districts. Many traditional social maintenance structures have subsequently come under stress; people have been forced to acquire new skills in order to survive in a changing urban landscape and to develop strategies to seek out jobs, housing preferences and possessions.

Migration has impacted upon the spatial transformation of cities. Unskilled semi-literate workers from the countryside now provide labor for the construction of high-

rise gated apartments that house China's aspiring white collar classes. Bulldozers and wrecking balls relentlessly demolish historic factories and traditional courtyard residences (*hutongs*)—and with this, traditional ways of life (see Zhou 2006). In this radical makeover of urban space overpasses, underpasses, ring roads, technology parks, theme parks, shopping malls and convention centers are the material manifestations of economic development.

This chapter examines the development of information and communication technologies (ICTs) in urban China, focusing mainly on their impact on social life. China provides a contrast with other studies in this book. China is 'in-between', less creative and technologically literate than its neighbors Korea and Japan, but ascending fast in its desire to compete as an equal in the knowledge-based society of the new millennium. In many respects China is also less tolerant of disruptive social behavior than some of the other robust democracies discussed elsewhere in this collection. One of the key questions raised by this chapter therefore is how the internet and mobile technologies affect the way people use and understand urban space. Furthermore, how do ICTs reconstruct communication networks in ways that allow people to feel a sense of connection and shared identity without causing the ruling regime to fear mass social uprising? Following some background information that acknowledges China's technological 'leap forward', we present findings of research that shows the relationship between urban mobility and the creative use of communication technologies. One of the conventional indicators of urban mobility is the automobile (Doulet and Flonneau 2003). We examine perceptions of urban space, strategies to master city trips through the use of web-based technologies, and community celebration of urban experience.

## **A more connected urban society**

The extensive rollout of information and communication technology services during the past two decades has given China an unprecedented platform to catch up to the developed West, something it was unable to do under Maoism (cf. Keane 2007). By comparison with revolutionary China, the China of today is open to both ideas and business. Furthermore, the gradualist commodity economy development model

espoused by Deng Xiaoping in the early 1990s has adapted to global conditions. With cities absorbing more migrants and more international influences, urban space has been reconstructed, reconfigured and made more productive. Castells ([1993] 2007, 486) argues, 'In the new economy, the productivity and competitiveness of regions and cities is determined by their ability to combine informational capacity, quality of life, and connectivity to the network of major metropolitan centres at the national and international levels'. Castells coined the term 'space of flows' to refer to the system of exchange of information, capital and power. In particular, the communication revolution has had a major impact on social relations and values in a society that formerly lacked mobility. In looking at the social implications of ICTs in urban China, we confirm therefore that they enable the adaptation of spatial behaviour to an ever-changing social context. From this perspective ICTs are tools that allow people to be more flexible. The rapid increase in telecommunication infrastructure, together with the state assisted development of the Internet in China – and more specifically Web 2.0 applications and services – has increased the 'space of flows', and with it, the number of online communities. The result has been a redistribution of social meanings and values.

The global dimension of information technology innovation provides us with four key ideas to contextualize China's 'peaceful rise'—the latter is a felicitous term adopted by the Chinese Communist Party to draw attention to China's increasing influence and positioning in the global economy. First, information technology goods and services are now produced, marketed and absorbed at an ever increasing rate. Second, consumers and workers must upgrade skills to stay abreast of developments (Ruggles 2005). Third, users of new technology are increasingly involved in influencing the design of technologies. Fourth, while information technologies are to be found in all strata of society, a great deal of user innovation is associated with young mobile urbanites.

These developments apply equally well to China. Despite a low per capita income compared to most Western nations, China has experienced high-speed growth in access to new communication technologies<sup>1</sup>. By October 2003, the number of mobile subscribers had already overtaken fixed line telephony. According to the Ministry of Information Industry (MII), by December 2007, there were 412 million mobile users

(CNNIC 2007). In actual fact, because many users have more than one phone the actual number of devices registered was 548 million. In big cities, like Beijing and Shanghai, mobile penetration is over 90 percent.

By the end of 2007 China ranked second after the United States with more than 210 million Internet users (CNNIC).<sup>ii</sup> However, compared with national mobile phone penetration (30 percent), the Internet reaches only 16 percent of the total population. Penetration in urban areas (27.3 percent) is of course much higher than rural areas (7.10 percent) (CNNIC December 2007). Mobile internet represents a growth market. At the end of 2007, 50.4 million people, or 24 percent of all internet users, were using mobile devices to connect to the Internet. Another way of understanding this is that 12.6 percent of the total 412 million mobile phone users accessed the Internet (CNNIC 2007). This is an astounding figure when one considers that third generation (3G) licenses are yet to be rolled out (as of writing). Slow download speeds of the 2.5G system results in high charges as they are calculated on a per data basis. This means that viewing anything on the Internet via a mobile device will cost much more than on a computer. With 3G technology China will enter a new informational age: the costs of connecting to the Internet through the mobile phone will reduce as a direct result of network externalities, that is, there will be many more mobile users.

The total number of SMS (*duanxin*) sent in China grew from just half a billion in 2000 to more than 592 billion in 2007, while the number of Internet café users grew from 60,000 to over 60 millions during this same period. In the rapidly changing urban environment, customized services are available for low-income workers, including SMS, prepaid phone cards, Internet Cafés and little smart mobile phone (*xiaolingtong* / PHS). Indeed, studies have shown that the mobile phone plays an important role in helping migrant workers to develop and extend a large number of weak ties with casual acquaintances or organizations, and exchanging mass job information within such ties (Law, 2005).

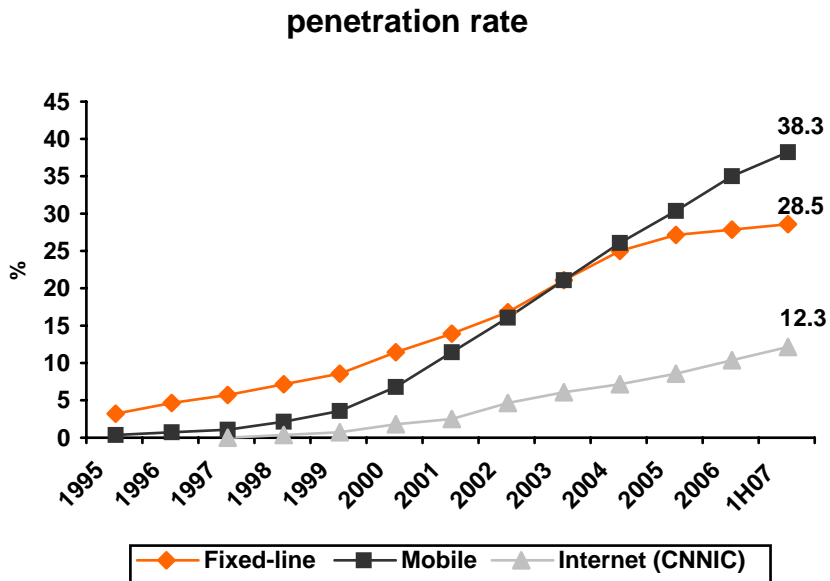


Figure 1: Penetration rate of fixed-line, mobile and internet in China (1995-2007).

Source: MII, CNNIC and National Bureau of Statistics (Beijing) \*Note: fixed includes PHS/Xiaolingtong subscribers.

According to the China Internet Network Information Center (CNNIC), the ‘typical’ Chinese Internet user is young, with low income or no fixed income. Indeed, 69 percent of Chinese internet users are under 30 years old, while some 50.9 percent are below the age of 25 (CNNIC 2007). The most popular online activity is entertainment. Bulletin boards (BBS) and gaming are extremely popular while there is high instant messaging (IM) penetration. IM is more widely used than email. Many users go to internet cafés to chat over QQ, the leading IM service provider. For youth, instant messaging and game-playing are major obsessions. The leading provider of IM is QQ, which was officially launched by Tencent in February 1999. QQ announced a massive 292 million active users in its 2007 report. QQ has built up several value added services such as QQ.com, QQ Game, QQ Zone, QQ Show, and Paipai.com. All of these services have been seamlessly integrated with QQ IM and can be accessed with a user’s QQ account. QQ even introduced a virtual currency named Q-coin, which can be used to buy virtual clothes, hairstyles, furniture – and even virtual pet food for

virtual pets. In a way, QQ combines aspects of the social networking site MySpace, the video sharing site YouTube and the online virtual world of Second Life.

I play with QQ about three to five hours a day...I usually play QQ games, buy game stuff from the QQ Game and buy decorations for my QQ show.

--- A 21-year-old college student in Beijing<sup>iii</sup>

There is an interesting social observation to be drawn from these activities. Because of the One Child Policy, which began in the 1980s, China's teenagers don't have sisters and brothers. As a result they rely heavily on sites such as QQ to communicate with their peers, to express their personalities and release pressure from the high expectations of their parents. Many become hooked on Tencent's QQ offerings in high school and stick with it in college. By providing all-in-one packaging of entertainment offerings, QQ has achieved dominance in this youth internet market.

These data show that internet based technologies have allowed Chinese netizens to connect across "scale free networks" to a great degree. Scale free networks are those that aggregate users in highly connected nodes surrounded by many less active connections. The point about scale free networks is that they are often vulnerable to epidemics. The internet itself is a prototypical scale free network. However what is perhaps more interesting than highly connected hubs is the development of many "small world networks". By comparison, small world networks are often characterized by shared identity; sometimes they are constituted by friends of friends or by people who share common interests or pursuits. These networks are inherently more stable: that is, no single individual will influence everyone and there are recognized observed protocols. In the following section we discuss one kind of small world network that has formed around the use of the motor car.

## **Urban mobility and the increasing use of telecommunication technologies**

In the developed Western economies new technologies have facilitated a great degree of mobility. The widespread consumer absorption of new products and applications, and the mastery of ICT tools, has allowed greater individual fulfilment together with participation in product re-development. As mentioned above the Chinese society has undergone wide-ranging economic reform during the past two decades, resulting in more mobile urban lifestyles. The high penetration of mobile phones, now linked to the Internet, illustrates how mobility is central to understanding the social dimension of technology in Chinese cities.

China is a transitional state in which modern behaviour competes with the values of traditional society. Increased mobility is challenging the concept of community, particularly in big cities. In other words, the increase in mobility challenges inherited forms of sociability, especially those related to the notion of proximity (Davis, 1995). Likewise the use of the internet and mobile technologies distances people from traditional face to face relationships. In addition to these direct effects of technological devices, contemporary community-building processes are undergoing radical changes (as we shall see below).

Mobility also has a visible material significance. Since 1992, many urban dwellers in China have invested in the purchase of homes and cars. The acquisition of the home is determined by income but it is increasingly subject to location preferences; for example, some neighborhoods are more fashionable than others. Attention to location displaces the former work-based mobility of the Maoist era. In Maoist China, travel distances were limited because of a strong geographical integration of work and residence. Residences were organized within or close to the work unit. Under the effect of the reforms, the work units are losing this structuring role. Today, companies have less control over the residential location of their employees: work places and residential places are scattered, resulting in longer travel distances. And because of severe traffic congestion, Chinese urban dwellers have to spend more time commuting everyday, hence the growing Chinese love affair with the car.

The transformation of urban space has largely been a result of planned reconstruction, aided by greater social mobility and affluence. In this combination of space and capital individuals have developed a more informed knowledge of the city. For decades, travel was effectively structured around the home-to-work pattern. Today, because of a more individual-based society and the increasing significance of leisure, people are multiplying their urban experiences. Travel for work, education and shopping remains the most common travel motives; however, for an increasing number of individuals, leisure is a necessity rather than just an option.

Up until the mid-1990s, urban mobility depended mainly on bus and bicycle. With improvements in transportation networks, people gained access to faster transportation (taxis, company cars, private cars, subway and light train). On average, every 1.46 household in Beijing has a car<sup>iv</sup>. Moreover despite the costs, taking a taxi is very common practice. Considering those contextual elements, it seems that mobility has become a key entry point to analyze the impact of telecommunication technologies on urban life in China. In the following part, we will discuss some of our findings.

## **“Car Club”**

Orange Labs Beijing (The France Telecom group) created a two-year research program with the purpose of : exploring ICT usage in China in order to assess the impact of mobility on the concept of community, investigating urban mobility as a social phenomenon, and examining urban space as a natural environment for interaction. To understand these ideas the lab examined the relationships between different forms of sociability and mobility linked with ICTs through in-depth interviews as well as new “mobile” methods.<sup>v</sup>

The Car Club is a “small world network”, an online community of owners of particular brands and models. We analyzed Car Clubs’ online and offline activities, their organization as well as their evolution, language, communication patterns and values. In understanding urban mobility as social behavior, we were looking at how

new technologies provide a site for creating new forms of collective practice and meaning.

Car ownership continues to grow at a rapid pace in urban China. The number of passenger cars on the road in 2000 was 6 million; today the figure stands at some 20 million today. 28 percent of Beijing residents now own their cars. Every day, 1,000 new cars (and 500 used ones) are sold in Beijing alone<sup>vi</sup> Because of this boom “car clubs” and “self-driving trips” are popular across the nation. What is particularly interesting, however, and different from most western countries, is that the surge of automobile ownership has occurred synchronously with the rapid adoption of mobile phone and internet in China. Both play a key role in the construction of a new urban lifestyle and act as symbols of independence.

In China, the car is also about status. On the other hand, Chinese social relations are typified by reciprocal social networks. The Car Club was online at the outset, but now plays a role in organizing real social networks. The coordinated activities of multiple individuals produce larger-scale effects, thus one of the effects produced by the “on the go” car club is a responsive collective mobile intelligence.

In Beijing there are 200,000 car owners and 79 car clubs. Car fans share their love, knowledge and problems about cars on BBS, which also serve as a conduit for offline activities among car fans.<sup>vii</sup> Netizens have developed a system of nicknames and acronyms to refer to their beloved cars and the car clubs they belong to, for example:

Camry: (little Fu) 凯凯 (Kai Kai), KK, KMR, CMR

Focus: 小福, 福福 (Fu Fu), FKS, FCS

Polo: 菠萝 (pineapple)

Peugeot 307: 小狮 (little lion)

Peugeot 206: 小六 (little six)

Audi A4: 小4 (little 4)

Nissan Taida: 达达 (Da Da), DD, QD

Opel: 宝宝 (bao bao/baby), 小欧 (little ou)

The Car Club communities are non-profit sites, formed by car owners independently from car manufacturers. They constitute an open community of car fans, car owners and potential owners. Compared with many online communities, particularly scale free networks, these “small world networks” are selective: social status is linked with certain car brands. Members of different car clubs in turn look for different experiences. Some seek to expand their social networks (e.g. BMW car club). Others pursue leisure activities among singles (Ford Focus car club), find persons with the similar “nomadic” lifestyles (Beijing Jeep car club) and learn how to get a better driving experience by exchanging knowledge among drivers. In a way, people join these car clubs not only for leisure activities or to share common interests, but also for daily mobility solutions in the face of the new urban life.

We noticed among respondents an evolution of attitudes towards the car club and its collective activities, from conspicuous consumption to community building and mobile lifestyle adoption. As one respondent says:

At the beginning, I noticed the online car club because I bought my first car and I was curious about who had the same car as me; then it started being great fun when we drove our cars on the road together in a line, it was very cool and attracted lots of attention. As time goes by, I begin to realize it is part of my life from just reading the post on the BBS, asking questions about how to better use the GPS, joining FB activities, and organizing group trips as the team leader, and helping new comers. I even was on a business trip, I still logged on to our BBS, even just to have a look at the conversations.”

--- Member of an online car club

### **Typical languages and activities**

Four types of topics are regularly generated on Car Club BBS or QQ groups: these are “asking for help”, “sharing experiences”, “organizing trips” and “providing information”. The following are representative of language and practices we observed in the car clubs.

- FB (short for *fubai*)

Are you searching for a place for FB event! Note: Considering the actual participant numbers will be far beyond the sign-up numbers, if you come without reservation, we will accept your money, but we won't let you in!

The literal meaning of *fubai* is corrupt. It comes from describing the act of corrupt officials freely spending to enjoy life. Within auto forums, the term has been appropriated to refer to netizens spending their own hard-earned money to enjoy life through such FB activities as going out for good food and traveling. Often these offline FB activities are organized online within the forums. Online friends, united by their love of a particular car, can quickly become offline friends.

- DX (short for *daxia*)

I have customized my car, would love DX to give comments on it. I am uploading pictures now!  
--- a netizen

The literal meaning of *daxia* is big shrimp. DX serves as a sort of honorific hero title for a male netizen who says something cool or does something interesting.

Within online car clubs, there is always someone who is highly active at organizing the group's self tour. These people will post the tour proposal either on BBS or in QQ groups, with a detailed description including route, activities, accommodations, budget per person and theme. The following shows how a group leader organized such a collective activity and the various communication tools he used for the coordination.

- 1) I posted a message on the car-mate forum to introduce the activity like a promotion.
- 2) I announced it in my QQ group;
- 3) I waited for people to sign up for participation;
- 4) I counted the number of participants;
- 5) I contacted the place to arrange the detail of accommodations and schedule, and visited the place by myself to fix the route in advance; I contacted participants with QQ (when I was out of office and home, and used mobile QQ) and posted the schedule and expected expense on the forum, asking everybody to bring their mobile phone and interphone.

With an increasing income and an increased number of vacation days per year, China has entered the society of leisure.<sup>viii</sup> Many people are attracted to out of town locations, even for weekend trips. Meanwhile, an increasing number of urban residents now choose to travel alone or search for travel mates online and organize group trips to go somewhere together. The boom in China-focused online travel agencies makes planning travel inside China much easier and cheaper than before. As a result, many Chinese people visit sites like Ctrip.com (a consolidator of hotel rooms and airline tickets in China that started in 1999) and Qunar.com (a price comparison site for travel) to make their holiday plans. In order to organize vacation, people obtain information in advance using websites or discussion groups and make plans collectively.

## **Mobility as collective behavior**

The traditional pattern of Chinese sociability relies on kinship and spatial relationships which are locally embedded in specific social structures. As illustrated below today's sociability is opening from small social circles, such as family and

close friends, to larger self-designed “small worlds” based on common interests such as car clubs, traveling enthusiasts and cooking-mates.

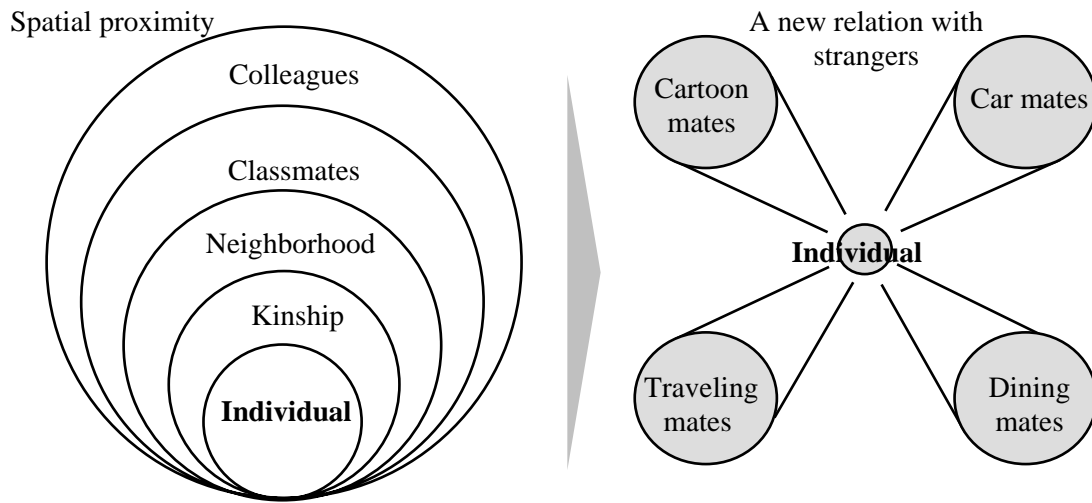


Figure 2: Transition of sociability patterns in urban China

Being mobile in an opening social circle goes along with a more sharing attitude towards space and collective mobility practices. The prevalence of car clubs is a case in point. In China, a car is not an individual consumption, it's about status. The way Chinese people behave with their cars shows the strategies to face the new urban life with the characteristics of increasing mobility, changing urban landscape, expansion of weak ties and ICT usage. A car club is built online at the beginning to offer a kind of organizational belonging to the segmented urbanites, but later it plays a role in everyday city life as a quite efficient reciprocal and practical social network. One of the effects produced by the "on the go" car club, is the responsive collective mobility intelligence.

Therefore, the significance of “Car Club” and “Travel Mates” is not the club or the online community itself, but the link it creates between online and offline activities, that is, from *collective sociality* to *collaborative spatiality*. Beginning with the concept of mobility, rather than technology, we propose a functional link between people and technology. From this perspective, while urban and mobile technologies are tools for problem-solving, they are more importantly sites at which social and

cultural practices are produced and reproduced (see Dourish et al, 2007). We observe that new technologies provide a site for creating new forms of collective practice and meanings. Being mobile therefore is not only the adoption of the car, or certain mobile technologies, but also the changing attitude towards urban life, reinvented sociability patterns and new relations with urban space.

## **Conclusion: Contextualizing the City 2.0, Connectivity, and Mobility**

In the past two decades, China has witnessed rapid development of urban infrastructures for telecommunication, a reconstruction of communities, a higher level of social, residential and daily mobility—especially with leisure-oriented mobility and the rapid adoption of emerging technologies and services. Web 2.0 innovations in China increasingly come from areas such as BBS/Online forums, IM services, P2P streaming, Internet TV, Mobile, Online gaming and virtual goods. Considering that the number of mobile users is more than double the number of internet users in China, the future is about “automating interaction” (Ruggles 2005). Here is the key point. Looking at China from the long view, one may observe the totality of control, the Communist state, the view pushed by China’s critics leading up to the Beijing Olympics. Looking close-up, however, we see a great freeing up of interaction: people talking on mobile phones, gamers connecting with distant players, SMS and IM networks continually connecting, and thousands of “small world” community networks like Car Clubs. The future of the Chinese City 2.0 is framed by ever-increasing connectivity, allowing mobile lifestyles that integrate personal mobile devices with use of space. The emerging City 2.0 allows individuals to collect greater intelligence about being mobile, to share knowledge within small world communities and to enable distant others to interact with that knowledge.

As we mentioned in the introduction, important trends in informatics are reflected in urban lifestyles. The first point we noted was that information technology goods and services are produced, marketed and absorbed at an ever increasing rate. In China, wireless and internet-based innovations have accelerated. Second, consumers and workers are upgrading skills and literacies as the boundary between online social

networking and offline social networking blurs. Both small world and scale free networks co-evolve. Third, mobility is providing opportunities connected with culture and sociability. Dourish et al. (2007) have investigated different approaches to dealing with mobility in urban computing. For instance, one classic approach is to view mobility as a “problem” that requires mobilization of static applications like PDAs to resolve disconnection from stable working situations. On the other hand, seeing mobility as opportunity foregrounds interactive opportunities for city travelers.

In recognizing these transitions, moreover, the developers of mobile applications have begun to incorporate lessons from social science to understand ways in which people produce spatial experience. In this inversion of market push, users of new technology become increasingly involved in influencing the design of technologies. This is the vision of the Chinese City 2.0. We hope that this may also be the design for a more open and democratic China. This is the challenge presented by information and communication technologies in transitional societies. On the one hand, a great leap forward for productivity, on the other, a democratization of information and a reshaping of social values.

## **Biographies**

### **Dan Shang**

Sociology Researcher and Service Development Manager at Orange Lab Beijing (France Telecom Group); her research focus is on urban mobility and online communities. She is especially interested in how mobile and urban technologies affect the way people use space and reinvent relations between mobility and sociability.

### **Jean-François Doulet**

Associate Professor, Jean-François Doulet has been exploring urban change in China for many years. He is more specifically interested in understanding how increasing mobility is transforming daily life in cities and the production of urban space. His bibliography is largely dedicated to automobile use and innovative mobility solutions in China and abroad. He co-authored (with historian Mathieu Flonneau) *Paris-Pékin, civiliser l'automobile* (2003), a comparative study on the impact of automobile use on urban mobility schemes in Paris and Beijing. In addition, he heads the China

Programme of the Paris-based think tank City on the Move Institute ([www.city-on-the-move.com](http://www.city-on-the-move.com)). Since 2006, he has been working, as a scientific advisor, in shaping research activities on ICT usage in Chinese cities within Orange Labs Beijing (France Telecom Group). <http://www.villeschinoises.com>

### **Michael Keane**

Associate Professor Michael Keane's research interests include creative industries internationalisation and innovation in China; audio-visual industry policy and development in China, South Korea, and Taiwan; and television formats in Asia. He is the author of *Created in China: the Great New Leap Forward* (2007), a study of China's creative economy, and how television, animation, advertising, design, publishing and digital games are reshaping traditional understanding of culture. His most recent co-authored book (with Anthony Fung and Albert Moran) is *New Television, Globalization and the East Asian Cultural Imagination* (2007), a major study of the evolving landscape of television in China, Hong Kong SAR, South Korea, Japan and Taiwan. <http://www.cci.edu.au/profile/michael-keane>

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## **Key Terms and Their Definitions**

**Urban mobility:** the whole of trips generated daily by the inhabitants of a city, and the methods and conditions associated with these trips (modes of transport selected, length of trip, time spent in transport, etc.)

**City 2.0:** a new expression designating the new approaches of organizing a city along the principles of Web 2.0, inciting participation from citizens to define urban services, a more widely shared type of urbanism.

**Collective mobility:** Trips are motivated by a more open sociability and individuals adopting mobility behaviors that are incited by one or more social groups. For example, car club self-driving tour.

**Collaborative spatiality:** the perception as well as the experience of urban spaces is partly shaped by the collaborative activities within groups. For example, through car club BBS, people build a "City-Wiki" including trip routes, cheap parking manuals and a GPS guidebook to share their mobility experience and knowledge.

**Sociability pattern:** the way individuals build their social circles and the interactions between these circles.

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<sup>i</sup> The average wage in 2005 was 18,364 yuan (\$US2371). See Donald and Benewick 2008, 49

<sup>ii</sup> Users are those that go online for at least one hour per week.

<sup>iii</sup> Cited from "Internet Boom in China Is Built on Virtual Fun", By David Barboza, Published: February 5, 2007, New York Times.

<sup>iv</sup> Beijing Traffic Management Bureau , 2007

<sup>v</sup> This research is based on two rounds of fieldwork: The first round was conducted in the summer of 2006, with 40 in-depth interviews and 6 time-space diaries, in Beijing, Shanghai and Guangzhou. Based on the findings of the first round, we moved on to the second round in the summer of 2007, with 16 in-depth interviews(8 in Beijing and 8 in Shanghai), 1 focus group, 1 creative session and 1 participative observation(cf. Join in the trips organized by online collaborative travel communities). All the interviewees are "highly mobile urban individuals", defined by a high level of motility (i.e. potential of mobility).

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<sup>vi</sup> Beijing Traffic Management Bureau , 2006

<sup>vii</sup> CIC, a leading Internet Word of Mouth (IWOM) research and consulting firm in China, collected Car BBS Posts for September: Number of messages:3,826,853; Number of unique posters: 93,720; Average number of posts per day:127,561

<sup>viii</sup> China has three seven-day holidays each year: Lunar New Year or Spring Festival early in the year, Labor Day (May 1-7), and the country's National Day (Oct. 1-7). The three "Golden Weeks" holidays are a delicious [choice of word?] break for urbanites. Up until the mid 1990's workers in China used to put in six-day work weeks and only had a long weekend or two off during the year. Now if all weekends and holidays are counted workers can enjoy up to 114 days off or about a third of the year is spent in leisure time. Instead of staying at home or visiting relatives and friends within the local area, the holiday saw millions of Chinese on the move, shopping, dining and traveling.