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ABSTRACT

This paper presents a near-future scenario for urban China, derived through application of scenario planning techniques to extrapolate components of a possible urban future, based on analysis of recent and current digitally-mediated urban spatial practice in Chinese cities. The scenario provides a framework for exploring the interplay of top-down modes of control and bottom-up "performance" in the digital city; the co-forming relationship between urban spatial practices and the appropriation of digital communications networks for social and spatial experimentation; and the culturally and socially conditioned roles that digital technologies play in the formation and evolution of urban morphology and urban societies.

Keywords: *mediated city, urban spatial practice, digital communications, floating population, Chinese urbanism*

INTRODUCTION

This paper elaborates a scenario comprising a number of hypothetical interrelated practices that exemplify possible near-future developments in mediated Chinese urban spatial practice. "Urban spatial practice" refers to the activities, interactions and behaviours of the various actors in cities, through which urban life, and cities themselves, are constituted.

PURPOSE

The inspiration for the research from which this paper stems came from two parallel developments in contemporary China; the mass-production of new cities and the meteoric development and spread of access to digital communication networks, and the most expansive and rapid processes of urbanisation and informatisation in global history. These trends can be seen as two facets of a multi-modal infrastructural and social development (Jachna, 2005), implying models of organisation, social interaction and spatial practice that span physical and virtual dimensions, constituting a unique 21st-century Chinese manifestation of the "smart" or "mediated" city.

The research presented here was motivated by a desire to understand possible implications of the digital "mediation" of urban spatial practice, in which urban planners, designers and inhabitants increasingly mediate their different relationships with, and within, the city through digital technologies. Such digital mediation can be observed at many levels and scales of action in urban situations, from the use of personal electronics by individuals in the way they inhabit and perceive urban contexts, to the use of computers to simulate and plan urban design measures, to the global networks through which cities are bound into meta-urban continua. Digital mediation of urban spatial practice affects the ways cities are planned, perceived and "performed".

"FLOATING" AND INDETERMINACY IN 21ST CENTURY CHINESE URBANISM

The socio-spatial transformations in contemporary China are exemplified by the country's "floating population" of a hundred million internal migrant workers, whose labour is crucial for the development of China's cities but who are denied full rights of urban citizenship.

The floating population poses a challenge to the Chinese government's strategy of household registration or *hukou*, by which each citizen is allocated either as an urban dweller or a rural dweller, in a self-perpetuating system largely tied to the residential status of one's parents (Faure & Liu, 2002; Solinger, 1999). Most of China's migrant workers possess rural *hukou* status even though they constitute a crucial component of urban economies, forming most of the menial, industrial and construction workforce. The government is hesitant to grant them urban residency (and it is this suspension of legitimacy that sustains the seasonal migration of these populations between their rural homes and their urban workplaces), but the scattering of these people far from their places of registration threatens structures of control built on an assumption of the anchoring of a person at a place – of co-identity of *home* and *residence* (Smith, 2000; Yu, 2003).

Another phenomenon of China's economic growth and urban expansion is the emergence of indeterminate, shifting pseudo-urban zones that blur the distinction between urban and rural (Friedmann, 2006). Some new cities are established by official declaration of Beijing, others founded surreptitiously by provincial governments by mobilizing infrastructure and shifting populations to conjure zones that correspond to the legal definition of a city, in terms of factors like kilometers of paved roads, degree of electrification and concentration of population. Enclaves in areas around existing cities are being developed by both governmental and commercial developers in an uneven way that creates amorphous patchworks of hyper-developed, undeveloped and indeterminate plots of land. Some regions, such as the Pearl River Delta, have become vast pseudo-urban continua in which individual cities dissolve into a fabric of blotchy density (Koolhaas, et al., 2002).

METHODOLOGY

Scenario planning refers to a family of methods that fall under the wider category of futuring (or futures) techniques. The trait of scenarios that distinguishes them from other futuring tools is their holistic and narrative structure. The founding of scenario development is generally attributed to Herman Kahn in his work for the RAND Corporation in the 1950s (Kahn & Mann, 1957). Scenarios have been described as "fictional stories, with characters, events, products and environments. They allow us to explore product ideas and key themes in the context of a realistic future" (Verplank, et al., 1993). A broader definition is contributed by Porter (1985, p.63), who sees a scenario as "an internally consistent view of what the future might turn out to be – not a forecast but one possible future outcome." Schwartz (1991, p.45) defines a scenario as "a tool for ordering one's perceptions about alternative future environments in which one's decisions might be played out".

This paper presents a near future scenario a network of interrelated mediated urban practices centred on China's floating population. The form and methodology of a scenario, rather than a project, is adopted for this illustration. A project is intrinsically told from the point of view of an author and describes a series of moves that are within the power of the author to set in motion and control, to achieve a certain goal. This form is at odds with the picture of mediated urbanism formed by this research, as the emergent effects of interactions between numerous urban actors, none of which is in a position to control what happens in the spaces between these practices.

The process of drafting of this scenario is described in detail elsewhere (Jachna, 2008). The scenario emerges from categories defined through a grounded-theory-based analysis of examples drawn from three different realms of mediated Chinese urban spatial practice (corresponding to the use of digital technologies in the planning, design and inhabitation of cities) as "survival forms" (Carroll, 2000), on the basis of which future practices may be extrapolated. It is derived through application of Carroll's idea of "convergent rationale" to define urban *moves* that can be supported by the convergence of rationale drawn from the findings of this research, filtered through the motivations and values of the "actors" who constitute the situation under study.

SCENARIO

The following scenario is a story of one possible set of interrelated practices in near-future urban China.

The Floating *Hukou*

The Chinese *hukou* system is based on unambiguous categorization of land, and the association of each citizen with one or the other of these categories of land, from which each citizen gains an identity. The floating population and the built landscape are both endlessly shifting, falling between the two poles of the binary rural/urban distinction, and thus outside of traditional structures of control and representation.

This scenario begins with the proposition that these two entities be linked to one another through the creation of a third *hukou* categorization – the floating *hukou*, by which these people-in-transit and these places-in-transition are paired in the same way that urban and rural land and urban and rural citizens are co-defined by their linking through the urban and rural *hukou*. With this simple strategic move, the Chinese government brings both the floating population and the pseudo-urban spaces into the fold. They achieve definitional fixity without spatial fixity, in a way that confirms and strengthens the established person-place grammar of control and distinction, rather than threatening it.

Members of the floating population are thus granted legitimate and exclusive (temporary) use rights to this floating land. Although in reality a black market would exist whereby these rights would be sold to members of other *hukou*, both by government officials and by members of the floating *hukou*. A plot of land is designated as "floating" until such time as it is slated for development, at which point it becomes urban *hukou* land and the floating residents must shift to other floating *hukou* plots. Habitation of a given plot of land is tenuous but habitation of floating land in general is a birthright.

Social Change

Digital communications media are appropriated by urban citizens in China to transgress limits set on them by society, tradition and political ideology, without breaking the outward façade of conformity (Chu & Peng, 2005; Fei, 1992; Xia, 2006). Virtual venues are forums for exercises in creativity, risk-taking and expressions of individuality that are not possible or acceptable in physical urban space. China's sexual revolution, alternative news and information distribution networks, its grassroots political and social movements all rely on digital networks and virtual places (People's Daily, 2003; Wang, et al., 2007).

One social movement that need not retreat into virtuality is the growth of capitalist and consumerist society, which expresses itself in a rash of private real estate developments that are eradicating large swathes of historical urban fabric and driving the sprawl of cities into their hinterlands. China's new and expanding middle class embraces the cult of the private home as a symbol of success. Housing developments based on the most kitsch Western subdivisions, as well as DIY shops, are springing up throughout China to serve this market. The floating population is excluded from this revolution, both by their lack of material means and by their lack of residential rights in the city. They are not, however, sheltered from media images presenting the private urban home as a symbol of belonging, not to a place but to a social stratum. While migrant workers are not able to possess an urban home as a physical object, they are able to appropriate the language of the home as a mode of expression, using digital tools.

Textual Spaces

The sms is the medium of the vernacular of the mediated Chinese city (Latham, 2007; Zhou, 2008), and the mobile phone is ubiquitous among the floating population. Although Internet access among this group is increasing, the mobile phone remains a more portable, personalized and accessible technology. Continuing from the use of sms as a medium for the composition and dissemination of novels (Beijing Portal, 2004) and poetry (CRIonline, 2003) that emerged in the early 21st century, this communication form could be adopted for the composition of "homes": abstracted personal architectural compositions in the form of grids of Chinese characters describing a codified plan of a residential structure. At the prosaic level, the characters for discreet tangible elements such as door, window, wall, tree, stone, etc. could be arrayed in a grid that evokes a literal sketch of a spatial plan. More adept practitioners develop this art through more nuanced renderings of spaces with increasingly poetic forms, the reading and appreciation of which would be an acquired cultural skill as with any poetry form.

The number of Chinese characters that can be displayed on a mobile phone depends on the service provider and the model of the phone. This defines the length of a chapter or poem, and the size of the spatial composition that can be created and displayed. So in effect, the model of one's mobile phone and the provisions of one's service contract define the virtual "real estate" and building material that one has at one's disposal. This already fetishized piece of technology becomes a determinant of a social hierarchy of virtual land-use rights as well. Within the paradigm implied by this set of practices, every migrant worker is endowed with a plot of physical (though miniaturized) territory that they never have to leave because – in a completely sensible and practical reversal from the point of view of the lived reality of the floating population – territory is not linked to (transitory) geographical location but is carried on the inalienable body of the person.

These sms poems / homes are private spaces. One shares one's private space with another person not by inviting that person in but by sending the space out as a message. This turns the accustomed typology of the home inside-out. The plan of the interior becomes the face of the home. The enclosing wall that defines a Chinese residential compound is implied only by the frame of the screen of the mobile phone on which it is read, not an integral part of the architecture but of the device on which it is being read. Like phone screens, some forms of traditional Chinese poetry (i.e. four-syllabic, seven-syllabic) prescribe a fixed number of characters per line, taking the form of regular grids of lines and rows of equal length (Yiu, 1966).

The creation of a genre of 'spatial poems'can thus be seen as a development from literary poetry through sms that sketch architectural compositions. Like sms poets and novelists, sms architects would make a living from their design of these compositions or by 'copying' physical buildings into textual form. In their early stages, these textual spatial compositions are forwarded among members of the floating population. Semacode labels printed at an Internet café can be stuck to the door of one's quarters so that all passers with a camera-equipped 3G mobile phone can access one's spatial poem. One can even stealthily occupy any site of one's choice by sticking one's semacode tag to any surface in the city. A network of dream spaces throughout the city presents an alternative urban geography for those who know how to look.

Digital "Homes"

The textual representations of architectural space as sms spatial poems leads to 'construction', by some members of the floating population, of these homes in massively multiplayer online role-playing games (MMORPG) and online worlds such as Second Life. The greater spatial verisimilitude of these such virtual worlds may seem to be an 'improvement' on the text-based sms ciphers, but many bemoan the bluntness and banality of these VR constructions compared to the multiple readings, the potential for poetic expression and space for individual interpretation of the text-based 'spatial poems'. Though some will lament the collapsing of the *literary* space into a *literal* space, others counter that the textual version of *words that can generate a myriad of images*, was just a necessary but obsolete precursor to a true architecture of *images that are capable of generating a myriad of words* in the pseudo-spaces of online worlds.

For a majority of migrants, access to these homelands will be through the their mobile devices rather than high-processor-speed computers with broadband connections, indicating that the graphic interface to these online worlds will likely remain at a low-resolution or even textual level rather than the increasingly immersive environments of the most popular online worlds and games. In terms of Bolter & Grusin's (1999, pp.21-24) definitions, the high-bandwidth VR experiences would tend toward "immediacy", in which the medium recedes from the consciousness of the user as it becomes increasingly frictionless and immersive in its representative function; whereas the mobile-phone-accessed high-abstraction textualized version of the interface represents an example of "hypermediacy", in which the medium is brought to the forefront of consciousness by impressing its own aesthetic or bias in the process of representing. These different approaches to private virtual space delineate a rift between, on the one hand, a "classicist" vein of practice that values the *hypermediate* interfaces that embody a grammatical structure and symbolic bias, and, on the other hand, a "modernist" school that values *immediate* interfaces that present a *tabula rasa* and an image-oriented visual bias.

Some enthusiastic *netizens* try to bridge this rift by creating special sets of virtual components for structures in online worlds, fusing two semiotic dimensions – that of architectural elements and

that of Chinese pictograms – into one vocabulary of forms. Eventually, this emerging design niche captures the attention of established Chinese typographers, architects, game designers and web designers as a defining design problem of 21st century China, leading to a proliferation of high-design, high-profile "alphabets" of components.

Digital "Homelands"

The specificity and depth of this virtual architectural vocabulary is one factor that inspires dedicated online worlds by and for the floating population. Another contributing factor is migrants' desire for a stable territory and space of community. Eventually a native domain – .flt.cn – would be dedicated to these sites.

Native place networks are extremely important in job-finding, personal security, money lending, housing, enabling contact with family members in the home village and other essential aspects in a migrant worker's subsistence. Migrants from a given province or locality control certain goods and services, monopolize certain trades and lay claim to certain areas for their residences. The scattered and transitory members of the migrant population from a given province or locality would find that the online world provides a stable and open platform for their interactions with one another, in which one can leave one's mark, and from which one is never uprooted. Thus, it becomes common for online worlds to be set up by and for migrants from specific localities, or by the provincial government of their home provinces, in which the local dialect of the native province is the *lingua franca*, the base virtual topography alludes to the landscape features of the home province and the standard components out of which homes can be built are based on the regional vernacular architecture.

Cultural theorists compare the uploading of these virtual homes *cum* status symbols to the tradition of burning paper replicas of worldly goods, money, cars, mobile phones, houses as offerings to provide a comfortable afterlife to deceased ancestors. However, in the case of the migrant workers, the recipients of these virtual amenities are not departed family members but their own online alter-egos. This is cited as symptomatic of the dissolution of traditional family structures, growing narcissism and consumerism and other ills said to be imposed on Chinese society by the encroachment of free market capitalism. One neither feels beholden to the past nor expects obeisance from one's offspring. Rather, one creates one's own blessings in the here and now.

Control Mechanisms

As neither land nor people of the floating *hukou* are fixed in physical space, the government requires a different datum as an index and medium of control: a place that can be addressed and supervised. To achieve this, the Ministry of Information requires migrants to register with local authorities, who update locational information on individuals on an online database. This soon proves unenforceable. As governments do not provide the floating population with schooling, facilities or utilities, the use of which could be made dependent on registration, there is little motivation for compliance. The online worlds of the .flt.cn domain, inhabited by migrant workers offer the government ready-made spaces of potential surveillance, and a more reliable index of a population that maintains no long-term residential or employment status. Like proprietors of websites and Internet cafes in present-day China, proprietors of these online worlds offer apparent adherence to government requirements to report data on all residents. There are incentives for compliance, because confiscation of the website's server or blocking of access to an overseas server accessed through a proxy server in China as a result of non-compliance would be fatal to such a world, unlike a blog or bulletin board that can be re-launched under another guise. As a back-up control measure, the tens of thousands of plainclothes 'roving spies' hired by the government to scan urban space for bad elements, and the similar number whose job it is to patrol online bulletin boards and chat rooms would be joined by another army of 'avatar spies' performing a similar role in virtual online worlds.

Though the government can thus maintain control and surveillance over citizens in both physical space and virtual venues, the dynamic nature and high potential for evasion of identification in both the physical and the virtual projections of the space of the floating population mean that neither of these control nets will ever unambiguously and completely address the floating population. Nor would there ever be certainty as to the match between a given citizen in physical space and an online "netizen",

so practices of control must treat the *personas* of the floating *hukou* and of the online homelands as two distinct populations, although they are both projections of the same *person*. Control over social practice is exercised by controlling the links between physical and social practice, as well as between informational and social practice.

Virtual "Belonging"

An increasing number of factors encourage migrants to perceive digital homelands as their primary datum-space of inhabitation, with some practices in physical space becoming subsidiary expressions of practices in virtual pseudo-spaces. The floating population's existence in the physical city is transitory, marginalized, denigrated, vulnerable and dispersed. Online worlds are representations within which the lived reality of this demographic "makes sense', literally" in that the floating culture is the root from which systems of meaning are derived, and in which this 'sense' is given pseudo-spatial and visual representation.

Sociologists describe these online worlds as rehearsal grounds for conspicuous consumption: venues not only for political and social experiments banned from physical space, but also for economic activities that migrants cannot afford in the world of tangible goods and common currency. Once practices have achieved acceptance in this virtual world, they are socially sanctioned for export into physical spatial practice. This is a way of gaining a consensus, being at the same time out in public, but not out in public. Companies discover this as a testing ground to gauge potential acceptance of a product among the migrant population before issuing it into the market in tangible form.

The generation of migrants who grow up within the floating *hukou*, and its accompanying mediated faces, is accustomed to online worlds allowing them to play out aspirations not possible in the physical world. This raises their expectations and leads them to seek to express, if not duplicate, these freedoms in the real world, as "floating" becomes a way of life on equal standing with urban and rural, and not a state of desperation. Thus, following on the lead of such social phenomena in China as the sexual revolution and the pro-human-rights movement, for which incubation in online forums preceded and fueled enactment in the physical space of the city, the offspring of the present day Chinese migrants begin to express the socially constructed space of the floating population, nurtured and developed in virtual venues, onto their structures of habitation on the "floating" land that is the territory of their *hukou*.

Physical Domain

Although physical land is not the primary medium within which meaning in the semiotic world of the floating population is reflected, a relation to land is nonetheless a constituent element of any *hukou* arrangement – urban, rural or floating. The physical territory of the floating *hukou* consists of land on the urban peripheries, land that is awaiting development, fallow cropland, urban wasteland, vacant lots, and land in new cities that exist in name but not yet in physical form. Floating use rights will be temporary, lasting from a few months to a few years. Municipal and provincial governments come to an agreement on what spaces can be occupied, temporarily, by the floating population.

Currently, migrant workers in China live in many types of housing, including rented rooms in farmhouses, temporary demountable barracks on building sites or attached to factories and quarters in the back rooms of businesses. While at first the citizens of the floating *hukou* are resigned to continuing the accustomed cycle of building cheap utilitarian structures and abandoning them when they are driven out, the sanctioning of "floating" as a valid way of life, and incremental increases in the material wealth and societal self-awareness of migrants in Chinese society, encourages experimentation with building types that capitalize on the characteristic of mobility while enabling a sense of continuity, identity and belonging. The changes in social practice encouraged by practices in the information city begin to have a pronounced effect on practices in the physical city. Modular, demountable and transportable structures provide the opportunity for the structures that house a community to move with that community. In this way, the entire built environment of the floating *hukou* can evade many planning and approval restrictions by taking advantage of the same 'temporary building' loophole in Chinese planning regulations that allow many of the current habitations of migrant workers to sidestep controls.

Remediating Homes

The term “remediation” (Bolter & Grusin, 1999) refers to processes by which new media adopt and adapt conventions of predecessor media (i.e. cinema remediates stage plays, photography remediates painting). In remediation, one can distinguish between strategies of “immediacy”, which aim at achieving a transparency that eliminates awareness of the medium, and those that favour “hypermediacy”, calling attention to the mediating role of the medium by exaggerating its bias and conventions (ibid, pp.20-50).

There are numerous ways in which virtual spatial poems are remediated as physical residences, through a variety of informal practices that cannot be subsumed under a unifying system or set of rules. Some denizens of the “immediate” immersive spectacles of online worlds are inclined to treat the representational relation between material reality and virtual reality as equally immediate and attempt to create literal material replicas of the structure they have created online, and entrepreneurs begin to offer the services of constructing mobile or temporary physical replicas of the online structures.

More interesting are the approaches by which the highly symbolic mobile-phone-“hypermediated” pseudo-spaces are translated (in equally hypermediated fashion) into physical reality. The structural principles of Chinese text messages, constructions in online worlds and modular building systems are cognate, in that they all typically involve the assembly of complex structures from the elements of predefined kits of units, each of which is a pre-assembled entity as opposed to the units of single pen strokes, pixels or bricks. That the native structures of these three spaces of the floating population all share this characteristic encourages and facilitates remediation and transferral of characteristic. Just as alphabets of components were created to remediate spatial poems as virtual pseudo-spatial constructions in online worlds, modular physical components are manufactured to provide a lexicon for the functional and semiotic construction of meaningful spatial statements in a residential typology. Translation of building blocks from one medium to another is dealt with differently by different designers, some borrowing explicitly from the physical appearance of the virtual elements to inspire the physical elements and others reinterpreting the semiotic grammar of the family of elements within architectural vocabularies of their own invention or borrowed from the Chinese vernacular.

Continuing the comparison between this mediated digital urbanism and the burning of paper offerings as a mediator between the living and the deceased ancestors, cultural critics make much of the contrast between the sacrificing of physicality through fire for one’s ancestors and the dragging of virtual forms into the material world for oneself.

Physical Components

The components from which ‘floating’ physical homes are constructed are of necessity mobile, modular and mass-produced. They would be available on the open market in different price ranges, in collections designed by different designers and supplied by different suppliers. Although some physical components will be simple low-tech construction elements, most will also be digital interfaces. The range of applications of this embedded digital technology is broad. At a basic level not requiring any processor power in the components themselves, each element could be become part of a machine-readable spatial configuration if plugged-into a contiguous set of components (see for example Frazer, 1995, pp.37-49) or within the range of a wireless LAN linked to a central processor, either at the level of the residence or of the entire settlement.

These components can be passed on to other family members as generation succeeds generation in migrating for work, and they can also retain a history or memory of past locations, configurations and events in which they have ‘participated’. Each modular building unit is at the same time a piece of technology that is one’s entry ticket into a digitally-mediated and digitally-constituted community, a status symbol / design statement and a repository for personal information that accrues the longer one owns it. The home thus becomes (among other characteristics) a personal digital accessory that shares many cultural and functional characteristics with the mobile phone. Each of these components also has an address within the .flt.cn domain, adding physical objects to the virtual websites in this territory. Each site in the physical territory of the floating *hukou* would have a url address as well as an address in physical space. Any .flt.cn tagged component can be plugged in to any such site

and become part of the machine-readable model of the material construct of the life world of the floating population which is, in essence, a diffused, amorphous, shifting, ephemeral city.

Walls

A likely model for the first generation of structures on floating land would be the *da yuan* (big yards) that characterize the self-constructed autonomous migrant enclaves such as the former Zhejiangcun in Beijing (Jeong, 2002; Li, 2001; Liu & Liang, 1997). These walled compounds typically housed residents from a given geographical region of origin and were stewarded by "bosses" who provided security and facilities such as utilities and schools as migrants have no right to avail of the protection or provisions that the municipal government provides urban citizens.

The walled compound is a resilient communal architectural form (truly a 'survival form', in Carroll's sense) in Chinese urbanism. Before the *da yuan* of the floating population were the *dan wei*, which housed work groups since the Cultural Revolution. These were preceded by the *si he yuan*, classical urban courtyard houses for extended families, and rural forms of clan-based residences such as the *tu lou* of the Hakka and the *diao lou* of Kaiping. Spatial partitioning of cities into districts distinguished by hierarchy, social group or function was also achieved by walls, most exemplarily in imperial Beijing, which was an extensive cellular tissue of walled zones, with the sequence of nested walled precincts of the Forbidden City at its center (Zhu, 2004). The walled compound was inherited by subsequent generations with mutually antagonistic ideals, yet it has a cultural resonance that is deeper than any of these. This spatial strategy has survived centuries of political and social changes and has housed and given architectural expression to the cohabitation of different types of social units throughout Chinese history.

As in all periods of Chinese urbanism, a system of walls is a primary structuring system of this floating urbanism. The "walls" of floating urbanism are linear built elements that contain the utilities cables and pipes to distribute to the individual living units, provided by the settlement bosses to tenants. Because the city government provides no utilities, and the land must be abandoned within a few years, these units are mobile and reconfigurable (and .flt. cn-addressed). In the spirit of light urbanism and of practicality, excavations are avoided and all utilities run within these re-usable walls.

Public amenities of the settlement such as schools, meeting places and security stations are also components of this wall system. The floating population, by nature of the pact with the government, must provide most services for themselves. It can be hypothesised that the government will tolerate all sorts of these private initiatives if it cannot provide an alternative. Thus, there is good reason to develop services that are not anchored to the site, that are not lost when they are forced to move and that are easily deployable.

Through sms spatial poems, the wall surrounding the "home" changes from a barrier that hides a private interior as a defensible territory, to a frame that presents a private interior as a message, and this characteristic is carried into the physical generation of this information architecture. The walls are laid out behind and between individual structures and not along the street, defining individual spaces but in a way that forms a backdrop for the individual living units rather than enclosing and concealing them, dividing from the neighbors but presenting the home to the street. The backdrop, like the frame of the mobile phone LCD screen, is generic, with the personal "message" set off against it. In its generic character, it performs both the unifying and structuring function of traditional city walls and the framing and presenting function of the mobile phone screen.

Physical Arrangement and Addressing

The real-time updating data on the physical configuration and status of elements can be applied to banal tasks like keeping an inventory of parts and an addressing system of the inhabitants of a settlement, but would also be used in other practices, such as automatically updating the virtual version of the home to correspond to the current manifestation of the physical arrangement; or automatically updating the physical version of the home to correspond to the current manifestation of the arrangement of the virtual home, whether automatically through actuators or through instructions issued for contractors. However, some may not choose to maintain a link between the virtual and physical representations of their home, either developing the two as separate structures

or abandoning the virtual version once a physical version is attained. Beyond a structure's potential reading as a mechanistic functional ensemble or formal composition, it can also be read as a semiotic – even literary – construction. Software capable of supporting grammatical or literary interpretations of residential structures or whole settlements as machine-readable models would be equally important in maintaining an understanding of the 'functioning' of these spaces.

The relation between the physical and the virtual spaces of the floating *hukou* is real and close but not *spatially* isomorphic (though perhaps isomorphic by another logic). Neither space is simply a representation of the other. Nonetheless, a constant reciprocal practice of representation, in which each of the spaces is simultaneously the referent and the representation of the other, is what binds these two spaces together.

Public Space / Communal Space

Where Chinese migrant communities have been able to create their own spaces, a social logic tends to inhere that is similar to that of a peer-to-peer community. Although the physical structure and amenities of a *da yuan* are typically provided by the *da yuan*'s "boss" in exchange for rent, the overall social organization of these communities is more a flat network of collaborating equals than a hierarchical society. The *da yuan* is a platform that facilitates these networks without controlling them.

The public space of the traditional Asian city is defined more by situated interaction of people in generic urban spaces compared to the Western urban strategy of designers creating specific spatial frames for prescribed urban activities (Shelton, 1999, pp.38-40). This characteristic is extended beyond a description of day-to-day urban life, to propose a model for the formation of urban space as a social practice that solidifies social bonds and shared meanings by/whilst communally constructing physical referents for these meanings. It is proposed that a "platform of ritual" be established on which a practice of tangible communal mythmaking is based to produce meaning (Pfaffenberger, 2001, p.1).

The system of walls forms the backbone of a settlement in a functional sense and also in a psychological sense. The system is of necessity reconfigurable and modular, taking on a different dendriform arrangement each time it is moved and recombined. The geomantic and parametric heritage of Chinese urbanism informs the approach to each new site as an interpretation of a generic spatial strategy in conversation with the particularities of a specific site. In the context of this scenario, the common spatial strategy is defined internally by the components and rules of combination of the wall components, in contrast to the external parameters of ideal form placed on cities by classical Chinese urban rule systems. Traditionally, the site-specific forces in conversation with which a city achieves its form are represented in large part by geomantic beliefs such as *feng shui* in traditional Chinese city-making. *Feng shui* is a set of spatial principles adopted by urban planners, architects and individuals alike, in classical Chinese cities, and provides an example of a symbolic and ritualized communal spatial mythology that spans different realms of spatial practice, uniting different urban actors: a latent set of forces that can be actualized in any man-made structure of any scale.

The communal mythology of the floating population in this scenario inheres in the consensus to conceive of their territory as spanning physical space and virtual pseudo-spaces, which is supported by constantly enacted rituals that link these two modes of spatial practice performatively in the various moves and conventions outlined in the preceding pages. "Communal" is therefore not a bounded and localized type of space, but a characteristic of the settlement as a whole that is not a result of zoning or planning but of an epiphenomenal communal investment of meaning through involvement in a set of practices to which one must submit to gain membership in the community.

DISCUSSION

Urban villages (*chengzhongcun*), walled *da yaun* and the factory barracks in which many members of the floating population are now housed in China's cities are examples of very specific Chinese urban forms that have arisen from a historically unique confluence of opportunities, demand and social groups in the late 20th and early 21st centuries (Chung, 2010; He, 2009; Qi, et al., 2007; Song, 2007; Uehara, 2006; Wei & Yan, 2005). China's cities continue to evolve, and this scenario is an attempt to extrapolate new forms of urban habitation that could supplant or supplement such established models.

A scenario, in the most general sense, is *a story, used as a tool.* The purpose in constructing a scenario is to support an understanding of a situation, not to seek strategies to attempt to exercise control over it (which is inimical to the character of the mediated city). It is a framework for understanding practice, not prescribing practice.

This scenario is neither a plan nor a design, though plans and designs exist at all stages and levels of the scenario. The space of the digital city opens up only through the interplay of these various practices. This is in distinction to projects that propose systems as servomechanisms for the city, providing supposedly benevolent and prescient systems that, in providing splendidly for specific predetermined dimensions of freedom in the city, structurally exclude many other potential dimensions of freedom, as has been discussed elsewhere (Jachna, 2009). The scenario is not a depiction of a system. It is neither exhaustive nor self-contained. It is an extraction of some threads from a web of practices that form a program of a hypothetical near-future Chinese mediated city.

Certeau (1984, p.42) sees stories as generators of space. Comparing them to the rituals used by the ancient Romans to symbolically open up a space for military excursions beyond the boundaries of the empire, he writes, “Like the Roman *fētiāles*, stories ‘go in a procession’ ahead of social practices in order to open a field for them. Decisions and juridical combinations themselves come only afterwards” (ibid, p.124). At the frontiers of a territory, of space or of knowledge, stories found a space where none previously exists. They “create the field” within which actions can be undertaken and practices practiced.

CONCLUSION

The approach applied in deriving this scenario draws on the concept of the mediated city as a process of conversation and negotiation, not as a program of grand plans and top-down imposition (Jachna, 2012). This scenario is intended, not as the end of a conversation, not a solution or resolution, but as a set of statements in a conversation, which pick up on previous statements by others in this conversation, and wait in anticipation to discover what statements this declaration will evoke.

The urban paradigm outlined here is culturally specific, in that it draws on the socio-cultural particularities of 21st century urban China to extrapolate potential multi-actor cultural processes. However, rural-to-urban migration, rapid and informal urbanization, and the proliferation and democratization of digital technologies are phenomena that are being experienced by metropolises across Asia. As such, the narrative presented here could serve as a point of entry for considering what culturally specific versions of mediated urban spatial practice might emerge in the near future of Hanoi, or Bangkok, or Jakarta.

Digital technologies continue to open new potentials for the future development of urban spatial practice, but these technologies do not in themselves pre-determine or prioritise the actualisation of one of the many possible futures implicit in this field of potential over the others. The futures that emerge will be influenced by the choices and “moves” made by urban actors within this field of possibilities. While not presuming to predict a likely future above all the others, this scenario proposes potential moves that could be taken within this context, to exemplify the types of urban practices that this paper is trying to articulate, to aid in the refinement of said articulation, and to draw comment and critique from others concerned with the future of Asian cities.

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