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SCARCITY + CREATIVITY IN THE BUILT ENVIRONMENT

6

URBAN SCARCITIES

Deljana Iossifova

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THE BUILT ENVIRONMENT

URBAN SCARCITIES:
A LOOK AT SHANGHAI

6

A Working Paper for SCIBE
Deljana Iossifova

> If you are late for work in the morning in Bombay, and you
> reach the station just as the train is leaving the platform, you
> can run up to the packed compartments and find many hands
> stretching out to grab you on board, unfolding outward from
> the train like petals. As you run alongside the train, you will be
> picked up and some tiny space will be made for your feet on
> the edge of the open doorway. [...] Your fellow passengers,
> already packed tighter than cattle are legally allowed to be,
> their shirts already drenched in sweat in the badly ventilated
> compartment, having stood like this for hours, retain an
> empathy for you, know that your boss might yell at you or cut
> your pay if you miss this train, and will make space where
> none exists to take one more person with them. [...] Come on
> board, they say. We'll adjust.[1]

Space, so the narrative goes, is scarce in cities[2]. Urban reality in most parts
of the world is characterised by 'unplanned' growth in terms of space and
population, causing a sense of helplessness on the part of those in charge of
planning, designing, and managing cities. But in concentrating people,
resources, information, capital, and goods, cities seem to offer the unique
opportunity to build 'highly efficient and cost effective' systems of service

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[1] Suketu Mehta, *Maximum City: Bombay Lost and Found*, 1st edn (New York: Vintage Books,
2005).
[2] see, for instance, Jorge E. Hardoy, Diana Mittin and David Satterthwaite, *Environmental
Problems in an Urbanizing World: Finding Solutions in Africa, Asia, and Latin America* (London
and Sterling, VA: Earthscan, 2001).

provision and energy supply[3]. One significant challenge in an age of urbanisation poses the question of how to ensure that all 'individuals that make up a population are guaranteed a modicum of wellbeing by ensuring their access to a basic level of resources'[4] .

Resources (goods and services) are generally considered 'scarce' when they are desired but not plentiful. Especially in consumer societies that have adopted or are transitioning toward 'free market' economies, 'scarcity' is a driver for demand, production, and continuous growth. The current debate around the notion of scarcity is shaped by two alternative, equally anti-poor narratives: the limits-to-growth narrative, evoking neo-Malthusian frameworks of thought and calling for a reduction of demand, and targeting primarily those who are still poor; and the narrative of scarcity as defined in neoclassical economics, positioning one good in relation to another—hence suggesting the 'infinite potential to substitute abundant materials for scarce ones', leading societies to disregard the needs of the poor[5]. In the 'developed' as much as the 'developing' world, urbanisation, 'urban renewal', and the commodification of space are manifestations of global capitalism: the investment of surplus capital in urban 'development' holds the promise of rising profits and continuous economic growth[6]. China, for instance, is currently transitioning from a model of 'cities of production', propagated by Mao over the duration of his rule, to 'cities of consumption'. For residents of China's cities, the very comparison of the own situation with that of an envisioned or co-present better 'other' allows for the appropriation of 'scarcity' as a constant and kindles the desire for 'more'. Introducing the 'free market' has meant presenting urban residents, once modestly content with their functional homes and simple lifestyles, with the

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[3]   Sean   C.S.   Chiao,   'Planning   China's   Megacities',   *What   Matters*,   2011 <http://whatmatters.mckinseydigital.com/cities/planning-china-s-megacities>   [accessed   2 February 2011].
[4] Lyla Mehta, 'The Scare, Naturalization and Politicization of Scarcity', in *The Limits to Scarcity*, ed. by Lyla Mehta, Science in Society (London & Washington, DC: Earthscan, 2010).
[5] Richard Rayner, 'Foreword', in *The Limits to Scarcity*, ed. by Lyla Mehta, Science in Society (London & Washington, DC: Earthscan, 2010) [accessed 12 January 2011].
[6]   David   Harvey,   'The   Right   to   the   City',   *New   Left   Review*,   53   (2008) <http://www.newleftreview.org/?view=2740> [accessed 25 January 2011].

availability of 'more', thus transforming them into a society of dutiful consumers; it has meant the transition from services and goods available to all urban residents, at least in theory, to services and goods available only to those who can afford them. On the example of a neighbourhood of Shanghai, in this paper, I will look at the ways in which residents conceive of, appropriate, handle, and adapt to scarcity in the context of the city.
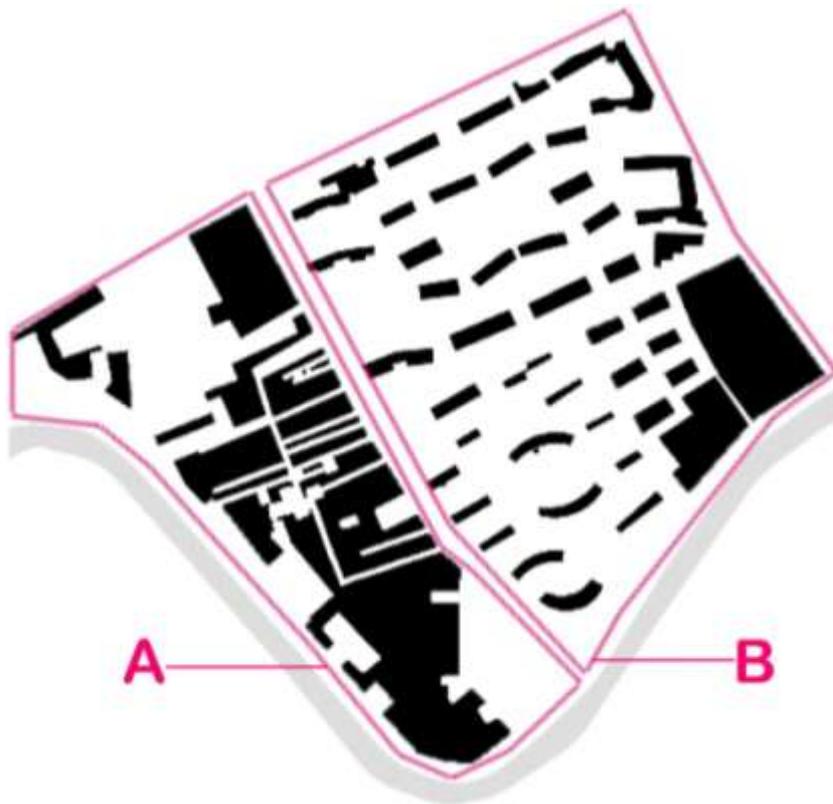

Figure 1:
The case study
area.

Emerging Scarcities

The splintered study neighbourhood (see Figure 1), located north of Suzhou Creek (which served during the last century as the 'dumping ground' for industrial facilities along its banks) in Shanghai, was inhabited by a diverse mix of people. Urban newcomers—the members of an emerging urban middle-class—resides in the brand-new, gated, and evidently affluent high-rise compounds that took the place of most of a huge shantytown, or

pingminqu (B). When the developer bought the land some years ago, the majority of original *pingminqu* residents were resettled to the outskirts of the city; by 2008, the total number of residents in the new high-rise buildings amounted to more than 6,500 people.

One of them, ZXG (see Figure 2), was born here in the 1950ies to poor parents from an adjacent province. He was laid-off from work in a state-owned enterprise in the early 1990ies and started his own business selling roasted chestnuts. Redevelopment of his neighbourhood resulted in the demolition of his family home, but his chestnut enterprise had put him in the favourable (and exceptional) position of being able to buy a ground-floor apartment in the gated commercial development that would be built in the old neighbourhood's place. Since then, he insisted, 'the neighbourhood has changed for the better'—not only had his living conditions largely

Figure 2: ZXG in the living room of his apartment in (B).

improved, but 'rich people' had moved into and improved the image of the area (Interview with ZXG, September 2008). ZQH, one of the 'rich people', was only twenty-seven years old at the time of the interview and had moved to Shanghai just five years earlier. His income as a real estate agent allowed him to take up a mortgage for his brand-new apartment in the gated compound. However, ZQH complained that there were 'no bars, no Starbucks, and no entertainment opportunities like in other places', and he considered his current apartment 'just a temporary stop, an investment' (Interview with ZQH, October 2007). Further, he felt unhappy with the presence of 'the village', as he called it, across the street—a left-over of the large pingminqu (A).

The area (A) housed long-term, mostly unemployed residents and recent rural-to-urban migrants in self-made or provisionally mended dwellings. Of the 5,000 people registered in (A), just about half were said to be from Shanghai. Many 'original residents, the real Shanghainese', had moved out of the area as soon as they were able to afford a better place, and had rented their old homes to the 'many migrants that kept coming during the last years' (Interview with neighbourhood committee representative, May 2009). Not least because they despised being associated with the rural-to-urban migrants who now lived in the area, many of the remaining original residents eagerly anticipated the day of their resettlement to 'a new and better place' (Interview with CHX, October 2007) in the suburbs. So far, however, the government had not informed them of the city's plans for their neighbourhood.

Seeing adjacent neighbourhoods anticipating and preparing for the arrival of the World EXPO 2010 in Shanghai, even neighbourhood committee representatives of (A) with close ties to the government could not but feel disappointed about the little attention that they seemed to receive:

Figure 3: YZM in the living room/kitchen/bedroom of his family home in (A). Photograph: YZM.

> The government does not expect too much from our neighbourhood; keeping things clean and in order, they say, that's all they want us to do. It is clear to us that our neighbourhood can only be improved if they tear it down first. It needs rebuilding. (Interview with neighbourhood committee representative, May 2009)

Most residents of part (A) described their own 'impoverished' conditions in relation to that of the 'lucky ones' in new-built high-rise apartments across the street. As one resident put it:

> It hurts me to see my son play outside in-between all the garbage. Across the street, they have big playgrounds, and real kitchens, and private bathrooms. Cooking in a room not

designed for cooking differs from cooking in real kitchens!
(Interview with YZM, October 2007; see Figure 3)

CHX, another resident of (A), had worked with a state-owned company before, but retired early several years earlier (in fact, like ZXG above, she was laid off). Lacking the skills to find employment in an increasingly competitive job market, she felt excluded from a better-off society. Her neighbourhood, she insisted, had changed for the worse. She explained, rearranging the laundry and quilts that lay drying on the balcony of her little house:

> Look at this place, it's a rat hole. And over there [pointing at the new high-rise buildings]—these people are so much better off. They live in modern buildings, they need not worry about such things. They don't have the rain coming in through their roofs and windows (Interview with CHX, October 2007).

In this case, we see that scarcity is a notion that is socially constructed; it emerges from the everyday experience of difference and is tied to desires which are not necessarily based on 'actual' needs. Residents began to locate their individual situation as relatively low on the socioeconomic status scale only in comparison with the co-present 'other'. Once the desire for a 'proper' home in a new apartment featuring all the material stuff that the long-term residents of (A) had begun to regard as indispensible for 'modern' life—not least because it was there for them to see in immediate proximity, in (B) across the street—continuing to lead the lives that they were familiar with seemed increasingly unbearable and unacceptable. The close-knit social fabric and relationships they had formed over a life-time began to appear only secondary to the emerging need for 'more space' and 'better apartments' in resettlement housing far away. The value of a resource, service, or good, is derived from the fact that is *considered* scarce (i.e., living in a brand-new high-rise apartment has become a status symbol associated

with certain socioeconomic standing—a so-called 'positional good'[7]). 'When adaptation creates ever more wishes,' Luks writes, 'and when supply of certain goods cannot by definition meet the demand, there can be no end to scarcity. The promise of modernity with its emphasis on development, growth, progress and abundance *cannot* be fulfilled'[8]. The city seems to be built on the promise of modernity.

Embedded Inequalities

Historically, independence and better incomes have been the factors that drew migrants from the countryside to the city[9]. The literature suggests that migration restrictions in China were relaxed in the late 1970ies in response to more than 150 Mio surplus labour in the countryside[10]. Initially welcomed as cheap and exploitable labour force, 'farmers' came to the city to find work in factories and at constructions sites. In Shanghai alone, the 'floating population'[11] today is estimated at 6.6 Mio, but certainly not considered welcome. CHX's father, for instance, who had come to city from the countryside in the late 1940ies—a rural-to-urban migrant himself—and had lived in the *pingminqu* (A) ever since, thought of his neighbourhood as 'not quite as nice as before': 'small houses have turned into high-rises', he said; but more importantly, 'too many migrants [had arrived] from the countryside' (Interview with CLS, September 2008).

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[7] P. Brickman and D. T. Campbell, 'Hedonic Relativism and Planning the Good Society', in *Adaptation-Level Theory: A Symposium* (New York: Academic Press, 1971), pp. 287–302.

[8] Fred Luks, 'Deconstructing Economic Interpretations of Sustainable Development: Limits, Scarcity and Abundance', in *The Limits to Scarcity*, ed. by Lyla Mehta, Science in Society (London & Washington, DC: Earthscan, 2010).

[9] Milton Santos, 'Space and Domination - A Marxist Approach', *International Social Science Journal*, 27 (1975), 346-363 <http://www.eric.ed.gov/ERICWebPortal/detail?accno=EJ123483> [accessed 27 January 2011].

[10] Daniel Goodkind and Loraine A. West, 'China's Floating Population: Definitions, Data and Recent Findings', *Urban Studies*, 39 (2002), 2237 -2250 <doi:10.1080/0042098022000033845>.

[11] Rural-to-urban migrants are officially excluded from public services such as insurance, health services, or education. See, for instance, Daniel Fu Keung Wong and He Xue Song, 'The Resilience of Migrant Workers in Shanghai China: The Roles of Migration Stress and Meaning of Migration', *International Journal of Social Psychiatry*, 54 (2008), 131-143 <doi:10.1177/0020764007083877>.

Almost all rural-to-urban migrants I interviewed for this case study were, indeed, residents of (A), the old shantytown; they were self-employed and running small businesses in the city. They often formed homogenous communities based on their place of origin as they lived in privately rented rooms, spaces rented from the government, and converted warehouses. In a small alley, for example, I was invited to have a seat in the alley while residents of the nearby houses—rented from Shanghainese who had moved out years ago and inhabited mostly by people from Sichuan Province—were going about their everyday chores on a Sunday afternoon: a man was preparing dinner; a young woman was washing her hair; somebody else was doing dishes. Two women were chatting and knitting rompers for their grandchildren. They had been in the city for around four years, had found employment as *ayi*s (maids), and had learned a bit of English in order to be able to communicate better with their foreign employers. The women usually used the metro or rode their bicycles to get to the high-rise compounds where their respective clients lived.

> When we arrived here, we were surprised. Even the streets are not flat! Nothing was the way you see it on TV! […] Later, my mother came to visit from Sichuan—and she was shocked. She said the way we live here reminds her of the situation back home in the 1950ies! (Interview with anonymous resident, May 2009

A few alleys away, at the centre of part (A), a former storage courtyard made for the home of another group of new arrivals, all of them related to each other in one way or another. They lived here in tiny shared rooms between four and ten square meters in size, and during the summer months, the courtyard would be buzzing with children—their sons and daughters, visiting from the countryside. The group had slowly formed in the city after two brothers, the first to arrive, had established a small catering business. Entire families would sit in the yard to clean vegetables and prepare meat

Figure 4:
Makeshift
accommodation for
rural-to-urban
migrants.

and seafood for the evenings, when they would swarm out to sell skewers on the street. As I was told, 'it is good business. It pays for the kids' English lessons; they run at 50 RMB[12] per hour!' (Interview with anonymous resident, July 2009). Complaining about some aspects of their lives, migrants felt nonetheless quite content with their living conditions, and

[12] Approximately £4.80.

especially so when they had been in the city long enough to remember the past:

> They used to knock on our doors in the middle of the night and 'count heads'. Things got messy if they found someone without proper documentation. (Interview with anonymous resident, July 2009)

Slum-like agglomerations—or 'urban villages' characterised by 'poor living conditions' and 'inadequate and poorly maintained' facilities, such as a bathroom, a kitchen, heating, air-conditioning, electricity, television, and refrigerator[13]—in urban China have been portrayed as structures that reflect the 'match between migrants' demand for cheap housing and the supply of low-cost housing in villages encroached upon by urban expansion'; the exclusion of migrants from the formal housing market has been rendered as rooted in their inability to afford buying or renting commodity housing, leaving them confined to dorms provided by their employer, or housing in 'urban villages' like (A) in this case study[14]. As one resident put it:

> The Shanghai Government should build a quarter for migrants like us, who only come here to work. When they tear down all places like this old neighbourhood, where will we find a place to live? (Interview with anonymous resident, May 2009).

Indeed, the availability of 'modern' facilities across the study area varied. While in the newly developed parts (B) all residents had access to private bathrooms and kitchens, in (A) availability seemed to depend on the background of the respective occupants[15]: 67% of urban respondents had access to a bathroom, and 92% to a private kitchen, while for rural residents the respective numbers were only 25% and 38%. On average, urban

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[13] Siqi Zheng and others, 'Urban Villages in China: A 2008 Survey of Migrant Settlements in Beijing', *Eurasian Geography and Economics*, 50 (2009), 425-446 <doi:10.2747/1539-7216.50.4.425>.

[14] Zheng and others, 425-446.

[15] This is based on in-depth interviews conducted between 2007 and 2009 with 54 residents of different socioeconomic background.

residents lived in up to 40m² per capita in (B) and 14m² per capita in (A); rural-to-urban migrants in (A) had only 6m² per capita to their avail. Most significantly, however, for places often without basic sanitary facilities, light, or air, rural-to-urban migrants paid roughly 26 and 53 RMB[16] per m² and month in rent to the government and private landlords, respectively. For fully equipped apartments rented from private landlords, their urban neighbours in the adjacent high-rise residential compounds of (B) paid on average only 37 RMB[17] per m² and month. Rural-to-urban migrants invested on average 6% of their monthly incomes to rent from the government, and 22% to rent from private landlords; the respective figures for urban residents were 1% and 8%. The numbers suggest that why migrants do not rent in the formal commodity housing market is not primarily tied to their ability to afford it. One possible explanation for the situation in Shanghai might be found in recent policies released by the local government: reasoning that over-occupation and overcrowding would inevitably lead to 'safety risks' for commodity apartment buildings, the government decided to take measures and to prevent landlords from renting out 'modern' apartments to multiple parties, made up, of course, mostly of rural-to-urban migrants who were willing to share rooms[18]. Although 'modern' housing was amply available in part (B), the artificially generated scarcity of space for rural-to-urban migrants forced them to seek accommodation in (A), the old shantytown, where both government and private landlords took advantage of their situation.

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[16] Approximately £2.50 and £5.07.
[17] Approximately £3.55.
[18] see, for instance, Yan Zhen, 'Divided Rooms Raise Concerns', *Shanghai Daily Online Edition*, 20 June 2007 <http://www.shanghaidaily.com/sp/article/2007/200706/20070620/article_320250.htm> [accessed 9 November 2008].

Figure 5:
Hidden away: the
old (A) behind the
new-built concrete
fence.

Eagerly competing to attract foreign investment in order to become a 'Global City' and zealously preparing to host the World EXPO 2010, Shanghai had embarked on an ambitious journey to showcase what 'Better City, Better Life' (the official motto of the EXPO) would look like on the ground— and to erase all traces of the poor and the old along the way. Strategies to 'hide' any evidence of poverty and to transform it into one suitable for the foreign visitor began to be implemented on a massive scale and within no time. Located on the banks of Suzhou Creek, a major tourist attraction and now constantly frequented by foreign visitors on boat tours, the study area had naturally become the target of modernisation and image-improving attempts that targeted the *pingminqu* (A) in particular. The government reckoned that cooking, washing, and talking people, strolling dogs, and playing children in the street between (A) and (B)[19] posed a problem for automobile traffic in the area. The solution to this issue— people appropriating the street as a space of encounter in their everyday life rather than treating it as the territory of the private car—was simple: on a one-week notice in the summer of 2008, the district government constructed a two-meter high concrete fence in front of existing houses and shop fronts along (A; see Figure 5). Unsurprisingly, the immediate consequences were devastating.

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[19] See Deljana Iossifova, 'Blurring the Joint Line? Urban Life on the Edge Between Old and New in Shanghai', *Urban Design International*, 14 (2009), 65-83 <doi:10.1057/udi.2008.9> for a detailed analysis.

Resilient Adaptation

In the field of engineering, it is assumed that the exposure of a system to stress forces it to change in order to adapt to the new condition and reach a 'pre-stress equilibrium'; successful adaptation depends on the 'intensity, duration, and repetition' of the imposed stress[20]. In the social sciences, systems are seen to vary in their capacity to react and adapt to conditions of stress: when a system maintains its functionality, we speak of resistance; when a system exhibits 'a relatively transient but significant decrement in functioning, followed by quick recovery'[21], we speak of resilience. If we conceive of 'scarcity' as the experience of change that results from the shortage of one or more resources, we can assume that the type of the resource in question as well as the duration and severity of the resource shortage are crucial to the success of adaptive behaviour. How do humans adapt to and function under emerging and ongoing conditions of stress— and in particular, under conditions of scarcity?

Back in the case study area, WY was one of the shopkeepers who were directly affected by the construction of the fence. She had come to Shanghai a few years earlier to set up a small business in a makeshift, garage-type space rented from the local government. With her husband, she used this space as a dwelling at night and as a shop during business hours. Because open, green space was hardly available within the *pingminqu* (A) behind WY's shop-house, like other residents of (A), she had made it a habit to take her little daughter for walks in the private park of the gated high-rise compound (B) across the street on a daily basis (see Figure 6). There, manicured green spaces and play areas were readily available, although rarely used by compound residents themselves. Having established friendly

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[20] Christopher M. Layne and others, 'Risk, Vulnerability, Resistance, and Resilience: Towards an Integrative Conceptualization of Posttraumatic Adaptation', in *Handbook of PTSD: Science and Practice* (New York, London: The Guilford Press, 2007), pp. 497–520 <http://mirror.lib.unair.ac.id/bahan/SYAHRANI/2008-04%20E-BOOKS/Medical/Handbook%20of%20PTSD%20-%20Science%20and%20Practice.pdf#page=514>.
[21] Layne and others, pp. 497–520.

relationships with the guard on duty at the compound's gates, long-term residents of (A), regardless of their origin, were able to gain access to the areas originally intended to be beyond their reach. Open, green space as an environmental element of the *pingminqu* was perceived as redundant, as residents had appropriated the abundant green space in the 'gated' compound nearby.

Figure 6:
The son of rural-to-urban migrants (right) who live in (A) plays in the private park of (B) with the child of urban residents.

Unable to afford the required kindergarten fees for her young daughter, WY had to rely on her next-door neighbour's help: when she had to leave her shop-house to run errands, she would hand the child over to the family next door, and gladly return the favour when her neighbour needed someone to watch over her little boy. The construction of the fence (the stress-inducing event!) in front of her shop-house hit WY and the others out of the blue. Not only did the local government succeed in keeping people away from the street, at least in the short term, but also in keeping potential customers out of the businesses and shops behind the fence, forcing many to

close down[22]. Apart from having to invent ways in which to cater to customers despite the fence, their children, once free to explore their environment as long as they stayed within reach, were now confined to the small, cramped space between the shops and the concrete fence.

But the government went even further. A new policy issued immediately after the construction of the fence prohibited the use of shop-houses as shops and dwellings simultaneously, and tenants were ordered to look for accommodation elsewhere if they wanted to keep their shops. WY and her family could not afford to pay rent for extra housing while keeping their shop, and hence had to 'downgrade' quickly; they rented a stall at the local grocery market and moved to a small room some ten minutes away. In addition to the resulting financial pressure, moving back and forth between the shop and 'house' all the time—to cook and wash, for instance, and to provide for her child—became progressively harder. The family decided to give up the accommodation that they had found for themselves, again, and to move into the smallest affordable space that they could find. Amongst other migrant families, they settled in a former warehouse (see Figure 7), located right next to the market where their stall stood. Furthermore, making use of their close relationship to their family 'back home', WY and her husband had arranged to send their daughter to the countryside, where she would live with her grandparents, should conditions in the city become even worse.

After about six months, the shopkeepers who had managed to remain in the street behind the fence began to return to 'business as usual'. They started to transform the concrete fence to their advantage and to reinvent its purpose entirely—not, however, without considering that they would have to make their actions quickly reversible for the case that the local government decided to persecute them for breaching the rules. Making use

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[22] Deljana Iossifova, 'Negotiating Livelihoods in a City of Difference: Narratives of Gentrification in Shanghai', *Critical Planning*, 16 (2009), 98-116.

Figure 7:
A new home for
WY and her young
family inside an
old remodeled
warehouse.

of the space in-between the original façade and the fence as a waiting area, featuring welcoming sofas and chairs for their customers, some began to appropriate it as an extended façade to their retail space. Others skilfully dismounted selected concrete bars to provide access to their stores, stored them away for the day, and placed them back seamlessly whenever needed

Figure 8:
Adapting to the
fence

(when, for instance, the local city management team would conduct checks in the area). After some additional time had passed, some had gathered enough courage to remove the concrete bars completely and replace them with 'proper' metal gates (see Figure 8).

Scarcities, whether socially constructed (that is, emerging from the direct comparison of the condition with an envisioned or co-present alternative—like that of long-term residents in old neighbourhoods in the city) or purposely generated (in the name of image and economic profit— like the artificial 'scarcity of space' for migrants in formal, commodified housing)[23], however, are always experienced and perceived as 'real' by those affected. This understanding implies that 'scarcities' must be addressed as an actuality regardless of their origin, be it top-down through formal processes of redistribution and re-allocation of resources that are perceived as scarce; or bottom-up through alternative (informal) processes of allocation or replacement of scarce resources by abundant ones.

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[23] Mehta, for instance (see Lyla Mehta) distinguishes 'between "lived/experienced" scarcity (something that local people experience cyclically due to biophysical shortage of food, water, fodder, etc…) and "constructed" scarcity (something that is manufactured through socio-political processes to suit the interests of powerful players'.
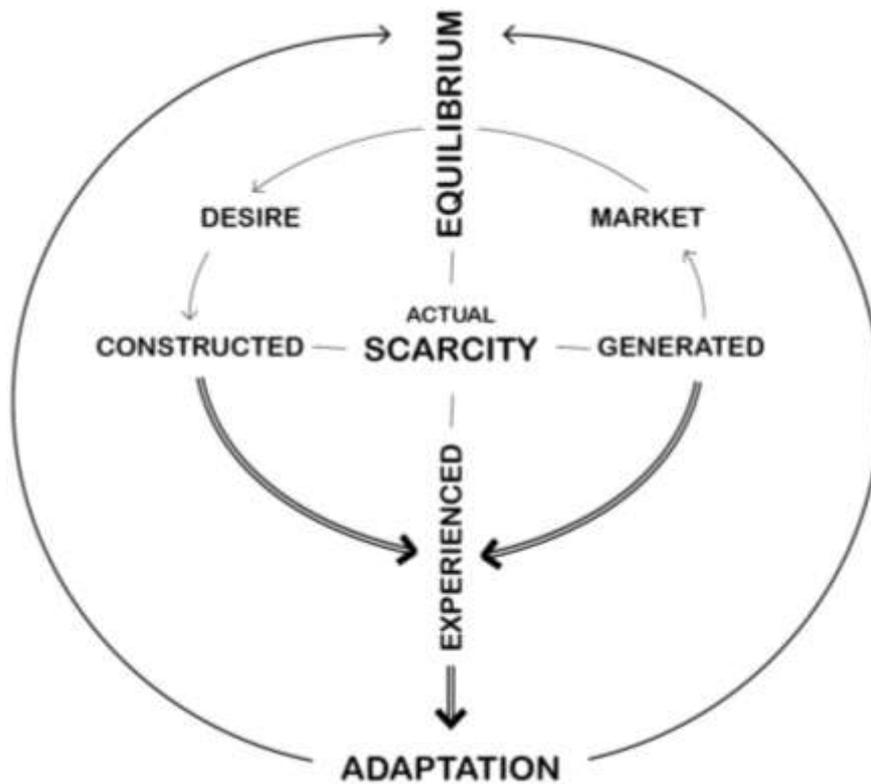
Figure 9:
Scarcity and
adaption

When it comes to the city, design and planning approaches often intend to 'provide' people with resources that are commonly considered as 'needed', based on a preconceived understanding of 'development'. Design and planning interventions are sometimes not only unnecessary or unwanted; in some cases, they take away from the 'community' what has evolved in response to actual want, just to provide what is believed to contribute to 'development'—in the context of international development rightly defined as the imposition of the 'culture of moving toward fossil-fuel (or non-renewable energy-dependent) lifestyle'[24].

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[24] Dipak Gyawali and Ajaya Dixit, 'The Construction and Destruction of Scarcity in Development: Water and Power Experiences in Nepal', in *The Limits to Scarcity*, ed. by Lyla Mehta, Science in Society (London & Washington, DC: Earthscan, 2010).

Creative Cities

The 'planned city can identify, accommodate, and enable the kind of organic growth that feeds innovation and inspiration', and that 'creative innovation' is something designed into 'the vision of the master plan', following the example of 'existing cities such as Paris, New York, and Venice', some argue[25]. Others claim that combating ghettos and slums—the 'homogeneous spaces that have a high concentration of people and a low socio-economic status' will create more problems than solutions in the long run[26]; they see squatter cities as the 'laboratories for innovation and adaptation', and claim that 'architects must be agents of active change and advocates for the users of their designs'[27]. In this paper, I have tried to show on the example of Shanghai that the city is a system which contains both, 'formal' and 'informal', and that these elements are already inherently linked to each other. If we want to understand how scarcities are generated, constructed, and perceived in the context of the built environment, it is necessary to look at the city as a system which spans across a multitude of scales and agencies. Creative reaction and adaptation to real or perceived scarcities, then, happen on different scales and influence each other, and creativity can no longer be thought as a property exclusive to the designer. In the words of Swyngedouw and Kaika: 'Not only considerable urbanistic and architectural creativity needs to be mobilised, but also a reconsideration of the meaning of urban citizenship in terms of a multitude of identities constructed through myriad of spatially overlapping relations and networks' [28].

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[25] Stan Gale and Alfredo Brillembourg, 'The Debate Zone: As the World Urbanizes, Will the Most Successful Cities Result from Top-down Planning or Bottom-up Innovation?', *What Matters* <http://whatmatters.mckinseydigital.com/the_debate_zone/as-the-world-urbanizes-will-the-most-successful-cities-result-from-top-down-planning-or-bottom-up-innovation> [accessed 2 February 2011].

[26] Sandro Cattacin, 'Why Not "Ghettos"? The Governance of Migration in the Splintering City' <http://muep.mah.se/handle/2043/3130?mode=full&submit_simple=Show+full+item+record >.

[27] Gale and Brillembourg.

[28] Erik Swyngedouw and Maria Kaika, 'The Making of 'glocal' Urban Modernities', *City*, 7 (2003), 5-21 <doi:10.1080/13604810302220>.

WWW.SCIBE.EU

Scarcity and Creativity in the Built Environment (SCIBE) is a trans European research project that explores how conditions of scarcity might affect the creativity of the different actors involved in the production of the built environment, based on the analysis of processes in four European cities: London, Oslo, Reykjavik, and Vienna. SCIBE is funded by HERA – Humanities in the European Research Area, a partnership between 21 Humanities Research Councils across Europe and the European Science Foundation (ESF).