BORDER CONDITIONS ALONG THE NEW SILK ROAD GRADUDATION STUDIO



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URBAN IMPROVISATION

RESEARCH ON RESIDENTS'
SPONTANEOUS
ARCHITECTURAL AND URBAN
PRACTICE

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INTRODUCTION

Atelier Bow-Wow uses the term "Pet Architecture" to describe the buildings that have been squeezed into leftover urban spaces. 'Our society does not consist only of human beings. Various animals come into our lives as 'Pets', and they are given spaces to live... If decent buildings standing in decent spaces are considered 'human beings', small buildings standing with all their might in odd spaces would seem to be like pets in urban spaces.' This type of architecture is not at the forefront of aesthetic design or advanced technology but produces a unique characteristic of self-appropriation in cities.²

Architecture is the practice of constructing buildings and related spaces for people to use and occupy. And of course, it is not restricted to the interiors of buildings. Squares, streets and even highways are all offering important experience for people who use them. But architects are not the only doers of architecture. Long after the buildings have been made, the non-architects continuously shape them. When non-architects occupy space, they start to 'do-it-themselves'.³ In most cases, they do this in an already occupied territory, where the activity of doing architecture has been classified and claimed

by architects - the rules have already been established.⁴ But there are also some space occupations that are out of the rules, such as squatting, vendors, graffiti, protest. They, like "pet architecture", do not necessarily create appealing spaces, and some are even illegal, but they can highlight people's demands and show people's bottom-up determination to shape the city.

These activities can be seen as improvisation. When people do the improvisational practice out of rules, they mainly based on their own current needs and what material they have instead of considering the building or city as a whole. Seen architecture as paintings, in these cases, their improvisational activities are more like a collage rather than fully considered composition. But as Jencks explains, it involves using an available system in a new way to solve a problem quickly and efficiently.⁵ By doing so, it offers a way for everyone to shape and discuss the city they live in. And for the public, there should be nothing preventing them, in an agonistic and participatory manner, from devising and debating forms of their shelter and space for daily life.6 The improvisational practice has itself taken inspiration: Another world is possible.

CHAPTER 1: DEFINITION OF URBAN IMPROVISATION

1.1 "IMPROVISATION"

The definition of improvisation from the Cambridge Advanced Learner's Dictionary is: 1. a performance that an actor, musician, etc. has not practiced or planned; 2. the act of making or doing something with whatever is available at the time.⁷ From a wide range of disciplinary perspectives, including musicological, historical, architectural, sociological, political, philosophical, psychological and computational, improvisation is being discussed, although lacking a single widely accepted definition of improvisation.8 Despite this diversity, there are some common features that run through these perspectives on improvisation. These include issues like spontaneity, indeterminacy, freedom and other related concepts. It represents a feeling that is different from composition and design. Improvisation is like a collage. Typical qualities of design and composition such as precise, rigorous, and aesthetic always turn out to be less critical for improvisation. Its charm lies in adaptability and unexpectedness.

These concepts do not function as necessary and sufficient criteria to define improvisation, although they are prevalent in many discourse areas. But it can give us an initial impres-

sion of improvisation before delving into improvisational practice in a specific field. From different perspectives, the definition and practice of improvisation are different for many reasons, but understanding it from the general definition can make subsequent research on improvisation more precise and have higher recognition in more fields.

1.2 URBAN IMPROVISATION

Urban and architectural improvisation allows not only urban planners and architects but everyone to use whatever they have in their hands to respond to current needs and change buildings and cities. Urban and architectural improvisation is an incremental working process. And cities are dynamic, as well as life. People become objects rather than subjects of design when the urban planners and architects turn the complex process of city growing and housing into things they could design. 10 So the design always lacks dynamic. But By improvisation, people as subjects make the improvisational changes themselves whenever they need in the whole process of city and architecture's developments.

¹ Kesaharu Imai, and Tokyo Institute Of Technology. Tsukamoto Laboratory. 2005. Pet Architecture Guide Book. Nakano: World Photo Press.

^{2 &}quot;Pet Architecture I Agile City." n.d. Agile-City.com. Accessed January 11, 2022. https://agile-city.com/agile-city-research/pet-architecture-building-in-leftover-urban-spaces/.

³ Hill, Jonathan. 1998. Occupying Architecture: Between the Architect and the User. London; New York: Routledge.

⁴ Martin, Reinhold. 2011. "Occupy: What Architecture Can Do." Places Journal, no. 2011 (November). https://doi.org/10.22269/111107.

⁵ Jencks, Charles A, and Nathan Silver. 2013. Adhocism : The Case for Improvisation. London [Etc.] The Mit Press.

⁶ Martin, Reinhold. 2011. "Occupy: What Architecture Can Do." Places Journal, no. 2011 (November). https://doi.org/10.22269/111107.

⁷ Cambridge Dictionary. 2022. "Improvisation." @CambridgeWords. January 5, 2022. https://dictionary.cambridge.org/dictionary/english/improvisation.

 $^{8 \} Goldman, Andrew \ J.\ 2016.\ "Improvisation \ as \ a \ Way \ of \ Knowing." \ Music \ Theory \ Online \ 22 \ (4). \ https://doi.org/10.30535/mto.22.4.2.$

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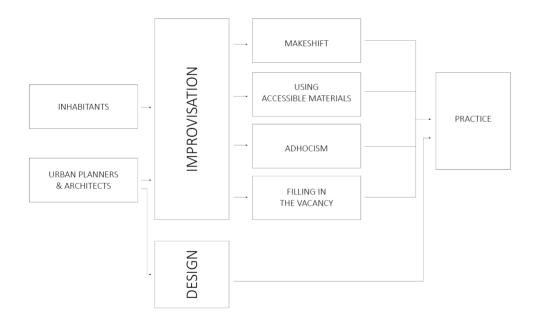
¹⁰ Hamdi, Nabeel. 2014. The Spacemaker's Guide to Big Change: Design and Improvisation in Development Practice. The Spacemaker's Guide To Big Change: Routledge.

CHAPTER 2: RESEARCH FRAMEWORK

Professional architects and urban planners are not the only persons who have design control over the city. Improvisation is spontaneous and supports everyone in expressing their needs within each period of the development of the cities and buildings. The importance of improvisation shows in the immediacy and rapidity of temporary solutions to the current problems and the potential to create a more distinctive city full of possibility, creativity and vitality. These potentials stem from the temporary and unpredictable nature of the problems to be solved, as well as the constraints of materials and sites. Such limited conditions stimulate people's creativity and the city's possibility, resulting in various unexpected improvisation. It provides a better fit

both now and over time between the city and the needs and aspirations of individuals.

Based on previous research, the identities of urban and architectural improvisation above can be summarized into four aspects: makeshift, using accessible materials, Adhocism and filling in the vacancy. By defining and researching improvisational practice from these four perspectives, it can be seen that how people shape the city spontaneously. The improvisational practice that seldom seems to gain widespread attention or even not appears on the map is an integral part of the city as important as design practice by architects and urban planners.



CHAPTER 3: IMPROVISATIONAL PRACTICE – MAKESHIFT

First, the improvisational practice is makeshift. It is created in times of dire need and aims at solving the current problems as soon as possible. It is functionalism at its highest form. 11 In most cases, although the architects and urban planners try to design for the future, their work can not react to urgent situations and meet all the current needs quickly. Life for a growing number of city-dwellers has been reduced to a permanent state of emergency characterized by an inadequate supply of basic resources and/or absence of discernible infrastructures and institutions. 12 So improvisation is needed, and it is makeshift - usually of poor quality and temporary. But it does not need to be perfect: they improve people's life by mainly focuing on solving the problems rather than aesthetics, and they enable, how

ever fleetingly, a community to experience its life, its experiences and realities, in their own terms.¹³

Typical example of makeshift architecture is makeshift housing. Housing is one of the most critical problems to solve globally, and quite many homeless people need shelter urgently. The Danish photographer Jacob Ehrbahn took this picture (Fig. 2) in a public park in Erdine, near the Turkish border with Greece, in 2020. It shows a Syrian family who are on their way from the border town in Turkey to Greek. They create a makeshift tent with what they can get – plastic, branches and stones. Although it may be too transparent to be called a tent, it does solve their current problems. They need shelter to sleep and



Fig. 2 A makeshift tent made by a Syrian family

^{11 &}quot;MAKESHIFT ARCHITECTURE." n.d. THE REPAIR ATELIER. Accessed January 08, 2022. http://repairatelier.com/repair-in-times-of-crisis/2020/7/19/makeshift-architecture.

¹² Simone, A M. 2006. For the City yet to Come : Changing African Life in Four Cities. Durham: Duke University Press.

¹³ Simone, A M. 2006. For the City yet to Come : Changing African Life in Four Cities. Durham: Duke University Press.

¹⁴ Ehrbahn, Jacob. 2021. A Dream of Europe. Stockport, England: Dewi Lewis Publishing.



Fig. 3 Emergency wards transformed from stranded trains



Fig. 4 Interior of the emergency wards

against the wind. Another recent example is the emergency wards for covid-19 in India (Fig. 3-4). It's a makeshift hospital transformed from stranded trains to meet the needs of traditional hospitals. With the number of Covid-19 positive cases rising, experts say the lack of robust public healthcare remains India's biggest challenge. The temporary improvisation is a good initiative to solve the urgent situation and will fade away with the virus.¹⁵

It always happens that the environment and space people are given cannot meet their current needs, so they have to improvise themselves. So makeshift architecture is created and used because there is nothing better available and can meet all requirement. But the advantages are also prominent - Solve current problems efficiently and quickly. And when new issues come, the improvisational practice can also be dismantled or converted to a new makeshift architecture more quickly. It gives the architecture and the city expansive scope of flexibility.

¹⁵ CNN, Hema Ramaprasad, for. n.d. "India Has Closed Its Railways for the First Time in 167 Years. Now Trains Are Being Turned into Hospitals." CNN. https://edition.cnn.com/2020/04/05/asia/indian-railways-coronavirus-hospitals-in-tl-hnk/index.html.

CHAPTER 4: IMPROVISATIONAL PRACTICE – USING ACCESSIBLE MATERIALS

Another fact is that improvisational practice is always restricted by a lack of materials. It is makeshift, mainly focusing on meeting people's current needs, which are often unpredictable or urgent. Sometimes the improvisational practice is under the situation that normal construction materials are not easy to get or not enough. And sometimes, people who do the improvisation are not architects or urban planners. They lack access to conventional building materials. As a result, they have to use whatever they can find for the improvisational practice. 16 So because of urgency, poverty, spontaneity, in most cases, improvisational practice is always in a shortage of typical construction materials.

Photographer Ben Murphy's series called The Riverbed reveals improvisational housing practice created by multi-cultural nomads living in rural southeast Spain. ¹⁷ Because of the lacking of typical construction materials like bricks, concrete and wood, they all use materials that are not common in housing construction but are cheap and easy to access to make shelter themselves. For example, in Fig. 5 they used straw bales for walls and canopy for the roof, and in Fig. 6 they transformed a vehicle into a shelter and used stones and cloth for wall and roof.

The materials used for improvisation are used in the absence of the real, original or delicate objects to bring about a similar effect that the real or complicated materials would have brought.¹⁸ And due to the limitation, the materials used for improvisation are different from those used in ordinary designs in the same cases, sometimes creating surprising results, such as using beer crates for flowerpots or bicycle tires for tables.¹⁹ Because improvisation activities were unplanned but needed to be finished quickly, the materials used for improvisation were what they could get immediately and were always limited. These materials always be invented or produced from readily available materials within the environment.²⁰ Common features for those materials are easy to access, light and cheap, and persistence is not necessarily an essential factor.







Fig. 5- Fig.7 Makeshift architecture

^{16 &}quot;5 Examples of Makeshift Housing." 2015. The Borgen Project. July 15, 2015. https://borgenproject.org/5-examples-makeshift-housing/.

^{17 &}quot;Ben Murphy Photographs Makeshift Architecture in Mountains of Spain." 2017. Dezeen. January 22, 2017. https://www.dezeen.com/2017/01/22/riverbed-photography-ben-murphy-makeshift-temporary-architecture-spain-mountains/.

¹⁸ Osei-Himah, Valentina, Joseph Parker and Isaac Asare. "The Effects of Improvised Materials on the Study of Science in Basic Schools in Aowin Municipality - Ghana." Research on humanities and social sciences 8 (2018): 20-23.

^{19 &}quot;Adhocism." 2014. Our Architecture Is Hear. October 28, 2014. https://situatedarchitecture.wordpress.com/2014/10/28/adhocism/.

²⁰ Osei-Himah, Valentina, Joseph Parker and Isaac Asare. "The Effects of Improvised Materials on the Study of Science in Basic Schools in Aowin Municipality - Ghana." Research on humanities and social sciences 8 (2018): 20-23.

Fig. 8 Eagle- vase by Abbot Suger

CHAPTER 5: IMPROVISATIONAL PRACTICE -ADHOCISM

The innovative manipulation of limited resources immediately to hand to resolve present needs is a timeless human process.²¹ Because of the limited resources and the various present needs, and the creativity by not only the professional architects and urban planners but all people, the improvisational architectural practice always leads to something unexpected. It has the possibility to create something surprising, and this identity can be described as adhocism.

Jencks defined adhocism as a conjunction of ad hoc, meaning 'for this particular purpose' and -ism, shorthand for a movement.²² And James Stevens Curl explained it as 'design, essentially a collage, where every part of a building, or element of a building complex, is designed with scant regard to the whole and often involves disparate parts taken from catalogues' in architectural perspective.²³ It is described as the coming together of disparate materials. People bring together various, immediately-to-hand resources in an effort to satisfy a particular need.²⁴ When doing improvisational practice, people do not care about perfection but try to solve their problems. They choose from available components to achieve their goals. Paying more attention to the components rather than the

whole, coupled with the temporality of the problem and the limited choice of materials, the result of improvisational practice is often unexpected. And similar to collages, not every part can fit each other very well individually, but they together form a harmonious whole. This doesn't necessarily mean that the results of adhocism are not refining, but high refinement usually suggests great patience and dissatisfaction with compromises, which is not always happening in improvisation.²⁵

For example, Abbot Suger's work Eagle-vase(-Fig. 8) is an ad hoc artwork. It's a combination of components that don't seem to have many relationships with each other - a red porphyry vase, perhaps of Egyptian or Roman provenance and a gilded eagle sporting extraordinary wings. It is impressive that people can come up with such work. These works may not appear in conventional design, sometimes it is adversity that fueled innovation. Because of all the limitations they have in improvisational practice, they finally come up with such unexpected works.

^{21 &}quot;Adhocism." 2014. Our Architecture Is Hear. October 28, 2014. https://situatedarchitecture.wordpress.com/2014/10/28/adhocism/.

²² Jencks, Charles A, and Nathan Silver. 2013. Adhocism : The Case for Improvisation. London [Etc.] The Mit Press.

²³ James Stevens Curl. 2006. A Dictionary of Architecture and Landscape Architecture. Oxford: Oxford University Press

²⁴ Jencks, Charles A, and Nathan Silver. 2013. Adhocism : The Case for Improvisation. London [Etc.] The Mit Press.

^{25 &}quot;Adhocism." 2014. Our Architecture Is Hear. October 28, 2014. https://situatedarchitecture.wordpress.com/2014/10/28/adhocism/.

²⁶ Jencks, Charles A, and Nathan Silver. 2013. Adhocism : The Case for Improvisation. London [Etc.] The Mit Press.

CHAPTER 6: IMPROVISATIONAL PRACTICE - FILLING IN THE VACANCY

In Local Code, Nicholas de Monchaux stressed new value to forgotten pieces of our urban fabric - the dead-end alley, the vacant corner lot, infrastructure's leftovers.²⁷ These spaces are often neglected areas within the city. They are always ignored on the typical city map. However, as they are temporarily unoccupied by defined urban functions, the space provides unique interstitial conditions that open for improvisational practice.²⁸ Utilizing these spaces is cheaper and more accessible for people. They offer a stage for people to improvise, and in turn, people activate these spaces by improvisation. Beyond what can be seen on the map, improvisation practice fills in the city's blank. And they offer crucial complements to the formal and defined urban spaces.²⁹

And with the rapid economic and technological development, the city's original layout and spatial functions have been affected. Residents' habits and requirements have also undergone many adjustments and reorganizations. And the city does not represent a static notion but is continually changing and reconstituting, including unused or leftover space. Through improvisation derived from different needs in different periods, inhabitants can better fill these urban blanks than urban planners who often focus on large-scale urban construction. A city's spatial environment emerges from the ongoing negotiation between the constructed environment, urban processes, and bodily experience.³⁰

CONCLUSION

Circumstances are constantly changing, so people's requirements and the problems they face are also continually changing. Architecture and cities designed by architects and urban planners at one time are difficult to deal with dynamically changing environments and meet people's needs at any time. And no singular stakeholder wields absolute authority. Urban planners and architects, even government, are not the owner of neither the city or a single building. Cities belong to people who live there. Adapting to changing circumstances by improvisation, people's spontaneity will inevitably insinuate itself within the practice as creativity, resistance, and response to the crisis.31

By researching urban and architectural improvisation from the four aspects: makeshift, using accessible materials, adhocism, and filling in the vacancy we can find that using

limited materials in limited space to meet current needs as quickly as possible is urban and architectural improvisation - a way for inhabitants to transform the city from bottom up. "An architect does not create a city, only an accumulation of objects. It is the inhabitant who 'invents' the city; an uninhabited city, even if new, is only a 'ruin.'" 32 Through urban and architectural improvisation research, we as architects can better understand our position in the cities' development. We are only part of the city, we seem to occupy a dominant role in shaping the urban form, but it's not the most up-to-date and not necessarily the most satisfying part that meets inhabitants' needs. Inhabitants' shaping of the city cannot be ignored. And among all the activities, the city finds its dynamic balance spontaneously. It can always find the balance between government and inhabitants, designers and users, composition and improvisation.

²⁷ Nicholas De Monchaux. 2016. Local Code: 3,659 Proposals about Data, Design & the Nature of Cities. New York: Princeton Architectural Press.

²⁸ Wu, M., & Bachmann, B. (2021). The impact of social interaction on the leftover space. Pollack Periodica, 16(3), 151-157. https://doi.org/10.1556/606.2021.00397

²⁹ Kesaharu Imai, and Tokyo Institute Of Technology. Tsukamoto Laboratory. 2005. Pet Architecture Guide Book. Nakano: World Photo Press.

³⁰ Wu, M., & Bachmann, B. (2021). The impact of social interaction on the leftover space. Pollack Periodica, 16(3), 151–157. https://doi.org/10.1556/606.2021.00397

^{31 &}quot;Architecture, Improvisation and the Energy of Place." 2014. Our Architecture Is Hear. October 23, 2014. https://situatedarchitecture.wordpress.com/2014/10/23/architecture-improvisation-and-the-energy-of-place/.

³² Belogolovsky, Vladimir. "Interview with Yona Friedman: 'Imagine, Having Improvised Volumes "Floating" In Space, Like Balloons.'" ArchDaily, 24 Feb. 2020, www.archdaily.com/781065/interview-with-yona-friedman-imagine-having-improvised-volumes-floating-in-space-like-balloons.

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