

Ghost Density, Icebergs, and the Ultra-Thin

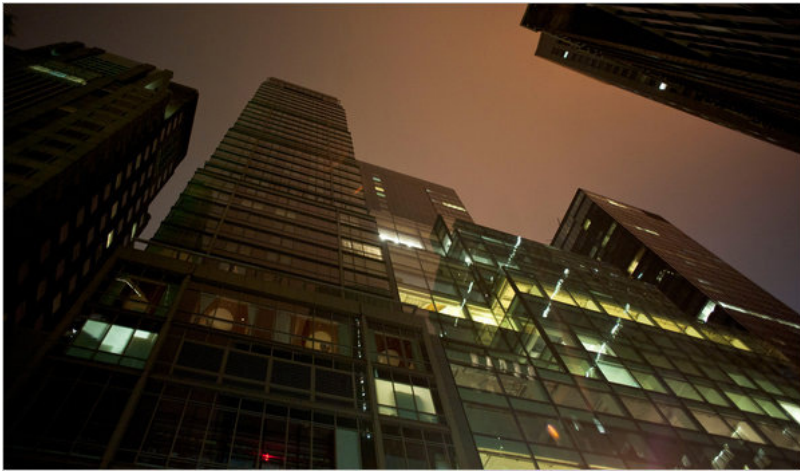
Many strains of architectural discourse orbit around either one or the other of two dominant paradigms of contemporary urbanism; the rapidly growing city-region represented by locations such as the Pearl River Delta, and conversely, the shrinking city, represented by the likes of Detroit and the Ruhr Valley. The mirroring of these parallel paradigms suggests that the trajectories of globalism ensure that growth somewhere involves shrinkage elsewhere. While this may indeed be the case in many instances, the particularities of post-industrial economies are propelling a novel manifestation of this dyad, one in which both the geographic and temporal distance that often separates growth-related phenomena from those of shrinkage is disappearing.

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In other words, characteristics that typically accompany growth and those that typically accompany shrinkage are increasingly found together, in the same place and at the same time. This paper examines this spectral overlay that lurks largely under the radar of perspectives that emphasize either rapid urbanization vis-à-vis population growth and economic expansion or rapid de-urbanization vis-à-vis economic contraction and out-migration. In pursuing this topic of investigation, the paper focuses on the spatial avatars of the super-wealthy, a demographic group that is having a significant impact on the contemporary configuration of architecture and cities and is propelling new forms of hollow expansion. Contemporary capitalism has exacerbated the number of super-wealthy individuals and their impact can be traced most vividly in cities widely perceived to be attractive for the acquisition of real estate assets. As listed in a litany of global city indices, these anointed destinations for super-wealth capital include the usual suspects of New York, London, and Hong Kong, but also extend into a large number of 'new' frontiers for investment such as Beirut, Tel Aviv, and Stockholm. Within this geography of surplus capital absorption one can witness an emergent 'ghost density' populated by architectural forms tuned to the demands of super-wealth.

The emergence of super-wealth as an urbanizing agent can be understood in relation to the increasing income inequality that appears to be an important trait of post-industrial economies. The Gini coefficient, in which a measurement of zero denotes perfect equality and the higher the number the greater inequality, is



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the most common yardstick of inequality and it has been registering increases in many nations.¹ A useful frame in which to consider the correlation between inequality and post-industrialism are the thirty-four member countries of the Organization for Economic Cooperation and Development (OECD). The OECD membership includes what are widely accepted to be the world's most advanced capitalist economies which exhibit the most pronounced attributes of post-industrialism; those in Western and Central Europe, North America, and Japan, South Korea, Chile, Turkey, Israel, Australia and New Zealand. The average Gini coefficient of all OECD countries grew from 0.29 to 0.32 between 1985 and 2008, with every member country except Greece and Turkey experiencing an increase during this period.² As inequality has increased in these nations, the number of very wealthy individuals has increased. However, the growth in this economic demographic is not limited to highly post-industrialized nations, since as industrial production has shifted to countries such as China and India, new frontiers of wealth in those countries have given rise to large numbers of the super wealthy.

The banking and finance industries refer to exceptionally wealthy people as High Net Worth Individuals (HNWIs). The most prevalent definition for an HNWI is an individual with financial assets in excess of US \$1 million, excluding the value of a primary residence. Since HNWIs represent a lucrative client base for banks and investment managers, significant effort goes into analyzing them. Since 1993, Capgemini, in collaboration with various financial institutions, has produced its annual *World Wealth Report*, which seeks to investigate the needs of high net worth individuals. According to the 2000 report, the global number of HNWIs was 6 million in 1998, representing a total of US\$22 trillion in financial assets.³ By 2007 that number had swelled to 9.5 million HNWIs with \$40 trillion in assets and by 2011, some four years into the global financial crisis, it had reached 11 million individuals collectively holding \$43.2 trillion.⁴ In thirteen years, both the number of HNWIs and the collective amount of their assets almost doubled. At the same time that the number of HNWIs has mushroomed, their geographic distribution has also shifted in relation to emerging economies. In 1998, the Asia-Pacific region had 22% of the world's HNWIs.⁵ By 2011, the number rose to 31%, equal to North America and just a touch above Europe.⁶ This gradual shift has resulted in an essentially equal distribution of HNWIs between Asia, Europe, and North America.

This unprecedented scale and geographic scope of super wealth led to the creation of new subcategories of HNWIs to emerge in banking parlance in the mid 2000s. 'Very HNWI' is now used to describe those with between \$5 million and

Figure 1: 'Ghost Density' in Manhattan, New York City. Credit: Mylan Cannon for *The New York Times*.

\$30 million in assets, whereas 'Ultra HNWI' defines those with over \$30 million in assets. In 2012, standard HNWIs accounted for 90% of total wealthy individuals, whereas 9% were Very HNWIs, and 1% were Ultra-HNWIs.⁷ According to the *2013 World Wealth Report*, that top band of Ultra-HNW individuals held just over 35% of all HNWI assets amounting for over US\$16 trillion in 2012.⁸ The 111,000 Ultra-HNWIs represent the wealthiest 1% of the top 1% and possess a radically disproportionate amount of capital. Some studies report higher Ultra-HNWI assets than Capgemini's annual report, with Wealth-X's report, which focuses exclusively on Ultra-HNWIs, reporting that the combined assets of this category amount to almost US\$28 trillion in 2012.⁹ Despite significant variations in numbers, even the most conservative statistics Ultra-HNWIs portray the outsize power of this demographic. All current predictions point to a continued high growth rate of both of HNWI and Ultra-HNWI. Wealth-X, for its part, currently projects that the Ultra-HNW population will grow by 22% by 2018 and its assets by over 30%.¹⁰

The history of the built environment is, of course, intimately related to concentrations of wealth. From the pyramids to Versailles to the Burj Khalifa, it's self-evident that the correlation between wealth accumulation and architecture is direct. The fact that HNWI and Ultra-HNWI individuals have a significant impact on the contemporary built environment is in itself nothing new. However, a number of factors have conspired to realign the spatio-financial ecosystem in which this new demographic of the very wealthy is producing unprecedented conditions. Most of these factors are straightforward; yet in combination possess Doppler like mutations that supersede their isolated simplicity. First is the simple fact that the sheer population size of both HNWIs and Ultra-HNWIs is unprecedented. It is this statistical fact that enables wealth managers to refer to the HNWI as 'the millionaire next door.' Second is the relatively widespread geographic distribution of these individuals. Third is the basic interconnectivity of global financial practices and the communication and transportation systems that enable them. Because it is now so normalized, it is easy to forget how radical and recent an innovation it is for relatively large numbers of individuals who possess the means to do so, to purchase real estate in globally far-flung locations en masse. These three basic conditions precipitate what might be called urban impact multiplication, in which serial purchasing of real estate in select cities multiplies, or magnifies, the urban and architectural footprint of the super-wealthy.

The increased prevalence of individuals with real estate investment portfolios that include properties in geographically diverse locations has been facilitated by the emergence of global real estate brokerage firms and also global brokerages that specialize in luxury residential properties. Colliers International is currently the world's largest real estate brokerage firm, by volume of sales, which handles residential property. While its history goes back to the late 19th century as a local brokerage in Vancouver, its inception as a global corporation begins in 1976 with official christening of 'Colliers International.'¹¹ The mid 1980s witnessed the general shift away from regional real estate brokerages to a new category of companies that integrated different regions nationally and more and more so, internationally. Colliers now employs over 15,000 people in 485 offices spread among 63 countries.¹² Colliers competes with other global real estate brokerages such as New York based Newmark Grubb Knight Frank, which became an international firm with 320 offices in 2000, and London based Savills, which has roughly 500 offices worldwide. The globalization of these firms mirrored the exponential growth of real estate values in the early to mid 2000s, as the number of offices and their geographic expanse grew remarkably during this period.

The largest real estate brokerages now operate in a number of countries that is similar to other highly internationalized corporations such as Starbucks (65 countries). At the same time that real estate brokerage globalized, new global niche brokerages that focus on luxury residential real estate emerged. The two most prominent arose from iconic auction houses Sotheby's and Christie's. Sotheby's International Realty, founded in 1976, now has 680 offices in over than 45 countries. Christie's International Real Estate started in 1995 and also now has operates in 45 countries. These single source brands enable purchasing continuity and fluidity across significantly different legal and economic contexts in a manner that is not entirely different from multinational commercial brands.

With the facilitation of globalized brokerages, the wealthy exercise outside influence on the built environment through their purchasing of real estate. This is partly because the very wealthy locate proportionally more of their wealth in real estate than average investors. The average investor tends to locate the majority of investments in stocks and bonds, whereas Ultra-HNWI investment portfolios allocate twenty-four percent to real estate, the majority of which is in the form of direct ownership in residential real estate.¹³ This investment in residential real estate is in addition to the ownership of homes for personal use, of which the global average Ultra-HNWI owns 2.4 homes.¹⁴ Ultra-HNWIs in Asia and Russia, specifically, have an average of three personal use homes each.¹⁵ These investment behaviors, allows the global real estate brokerage Savills in collaboration with Wealth-X, to state: "Global real estate is mostly residential and held by occupiers. But in the world of traded investable property, private owners are becoming more important than institutional and corporate ones."¹⁶ They go on to say, "[a]ccounting for just 0.003% of the world's population, the real estate holdings of ... UHNWIs ... total over US\$5 trillion, or around 3% of all the world's real estate value. ... [P]rivately wealthy individuals are becoming an increasingly important force in the world of real estate."¹⁷

Particular locations in the world attract the majority of real estate investment from Ultra-HNWIs and are typically broken down into either urban and resort categories. The urban centers that place high on prominent global indices are those that attract most international residential real estate investment. London is invariably the city that is the greatest magnet for Ultra-HNWI real estate investment with New York second. Beyond the clear dominance of those two cities, the remaining magnet cities are matter of debate among various entities that chart investment flows. According to *Super-Prime Property Journal*, the next seven most important cities are: Dallas, Hong Kong, Los Angeles, Miami, Paris, San Francisco, and Toronto.¹⁸ In general, 'global' cities that are perceived to have long established and transparent real estate markets within stable governmental systems are most attractive. According to Andy Martin of Strutt & Parker-Christie's International Real Estate in London, "[a] transparent, secure, and liquid market is attracting homebuyers from all over the world to London."¹⁹ In 2012, luxury residential purchases made by non-local buyers amounted to 60% of sales in London, 45% in Miami, 40% in San Francisco, 38% in Paris, and 30% in Miami.²⁰

One of the prominent phenomena emerging from the wealthy's real estate investment activities is what is increasingly called 'ghost density,' in which a significant portion of residences in an area of a city are purchased primarily as investment properties, as opposed to places to live in, and as a result, sit mostly empty. Both London and New York offer pronounced examples the ghost density that can be found, in varying degrees, in magnet cities around the world. This is a new category

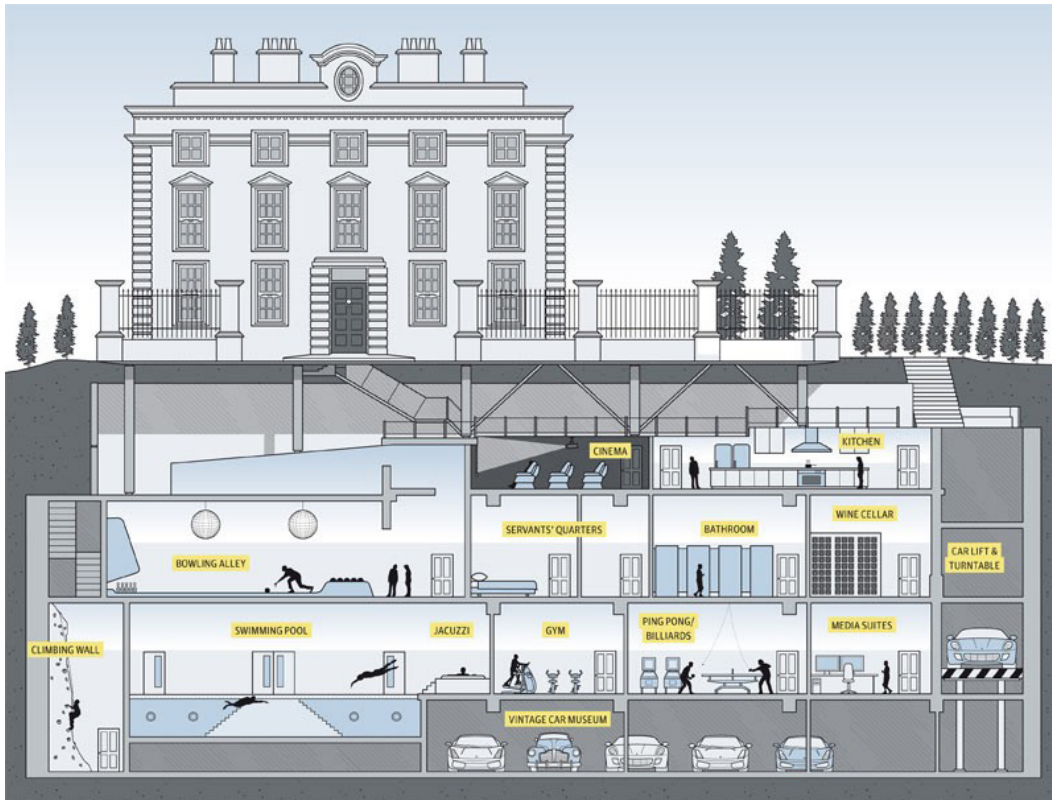


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of urban vacancy; a vacancy that is not the result of an overt system failure, deficiency or calamity, as in Detroit, the Ruhr Valley or New Orleans, but rather a vacancy of success. This is a vacancy emerging not from oversupply or low demand, not in relation to a declining jobs market, but instead it exists within the context of both strong demand and economic growth. This ghost density is the peculiar result of large numbers of investors purchasing residential property but leaving them vacant. As Sam Roberts reported on the case of Manhattan in a 2011 *New York Times* article, “[w]ealthy out-of-towners have always had pied-à-terre and unused investment properties in the city. What is new is how many.”²¹ Between 2000 and 2011 the number of units in Manhattan occupied by absentee owners and renters jumped by 70%, from 19,000 to almost 34,000.²² According to the 2005-09 American Community Survey, an owner or renter who spent less than two months in their unit per year occupied one in twenty-five Manhattan housing units.²³ In London, ghost density is more extreme. “Some of the richest people in the world are buying property here as an investment,” says Paul Dimoldenberg, a Westminster Council politician quoted in another *New York Times* article, “[t]hey may live here for a fortnight in the summer, but for the rest of the year they’re contributing nothing to the local economy. The specter of new buildings where there are no lights on is a real problem.”²⁴ Savills Research on the London property market reports that 59% of sales of existing residences properties in prime areas of central London, such as Chelsea and Kensington, during 2011/12 have been purchased by overseas buyers, and that about half of these properties are not rented and left largely empty.²⁵ As Yolande Barnes, of Savills, commented to *The New York Times*, “[t]he very wealthy won’t rent their houses out. Why would they? It’s more like buying their one private hotel, really – an alternative to living in a suite at the Dorchester.”²⁶

Figure 2: ‘Ghost Density’ at *One Hyde Park* in Knightsbridge, London. Credit: Graham Turner for *The Guardian*.

In London, these investment tactics have also resulted in the emergence of a perverse spatio-financial typology, what locals call ‘iceberg homes.’ Much of the



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most desirable real estate investment neighborhoods in London consist primarily of Victorian mansions that are modestly sized in relation to contemporary billionaire standards. At the same time, these neighborhoods are governed by zoning regulations that strictly limit above grade additions. As a result, there has been a wave of the super-wealthy achieving their aims for lavish programs and large interior living areas by radically extending existing homes underground. In these neighborhoods, it has become increasingly common for existing mansions to be augmented by three or four stories of underground space, accessed by elevator, which dwarfs the size of the original above ground structure. Between 2008 and 2012, Kensington alone approved 800 basement extensions.²⁷ For example, a particularly contentious proposal was Canadian TV mogul David Graham's plan to triple the size of his above grade purchase by building 3 stories to a depth greater than the height of neighboring homes to make room for a ballroom, swimming pool, 15 bedrooms, and a three car garage.²⁸ Essentially, central London has been hollowing itself out with mini-towers that plunge into the earth.

New York is witnessing an inverse form of architectural extremism that caters to the super rich. As Paul Goldberger reports, Manhattan is witnessing a new crop of residential towers that "are much taller, much thinner, and much, much more expensive than their predecessors. And almost every one of them seems built to be taller, thinner, and pricier than the one that came before. Few people are inclined to mourn the end of the age of the luxury apartment building as a boxy slab. But what is replacing it, which you might call the latest way of housing the rich, is an entirely new kind of tower, pencil-thin and super-tall."²⁹ As James Russell similarly remarked in an April 2014 *Architectural Record* essay, "[i]n New York City these days, residential towers cannot be too slim or too tall."³⁰ Russell's article begins with the tagline: "Structural gymnastics help ultrathin, ultra-tall residential towers for the ultrarich make their mark on the Manhattan

Figure 3: Illustration of an archetypical 'iceberg home' in London. Credit: Ben Hasler for *The Guardian*.

Figure 4: SHoP Architects' *111 West 57th Avenue*, New York City. Credit: SHoP Architects.



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skyline.”³¹ A parallel registration of this phenomenon is the Skyscraper Museum’s Spring 2014 exhibition, *SKY HIGH & The Logic of Luxury*, which explores the contemporary relationship between luxury housing and architectural form. The introduction of the exhibition reads: “Sophisticated engineering and advances in material strengths have made these spindles possible, but it is the excited market for premium Manhattan real estate that is driving both heights and prices skyward. Reported sales seem almost inconceivable: some penthouses in the buildings featured here are in contract for \$47 million to \$95 million.”³² The exhibition features six projects, selected from a larger crop of at least twelve. The epicenter of these towers is midtown Manhattan, from where they command preeminent views over central park. This midtown phalanx includes One57, by Christian de Portzamparc, which will be the tallest residential building in the Western Hemisphere upon completion. One of two penthouses was sold for over \$90 million to a hedge fund manager who, according to *The Wall Street Journal*, does not plan to live there but hold it as an investment.³³ Rafael Vinoly’s 432 Park Avenue will surpass One57’s height when it’s done in 2015, and its top residence sold for \$95 million. While Vinoly’s tower has a dramatic slenderness ratio of 1:15, it is mocked by the unprecedented slenderness of SHOP’s proposal for 111 West 57th, which is attempting 1:23. Manhattan is pioneering an unprecedented manifestation of structural heroism, the irony of which is that the top reaches of these ‘spindles’ will sit largely empty as totems of a new relationship between money and architecture.

Global post-industrial, neoliberal capitalism has engendered a new financial ecosystem in which the super-wealthy have mushroomed in ranks. They are making their marks on major cities everywhere through the emergence of extreme typologies and a new normal of ghost density. This is a stranger than fiction reality that confounds common perceptions of vacancy and urban expansion. Ultimately, this

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conveys the challenges that arise when the immaterial performance and trajectories of financial instruments merge with the material conditions of the built-environment. The inherently abstract character of financial investment vehicles such as stocks, bonds, and mortgages have historically operated in parallel to the built-environment, connecting to it at very specific junctures. Those junctures have now become less pronounced and localized. Instead, a more diffuse relationship has succeeded in absorbing the built-environment into the condition of financial abstraction in which it itself performs increasingly as an abstraction in which its inescapable materiality is pushed into ever more peculiar contortions. These contortions can be understood as necessary tensions that announce the financialization of non-financial entities.

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RESILIENT COMMUNITIES: DESIGN STRATEGIES FOR HEALTHY + SUSTAINABLE ENVIRONMENTS

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Three key words may represent the eight papers presented in the section 'Resilient Communities: Design Strategies for Healthy + Sustainable Environments': place making, minimum service, and modern life in the city. From Kenya to Bangladesh, these eight papers covered diverse places in the world. The scale of the projects also ranged from a single building to whole villages and the city itself. Even though all the presentations were related to sustainability issues, the spectrum of the approach was wide enough, starting from hygiene issues and well being to climate adaptation and socio-psychological issues.

As 'sense of place' has long been a topic of investigation in the discourse of architecture and urbanism, the first keyword 'place making' would sound somewhat banal if it were confined to the abstract relationship with the environment. However the issues dealt in the section were more focused on the people and environment in terms of the medium created by environmentally sound public spaces. In the paper 'Resilience: Scaled Strategies for Health', Susan K. Rogers, University of Houston, focused on different possibilities in the neighborhood. Paying attention to small-scale development based on local resources, new programs are carefully inserted into and connected with what is existing. Local farms and empty lots are therefore hooked into newly created corner stores and new walkways, taking advantage of utility easement and right-of-ways. Susan framed seven strategies—economic opportunities, education, environmental justice, food security, neighborhood stability, public spaces and safety—with potential impact on community health indicators such as physical activity, obesity, personal health, community activation, neighborhood safety, social cohesion, stress reduction, property values, equity and family wealth, economic prosperity, healthy eating and good nutrition. As such, she was able to concretize the goal of spatial strategies. Approaching schools as a place for expanding services for children and families to increase opportunities for physical activity and healthy living, she proposed networking among places of learning (schools), places for safe food (community farms, school cafeterias, corner stores), places of civic activity (public spaces) and safe places for exercise (walkways, open spaces). This logic derives from research related to health, education and employment. The work is about the cycle of crucial factors related to community resilience; education and employment increase individual income and eventually leads to improved individual health, community prosperity, and income equality. Based on the belief in the power of design in changing the city, she identified the missing links and connective tissue at both the micro and macro-level.

In the paper 'Measuring Urban Resilience: People-Place Relationships in Sustainable Communities', Aliaa Elabd, Celen Pasalara and George D. Hallowell paid attention to the measurable dimension of the physical characteristics of the community. As part of the larger project "Uncovering Southwest Raleigh," the North Carolina State University research team framed data by using a correlational approach and multiple data collection techniques, including extensive survey instruments, interviews, and GIS mapping procedures. Pointing out that previous studies lacked focus on the relationship between the formal and spatial environment of a neighborhood and the resident's sense of place, identity, and attachment, they emphasized the importance of social amenities, residential choices, local social networks, individual needs, and personality styles in the connection to a place. Taking into account factors such as physical characteristics and socio-psychological place identity metrics their goal was to understand current and future forces affecting change and to develop strategies to enhance and promote a healthy, creative, and economically sustainable neighborhood. While the methodology of narrowing down the physical characteristics that enhance neighborhood resilience was developed by the NC State University research team, the University of Houston team applied existing research results to real projects to promote community resilience. Pairing these two studies and their presentations, we vividly see the meaning of institutional research-based-design.

In the paper 'Building Resilient Communities in the aftermath of natural disasters: A Demonstration Home in Joplin, Missouri', Nancy Chikaraishi and Traci D. Sooter pointed out that the design and construction process can itself be a cohesive ritual for communities. They taught the community about sustainability through the community participation process while third-year design studio students spent one semester finishing up to construction document. Functioning as public education center as well as bed-and-breakfast, sustainable, resilient, net-zero homes designed for the community was a meaningful test-bed for disaster-resilient structure and materials. Co-work with the community and public presentations were part of the education process. Community participation was intended as a strategy to nurture attachment to place. This kind of education through community participation was also presented in the paper 'Misi-Ziibi: Living with the Great Rivers, Climate Adaptation Strategies in the Midwest River Basins' by John Hoal, Derek Hoeflerlin, and Dale Morris. This paper showed examples of multi-disciplinary workshops for spatial design that integrated methods for climate adaptation and sustainability along the Mississippi and Missouri rivers. The participants sought input from local stakeholders and communities to ground the work in specific realities and existing initiatives. Through the workshop, a series of scenario-based scaled design strategies were produced for flood-risk-protection, land-use planning, drought tolerance, ecological benefits, and sustainable design developments along the American Midwest metropolitan river regions.

The second keyword 'minimum service' was applied in various situations in the projects presented in the session. For example, a slum in Bangladesh and a site and service project in Kenya were studied for long term change. In the 'Sites-and –Services from an Architectural Perspective: A Case Study in the Dondora Community' research team investigated the short comings of a site and service project that was considered unsuccessful and thus neglected for a long period. Revisiting and reviewing the project, the study revealed how the residents had modified their basic dwelling. Research on the slum area in Bangladesh showed how the residents resolved minimum services such as cooking and ventilation. They slowly created their own optimum multi-purpose spaces (such as playing and social gathering spaces) by effective adaptation and building within their means. Our built environment is a place of settlement and thus sustainable development starts from sharing and reusing minimum resources for the future. While the slum in Bangladesh is run by the bottom-up approach initiated by the people and without any help from the public sector, the site and service project in Kenya is comprised by a core-housing concept, a top-down approach planned and carried out by the government. As the concept of the core-housing

format site and service is derived from the self-building of the squatter settlements, it was more meaningful to compare it with the survey on illegal slums in Bangladesh. The main issues investigated were infrastructure such as electricity, water supply, and sewage: the first precondition of the top-down project and a desperate need for the slum. A comparison of these two cases reveals a wide spectrum of relations among people and place. Slum residents shared a common kitchen and created shared multi-purpose space of their own, gradually forming a sense of place in the midst of their temporary settlement. However, in the site and service project area, people removed potential common areas, sub-letting rooms in the plot and disregarding the original intention. Their original common kitchen was eliminated and individual informal kitchens, regardless of their tiny room size, were formed. Lacking the cohesiveness, residents marked an artificial boundary of their own, blocking the alley way and hiring safeguards during the night. The reason for this direction could be attributed to the politics, culture, and demography of the people who live in the area. It could be said that, in contrast to the sense of community gradually formed in the middle of the illegal and temporary settlement of Bangladesh, the ownership of the site and the service project created an exclusive setting. Both case studies concluded with the emphasis on the importance of the power of place making through the inclusive sense of community and sensitive observation of urban morphology in societies with limited space and resources. Therefore, regardless of the size and physical condition of the environment, place making is the key issue, the very minimum requirement for living.

The third keyword 'modern life in the city' was approached from two different positions related to the overexposure of the basic devices of modern life - electric light and the automobile. Since the industrial revolution and until the advent of the recent green paradigm, these two major devices used to be the barometer of quality of life. Presently, LEED points are directly related to the reduction of automobile use and the reduction of light pollution to allow the right to see stars in the night sky. In the paper '24/7 Temporality and Post-Industrial Chronobiology', Aki Ishida examined, along with the historical development of electric light in industrial cities, medical findings on the impact of electric and natural light on human circadian rhythms. Reflecting on lighting technology that shaped 24/7 sleepless post-industrial cities, Ishida speculated that the design of buildings in the 24-hour city can enhance sleep and well-being. In his paper 'Avoiding "Compulsory Automobility" in Asia's Open Cities' Cotten Seiler explores the important topic of increased automobile use in crowded Chinese cities and how urban design affects car use. Primarily focusing on Shanghai and Guangzhou, where the automobile has belatedly colonized the physical and cultural landscape, Seiler examined the more cultural and political-philosophical dimensions of automobility. He paid particular attention to the tension between an individualistic, modern car culture and the urban and ex-urban built environments that do not accommodate it. He speculated on how urban planners and architects working in Asia sought to reconcile the prerogatives of mobility and the need to preserve or produce a dynamic, safe, and engaging urban landscape.

As was the intention of the section 'Resilient Communities: Design Strategies for Healthy + Sustainable Environments' and the conference 'Open City', all eight papers covered diverse topics and various scales over a global setting. Stitching together studies and pedagogical projects of design education, participants clearly showed the great potential of research based design in institutional settings where the city itself becomes a common ground.