

Part IV: A Short History of Glass

The continued development of the highrise structure in the late 20th century reflected ever-growing urban populations worldwide. As seen in Part I (*Mud*) and Part II (*Concrete*), the building of these structures was facilitated with the emergence of the elevator and a number of other inventions. In the late 20th and early 21st centuries, the combination of both residential and commercial spaces within these buildings also became common, resulting in increased market value of the properties. Part IV (*Glass*) outlines some of the concerns that developed in the late 20th century, with regard to adequate public housing in an increasingly commercializing real estate venture period. *Glass* highlights that while vertical development may seem to respond to the social need for housing, not all types of public housing are equal. By the middle of the 20th century, buildings using sheaths of glass and foundations of steel were commonplace in most cities of the world. In fact, the latter half of the 20th century saw highrise developments whose principal concerns were commercial. This is distinct from earlier incarnations of the highrise, as most buildings of this type were previously earmarked for residential use. The commercial purpose shifted the utility of these buildings and, as we see in *Glass*, the issues surrounding access to affordable housing increased at an alarming rate. The interdependent contexts of globalization and sustainability also had an impact on this type of architectural development.

Highrise buildings in the mid-to late 20th century required the implementation of safety measures, such as provisions for power failure and fire protection. These concerns created the conditions for an industry of insurance, one that paralleled the rise of real estate and investment speculation, increasing the value of these structures and simultaneously decreasing their affordability for anyone but the wealthy. Moreover, in terms of actual building materials and technological innovation, highrise structures needed to be strong enough to sustain environmental challenges, such as high winds, hurricanes, earthquakes and other uncontrollable weather patterns. These increasingly costly factors, along with the rise of globalization and insurance industries, resulted in further separation of social classes, particularly in terms of housing and economic power. As illustrated toward the end of *Concrete*, the highrise was in large part blamed for the social issues that emerged from the “warehousing” of individuals alongside retail outlets.

While the industrial revolution of the 19th century created a need for more housing, as citizens moved to the cities for work and other economic opportunities, the result was new development of a societal sector forming at the end of the 20th century. Populations increasingly sought to escape the demands of city living, creating urban sprawl, which became known as suburbia. The types of multi-story structures built as a result of urban renewal policies reflected the contrast between those who could afford luxury highrise apartments and those who could barely afford to remain in the city. *Glass* also explores how the squat and housing projects co-existed with the continued development of sky-scraping condominiums in the West. The chapter notes that the trend of developing more skyscrapers in the form of privately owned highrise housing continued unabated in the East. As we learn in *Glass*, the 20th century's urban planning field would take on the task of coordinating the sustainability and implications of privately owned condominiums with varied results. As we see in *Concrete*, public housing shifts from issues of accessibility and equality to the commercially driven concerns of real-estate speculation, market investment and economics. The move away from the core of the cities to avoid urban crime, pollution and congestion helped create the suburbs and the strip malls we see today, along with what has become known as the commute. Increasing awareness of the environmental impact of traffic and congestion is central to the larger issue of urban sustainability.

Glass: Study and Discussion Questions

- Why do you think urban real estate is so valuable? What is the human cost?
- Discuss the contrasts between luxury condos and micro apartments in the city.
- Evaluate how successful vertical living is for the general population.
- What are a city and/or government's roles in terms of providing for their citizens?
- What kinds of local initiatives are there in your neighbourhood to raise awareness about the environment?
- Discuss how urban living can be sustainable. What is necessary?
- What kinds of buildings are there in your city?
- What do you think is next for the highrise? What is the future of cities?

Understanding Glass: References and Definitions

Globalization

The site globalpolicy.org/globalization.html discusses the idea that “unprecedented changes in communications, transportation, and computer technology” have made “the world more interdependent than ever.”

Mega City

See newrepublic.com/article/books-and-arts/magazine/103329/highrise-skyscraper-woha-gehry-pritzker-architecture-megalopolis?page=0.1, an article that helps contextualize the century of urban highrise development and increased population densities worldwide.

Urban Slum

The article at geography.about.com/od/urbaneconomicgeography/a/Urban-Slums.htm outlines some of the characteristics of hyper-dense living conditions and the housing requirements of developing nations.

Urban Sprawl

The site ei.lehigh.edu/envirosci/enviroissue/sprawl/whatissprawl.html outlines the definition and potential solutions for widely spread urban populations, noting the heavy impact this trend has on the environment.

Urban Renewal

The Free Dictionary defines this term as: “rehabilitation of impoverished urban neighborhoods by large-scale renovation or reconstruction of housing and public works.” Interpretations of the term vary, depending on the context and purpose of its application.

Speculation

A practice of investment that has immense social consequences, as witnessed in the early 21st-century economic downturn in the US and Europe. The ripple effect of failed investment practices has been bailouts, bankruptcy, economic bubbles, volatility—and even sustainable food practices and limits on foreign investment policy.

Sustainability

A Merriam-Webster dictionary definition: Able to be used without being completely used up or destroyed; involving methods that do not completely use up or destroy natural resources; able to last or continue for a long time.

Torres de David (Tower of David) in Caracas, Venezuela

This 45-storey skyscraper has become a symbol for inadequate housing in Venezuela. It is the highest such building used as a squat in the world.

1520 Sedgwick Avenue – the birthplace of hip hop

The Web page cincystreetdesign.com/1520_Sedgwick outlines the cultural significance of this Bronx apartment building complex and illustrates the cultural outgrowth of the highrise context.

Additional Reading and Resource Materials for Glass

- [City Mayors Foundation](#) – about a foundation established to promote the sustainability of cities across the world.
- [Maps of World Cities Resource](#) – links to global cities and maps with stats and info.
- [Toronto Highrise Development](#) – *CBC News* story on the problems with some of the city’s most recently built condominium towers.
- [Urban Farmers Go Vertical](#) – *Huffington Post* video on sustainability efforts in the city. The space for food growing is also becoming limited and going vertical is being explored.
- [UN Habitat Link](#) – information on global efforts to obtain equitable and accessible housing. This site offers invaluable resources for the environment, future directions and historical context of urban development issues.
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- Foroohar, Rana. “[The Economy’s New Rules: Go Glocal](#).” *Time Magazine Online*. 20 Aug. 2012. Web.
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