SEOUL: OF ISLANDS AND MEGASTRUCTURES

Abstract:

This book focuses on understanding how a megacity like Seoul can be read as a formal architectural composition and not an endless urban sprawl. In a broader sense, the book discusses the dichotomy between city and urbanization; "city" being an architectural problem of bounded forms, while "urbanism" is an infrastructural project of expansion. It is an uncontested reality that urbanization is a continuous global process that has produced nebulous conurbations labeled as megacities. These expand beyond the virtual administrative boundary of any said "city," producing a discrepancy between an area of administrative control and the real physical condition of human settlement. If there were a better formal understanding of mega-cities through their typological architectural conditions, then there could be a better assessment of the qualitative state of urbanization. Avant-garde groups from the 1950s, 1960s, and 1970s such as Team X, the Situationist, the Structuralist, and the Metabolist worked with ideas of megaforms and megastructures to address this issue. Although most of these proposals remained as paper architecture, this book reevaluates some of these ideas for the 21st-century megacity, using Seoul as a case study due to its clear typological formations produced over its different periods of governance. The aim is to present the concept for an infra-architectural hybrid model of typological islands and subterranean megastructure that organizes Seoul as a flexible multi-linear city.

Chapter 1 - Introduction: **Understanding Seoul in the context of Urbanization**

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Abstract:

This chapter introduces the current state of global urbanization, a phenomenon that has produced global conurbations that surpass administrative boundaries. Infrastructural networks seem to seamlessly connect larger territories, as seen in satellite images of the world at night. This condition of urbanization questions the idea of a city being a human settlement with a bounded form as metropolitan areas expand sharing economic benefits. A person can live in Providence, RI and work in Boston, MA, for example; live in Milan, Italy but work in Lugano, Switzerland; or even commute from Daegu to Seoul. In the current digital age, one can live anywhere in the world and work remotely. The evolutionary development of infrastructures has allowed for this transition from bounded City to sprawling Urbanization that diffuses the idea of city form, a transition that can be attributed to the 20th century focus on infrastructure as the dominating factor in organizing an expanding human settlement leading to megacity formations. The expansion in Asian cities has led to some of the biggest "cities" in the world. Seoul claims a spot within these megacities, with a metropolitan population of 25 million people, Seoul has expanded into what seems an endless urban sprawl. In an era of sustainable development, it seems necessary to understand how this growth can be organized to achieve a high-quality urban space. This chapter introduces the idea that projects from the 1950s, 60s and 70s of megastructures and architectural islands had the potential to look into this problem of formalizing urban sprawl, but they were perhaps out of context. Yet, in the thriving megacity of Seoul, these ideas seem to be alive and thriving. To introduce how these concepts can be observed in Seoul, this chapter also produces a synopsis of the history of Seoul to explain that the different governance periods shaped the typological islands that make up the urban fabric of Seoul while an expanding underground network connects all these islands as a giant megastructure.

"What sort of significant and critical relationship can architecture aspire to in a world that is no longer constituted by the idea and the motivation of the city, but is instead dominated by urbanization?"1

The ongoing project of urbanization is continuously presented through satellite imagery such as the NASA vision of the Earth at night which reflects an ever-expanding infrastructural network, illuminating connected conurbations. Pairing with this imagery, the hardly contested data from the United Nations² with regards to urbanization portrays a global population that is overwhelmingly becoming more urban.³ Within this context, the introductory question (from Pier Vittorio Aureli) points out a distinction to be made between the terms "City" and "Urbanization." From the question, it can be deduced that these terms are not to be used interchangeably as they represent a very distinct context for the role of architecture within them. The project of city-making can be related to architecture,⁴ while urbanization is a project of an ever-expanding human settlement and manifested through infrastructure as proposed by Catalan planner Ildefons Cerdà in his "General Theory of Urbanization."5 When Cerda proposed the Eixample for Barcelona in the second half of the 19th century, he aimed at distributing the density from the medieval city center into the surrounding landscape by means of an engineered infrastructural grid that would allow for a continuous expansion. This was done to accommodate the increasing population that was moving from rural agricultural areas into city centers as industrialization formed a new economy with new labor markets in the 19th century. Urbanization started shaping society through political, economical, social, and technological dimensions by means of infrastructural networks that facilitated new particular lifestyles. Urban expansion continued in the 20th century, and by the 21st century the United Nations identified cities with over 10 million inhabitants as mega-cities, presented through their World Urbanization Prospects report every year since 2008.⁶ Yet, the new label for megacities is challenged by the NASA image of "Earth at Night" which shows how difficult it is to formally identify said megacities since urban sprawl has expanded beyond administrative boundaries. If there were a better formal understanding of mega-cities as bounded elements rather than endless sprawling urbanization then it could facilitate managing resources, and producing equitable sustainable developments. Avant-garde architecture groups like Team X, the Situationist, the Structuralist, and the Metabolist foresaw a problem with the modern models of urbanization and conceptualized how architecture could take a role in organizing large formations. Although most of these proposals remain as paper architecture, perhaps their abstract concepts could present a contemporary architectural solution for the question: can architecture have a role in defining a clear idea of form at an extra-large urban scale that properly identifies city-form in a megacity as opposed to sprawling urbanization?

Urbanization trends by the UN have tracked Asia and the Pacific as areas of fast and vast urbanization.⁷ Twenty-nine cities out of forty-seven megacities identified by the UN in 2021 are

https://www.un.org/development/desa/publications/graphic/world-urbanization-prospects-2018-more-megacities-in-the-future. ⁷ ESCAP. "Urbanization Trends in Asia and the Pacific." United Nations, Nov. 2013.

¹ Aureli, Pier Vittorio. The Possibility of an Absolute Architecture. Cambridge, MA: MIT Press, 2011. p.2

² "68% Of the World Population Projected to Live in Urban Areas by 2050, Says Un | UN Desa Department of Economic and Social Affairs." United Nations, United Nations, 16 May 2018,

https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html.

³ Angel, Shlomo, et al. "[Re]Form: New Investigations in Urban Form, Panel 2." YouTube, Harvard GSD, 26 Sept. 2018, https://youtu.be/a2RaiAORKks.

⁴ Rossi, Aldo. The Architecture of the City. Cambridge, MIT Press, 2007.

⁵ Cerdá Ildefonso. Teoría General De La urbanización y aplicación De Sus Principios y Doctrinas a La Reforma y Ensanche De Barcelona. Vol. 1, Madrid, Imprenta Española, 1867.

⁶ "World Urbanization Prospects 2018 – More Megacities in the Future | Multimedia Library - United Nations Department of Economic and Social Affairs." United Nations, United Nations, 16 May 2018,

located in Asia.⁸ Among these megacities, Seoul has had a unique historical development, which consisted of radical periods of governance, with distinct agendas that influenced how the built space was formed accounting for rapid population growth for each period. This created a layering process of architectural typological formations in Seoul that reflected each epoch of governance and the demographic needs of the time from its inception, more than 600 years ago, to the present. By focusing on Seoul's urban morphology through these architectural typologies, Seoul can be understood as an organized architectural formation rather than formless urban sprawl.

A BRIEF INTRODUCTION TO SEOUL:

While Seoul has a massive metropolitan area, this book focuses on the area within the administrative boundary of the City of Seoul, and its twenty five Gu's (districts). Seoul presents the perfect condition for exploring Typological Urbanism⁹ due to its drastic changes in governance within its 625 years of existence that produced variants in typologies and urban fabrics that were highly documented through mapping and still exist today as different layers in the city allowing for first hand observations.

The progression that occurs from the foundation of Seoul in 1394 to its present day megapolitan condition can be separated into five phases: Hanyang as the Capital of the Joseon Dynasty (1394-1897); Hanseong as the Capital of the Daehan Empire (1897-1910); Gyeongseong as the Colonial Capital (1910-1945); Seoul as the Industrial Capital (1953-1988); Seoul as the Global Capital (1988-2002); and Seoul as the Cultural Capital (2002-present). Each transitional phase of Seoul was directly linked to a specific political and economic agenda, and shifts in population density that produced different urban fabrics through architectural typologies.

Shortly after the foundation of the Joseon Dynasty in 1392, a new capital was built in 1394 as the new center of the kingdom. This initial city had an infrastructural organization that followed geomancy principles and its architecture served the ritualistic operations of the king.¹⁰ Two observable typologies came from this period, the royal grounds produced political forms, and the generic urban fabric mostly made up of single family *Hanoks* that infilled the compacted area inside the city walls with about 17,000 homes for about 100,000 people.¹¹

In 1867 King Gojong declared the formation of the Daehan Empire proclaiming the Gwangmu Reforms in order to open the hermit state to modernities of the West.¹² As foreign economic treaties were signed, a new architectural typology was introduced, the iconic form (landmark buildings). In Seoul, these were Western Style legation buildings, separated from the generic urban fabric as stand alone autonomous buildings that served to foment the foreign alliances.¹³ This typology produced a more sparse urbanity in a city that now reached a population of about 200,000 people.¹⁴

The expansion of the city continued during the Japanese forceful occupation. This period starting in 1910 looked to continue the modernization reforms using the Meiji Restorations done in Tokyo and Osaka as a model for the colonial capital, and used as a tool for an assimilation process

⁸ "Megacities Worldwide | UNESCO." *Second International Conference on Water, Megacities and Global Change*, UNESCO, 2021, https://en.unesco.org/events/eaumega2021/megacities.

⁹ Lee, Christopher CM, and Sam Jacoby. "Typological Urbanism and the Idea of the City." *Architectural Design*, vol. 81, no. 1, 2011, pp. 14–23., https://doi.org/10.1002/ad.1184.

¹⁰ Henry, Todd A. Assimilating Seoul: Japanese Rule and the Politics of Public Space in Colonial Korea, 1910-1945. Berkeley, University of California Press, 2016. P. 23

¹¹ "Seoul - 2.3 Population Changes in Hanseong." *Seoul - 2.3 Population Changes in Hanseong - CefiaWiki*, 19 Jan. 2017, http://cefia.aks.ac.kr:84/index.php?title=Seoul_-2.3_Population_Changes_in_Hanseong.

¹² Kim, Mun Taek, editor. *Seoul Museum of History: Places and Memories*. Seoul, Seoul Museum of History, 2013. p.112-115

¹³ Kim, Mun Taek, editor. Seoul Museum of History: Places and Memories. Seoul, Seoul Museum of History, 2013. p.112

¹⁴ "Seoul - 4.1 Population Growth and Expansion of the Urban Center." *Seoul - 4.1 Population Growth and Expansion of the Urban Center - CefiaWiki*, 19 Jan. 2017, http://cefia.aks.ac.kr:84/index.php?title=Seoul_-4.1_Population_Growth_and_Expansion_of_the_Urban_Center.

towards the Japanese Empire.¹⁵ The reforms symbolized control over the colony and were constructed through a wave of slum clearing projects in order to modernize the city with new infrastructures. The neoclassical Government General Building completed in 1926, for example, was a clear imposition to the old Joseon structure by disrupting the main axis of the city and blocking Gyeongbokgung palace. The Old City Hall building built in 1925 in an Imperial Crown Style is another example that exists until today. Its autonomy in the fabric led to the urban void, which was transformed into Seoul City Hall Plaza in 2002.

The independence of Korea after the fall of the Japanese Empire was quickly followed by the Korean War from 1950-1953, which left Seoul in an impoverished and devastated state. After the armistice of 1953, the immigration from rural to urban rapidly surged, creating unplanned squatter settlements.¹⁶ Park Chung Hee assumed power in 1963 and shifted the country's economic focus to an export oriented industrialization producing rapid economic growth.¹⁷ With the 1960's policies of heavy industrialization, this immigration flourished at a rate of 300,000 people per year by the 1970's.¹⁸ Annexation projects, slum clearing projects, and large infrastructure projects were proposed by the government as the urban growth continued in the fringe areas. This pressure for housing led to the land speculation and urban growth south of the Han River with gridded patterns that formed Super-blocks and large apartment complexes that followed a western development style in order to achieve housing density at great speed.¹⁹ The need for mass housing quickly became a primary agenda that resulted in mid and high-rise single-use slab housing block typology, and the Sangga mixed use developments characterized by their megaform.

The need for housing construction sponsored by the government drove the scale of projects focused on quantity. Single developments were in charge of one-thousand to two-thousand units distributed in multiple slab buildings in the same parcel of land.²⁰ As a new development strategy using land owned by the government, Kim Swoo Geun is commissioned to design Seun Sangga. Influenced by the teachings of Kenzo Tange, Kim Swoo Geun plans for a megastructure to span over four city blocks, exploring the three-dimensionality of the city on a site that was left as a fire barrier from the Japanese occupation. The megastructure consisted of an elevated pedestrian deck that would connect the four blocks with two thousand retail and office spaces, a hotel with 177 rooms, and 851 apartment units.²¹ More megastructures followed such as Nagwon Arcade, and Yujin Sangga combining infrastructure and architecture as a singular project. Along the Cheonggyecheon Pyeonghwa market and Shin Pyeonghwa Fashion Town were also developed as two-hundred meter long buildings running parallel to the stream forming a military barrier and at the same time becoming hubs of fashion production and retail centers.

The 1988 Olympics became a driving force for showcasing the city as a modern metropolis. During this period two more block typologies were developed, the tower block with the 63 Building as the prime example, and the deep block with the emergence of the megamalls by the three leading retail developers, Shinsegae, Hyundai, and Lotte. Corporate towers took over the Central Business District as a redevelopment strategy for urban slum clearing. Large corporations were given rights to parcels in the center of the city with the condition that they develop the infrastructure of the block for their corporate headquarters as towers. COEX was developed as a mall and convention center, taking

¹⁵ Henry, Todd A. Assimilating Seoul: Japanese Rule and the Politics of Public Space in Colonial Korea, 1910-1945. Berkeley, University of California Press, 2016. P. 28

⁶ Kim, Mun Taek, editor. Seoul Museum of History: Places and Memories. Seoul, Seoul Museum of History, 2013. p.226

¹⁷ Graham, Edward M. "The Miracle with a Dark Side: Korean Economic Development Under Park Chung-Hee." Reforming Korea's Industrial Conglomerates, Washington DC, Peterson Institute for International Economics, 2003, pp. 11-24.

¹⁸ ibid

¹⁹ Kim, Joochul, and Ch'oe Sang-ch'ŏl. Seoul: the Making of a Metropolis. London, Wiley, 1997.

²⁰ Kim, Kwang-jung. Seoul, Twentieth Century, Growth and Change of the Last 100 Years. Seoul, Seoul Development Institute, 2003. p.127 ²¹ Seoul Solution. "Sewun Mall Development Plan." 서울정책아카이브 Seoul Solution, 25 Sept. 2017,

https://seoulsolution.kr/en/node/6304.

over a megablock in Gangnam to display a globalized Seoul that could offer international brands and be a host for international commerce. The Jamsil Sports Complex was completed as the grounds for the Olympics featuring state of the art monumental stadiums. Large infrastructural projects such as the subway system (1974), and the Olympic Expressway (1986) were developed to cope with the increasing vehicular congestion. Gangnam expands its developments following a 800m by 800m mega blocks system based of the Basic Seoul Urban Plan.²² The main streets of the mega blocks were bundled with the subway system and infrastructural conduits to create main avenues.

By the turn of the century, the rapid urban development that had pushed the population to ten million in a city of 605km2, had also pushed production and industry outside of the city. Housing blocks had become mono-cultured islands in the large megalopolis. This phenomenon was quickly recognized and towards the end of the century a new sentiment was brewing to transform the city from an industrial city of growth to a post-industrial Cultural Capital. In her book "Globalizing Seoul"²³ Jieheerah Yun makes an argument for Seoul being shaped by a globalization effort, "Segyehwa," that developed Seoul into a global hub, and as a consequence, globalization shaped its urban spatial context led by policies of rapid industrialization. Since the 2000's, Seoul has switched from this idea of being a global city to being a "cultural" city; from a heavy industrial city to a cosmopolitan one. Yun makes the claim that the idea of the cultural city became the discourse in the early 2000's when the Seoul Development Institute published a study in 2002 regarding the urban state of Seoul, in which they suggested that Seoul needed to cultivate cultural spaces.²⁴ The study described Seoul's Urban spaces as not being conducive to the cultivation of cultures. There should be a focus on cultural industries as opposed to manufacturing industries and promote a higher quality of life. This is not a new concept, as it had already been defined in 1985 by the European Capital of Culture Programme started by Melina Mercouri and Jack Lang, the ministers of culture from Greece and France respectively. As explained by the European Commission report for ECOC bids from 2020 to 2033, "Since the 1980s there has been steadily growth in the awareness of the role of culture in the life of cities: its contribution to citizens' well-being and to the prosperity of a city, as well as its potential to reinforce a city's positioning on the international map. Many of the cities which have held the ECOC title have not only had a successful year but have benefitted from a lasting legacy."25 This called for a cultivation of environments that were conducive to cultural activities. According to this concept, Seoul needed to change from an industrial city focused on speed and efficiency to a cultural city that showed appreciation for its traditional cultures.

This has had a profound effect in the way the city started valuing its infrastructure, building stock, and industrial relationship inside the city, which led to new housing models, a move towards preserving cultural enclaves with cultural blocks, and the optimization of its infrastructural spaces. In an almost live version of Koolhaas's "The City of The Captive Globe,"²⁶ the podium typology emerged in the 1990's and early 2000's as a new model for mix use. Each podium base represents an entire block that houses commercial retail and offices, while on top of the podium slab housing towers stand as independent pieces of architecture. In parallel, the underground systems built in the 1970's consisting of subway tunnels, and underground pedestrian crosswalks evolved as programmable commercial areas such as Myeongdong Underground Shopping District or Yeongdeungpo Underground Shopping District. More than just transportation infrastructure, this underground

²² Seoul Solution. "Development of Gangnam." 서울정책아카이브 Seoul Solution, 12 Dec. 2017,

https://www.seoulsolution.kr/en/node/3445.

²³ Yun, Jieheerah. *Globalizing Seoul: The City's Cultural and Urban Change*. Abingdon, Oxfordshire, Routledge, Taylor & Francis Group, 2018. p.1

²⁴ Yun, Jieheerah. *Globalizing Seoul: The City's Cultural and Urban Change*. Abingdon, Oxfordshire, Routledge, Taylor & Francis Group, 2018. p.3

²⁵ European Capitals of Culture - European Commission.

https://ec.europa.eu/culture/sites/default/files/capitals-culture-candidates-guide_en_vdec17.pdf.

²⁶ Koolhaas, Rem. "The City of the Captive Globe." The City of the Captive Globe, 1 Jan. 1972, https://dome.mit.edu/handle/1721.3/21258.

network became a second layer for the city as an underground architecture (infra-architecture in its literal meaning).

The transformation of infrastructures as new public spaces became more noticeable from Lee Myung-bak's term as mayor from 2002 to 2006, when he implemented urban infrastructure transformation projects in order to soften the cityscape. His most notable projects were adapting the Cheonggyecheon stream into a public landscaped recreational space through the city center.²⁷ He also transformed a vehicular roundabout in front of city hall into a grassy field that would serve as a plaza for public events and gatherings. Seoul Forest Park was also developed during his administration, creating a natural reserve public park that would serve as a new lung for the city. These changes have continued post Mayor Lee's administration through a series of open international competitions that focus on these cultural urban spaces. One of the most controversial being the development of the Dongdaemun Design Plaza by Zaha Hadid. In order to transform Dongdaemun as a new design node and attractor, the city decided to demolish two outdated stadiums, displace street vendors and construct a new cultural center. Despite the criticism from its lack of functionality, "the role of the building as a landmark and a tool for economic revitalization played a greater part than that of service provision."²⁸ Following the completion of the Dongdaemun Design Plaza a new series of competitions emerged. Seosomun Memorial Museum & Park competition in 2014 looked at redeveloping an urban park as a historic, cultural and religious space. Sejong-daero Historic Cultural Space Design Competition in 2015 called for the design of a new public cultural space across City Hall connecting to the underground. One of the most significant competitions was the adaptive reuse of the Seun Sang Ga megastructure. From the brief, "The objective of the 'Re-Structuring Seunsangga Citywalk' competition in Seoul is to renovate the deck and nearby public space of Seun Sangga Complex to improve the pedestrian environment and connect with surrounding areas of various nature and thereby re-establish a pedestrian axis from north to south through Bugaksan Mountain, Jongmyo~Seunsangga Complex, and Namsan Mountain. Not only is Seunsangga Complex Seoul's "urban-architectural heritage," it is a compound of history, culture and industry that connects the surrounding area and various activities." The following year in 2016 the Nodeul Dream Island Competition seeked to transform an island on the Han River as a music cultural center. Mayor Park Won-Soon commissioned MVRDV to transform and reuse an existing vehicular overpass into a pedestrian cultural bridge that connects Seoul Station to Namdaemun Market, which opened in 2017.29 These projects shed a brighter light on the transformation of infrastructure as architectural hybrids that operate as part of the commons of the city. This sentiment is evident with the competition to design Gwanghwamun Plaza (one of the most iconic cultural spaces of the city) as an underground connection to the subway and its surrounding buildings and the competition for the Intermodal Transit Center in Gangnam won by Dominique Perrault.³⁰

Industry has also been able to come back into the city under the umbrella of culture. Under the governance of Mayor Park Won-Soon "Sharing City Seoul"³¹ project was initiated to give rise to the sharing economy and optimize the use of the city and address the 4th industrial revolution of the "Internet of Things."

THE STATE OF URBANIZATION:

https://seoulsolution.kr/en/content/inclusive-growth-sharing-city-seoul-project.

²⁷ Seoul Solution. "1. Cheonggyecheon (Stream) Restoration." 서울정책아카이브 Seoul Solution, 28 Sept. 2017, https://www.seoulsolution.kr/en/content/7475.

¹⁸ Yun, Jieheerah. Globalizing Seoul: the City's Cultural and Urban Change. Abingdon, Oxfordshire, Routledge, Taylor & Francis Group, 2018 P 109

²⁹ "Seoullo 7017 Skygarden," MVRDV, https://www.myrdy.nl/projects/208/seoullo-7017-skygarden,

³⁰ Architecture, Dominique Perrault. "Dominique Perrault Architecture." Dominique Perrault Architecture - LIGHTWALK - Gangnam Intermodal Transit Center, Seoul,

https://www.pertaultarchitecture.com/en/projects/3463-lightwalk_- gangnam_intermodal_transit_center_seoul.html. ³¹ Seoul Solution. "[Inclusive Growth] Sharing City Seoul Project." 서울정책아카이브 *Seoul Solution*, 28 June 2017,

This brief recap of the history of Seoul is meant to illustrate the strong correlation that can occur between the growth of a city and specific architectural typological formations, which could show an architectural reading of the City of Seoul. The value in this analysis is to form a new strategy for how architecture can organize large urban forms, especially with the current state of what seems a planetary urbanization.

In a modern context, the transition from city form to urbanization largely influenced architectural research during the 20th century. Some of the investigations that emerged from the Avant-garde groups from the 1950s, 1960s, and 1970s dealt with megaforms, megastructures, and collective forms as a way for architecture to deal with the new urban paradigm where infrastructure had become the predominant tool. In the earlier half of the 20th century though, the transition in focus from architecture to infrastructure is palpable, for example, when comparing Ludwig Hilberseimer's 1924 Vertical City theoretical proposal for Berlin to his proposed plan for Chicago from 1944.

While the project for Berlin, Vertical City, proposed architecture as the means to produce urban blocks through a repeatable vertical typology, his proposal for Chicago focused on infrastructural organizations where the sense of city form is lost and only infrastructure remains in the imagery. His proposals indicated a clear deviation from architecture as a tool for city making to an infrastructural urban growth strategy.

Seeing this transition, the project of urbanization as a global phenomenon was radically conceptualized by Constantinos Doxiadis as a global phenomenon. Based on his research on Ekistics, in 1961, Constantinos Doxiadis coined the use of the term "Ecumenopolis," to describe a unified continuous settlement across the globe, which he later published in 1974 as, "Ecumenopolis: The Inevitable City of the Future."³² In his book, Doxiadis begins to describe an era of megapolitan expansion which can be already observed not only through the aforementioned NASA satellite imagery of the world at night, but as well through political and economic policies that agglomerate large economic zones linking multiple cities such as BeNeLux or the BosWash corridor. Cities that were once quite formal like Sao Paulo, Tokyo, and Mexico City have developed into amorphous conurbations agglomerated as metropolitan regions. In China for example, the conurbation presents a systematic approach of organization at different scales between large urban nodes and rural towns. The rural in this context is not present in the traditional sense. It is integrated into the larger urban nodes as part of an agrarian urban pixelation where rural towns repeat every kilometer.

Environmental historian William Cronnon wrote in 1996, "For many Americans wilderness stands as the last remaining place where civilization, that all too human disease, has not fully infected the earth. It is an island in the polluted sea of urban-industrial modernity, the one place we can turn for escape from our own too-muchness."³³ Although written from an American perspective, the continuous urbanization led by an expansive infrastructural network that crosses geopolitical boundaries formed the bases for studies that have been labeled as planetary urbanization, recognizing this as a global phenomenon.³⁴ Benjamin Bratton makes the case for a planetary computational

³² Doxiadis, C. A., and J. G. Papaioannou. *Ecumenopolis: The Inevitable City of the Future*. New York, NY, Norton, 1975.

³³ Cronon, William. The Trouble with Wilderness: Or, Getting Back to the Wrong Nature. Environmental History, Vol. 1, No. 1 (Jan., 1996), pp. 7-28. Published by: Forest History Society and American Society for Environmental History

³⁴ Neil Brenner expands on the idea that planetary urbanism is still simply the project of urbanization and shouldn't be labeled otherwise.

Brenner, Neil. "Debating Planetary Urbanization: For an Engaged Pluralism." *Environment and Planning D: Society and Space*, vol. 36, no. 3, 2018, pp. 570–590., https://doi.org/10.1177/0263775818757510.

framework that has already become an accidental megastructure at a global scale.³⁵ In this virtual context, the idea of "the city," has increasingly become even more dubious and nebulous.

URBANISM AND AN ARCHITECTURAL REACTION:

For the 21st century, the focus on infrastructure rather than architecture as a macro organizer of cities begs to ask the question again, "what is the role of architecture under these conditions?" Addressing this question, Xaveer de Geyter Architects would publish their research, "After Sprawl: Research on the Contemporary City"³⁶ in 2002, illustrating the current urbanization condition in Europe as one that resembles the envisioned Ecumenopolis. Architecture is non-existent, only to be presented as an accumulation of scaleless fields of urban patches, indistinguishable from one another and non contextual. Acting on this, a series of proposals are made where architecture intervenes in the urban sea through a manipulation of voids that achieve a sense of organization, directionality, and form; voids acting as urban islands. Architecture, in this sense, is approached through distanciation or separation from its context.

Much of the concept of the architectural island can be attributed to the works of O.M. Ungers and Koolhaas from the 1970's that led to the development of Berlin: A Green Archipelago³⁷ in 1977. The project looked at reestablishing a sense of order in post-war Berlin by evaluating nodes that were still working well in the city. These nodes could be concentrated through a typological grouping in order to create the micro-city (the city within a city) effect. While establishing the concept of the island as an architectural typology reflected a viable strategy for dealing with the issue of a continuous urbanization for de Geyter and Aureli, Ungers would use it as a "shrinking city" strategy. This would mean that the island represents an autonomous entity rather than an urbanization model. It would not matter if the island sits in the middle of an urban sea or a desert. The concept was revisited by Pier Vittorio Aureli in 2011 through The Possibility of an Absolute Architecture. The book reflects on the works of Mies van der Rohe, Hilberseimer, Palladio, Piranesi, Boullée, Koolhaas and Ungers as architects that implemented architectural strategies of separation to achieve an "absolute" separate condition. For instance, the use of the podium by Mies van der Rohe would separate his buildings from the rest of urbanity by producing a new ground for which to place his buildings. The podium would create a demarcation, a boundary between architecture and urbanization offering a way for architecture to stand out within the urban sphere.

While the architectural island offered a strategy for urban architecture, a parallel concept was growing out of the recognition that infrastructure was instrumental for the project of urbanization. This is attributed to the twentieth century planning manifestos, where the role of city making as a physical entity, transitioned to other fields such as urban planning and engineering. Under these professions, the idea of city making became more preoccupied with efficiency models of operations rather than quality of urban space. Engaging infrastructure as a potential architectural toolbox, Stan Allen published "Points + Lines: Diagrams and projects for the city"³⁸ in 1999, presenting a model for infrastructural urbanism. In order to engage the city through the technical dimension of infrastructure, infrastructural urbanism proposes projects that give a new sense of urban order through the use of expansive green networks that could operate as collective spaces, environmental infrastructure, and urban form. The notion of using infrastructure as green networks deviated more into Landscape Urbanism, led by Charles Waldheim and James Corner³⁹, where landscape is utilized for the organization of urban growth. While landscape in Landscape Urbanism is engineered to sustain urban

³⁵ Bratton, Benjamin H. The Stack - on Software and Sovereignty. Cambridge, MIT Press, 2016.

³⁶ Bekaert, Geert, et al. After-Sprawl: Research for the Contemporary City. Edited by Xaveer De Geyter, Rotterdam, NAi Publishers, 2002.

³⁷ Ungers, O. M., et al. *The City in the City: Berlin: A Green Archipelago.* Zurich, Lars Müller Publishers, 2013.

³⁸ Allen, Stan. *Points + Lines: Diagrams and Projects for the City*. New York, NY, Princeton Architectural Press, 2012.

³⁹ Waldheim, Charles. *The Landscape Urbanism Reader*. New York, NY, Princeton Architectural Press, 2006.

Waldheim, Charles. Landscape as Urbanism a General Theory. New York, NY, Princeton University Press, 2016.

ecologies, support water management, as well as provide urban form it is still within the realm of landscape architecture and not a cross-categorical hybrid condition between architecture and civil infrastructure. Hence, the proposal of using infrastructure as an architectural hybrid, as denoted by Stan Allen, still remains to be explored as an architectural artifact in order for architects to have an additional tool to engage urbanism from within the field of architecture. This makes it imperative to review models of urbanization from an architectural typology lens in relation to infrastructure and city form. The 20th century has been attributed as the epoch that delinked architecture from the project of city making, yet it is also a century marked with transitional theoretical debates between city function, and counter projects that can be attributed to birthing infrastructural architectural hybrid through conceptual projects such as Hilberseimer's theoretical Vertical City project for Berlin published in 1927⁴⁰, or Peter and Allison Smithsons' conceptual competition entry for the Golden Lane project in 1952, Constant's hypothetical New Babylon from the 1960's, Kenzo Tange's visionary unbuilt Metabolist projects, Josic Candilis and Woods proposals on Structuralism, or Paul Rudolph's proposal for LOWMEX from 1967. These theoretical projects tried to understand a systematic infrastructural approach for architecture to engage urbanism and the city. It is worth it to revisit these theoretical projects from the mid 20th century as infra-architectural hybrids in the context of Seoul due to its higher urban population, higher building densities and updated construction technologies. Infra-architectural hybrids are projects that tried to understand the city not as a separation of functions in a two dimensional plane, but as an intertwined network of bundled infrastructures in a three dimensional volume that offered a higher efficiency in urbanity and city form.

By Rossi's terms in the "Architecture of the City", the city could be understood as "...a 'gigantic man-made' structure that merges engineering and architecture."⁴¹ While the architectural islands and the megastructure proposals may have not worked independently to produce urbanization models due to their autonomy, scale, and perhaps their Western context in the 1960's, in the 21st century megalopolis of East Asia, these models (islands and infra-architecture) may already be operational, and working in symbiosis in these highly dense, technologically advanced environments. For example, publications such as "Cities without Ground: a Hong Kong Guidebook,"⁴² review the three dimensionality and interconnectivity that occurs in Hong Kong by means of pedestrian networks that form megastructures linking buildings throughout several blocks. Atelier Bow Wow's "Made in Tokyo"⁴³ discusses the effects of Tokyo's density on producing unique typologies that optimize the use of real estate through hybrid conditions. Highly developed Asian cities have also invested largely on mass transit systems that allow efficient connectivity through these expansive urban zones. Seoul presents these conditions, hence, studying the possibility of these theories not only still being in existence but remaining pertinent to understanding the megapolitan condition seems to represent a valuable study for the planetary state of urbanization.

⁴⁰ Hilberseimer, Ludwig, et al. *Metropolisarchitecture and Selected Essays*. New York, NY, GSAPP Books, 2012.

⁴¹ Rossi, Aldo. *The Architecture of the City*. Cambridge, MIT Press, 2007. p. 21

⁴² Frampton, Adam, et al. Cities without Ground: A Hong Kong Guidebook. Navato, CA, Oro Editions, 2012.

⁴³ Kaijima, Momoyo, et al. *Made in Tokyo*. Tokyo, Kajima Institute Publishing Co., Ltd., 2021.