SHIFTING MONUMENT

A Journey through Time, Space, and Future Urban Design

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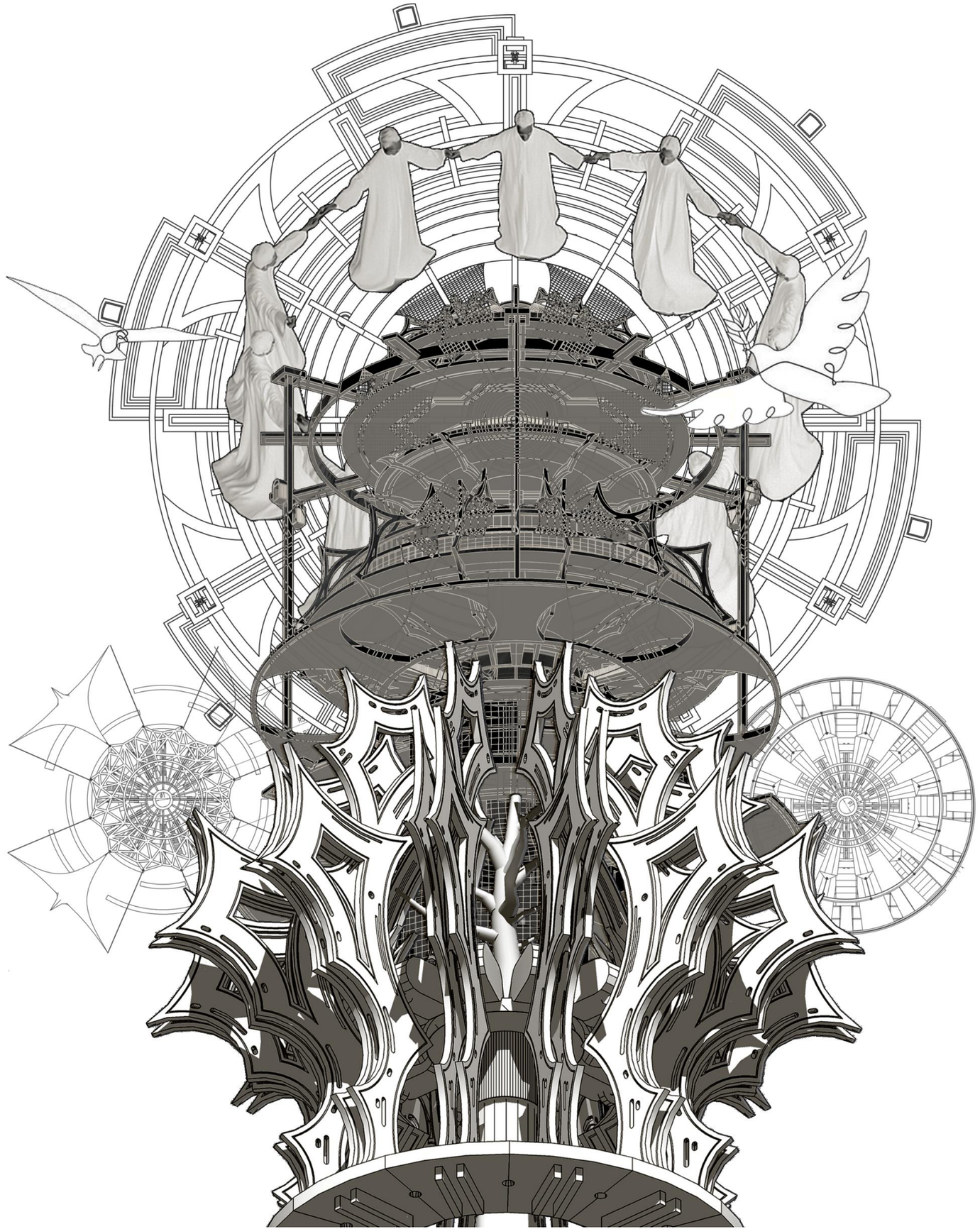

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INTRODUCTION

The influence of time and space on unique entities has always been a core theme of my design projects.Philosopher Martin Heidegger, in *Being and Time*, [1]emphasized that time is something to be experienced, embedded within people's daily behaviors and experiences. This concept forms the philosophical foundation of my installation design. In my project, the installation evolves over time, transitioning from a static entity into a dynamic one, gradually forming functional spaces based on community needs, eventually transforming into an adaptive, speculative urban ecological platform.

Set within a dystopian framework, my design project challenges the static aesthetics typically associated with art installations. It aims to push beyond the purely aesthetic function of contemporary installation art, experimenting with speculative design approaches to explore greater possibilities within urban design. Inspired by biological systems, such as the growth patterns of slime molds and bamboo fungus, my project is grounded in current global contexts and trends. The entire project is divided into three hypothetical phases, with each phase exploring the evolution of the installation under different environmental conditions：

2024-2099: Inactive Phase

During this initial phase, the installation remains inactive. Influenced by contemporary architecture, the installation is encased in building structures, deliberately showcasing the contrast and balance between organic forms and modern architectural materials. It serves the public through three different types of enclosures, offering multifunctional public spaces. Although static, the installation interacts with its surroundings and provides services to the community.

2099-2199: Activated Growth Phase

In this second phase, the project simulates a dystopian scenario where humans can no longer survive on the Earth's surface. The installation is distributed across different areas of London, with mycelium seeds embedded within. These seeds, following the natural growth patterns of slime mold, connect different points to form a conceptual city framework. The installation breaks through its initial enclosure, expanding upwards into architectural structures and roadways, gradually forming a new urban network.

2200 and Beyond: Urban Platform

In the final phase, the installation evolves into the framework for a future city. What began as a closed artistic installation has now transformed into a self-sustaining system that merges nature with urban infrastructure. This dynamic urban platform adapts to ongoing environmental and societal changes, becoming an integral part of the city's structure.

Through the lens of speculative design, this project reimagines the role of art installations. Inspired by designers Liam Young (Young, 2015) [2]and Neri Oxman (Oxman, 2014),[3] the installation transcends its aesthetic origins, transforming into a functional object that evolves over time to meet future societal challenges. By integrating natural growth patterns, the fluidity of time, and spatial adaptability, this project demonstrates how art can transition from static display to a crucial component of future urban systems, addressing the complex problems of a dystopian world.

[1] Heidegger, M. 1962, *Being and Time,* trans. Macquarrie, J. & Robinson, E., Blackwell, Oxford.

[2] Young, L. 2015, *Speculative Cities: Future Design Approaches,* MIT Press, Cambridge.

[3] Oxman, N. 2014, *Material Ecology,* Harvard University Press, Boston.

CHAPTER Ⅰ

Packaging Time: Combining Time and Space

The intertwining of time and space has always been a key topic of discussion among philosophers and designers. In my design project, the transformation of time and space is a core concept for research and practice, particularly through experimenting with individual installations, analyzing their static and dynamic qualities to enhance their adaptability to social and environmental changes.

I will explore the relationship between time and space from the following five aspects, using case studies to express my understanding from a design perspective.

1. The Interweaving of Time and Space: Escher's Visual Exploration

Artist M.C. Escher demonstrated the infinite possibilities and complexities of spatial relationships in his work *Relativity* (1953)***[Figure 1]***. [4]He combined multiple gravitational directions simultaneously, where the external world seen through windows and doors appears different, while the figures inside seem to follow distinct physical laws despite being in the same space. This multidimensional visual work creates uncertainty about the consistency of time and space, emphasizing the intertwining and multi-dimensionality of both.

In my design project, I drew inspiration from this concept, exploring how a single installation can evolve through dynamic changes in time and space, eventually becoming part of a new urban framework. My installation is not merely a static spatial element but grows and changes in phases like a natural system, adjusting according to environmental and societal needs. Through this design logic, the installation serves different roles over time, transitioning from a single unit to a community module, and ultimately becoming a component of the urban framework, illustrating the fusion of time and space.

2. The Fusion of Speculative Design and Nature

Speculative Design[5] provides a new mindset for future design. By imagining the direction of the future world, designers can create structures that not only adapt to future needs but also serve current human life. For example, designer Liam Young often bases his work on future urban planning, creating architectural concepts that break the traditional constraints of time and space. His project Planet City[6] envisions a fully self-sustaining future city that evolves through its integration with natural systems, addressing both environmental and societal demands. In this project, the city continually updates, showcasing the intertwining of time and space. This aligns closely with my project, where the installation transitions from static to dynamic over time, ultimately becoming a city platform.

Similarly, Neri Oxman's "Silk Pavilion" [7]project demonstrates how natural materials can organically combine with architectural structures to achieve dynamic evolution. In this project, thousands of silkworms wove silk on a digitally generated framework, illustrating the integration of natural systems with architectural layouts. Oxman's philosophy suggests that nature and architecture are not separate, but rather intertwine and evolve over time. Her design closely mirrors the growth pattern of slime mold in my project, showing how design can learn from natural systems to form the framework for future architecture.

3. The Temporal Cycle of Nature and Architecture

In my design project, the fusion of nature and architecture is not only reflected in the physical structure but also in the temporal dimension. Buildings are no longer static; like natural systems, they evolve and grow over time, adapting to environmental and societal changes.

The Bosco Verticale (Vertical Forest)[8] in Milan, designed by architect Stefano Boeri, is a prime example of the integration of nature and architecture. By incorporating vast amounts of vegetation into the building façade, the structure organically responds to seasonal and temporal changes. The plants grow, wither, and regenerate over time, showcasing the continuous interaction between nature and architecture. This design demonstrates how buildings become participants in time, rather than passive observers, continuously adapting like natural systems.

In my design, the installation simulates natural systems (such as the growth of fungi), evolving into a dynamic structure over time. It is not merely a physical entity but adjusts itself over time, reflecting the interaction between nature and architecture in the dimension of time.

[4] Wikipedia contributors, *"Relativity (M. C. Escher),"* Wikipedia, The Free Encyclopedia, last modified September 21, 2023, https://en.wikipedia.org/wiki/Relativity_(M._C._Escher).
[5] Wikipedia contributors, "Speculative design," Wikipedia, The Free Encyclopedia, last modified October 1, 2023, https://en.wikipedia.org/wiki/Speculative_design.

[6] Planet City, *"Main," Planet City,* https://planetcity.world/Main.
[7] Oxman, N. (n.d.). *Silk Pavilion I*. Oxman, from https://oxman.com/projects/silk-pavilion-i.
[8] Stefano Boeri Architetti. (n.d.). *Vertical Forest,* from https://www.stefanoboeriarchitetti.net/en/project/vertical-forest/.

4. The Intersection of Time and Space: A Contrast Between History and Modernity

By comparing the Prince Albert Statue at Holborn Circus ***[Figure 2]***,[9] we observe that traditional sculptures, often as historical monuments, remain static over time. Its characteristics in relation to the environment are merely to make the surrounding environment retreat and resist***[Figure 3]***.This static nature prevents them from interacting with modern society or responding to changes in the environment or social context. In contrast, I considered whether contemporary art installations could transcend their aesthetic role and serve as functional structures throughout their lifecycle. My project demonstrates how installations can evolve from static to dynamic over time, becoming more adaptable and flexible through the influence of time and natural forces.

Michelangelo's David[10] is a static piece of art, but as time and space have shifted, its significance in society has evolved. Initially, the statue stood in a public space outside Florence's city hall, symbolizing strength and freedom. Later, due to conservation needs, the statue was moved to a museum to ensure its long-term preservation. This shift illustrates how the intersection of time and space affects the symbolic and functional aspects of art. Through interaction with its environment, David shows how a static object can redefine its historical and cultural value over time.

5.Response to Environmental and Social Needs

Olafur Eliasson's work has influenced me a lot because his designs are closely related to environmental and social needs. In today's cities, the role of public art has changed a lot. Art installations are not just decorations or monuments anymore. They have become ways for people to interact and think about things like city changes and ecological problems. For example, as cities become more crowded and climate issues more serious, traditional sculptures and static art can no longer keep up with the fast changes happening around us.

For instance, "The Weather Project"[11] recreates weather phenomena to make audiences reflect on the impact of climate change on urban life. The installation isn't merely an artistic spectacle but an interactive space for environmental dialogue. By altering light and shadow dynamically, the audience is immersed in the experience,

[9] London Remembers. (n.d.). *Prince Albert - Holborn,*from https://www.londonremembers.com/memorials/prince-albert-holborn.
[10] Accademia Gallery. (n.d.). *Michelangelo's David*, from https://www.accademia.org/explore-museum/artworks/michelangelos-david/.
[11] Eliasson, O., 2003. *The Weather Project.* [online] Available at: https://olafureliasson.net/artwork/the-weather-project-2003/

fostering a deeper awareness of environmental issues. This mode of interaction mirrors the philosophy behind my installation design—not limited to decoration or commemoration but evolving over time and space, responding to environmental and social changes to become an integral part of urban functionality.

Conclusion: The Dynamic Evolution from Concept to Reality

My design project combines philosophical theories, Speculative Design, and the dynamic growth patterns of natural systems to illustrate the profound interweaving of time and space within art installations. From an inactive static state to a dynamic expansion that adapts to the environment, the installation ultimately becomes the core platform of a future city. This project is not only a rethinking of time and space in design but also a bold speculation on and response to the future needs of society. Through this design, my goal is to break the boundary between architecture and art, showing how they evolve, grow, and adapt together over time.

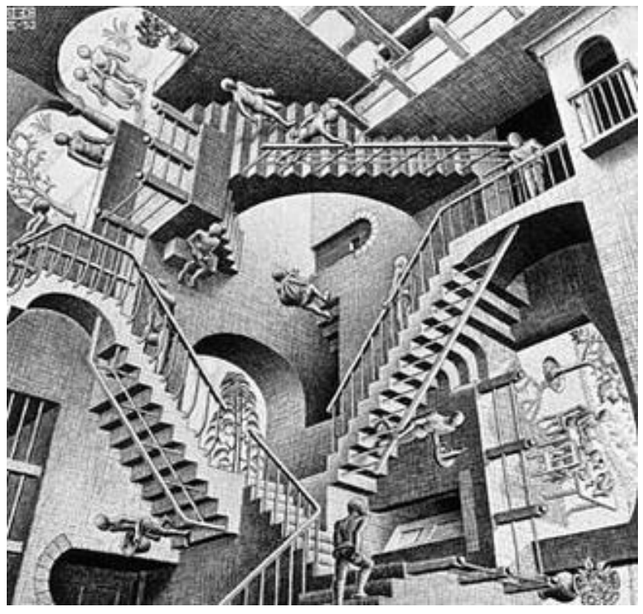


Figure 1

Figure 2,unit3 portfolio

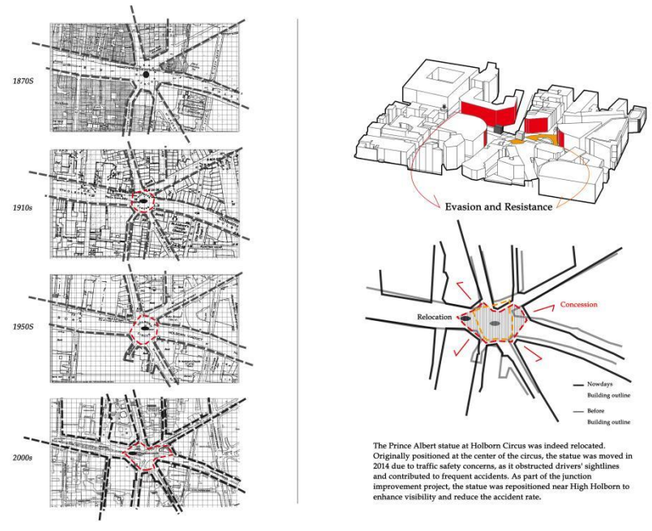


Figure 3,unit3 portfolio

CHAPTER Ⅱ

Exploring the Future of Time and Space

in Science Fiction Literature

I often read science fiction novels and am very curious about the construction of time and space in these stories. In these literary works, the concept of time and space is often used as inspiration to predict and imagine future societies. In the following section, I will discuss the works of William Gibson and Philip K. Dick, as well as the parable of the Tower of Babel, to explain how these stories provide a dystopian worldview for future city designs. In my project, I borrowed the time and space techniques from science fiction, using three hypothetical time periods to create a vision that transforms from modules to future cities in a dystopian world.

1. Concepts of Time and Space in Science Fiction

In William Gibson's *Neuromancer*,[12] cyberspace is described as an invisible, untouchable virtual world. It breaks the traditional understanding of "space." In this virtual world, physical boundaries disappear, and human consciousness can move and interact freely within the virtual environment. This setup not only blurs the line between the real and the virtual, but also makes the concept of time more fluid. In cyberspace, tasks are completed at a much faster speed than in the real world. This challenges our usual linear understanding of time and makes us rethink the relationship between time and space.

In contrast, Philip K. Dick's works often explore the variability of time. He believes that time is not only flexible but also nonlinear and even multidimensional. In his stories, reality often seems fragile and unstable, full of time paradoxes, memory changes, and overlapping multiple universes. For instance, in *The Man in the High Castle,*[13] Dick introduces the idea of parallel universes, where different histories can meet at the same moment. This makes time and reality no longer clear or absolute. These ideas not only break the traditional concept of linear time, but also make me question the stability of space and even whether time is as absolute as we think. It is this kind of thinking that has motivated me to explore the uncertain future of time and space in my student period project.

Drawing inspiration from these science fiction concepts of time and space, my project envisions an installation capable of continuously evolving over time. The multi-dimensional growth of the structure allows it to meet present urban demands while simultaneously adapting to new functionalities as time flows. This dynamic adaptability echoes the potential for a multi-functional, standalone structure in future environments, much like the boundless possibilities within cyberspace. The relationship between the installation's structure and time and space is no longer fixed but instead evolves continuously with societal and technological progress.

2. Visions of Future Cities in Science Fiction

J. G. Ballard's novel *The Drowned World*[14] portrays a future where rising sea levels submerge most of the Earth's land, leading cities to decay or adapt to the new environment. This extreme scenario mirrors the future context envisioned in my project, where, by the year 2099, Earth's surface is no longer hospitable to humans, forcing them to relocate to Sky Cities[15] while installations left on the ground continue to grow and transform. In Ballard's vision, both cities and their inhabitants must evolve to survive, which resonates with the transformative nature of my installation—an entity that uses biological systems, like the growth of mycelium, to adapt and gradually connect to form a new urban collective.

In my project, future cities are conceptualized as self-sustaining frameworks, akin to the evolving cities in *The Drowned World*. By leveraging natural systems such as the growth patterns of slime molds, the design anticipates a future where buildings and infrastructure are not merely constructed but "grown" and interconnected. This "living city" notion aligns with the speculative qualities of science fiction, where designed structures no longer resist their environment but respond and adapt to its changes.

3. The Metaphor of Rebuilding Cities in Mythology

The parable of *the Tower of Babel* [16]symbolizes humanity's ambition to reach the heavens while also reflecting the limitations of human unity and communication. The story embodies the idea that building grand structures is not just an act of defining civilization but also an

[12] Gibson, W., 1984. *Neuromancer.* New York: Ace Books.
[13] Dick, P.K., 1962. *The Man in the High Castle.* New York: G.P. Putnam's Sons.
[14] Ballard, J.G., 1962. *The Drowned World.* London: Gollancz.
[15] Conceptual era from Portfolio uni3 of DC.L
[16] Wikipedia, 2024. *Babelsberg Tower.* [online] Available at: https://zh.wikipedia.org/wiki/%E5%B7%B4%E5%88%A5%E5%A1%94

effort to transcend its current context. In modern times, skyscrapers like the Burj Khalifa and the Shanghai Tower can be viewed as contemporary equivalents to the Tower of Babel, striving to express national and urban ambitions through their sheer height.

In my project, I draw from the metaphor of the Tower of Babel to explore how a city can be reimagined and rebuilt from the ground up. Just as London's Roman Wall [17]once safeguarded and defined the boundaries of the ancient city, my installation offers a new form of protection and renewal. However, unlike traditional defensive structures, this installation draws inspiration from elements of ancient Roman architecture, such as Acanthus motifs and Corinthian columns, embracing organic growth that adjusts to changes in the environment and society. In stark contrast to rigid monumental architecture like the Tower of Babel, my design showcases the flexibility, resilience, and interconnectedness of future urban environments.

Conclusion

Science fiction's exploration of time and space has reshaped our thinking about the design of future cities. My project transcends static architecture by adopting a dynamic urban platform that evolves in response to environmental and societal changes. These speculative narratives challenge conventional notions of time and space, proposing that cities can become fluid and adaptive entities.

The future envisioned in this project is one where, in a dystopian context, urban resilience manifests through growth and transformation, much like natural systems. By combining speculative fiction with architectural design, it offers a blueprint for a city that can continuously adapt to the uncertainties of the future.

[17] English Heritage, 2024. *London Wall History.* [online] Available at: https://www.english-heritage.org.uk/visit/places/london-wall/history/

CHAPTER Ⅲ

From Concept to Practice – Case Studies and Application

In the previous sections, I have explored the theoretical foundations of the installation design, focusing on its adaptive nature and the dynamic interaction between time and space.

This section divides the installation's development into three key phases: 2024-2099 (Closed Phase), 2099-2199 (Expansion and Growth Phase), and 2200 and Beyond (City Framework Phase). Each phase demonstrates how the installation transitions from a closed, static structure into a dynamic urban platform that can adapt to the evolving environmental and societal needs. The uniqueness of the installation lies in combining classical architectural elements such as Acanthus and Corinthian columns with modern, evolving frameworks. I extracted and reinterpreted these elements using 3D cutting technology. With this method, I designed the entire structure and created a physical model, which includes motors to simulate the dynamic growth of the structure***[Figure 4,from unit3 portfolio]***. The fusion of classical elements with modern technology is not only an homage to architectural history but also transforms these traditional forms into functional, adaptable components that evolve over time.

2024-2099: The Closed Phase of the Installation

In the initial phase, the installation exists in a closed state, encapsulated by contemporary architectural structures, symbolizing latent energy. Despite its static nature, the installation serves as a multifunctional public space, offering opportunities for cultural exchanges, community interactions, and exhibitions.

The public space of the installation is divided into three main modules***[Figure 5,from unit3 portfolio]***:

Public Projection Cinema Module: This module is equipped with a projection system that records and showcases human behavior during this era. Visitors can interact with historical video records, creating a dynamic dialogue between history and the present. The interactive technology enables real-time engagement with archival footage, establishing a living narrative.

Public Commercial and Leisure Module: This two-tier structure is designed for temporary markets and pop-up events. It not only provides a space for commercial activities but also a place for relaxation, shopping, and socializing, adapting to diverse public needs.

Community Module: This module integrates various community functions, including a family-friendly play area, markets, and lounges for relaxation. It offers a multifunctional space that fosters social interaction, community bonding, and daily activities.

These spaces are designed not only to meet the diverse needs of contemporary society but also to lay the foundation for the future evolution of the installation.

The transformation of the installation from a closed structure to an urban framework was directly inspired by natural growth patterns, particularly through my bamboo fungus cultivation experiment***[Figure 6,from unit3 portfolio]***. By observing the bamboo fungus' growth cycle, I noted how it evolves from a spore in a confined space, eventually breaking free and expanding into a mushroom form. This natural growth mirrors the installation's design, as its closed structure gradually evolves and becomes part of the urban framework. By surrounding the installation with modern architectural elements, I intentionally created a contrast between human-made structures and the organic forces within the installation, emphasizing its power to break free from confinement.

2099-2199: The Expansion and Growth of the Installation

In the second phase, the installation shifts from being static to dynamic, breaking the original modular structure and growing both vertically and horizontally. The vertical growth, with its open-and-close movement, is inspired by the growth pattern of bamboo fungus, as the core structure is made of mycelium. The horizontal path expansion is influenced by the behavior of slime mold, a natural organism that forms efficient networks when searching for food.During my slime mold experiment***[Figure 7,from uni3 portfolio]***, I used a map of London and cut the agar into pieces based on the fragments of the Roman Wall. I connected these fragments one by one, setting them as coordinates for the installation. Then, I placed food at these coordinates to simulate the future city platform, allowing the slime mold to connect them while searching for the food, thereby forming the path network of the future city.

This growth mechanism mirrors natural organisms, adjusting to changes in the environment and forming new architectural structures. As a result, the installation evolves from a static artwork into a dynamic urban structure, contributing to the development of the city.Once the urban grid is established, the vertical city structures begin to stack layer by layer.***[Figure 8,from unit3 portfolio]*** The central structure of the installation (i.e., the core element) continuously rises over time, growing to predetermined heights. It adjusts itself based on the city's population density and societal needs. For further analysis, please refer to the portfolio.

The visual inspiration for this phase comes from Joseph Michael Gandy's A Bird's-eye View of the Bank of England[18], which shows how a single architectural structure integrates with its surrounding urban environment. Similarly, the classical elements within the installation evolve into functional parts of the city's infrastructure. These once-symbolic elements now serve as adaptable components, gradually merging with modern infrastructure.

However, in contrast to MVRDV's Expo 2000 project[19], the installation's design exhibits significant dynamic characteristics. In Expo 2000, the tree-stump structures are mainly static load-bearing components, emphasizing the fusion of nature and architecture. My design, on the other hand, is not limited to static support; the central structure of the installation grows upward like bamboo shoots, extending over time. This bamboo-segmented growth model allows the installation to adjust itself according to the city's population density and societal needs, providing greater flexibility and adaptability. This dynamic process makes the installation not just a component of the future city framework, but an organic system that can flexibly respond to environmental changes, embodying the symbiosis of architecture and nature in a futuristic context.

2200 and Beyond: The Installation as the City Framework

By the year 2200, the installation has fully evolved into a self-sustaining urban framework. It is no longer a standalone art installation but has become a core component of the city's infrastructure***[Figure 9,from unit3 portfolio]*** . The mycelium-based framework continues to expand, providing essential services such as energy management, transportation networks, and public spaces. The installation grows alongside the city, creating new roads, buildings, and public areas as needed.

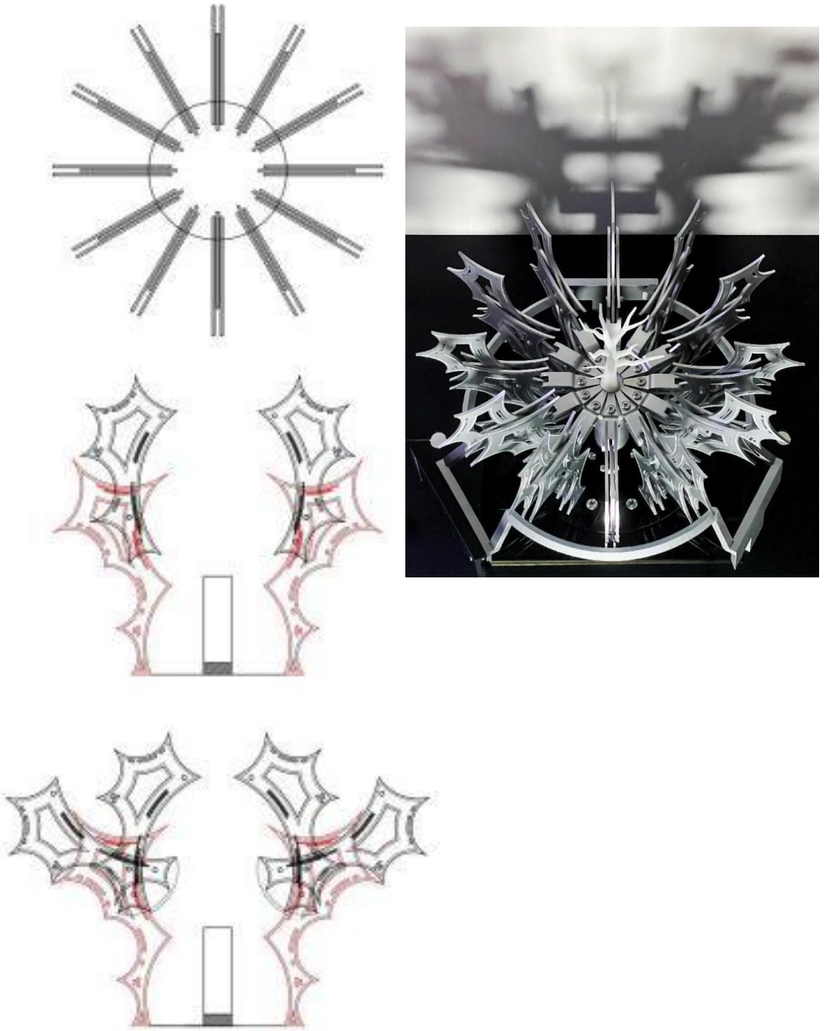
The inspiration for this phase comes from the MycoTree project[20] in Seoul, which vividly demonstrated how mycelium and bamboo can be cleverly combined to create self-supporting architectural structures. Similarly, my installation integrates these natural systems (mycelium and slime mold networks) with urban design. In this phase, the ground-level installation behaves like a "living organism" within the city. It is no longer a rigid architectural structure, but one that can sense external environmental changes and adapt, evolving as needed. Over time, it will continuously change its form and function according to the surrounding environment's demands.

In my design, I have also simulated an extreme environmental scenario. According to flood risk predictions for the City of London, as climate change intensifies, sea levels are expected to rise by 1 meter by 2100, [21]along with an increase in extreme weather events. Although the Thames Barrier currently provides effective protection, large-scale upgrades may be needed in the future to address these growing threats. In the hypothetical situation of London being submerged by floods, the fully developed installation can detach from its central structure and float as an emergency shelter during crises. This adaptive design presents a hypothetical solution to the flooding crisis in London.

Conclusion

My installation design evolves from a closed, static structure into a dynamic, self-sustaining urban framework, showing how a single art installation can develop in a speculative timeline. Through three distinct phases, the installation transforms from an isolated historical monument into a "living" urban organism, not only reflecting the passage of time but also predicting and assuming the future of a dystopian city. It represents a speculative installation design that embodies resilience, adaptability, and a close connection with the natural world.

Figure 4,from unit3 portfolio



[18] Sir John Soane's Museum, 2024. P267 - Rinaldo Conquers the Enchanted Forest. [online] Available at: https://collections.soane.org/object-p267

[19] MVRDV, 2024. *Expo 2000.* [online] Available at: https://www.mvrdv.com/projects/158/expo-2000

[20] Parametric Architecture, 2024. From Fungi to Foundations: *Mycelium in Construction.* [online] Available at: https://parametric-architecture.com/from-fungi-to-foundations-mycelium-in-construction/

[21] UK Government, 2024. Managing future flood risk and Thames Barrier: Thames Estuary 2100. [online] Available at: https://www.gov.uk/guidance/managing-future-flood-risk-and-thames-barrier-thames-estuary-2100

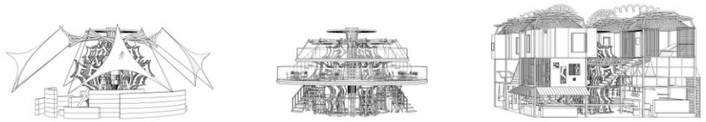


Figure 5,from unit3 portfolio

Figure 6,from unit3 portfolio

Figure 7,from unit3 portfolio

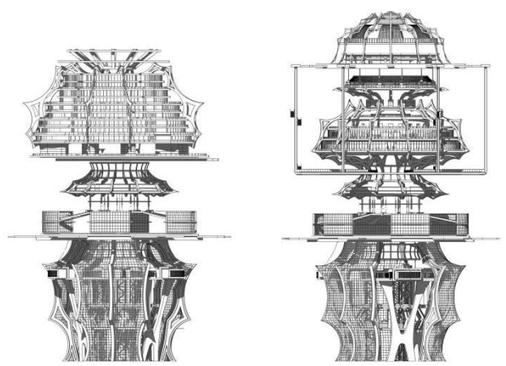


Figure 8,from unit3 portfolio

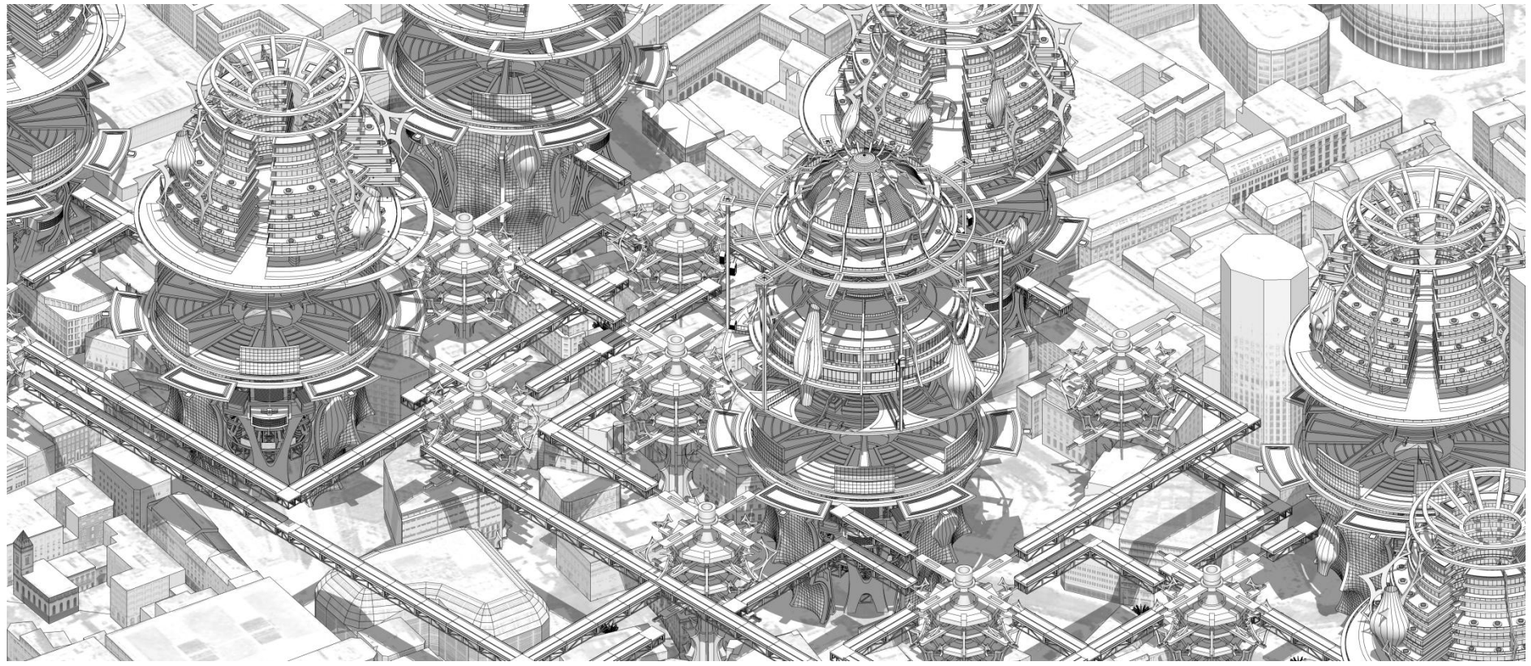


Figure 9,from unit3 portfolio

CONCLUSION

The Evolution of Time, Space, and Life-Cycle Thinking in Contemporary Art Design

In this paper, I explored how an art installation can transform from a static, commemorative aesthetic object into a multifunctional, sustainable, and dynamic urban structure. Many contemporary artworks, while visually impactful and meaningful in the short term, often lack long-term practicality and influence. Once their temporary exhibitions are over, many installations struggle to integrate into the long-term development of cities or society and gradually fade into obscurity, losing their original purpose.

Olafur Eliasson’s The Weather Project, though a temporary project, broke free from the limitations of pure visual aesthetics. It successfully sparked deep discussions about climate change and human interaction with the environment, demonstrating that public art can have a lasting social impact even in a short period. This breakthrough in temporary art inspired my own design—not only to focus on aesthetic impact but also to expand its influence through functionality and social engagement.

To address the limitations of contemporary art, my project integrates natural systems, postmodern design principles, and life-cycle thinking. This approach ensures that the installation is not just a temporary visual symbol but a long-lasting, organic part of the urban environment. It adapts and evolves according to the changing needs of the city and its society, maintaining its functionality. The installation adjusts as the city expands or as environmental conditions change, providing a space for cultural reflection in its early stages and transforming into a vital piece of social infrastructure in the future. This design breaks the temporary nature of contemporary art, giving it long-term functionality and adaptability, supporting the future needs of both cities and societies.

The Intersection of Time and Space

In my project, I explored the speculative impact of time and space on a single installation and its adaptability in the urban environment. Traditional monuments often remain stuck in a specific historical moment, representing a singular narrative. However, as cities evolve, such static forms of art become increasingly limited. My project adopts a dynamic design approach, allowing the installation to adjust itself based on the shifts in time, space, and societal needs.

For example,The Eden Project in Cornwall[22] and Masdar City[23] in the UAE showcase how natural systems can be integrated to achieve sustainable urban development. Similarly, my design evolves from a closed, static structure into a framework that interacts with the environment, supporting the social, ecological, and infrastructural needs of the city. The installation is not just an artwork but an evolving organic system that responds to the changing time and space around it.

Postmodern Design and Social Change

The design of the installation draws from the flexibility and complexity of postmodern architecture, emphasizing dynamic adaptation to environmental changes. Morphosis Architects exemplify this in their projects, such as the Caltrans District 7[24] Headquarters in Los Angeles,with its façade and functions adapting to surrounding environmental conditions. In my project, the use of mycelium-based structures allows the installation to grow in response to the city's needs. During the 2099-2199 phase, the installation expands based on population growth, commercial space requirements, and environmental pressures, reflecting the organic flexibility seen in postmodern design.

This design is not just flexible in form; it also has a deep social impact. As the city expands, the installation becomes a central hub for community interaction while addressing practical needs such as housing and public services. It moves beyond the realm of art, becoming a crucial element of adaptive urban infrastructure.

Resilience in Extreme Environments

In addition to its social adaptability, the installation is designed to withstand and respond to extreme environmental conditions. As climate change intensifies, cities around the world face increasing risks from natural disasters such as flooding, hurricanes, and rising

[22] Eden Project, 2024. Home - *Eden Project.* [online] Available at: https://www.edenproject.com/
[23] Foster + Partners, 2024. *Masdar City.* [online] Available at: https://www.fosterandpartners.com/projects/masdar-city
[24] Morphosis Architects, 2024. Cooper Union Academic Building. [online] Available at: https://www.morphosis.com/architecture/13/

sea levels. The installation’s floating capability allows it to detach from its foundation and act as a mobile emergency shelter in times of crisis, providing refuge for citizens during floods or other environmental disasters.

This design draws inspiration from projects like The Big U in New York, a flood protection system that also serves as a multifunctional public space. The dual functionality of protecting against extreme weather while providing social infrastructure is central to my design. As London faces increasing flood risks due to rising sea levels, the installation’s ability to float and provide emergency shelter emphasizes its role in future urban resilience.

Projections suggest that by 2100, sea levels around London could rise by up to one meter, necessitating major upgrades to the city’s flood defenses. While the Thames Barrier currently offers protection, the city will need new infrastructure capable of addressing these growing threats. My installation is designed with this in mind, ensuring it can adapt to extreme weather conditions while continuing to serve its public function.

Fusion of Classical Elements and Modern Frameworks

To echo the historical significance of the Roman Wall, my design incorporates classical architectural elements like Acanthus leaves and Corinthian columns, blending them with modern technology and structure. Using 3D cutting techniques for physical modeling, I reinterpreted these classical forms into functional components of the installation's adaptive design.

The larger concept is to return to the original purpose of the Roman Wall—built to protect the city of London. My design extracts key elements from the scattered fragments of the wall and reconnects them to create a new dystopian city. This new city preserves the protective spirit of history while sheltering the land in a modern context.

Future Outlook: Deep Integration of Nature and Technology

The Netherlands’ Expo showcased the potential of collaboration between nature and technology, using wood to construct static tree-shaped structures, representing human-nature cooperation. In contrast, my speculative design utilizes mycelium and other organic materials, giving the core of my installation the ability to grow dynamically. It not only merges with technology but also expands continuously, adapting to the changing needs of the city. This approach truly exemplifies a deep synergy between nature and technology, offering new possibilities for the sustainable development of future cities.

Final thoughts

This project demonstrates how integrating natural systems, modern technology, and life-cycle thinking can transform art installations into urban infrastructure. Future installations will not only possess aesthetic value but also respond to societal, environmental, and technological changes, becoming dynamic urban systems. This approach provides a fresh perspective on merging city design and art, offering a flexible and sustainable vision. Through this vision, cities can remain resilient and thrive in the face of change and challenge.

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