



PARASITIC ARCHITECTURE

EMBODIMENT OF DYSTOPIA

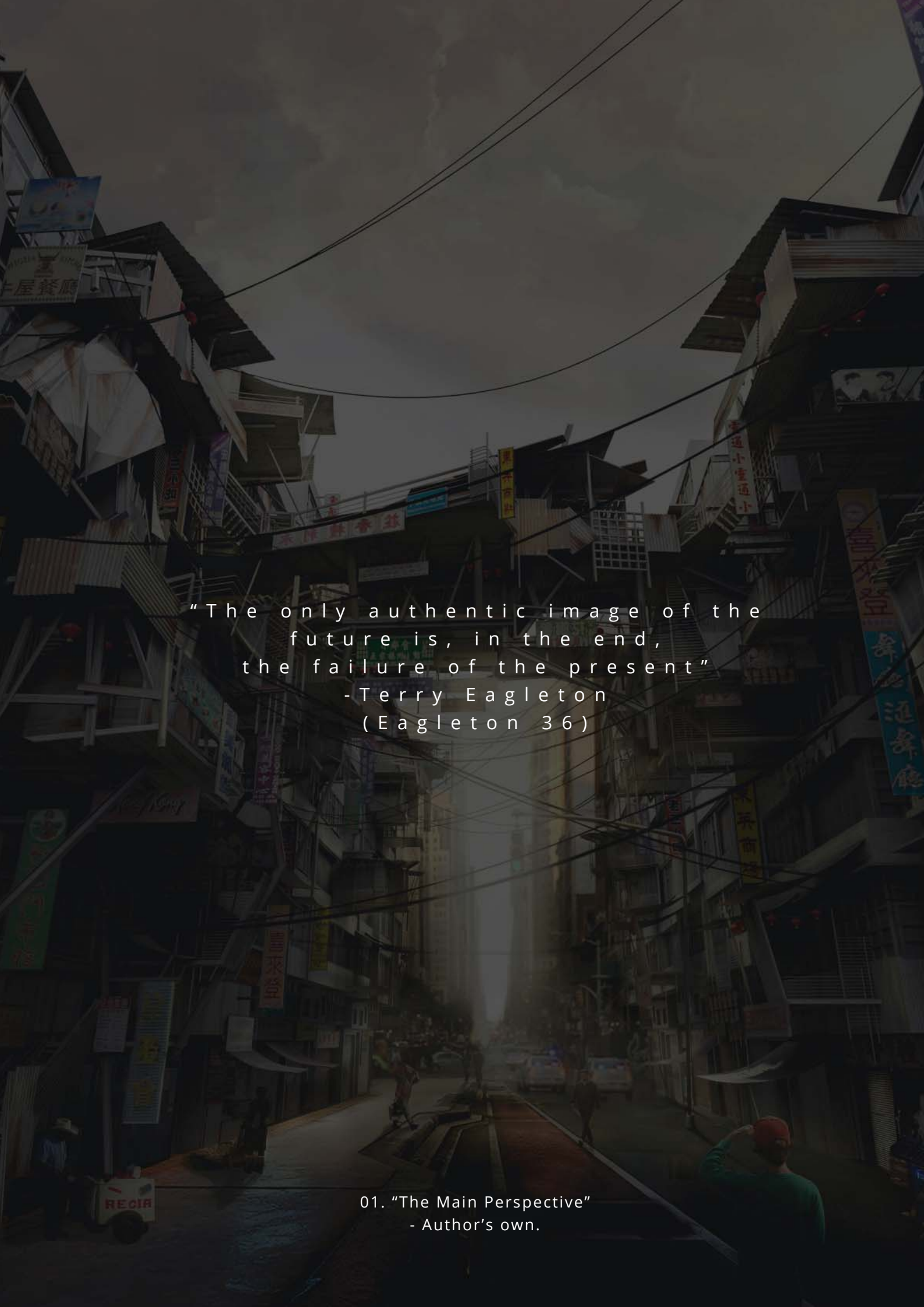
Parasitic Architecture - Embodiment of Dystopia

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A 120 - point thesis submitted to the
Victoria University of Wellington in partial fulfilment
of the requirements for the degree of
Master of Architecture (Professional)

Victoria University of Wellington

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"The only authentic image of the
future is, in the end,
the failure of the present"
- Terry Eagleton
(Eagleton 36)

01. "The Main Perspective"
- Author's own.



[abstract]

We always live on the edge of tomorrow, where the future is just around the corner. Today, as never before, futuristic ideas have become a prevailing part of a modern reality, as we live at a time when the most interesting science fiction books are indeed set in the immediate present. A more 'responsive' age of architecture suggests that the boundaries of our discipline be redefined. Through searching for answers and inspiration within precedents and fictional realms, this thesis opens a door to a hypothetical place where architecture takes new form - to the territory existing between abstract and physical, where speculative ideas become a way of understanding negotiation between present and future in search of new architectural solutions.

Beyond the physical built environment, architecture is a field of limitless possibilities, a vessel for an endless interpretation and the embodiment of narrative scenarios. This thesis advocates for unconventional solutions in architecture, arguing that traditional approaches may no longer be successful within contemporary realities. Thus, in order to create functional architecture, that is always relevant to conditions in which it exists, the thesis suggests that architects should not design for a better future as they usually tend to do, but should rather plan for more realistic and even pessimistic scenarios. This thesis, therefore, speculates about architectural behaviour in a dystopian scenario, where civilisation has gone to chaos, creating conflicting conditions of an overpopulated place, in which architects have no control over residential areas and architecture takes new form under the lack of buildable space.

Through analysis of case studies and fantastic scenarios portraying dystopias, this thesis traces the evidence of a future that is already here, in this way, arguing the importance of engaging with the present through understanding fiction in order to influence reality. Through acknowledgement of modern tendencies such as urbanisation, overpopulation, lack of space and unveiling layers hidden within fictional narratives, this thesis examines how such changes are shaping the image of the contemporary world.

Therefore, the thesis advocates for the importance of the speculative method in architecture, as such an approach allows one to imagine fictional possibilities in order to create more responsive structures, which are always modern.

Through analysis of parasitic behaviours, this thesis speculates on how architecture will respond to environmental and social changes, and what types of structures can evolve and adapt over time. Through experimentation and speculation, the thesis examines parasitic behaviors as a way for organisms to evolve, in order to test if such strategies could be successfully used in architecture. Moreover, the natural growth process allows an endless evolution of structure with the creation of additional spaces, allowing residential dwellings to reflect constantly changing human needs. Speculating on conditions in which people are forced to find living alternatives, this thesis challenges an architectural vision to embrace the role of the occupants providing them more freedom and control over the spaces they live in. Thus, the thesis proposes new ways for contemporary design to evolve through active participation of habitants in the ongoing developments and expansion of the buildable space around.



[p r e f a c e]

ARCHITECTURE IS MORE

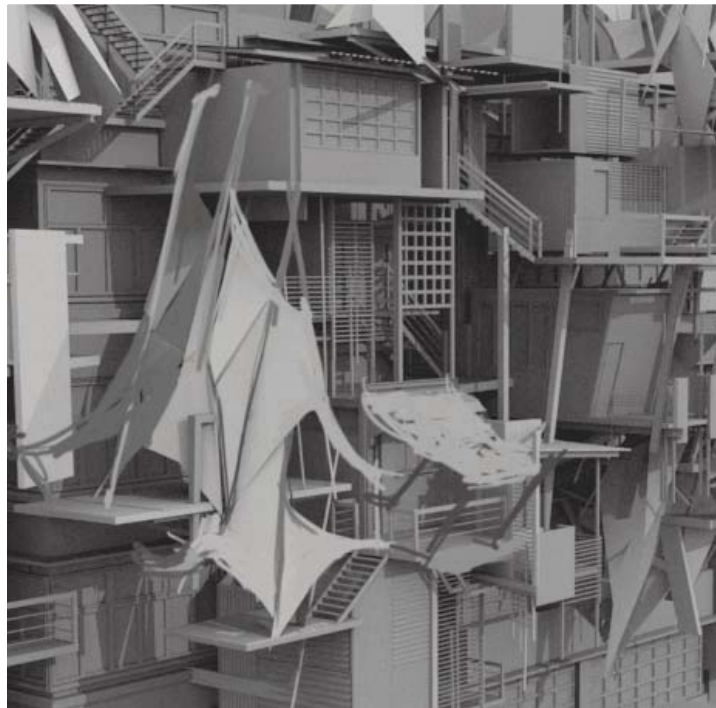
Being an architectural graduate I came to a belief that curiosity, wonder and courage are gears in the engine of progress. In my opinion the best ideas are being born from eagerness and experimentation, in the place beyond ordinary, on the line between insanity and realism. In my view architecture represents more than a design of functional spaces. It is a form of art existing to declare a statement, to provoke and inspire - an art form that represents ideas and embodies beliefs. Each building is more than just a structure, but a representation of our mentalities, cultures and traditions. Buildings of each era are portraits of their time, visions captured in frames.

I decided to set my project not here and not now, but in a place where anything is possible - in a scenario that allows a speculative possibility for future architecture and pushes the boundaries of the imaginary, at the same time offering a potential architectural solution for areas with no available buildable space.

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	[x]	p r e f a c e
	[2]	i n t r o d u c t i o n
	[6]	m e t h o d o l o g y
	[8]	p a r t 1
1 _ d y s t o p i a	[10]	
2 _ p a r a s i t e	[26]	
	[48]	p a r t 2
3 _ p r e c e d e n t s	[50]	
4 _ s i t e	[68]	

[table of contents]

	[84]	p a r t 3
5 _ e x p e r i m e n t a t i o n	[86]	
6 _ v i s u a l e x p l o r a t i o n	[104]	
	[116]	p a r t 4
7 _ f i n a l d e s i g n	[118]	
	[140]	p a r t 5
r e f l e c t i v e s u m m a r y	[142]	
c o n c l u s i o n	[146]	
	[148]	w o r k s c i t e d
	[154]	l i s t o f f i g u r e s



02. "Concept Development"
- Author's Own.



[introduction]

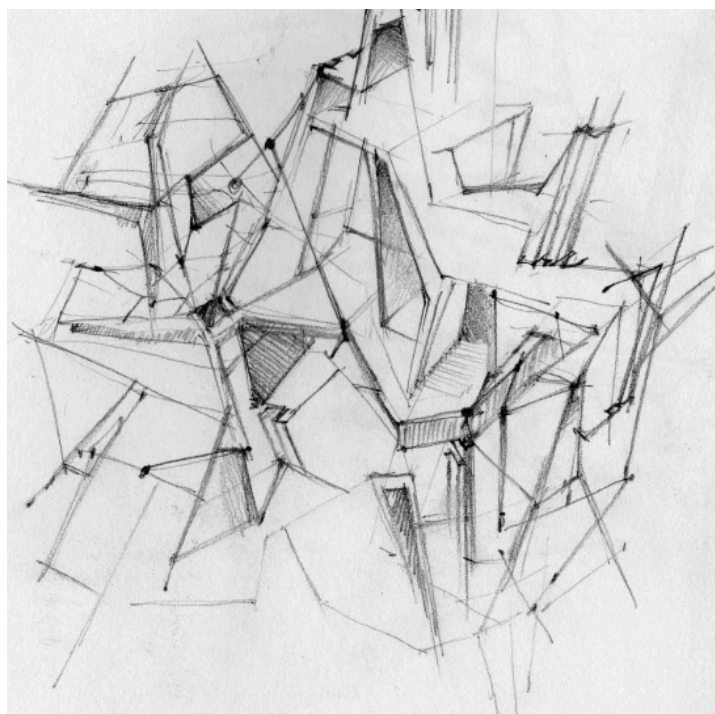
BRAVE NEW WAY

50 years ago ideas that seem ordinary today would only live on the pages of books and movie plots. Many of the things that are happening this very moment have direct parallels to the narrative ideas of the futuristic society. Rapid urbanisation, uncontrollable population growth and immigration - these are the shaping elements of a contemporary world. These are the tendencies that are fundamentally altering the course of our lives, changing the image of the modern environment; such adaptations suggest new styles, architectural freedom and urgent building methods. A new era reveals possibilities for innovative and unprecedented solutions.

The reader will be taken on the imaginary journey to the possible futuristic scenario of a world where architecture has evolved to adapt - to the fictional space, where structures behave like living organisms and have developed survival techniques by "feeding" on decaying buildings in order to sustain their own existence. The reader will encounter a visual story of a fictional overpopulated city, where lack of space and regulations has created a dystopia - a chaotic environment with inflicting conditions forcing architecture to transform.

Travelling through a speculative space, the story will unfold in an extraordinary way, negotiating the correlation between speculative prospects of urban space and natural survival strategies, their morphology and relevance to a contemporary world.

The aim of this thesis is to create an innovative approach for parasitic residential architecture within the urban city area as a representation of dystopian ideas. The intent is to move beyond categorical thinking, to experiment, speculate and create architectural design as a visualisation of futuristic possibility.



03. "Concept Development"
- Author's Own.



[methodology]

Starting from theoretical investigation, the research began with an exploration of dystopian narrative scenarios, comparison of terms related to utopia and dystopia and understanding of their role in shaping modern architecture. Followed by study of symbiotic relationships in nature as survival strategies and their possible implementation in design, the second part of the thesis analyses existing emerged structures and non-fictional precedents, their relevance to dystopia and parasitic architecture. Such a theoretical and speculative design approach is used to create the design, which is explored in the third part of the thesis, describing the idea development through visual and digital experimentation. The process leads to a visualisation of dystopian ideas and their incorporation into a parasitic structure. The final part describes the development of the design and the way researched ideas have been implemented, concluding with a reflective summary and comments.

[part 1]

This part opens a discussion towards the importance of speculative thinking in architecture. Seeking inspiration in narrative scenarios and organic relationships, it investigates the terms parasite and dystopia, negotiating their relevance to each other and to architecture. The following part of the research investigates possibilities under which parasitic architecture and dystopia can be perceived in a functional or more productive way, turning what are seemingly negative, reactive phenomena into positive proactive ones.



[chapter 1]

DYSTOPIA - A DARK REALITY

This chapter investigates the intellectual value of understanding dystopia in order to reimagine architecture. Starting with analysis of the terms dystopia and utopia, this chapter argues the importance of designing for dystopian vision in order to create more responsive types of structures. Following analysis of the terms, this chapter analyses science fiction case studies, where architectural representation of a city is being explored and discussed.

SPECULATION IN ARCHITECTURE

Author's and artists have always been fascinated with an idea of imagining futuristic environments, which can be evidenced by as myriad of science fictional novels, films and artworks. In order to better understand and evaluate present social, cultural, and technological conditions and project them to future possibilities, architects and designers often utilize speculative fiction to consider 'what if'. Science fiction is the only genre that explores the possibilities of how society could function differently. This is why Dr Helen Klus believes that fiction "allows us to imagine the future we want, and work towards it. It also makes us aware of the futures we wish to avoid, and helps us prevent them" ("Imagining the Future").

Fictions usually actively reflect modern conditions while suggesting the possibility of what is yet to come, engaging contemporary realities with visions of the future. In the interview given to Arch20, Liam Young suggests that speculations do not envision the future, but rather reflect the "visionary present", allowing us to see the modern world from a different perspective. Thus, Young implies that fiction exposes and exaggerates everything that can go wrong; therefore, the exploration of the imaginary allows us to see the world and times we live in with "fresh eyes" ("Interview with Liam Young").

Liam Young also believes that speculative architecture is a way for designers to engage with emerging tendencies and to stay relevant to the constantly changing city in a “much more critical and urgent way” (“Liam Young on Speculative Architecture”).

DYSTOPIA

Whether it is art, a novel or an architectural speculation, there are two main scenarios picturing the future civilizations: utopian and “dystopian” (The Hutchinson Unabridged Encyclopedia). The term “utopia” was popularised by writer Thomas More and usually represents an overly optimistic vision of a future society, a system of political or social perfection (The Chambers Dictionary), most commonly an idealised world, which is too good to be true. An opposite term, “dystopia”, also known as anti-utopia is a version of a future where things are far from ideal, commonly representing a community or society that is undesirable and daunting (Political Philosophy A-Z). Jonathan Lewis describes dystopian fiction as “ruined cities, broken institutions, and ecological, technological, political, and economic collapse” (45). Thus, while utopia offers an idealised scenario, dystopia usually represents a dark depressing reality.

Despite the name, dystopia is not simply the opposite of utopia. As suggested by Michael Gordin, to be truly opposite of utopia, dystopia would be “a society that is either completely unplanned or is planned to be deliberately terrifying”. Instead, dystopias usually have parallels with modern societies that are “planned, but not planned all” (Gordin et al., 1).

Although these terms are antithetical to each other, there are many similarities. Both utopias and dystopias share characteristics of science fiction; each have both negative and positive implications to them. While dystopia is being associated with something purely negative and dark, Darryl Chen suggests utopia is “too idealised and usually perceived as an overtly moralistic tale which can exist only in the imagination” (“Productive Dystopia”). If we look at the literal definition of “utopia”, it stands for a “no place”- a society that cannot exist (The Chambers Dictionary); therefore, it raises a discussion whether it should no longer be a model for an architectural aspiration, and if, instead, architects should design for dystopia, which represents a more realistic and relevant vision of the future. Young argues that traditional architectural methods are no longer relevant, as progress “happens to us rather than being shaped by us”.

According to him, by speculation, we take an active role in shaping environments around us. He uses a phrase “exaggerating the present” when describing his methods, implying an “extrapolation of present”, which usually reveals modern issues and cultural “idiosyncrasies” allowing one to critically engage with the present in a really meaningful way, allowing us to take a little more control of the futures we want (“Liam Young on Speculative Architecture”).

Michael Gordin refers to a present as a place “beyond utopia”, a scenario that comes “after or before”. He examines utopias and dystopias by historical conditions that generated such scenarios, through seeking evidence and precedents of both scenarios that took place sometime in our own history. Thus, according to Gordin, dystopia is a more common scenario as everything in the world is “more likely to go wrong”. He also argues that “every utopia always comes with its implied dystopia”. Thus, any utopia eventually collapses, becoming a dystopia, yet, it does not necessarily it work the other way around (3).

Through a series of articles and shared thoughts, founder of Tomorrow's Thoughts Today, Darryl Chen argues that representation of utopia in modern architectural tendencies is ignoring the contemporary tendencies. Dystopia, on the other hand, exposes the problems of modern/future society, gives a place for hope, new beginnings and protagonism (Tomorrow's Thoughts Today). Chen introduces the term "productive dystopia", in which a futuristic scenario is measured not by its possibility to happen, but rather by its "ability to alert the viewer to a more sophisticated sense of the present, provoking an action within a problematic present" ("Productive Dystopia").

Jonathan Lewis also suggests that every dystopia can be cured, and comes to a conclusion that in each dystopian novel, there is always a protagonist's response to "ameliorate the present discomforts or prevent, take advantage of, or simply try to survive an impending catastrophe" (46).

Gordin suggests that “utopia and dystopia in practice tend to test the boundaries of reality”; thus, utopia tends to evolve towards ideal but rarely reaches it, while dystopia is always vulnerable and should be seen as disease, which can be treated (6). As stated by Tom Moylan, dystopian narrative enables readers to find their way within the conditions that “mask the very causes of the harsh realities in which they live”. Dystopian vision always negotiates the “continuum between being partly utopian and partly anti-utopia” (12).

He also believes that, although a dystopia is a pessimistic representation of the very worst of social alternatives, it always maintains a horizon of hope. Dystopian narratives ensure contradictions of society that are present in order to evolve an action (149).

According to Chen, to be able to create concepts for future architecture, we need to look beyond modern trends into something more unprecedented. Dystopia allows for the extraordinary to happen, as in fiction anything is possible (“Productive Dystopia”).

CASE STUDIES

IMAGE OF THE CITY IN DYSTOPIAN FICTION

Blade Runner

Dystopian civilization represented in *Blade Runner* criticizes modern society through exposing contemporary issues and tendencies. The image of a futuristic city is portrayed in dark colors, showing the city of despair, where holograms, digital billboards and a myriad of advertisement hides the reality of an ugly, dark and depressing architecture, which seemed to be buried in ruins of the past. This setting itself is a reflection of everything that has gone wrong with the society. The dystopian future of *Blade Runner* portrays a city filled with waste, pollution, dirt - with streets that are filthy and full of crime, where people run like cockroaches on the overcrowded streets, where there is no light, no sun or artificial lighting. It is a constant night. It is so dark in the city, that it almost seems to be purposely hiding the seamliness of a dystopian society to make it be less visible to a naked eye. "Endless rain falls from the polluted" clouds forcing people to lurk under a myriad of canopies on the ground level of the city. Seung Hyun Park suggests that the image of the city in *Blade Runner* reveals "an aesthetic of decay, exposing the dark side of technology, and the process of disintegration. It is like a hell on earth, just waiting for the hope of redemption" (95).

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04. "The City of the *Blade Runner*"
- Inside *Blade Runner* 2049.

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05. "The City of *Total Recall*"
- Environments and Imagery.

Total Recall

The futuristic city of *Total Recall* resembles 'Habitat 67' - a multi-level settlement, where modules varied in size, shape and position towards the north, were stacked on top of each other, forming a structure that represented "a gigantic sculpture of futuristic interiors, links, pedestrian streets and suspended terraces" (Habitat 67). Similarly, many structures presented in the movie *Total Recall*, were relatively small modules, which were stacked on top of each other or attached to the surface of larger buildings, but in more vibrant and organic ways. Clusters of smaller dwellings seemed to be growing like parasites on top of larger ones. Such assemblance of dwellings suggests an impression of constant growth and vertical expansion of the city, suggesting the lack of buildable space, enforcing to use of anything that could allow a sufficient support for new buildings. In comparison to *Blade Runner*, the future of *Total Recall* seems to be less terrifying; the city itself shows a certain dynamism through a variety of residential dwellings; it gives a feeling of a breathable city that is alive.

Ghost in the Shell

The city of *Ghost in the Shell* is filled with holograms, which are enormously large and occupy all empty spaces of the city. The entire city seems to be alive and always in movement.

In comparison with the two previous case studies, the city of *Ghost in the Shell* seems to be quite normal and overall healthy and functional. There are of course similarities, represented in holographic images which seem to be the size of skyscrapers. This discusses an interesting idea of the aesthetic future of architecture. It suggests that architecture can be simplified to basic shapes, as it will be impossible to admire it, when it is covered with billboards and all the attention is being drawn to the surrounding advertisements. It is important to mention that the few scenes took place in Hong Kong, which was selected for its resemblance to a futuristic city and particularly a dystopia ("Filming Locations of *Ghost In The Shell*").

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06. "The City of the *Ghost in the Shell*"
- Behans.

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07. "The Stacks of the *Ready Player One*"
- Steven Spielberg's latest blockbuster.

Ready Player One

The story features a dystopian vision of the future where virtual reality is a part of an everyday life. This is why there is no need to go to school or work, as everything is online in the virtual world called "Oasis" (Cline 58). This suggests a certain level of neglect for the beauty of architecture as most people never go outside. Cline does not describe any cities in his book in detail; however, his short description of the suburban settlement is quite vivid; it was also illustrated on the cover page of the book and featured in the latest movie trailer.

Cline describes residential settlements as "stacks", where people live in communities consisting of trailers that are stacked on top of each other, with a steel structure in the middle providing support and holding trailers together. Each roof is filled with solar panels, which provide essential power for the units below; there are also tubes, supplementing the water and sewer pipes running alongside. The settlement is filled with everyday necessities, creating a cluster of junk, such that even the sun could not reach ground levels (22). Such a type of architecture is assembled purely by tenants and seems to be an affordable residential alternative.



[chapter 2]

PARASITE

Starting with defining the term parasite, this chapter discusses different exploitation strategies, their role in host-parasite co-evolution and their translation to architecture, questioning if parasitic structures could occur as a part of natural selection. Following analysis of parasitic tactics and their place in architectural design, this chapter discusses the relevance of those types of structures to dystopia.

A “parasite” is an organism that can only sustain its own existence by benefiting from other organisms, which are usually called hosts. “Parasitism” is defined as a long-term relationship between species, in which one organism usually feeds and benefits from another (Oxford English Dictionary). Parasitism is a cruel, but advantageous and necessary way for organisms to survive.

A parasite’s own survival is very dependent on the host; therefore each exploitive organism adapts to the host over time in order to establish itself, while the victim always tries to resist.

A parasite demonstrates an oppressive behaviour, establishing itself within or on the host, while a host demonstrates a defensive behavior as it always tries to resist parasitic invasion. As stated by Serge Morand, such resilient interactions create contradictory conditions, forcing both parties to constantly respond to each other and adapt. Such a process is called a “co-evolutionary interaction”, which suggests that parasites and hosts evolve in response to constant competition between each other (81). Such interaction sets the scene for a “co-evolutionary scenario” where the hosts and parasites are endlessly responding to the threat provided by the opponent (Sorci 2645).

Paul Schmid-Hempel states that all organisms are involved in “host-parasite interactions”, arguing the importance of such interaction for the evolution of both “competing organisms”. He states that as a result of co-evolution, parasites develop an ability to adapt to “any resistance or complications” caused by the hosts, while hosts improve a resilience towards the invaders. Thus, both participants develop evolutionary changes (305-306).

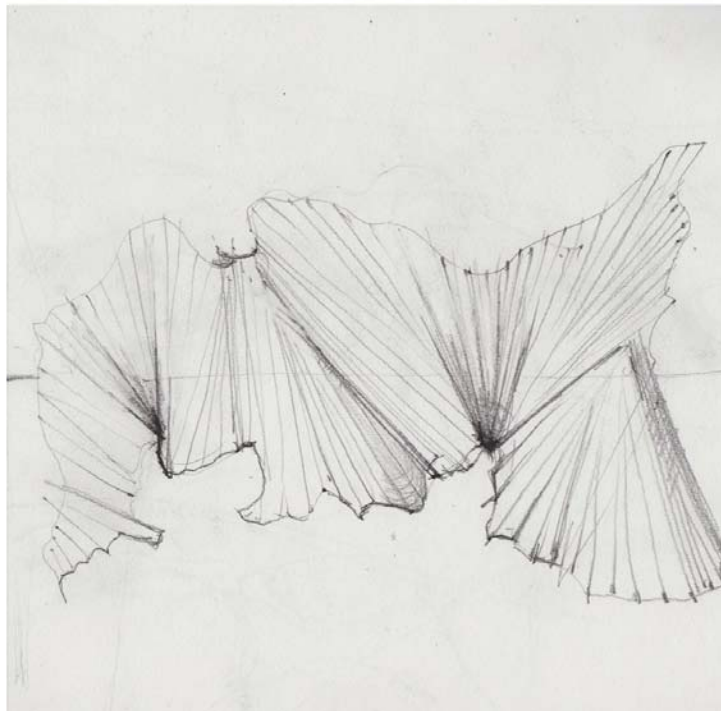
Parasitic interactions are very diverse and vary from relationships when the host is either not harmed or also partly benefits from the parasite, to the extreme ones when one party exploits another. It is commonly called a host - parasite interaction (Sorci 2645). Such interactions are divided into categories, each consisting a different type of a parasite.

The following pages describe a few types of the parasites researched for this topic.

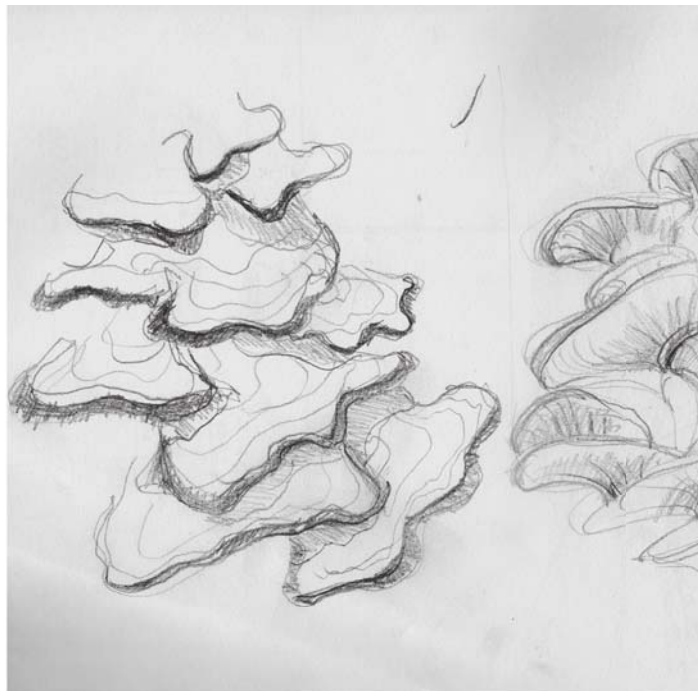
PHOTESIS [PHORESIS]

In a phoretic association, one organism uses another for transportation and protection. A good example of phoresy is barnacles living on whales (Schmid-Hempel 33).

Whale barnacles are "ectoparasites" - organisms that live on the surface or outside the host. Barnacles attach themselves to the bodies of baleen whales during the barnacles' "free-swimming larval stage". This causes nearly no harm to the whale, as barnacles mostly stay on the surface, not penetrating the skin of the whale. When detached barnacles die ("How Do Barnacles Attach to Whales").



08. "Sketch Inspired by Barnacles"
- Author's Own.



09. "Sketch Inspired by Parasitic
Mushrooms"
- Author's Own.

SAPROPHYTE

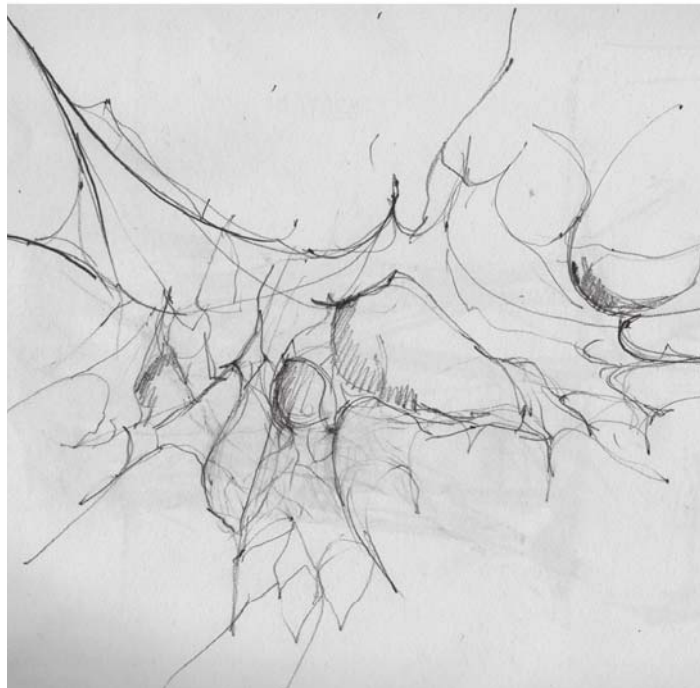
An organism that "grows on dead organic matter."

"Saprotrophytes" are decomposition organisms, which is why they are crucial for the nutrient cycle (Encyclopedia Britannica). Mushrooms as a saprophyte live on decaying trees, feeding on the nutrients that are still left. They "extract carbon dioxide and minerals from it" (Elevitch 34).

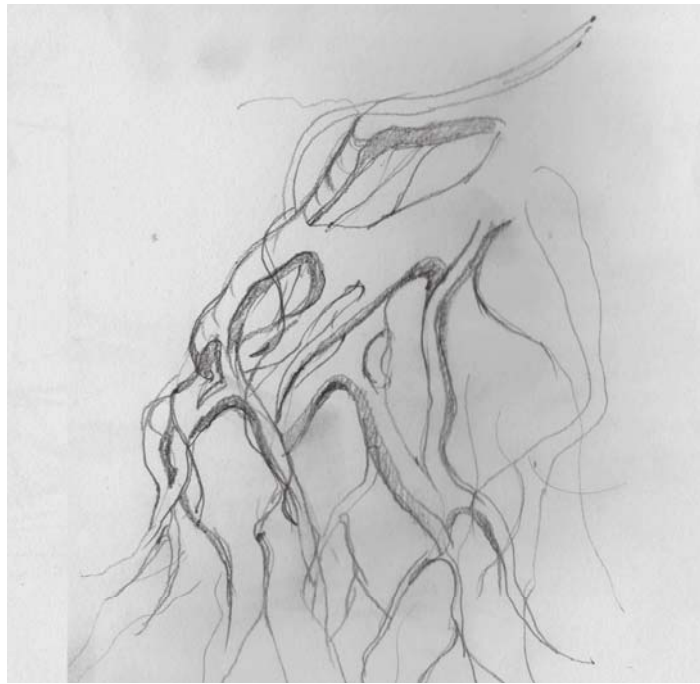
PARASITOID

An organism that causes harm to the host.

Parasitoids grow inside or attached to a host, and typically kill the host as an "obligate part of their life-cycle" (Schmid-Hempel 279). For parasitoids, the adult stage is "free-living and the larval stage is parasitic". This category typically consists of parasitic insects, such as wasps. Parasitoid wasps, more clearly their larvae, are examples of "endoparasites - parasites that live inside the host" (Encyclopedia of Biodiversity). There are many types of parasitoid wasps; usually invasion by parasitoid wasp has a response from the host that can be visually observed. For example, the female wasp, which injects her eggs in oak tree flowers causes a shape deformation, when "acorns grow into galls. The gall is a protective growth that is caused by the immature larval secretions" ("Insects of Scotland").



10. "Sketch Inspired by Galls"
- Author's Own.



11. "Sketch Inspired by Stranger Fig"
- Author's Own.

EPIPHYTE

A plant that grows upon another plant or object merely for physical support.

The strangler fig is a good example of a parasitic epiphyte. It starts growing as a parasite, eventually turning into a self-sustained independent plant. Beginning its life as a sticky seed on a tree branch, it develops long roots that “descend along the trunk of the host tree, eventually reaching the ground and entering the soil.” Over time it expands twining roots around the host; this process eventually can kill the host (Putz 781). When the host tree is dead and the root structure of the fig is strong enough, it can become a self-standing, self-sustaining plant. Epiphytes use hosts primarily for support, however, they also intercept light, minerals, and water (Smith 74).

It is important to conclude that even parasites behave as invaders and are being perceived very negatively. They play a very important role in the evolutionary process of organisms, ensuring a constant development through host parasite co-evolution.

PARASITIC STRATEGIES

According to Sorci, the success of parasitic infection can be measured by the “ability of the parasite to establish within the host” and the “probability of its future expansion and reproduction”. In most cases the host provides shelter and nutrition supply, while the parasite develops its own adaptations, such as additional structures to attach itself to the host. A successful parasite, according to the author, is a parasite that eventually spreads to other hosts (Sorci 2647).

The author defines three main stages of adaptation involved in the co-evolutionary process between parasites and their hosts (Sorci 2649):

1. Finding a suitable host.
2. Establishing ownership of host resources.
3. Defending establishment, ensuring safety for reproduction.

Through other research, Paul Schmid-Hempel indicates the following parasitic stages:

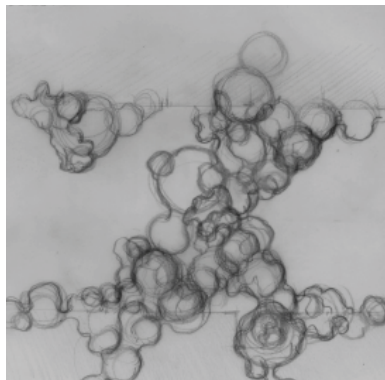
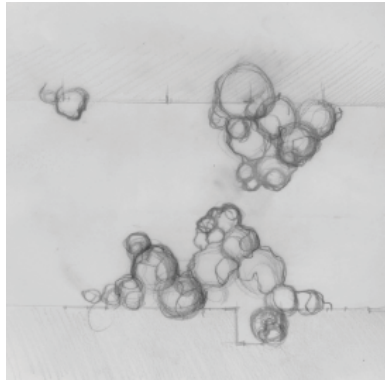
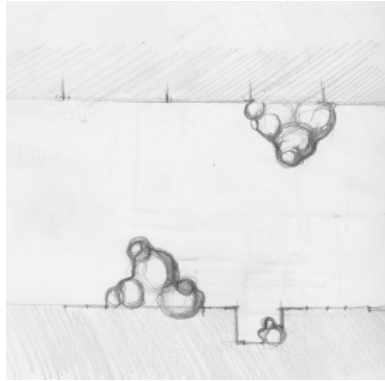
1. "Selection of a suitable host", location of the victim.

2: "Infestation/establishment" in or on the host. At this stage the parasite must attach to the surface of the host or "overcome the outer barriers" and establish itself safely inside for further development. After infection, some ectoparasites ensure proper connection on the outer layout of the host by generating special structures that hold them tight.

3: "Growth." Once a parasite safely established itself, it can expand and develop by taking nutritions and extracting resources from the host.

4: "Reproduction." This step is also determined by the ability of a parasite to expand and survive the resilience of the host.

5: "Transmission." This is the stage when a parasite either grows to establish on another host or is transmitted to the next one. This is a very important step in the relation to expansion and evolution of the parasite (Schmid-Hempel 38-39).



12. "Simplified Exploration of Parasitic Strategies"
- Author's Own.

RELEVANCE TO ARCHITECTURE

Multiple modern examples of parasitic building suggest that parasitic behaviour often is being adapted to architecture. Parasitic architecture can be defined as exploitive forms of structure that benefit from other buildings by using them in one or another way. Usually associated with something rather negative, parasitic structures can potentially be seen as an architectural intervention and speculatively a natural way for architecture to evolve within a compact city structure. Objectively, truly parasitic architecture, which reflects invasive and exploitive behavior, can only exist in a world with no rules or regulations. There also have to be certain conditions that will trigger such mutations. Therefore, it can truly expand and evolve in an environment of dystopian reality. Chaotic, unpredictable nature is crucial for such architecture to take place. Dystopia creates 'perfect' conditions, where architecture unfolds adapting to changing conditions through its own resilient and exploitative way.

In order to understand the behaviour of parasitic architecture within dystopian environments, survival strategies have been researched and analysed.

INVASION

Allocation/Selection of a victim. In order for a host to be chosen by a parasite, it has to be suitable for a successful establishment. Thus, the host has to have a safe hidden space, where a parasite could safely establish without being noticed or causing disturbance to the everyday life of residents of the host building. An existing building should have a sufficient area where the invader could expand in the future. It also has to have a visibly stable construction in order to serve a parasite as a structural support and has to be able to provide sufficient resources, such as drainage and electricity, to ensure a future growth and development of the parasite.

ESTABLISHMENT/OCCUPATION

After safe establishment, a parasite begins feeding on nutrients supplied/provided by the host, which enables the growth of the structure and development of future dwellings. Exploitation of the host includes use of existing drainage, electrical services and circulation. Thus, the parasite could form around main circulation passages or staircases, ensuring expansion over multiple levels. It could grow extra branches enabling it to feed off the electricity and drainage, which will allow it to develop into sufficient units with good livable conditions. Consequently that will lead to a creation of more residential units.

EXPANSION

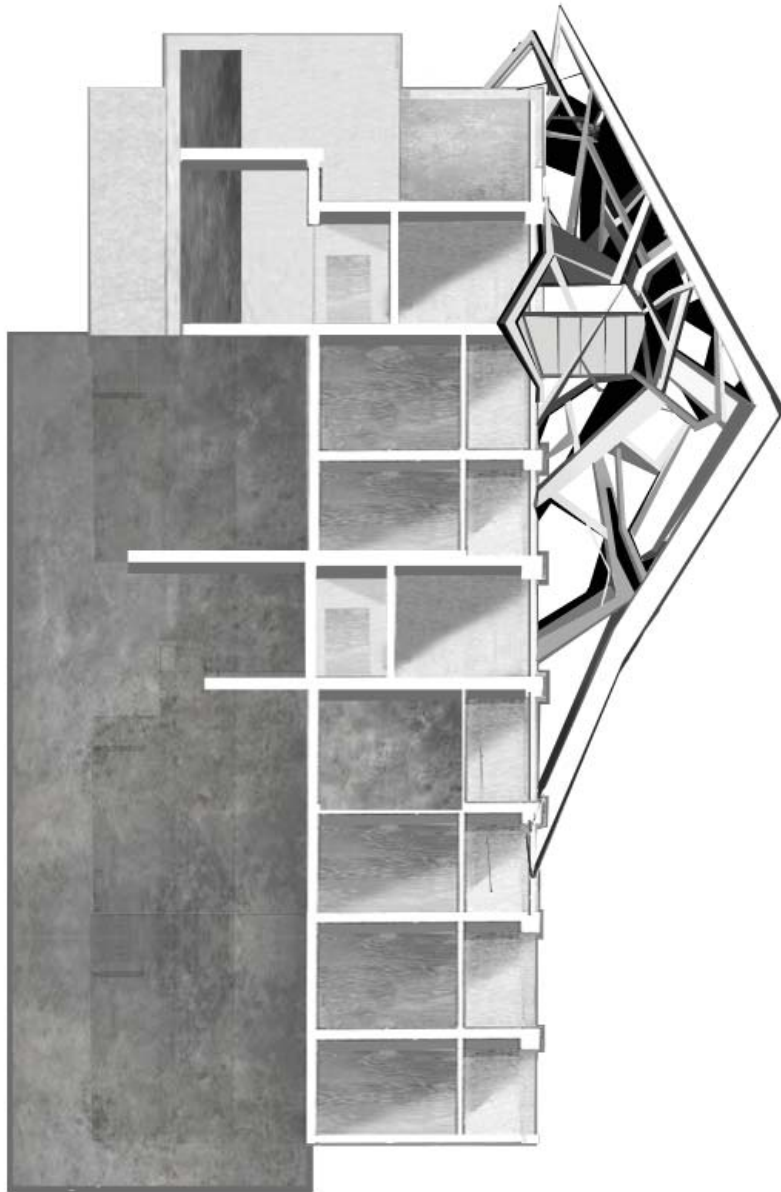
This stage includes expansion of a parasitic structure. Its involvement is provoked by responsiveness and adaptation towards the resilience of the host. This stage might include intrusion inside of the building, where a parasite is no longer established only on the surface of the host. Thus, the structure may expand into the interior spaces of the building, starting with the invasion of public/main areas, and moving into the occupation of residential apartments. This could happen if a parasite could introduce more livable spaces and extension of existing units through utilisation of common spaces such as staircases or additional semi-levels within the skeleton of a building, creating loft apartments.

SOVEREIGNTY

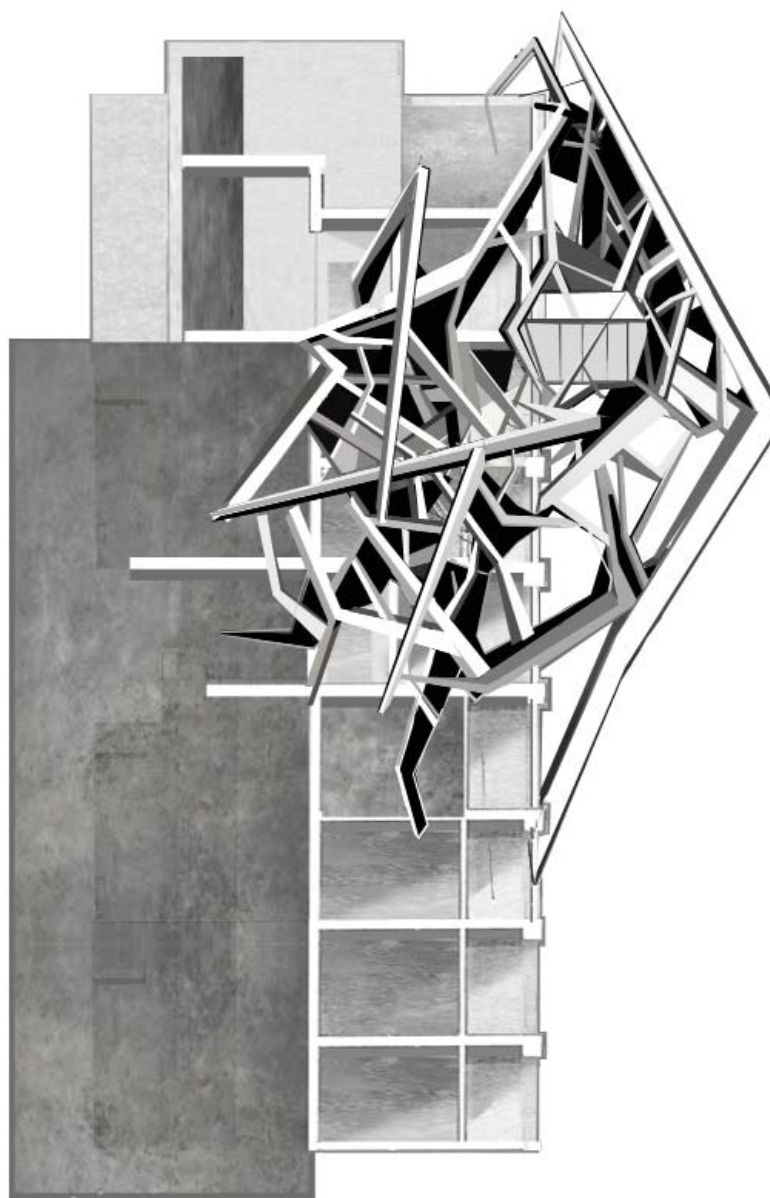
This stage is more speculative than others; however, it still reflects the behaviour of strangler figs, which in many cases becomes a self-sustained plant. Thus, this stage is suggesting a sovereignty of an organism, negotiating whether parasitic structures could become self-sufficient after the host building dies of decay or is demolished in the future. This scenario is possible if a parasitic structure will expand to the degree that it would be able to support itself.



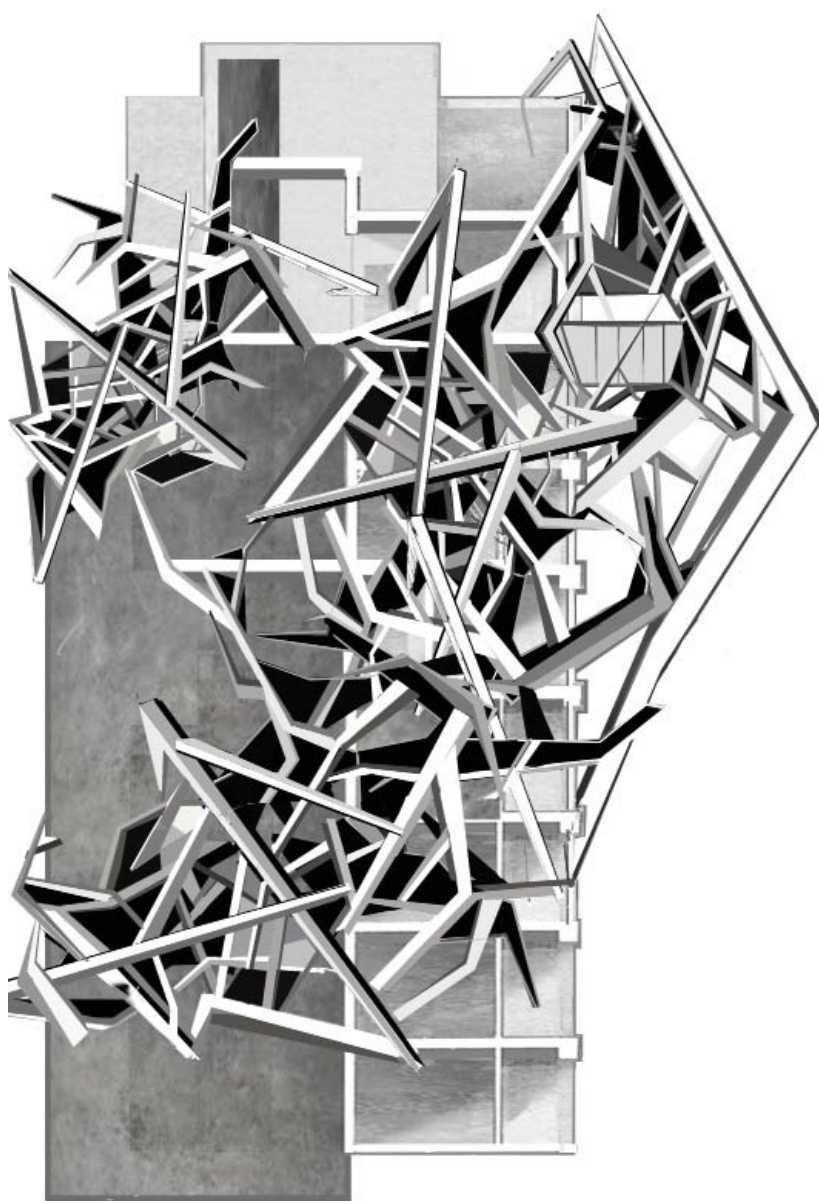
13. "Invasion"
- Author's Own.



14. "Occupation"
- Author's Own.



15. "Expansion"
- Author's Own.



16. "Sovereignty"
- Author's Own.

[part 2]

SITE AND PRECEDENTS

Through investigation of case studies and site analysis, this part opens a discussion towards the way people occupy buildings and take an active role in shaping spaces around them in order to improve living conditions. Such parallels are important for examination of architectural behavior in the anarchic conditions of dystopia. The following part studies how cultural implications resonate with our perception about the utilisation of spaces, spatially altering conventional mentalities regarding the role and meaning of architecture.



[chapter 3]

STRANGER THAN FICTION

We are living in the age when emerging tendencies are stranger than fiction. Behind the scenes of our everyday life lie alternative worlds that are darker and more terrifying than fiction, as they are real and present. This chapter investigates such case studies - places, that speculatively represent and resemble dystopias, scenarios where architecture emerged responding to worsening housing conditions. It raises questions about what can be learned from the non-fictional dystopian precedents and how these ideas can be materialised in the architecture of a hypothetical futuristic scenario.

CASE STUDIES

HONG KONG ROOFTOP DWELLINGS

Rooftop dwellings are one of the most common examples of emerging structures in Hong Kong. They can be found in the older urban areas, usually located on top of tenement houses built in the 1940s and 1950s (Wu 246). Rooftop structures usually are being built for the purpose of living in them, however sometimes as rental properties. Being constructed without approval of the government, rooftop apartments have become an illegal alternative for those who are “not eligible for social housing or unable to afford a better living” (Wu 246). Although rooftop dwellings “emerged as a result of a housing crisis” and are considered to be slums, they serve as a temporary solution to a housing shortage and “provide additional housing options” within urban areas (“Hong Kong Rooftop Slums”).

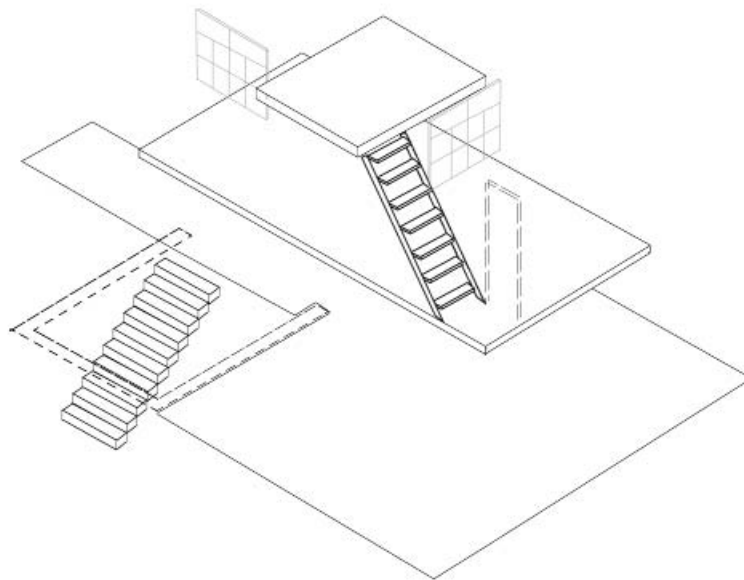
Rooftop houses are considered to be temporary; however such dwellings have been in Hong Kong for more than half a century and as stated by Rufina Wu, are most likely not going to be demolished in the near future (Wu 246).

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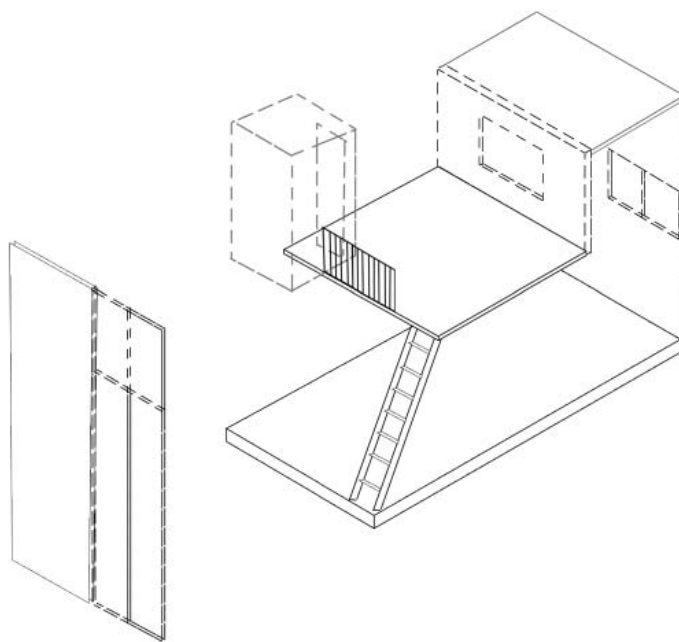
17. "Rooftop Slums"
- CNN.

Although, Hong Kong's government has a tolerant attitude towards rooftop structures, it has been decided that the structures will be demolished if there is a particular threat to a third party (Wu 254). Consequently, the rooftop communities have a unique place in the residential architecture of Hong Kong, being illegal, yet tolerated by the government.

As mentioned above and described by Rufina Wu, rooftop houses usually are located on top of tenement houses, which are old apartment blocks, usually "5 to 6 storeys high". They are commonly in poor decaying conditions, as most of them were built more than 70 years ago. The demand for housing in Hong Kong is so high, that a cluster of rooftop houses can form a village, which can occupy the entire roof of a large building. One of the biggest rooftop villages is situated on a roof of a 12 storey building, in which the elevator only goes to level 11, forcing rooftop tenants to use a fire escape to access the roof. The settlement is 700 meters square, and is located in the Shui Po District. Another village, considered to be the largest rooftop community, located in the Yau Tsim Mong district. It has an area of "1145 square meters with more than 35 domestic units ranging from 3 storeys high" which are linked by "the maze like system of corridors and stairs" (Wu 145).



18. "Rooftop Slums Study"
- Author's Own.



19. "Rooftop Slums Study 2"
- Author's Own.

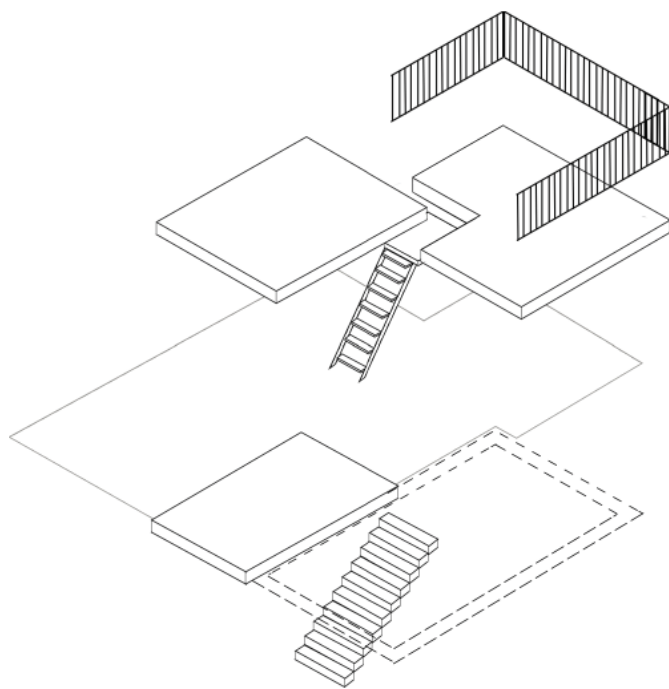
Numerous corridors connect all the spaces together; some multi-level dwellings require small ladders to provide access between floors. Rooftop houses are usually connected to their host building's electrical, water and sewage networks, and their inhabitants pay the same utility fees as other building residents (145).

Rooftop houses mostly are being built up from scratch out of scrap materials and leftovers by immigrants or marginalised and low-income families ("Once Upon a Rooftop"). Most houses are one storey tall and are quite small, ranging in size from 30 to 80 square meters. Due to the small size, apartments are usually quite crowded and filled from top to bottom with everyday necessities. There are no wasted or purposeless spaces, as every area is being used for different purposes. As such, every wall will have hangers or multiple shelf units. Some houses have loft floors or semi-levels, usually used as sleeping or storage areas, that can be accessed by a ladder. Levels are also introduced on the exterior, creating multi-leveled dwellings with spaces outside that can be accessed by a staircase. In some cases, higher roof space or a separate space nearby is used as a courtyard to hang clothes or for kids to play or as storage (Wu 146). Overall, there is an impression of multi-levels and structures seem to spread quite randomly, occupying any available space.

Houses have brick or concrete walls and sheet metal roofs that are pitched at a slight angle. Windows and doors are usually purchased at markets or found on the streets of Hong Kong ("Hong Kong Rooftop Communities").

Tenants of roof top slums mostly include low-income families who have been living in rooftop dwellings for most of their lives; some apartments have been used by several generations. There are also migrants who rent those apartments temporarily in hope of a better living in the future. As much as rooftop houses resemble slums, and represent a pure manifestation of the housing crisis, people seem to love it as it is their home and they treat the community as their family.

Rooftop houses are an architectural phenomenon, representing everything that can go wrong with urban houses, but at the same time being a productive structure, providing an alternative solution to a housing crisis. Rooftop structures illustrate what happens in architecture, when everyone have a willingness to live in an urban area, which can no longer support any new houses, that new structures appear on top of existing buildings. Such forms of emerging architecture could have a place in a contemporary world, if there were no regulations or if it was mentally accepted and considered normal.



20. "Rooftop Slums Study 3"
- Author's Own.

KOOWLOON CITY

The Kowloon Walled city was one of the greatest anomalies of the world's history. It represents a pure manifestation of anarchy, associated with all that was darkest and most threatening. The walled city was one of the most curious architectural phenomena, a working model of a dystopian society. A "perfectly" self-contained, self-locked community, the city was an organic megastructure responsive to changing requirements of its users, fulfilling every need of its inhabitants.

The Kowloon City emerged in the land that was geographically situated in Hong Kong, being under Great Britain's jurisdiction at the same time. Thus, Hong Kong did not have political control over the area, and Britain could not maintain the law, as the city was thousands of kilometers outside of its control. Such circumstances created conflicting conditions for the creation and development of a lawless community that represented a true nonfictional dystopia. "The walled city became a legal no-man's-land, a notorious city of darkness and sin" (Girard 60). It was a vertical urban village, a lawless labyrinth where crime, commerce and community co-existed for generations" ("City of Imagination").

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21. "The Kowloon Walled City"
- CNN.

As stated by Vittorio Magnago, at the beginning, Kowloon was a city built for officials and soldiers, and it became an enclave after the New Territories were leased to Britain by China in 1898. With the wave of new immigrants after World War II and Japanese occupation, the city started to expand dramatically, struggling to provide livable spaces. In the early days, buildings were only 3 storeys high; there was burglary prevention and health control. Apartments positioned on the perimeter of the city had fresh air and views and Kowloon was considered an attractive residence. The rapid population and urban growth combined with the majority of the population being working class people, continued to aggravate the housing problems (112).

Thus, initial structures were extended with the assumption that buildings might grow allowing a few storeys to be added later on. By 1957 many similar accommodations had been built, without consideration of "basic standards and community spaces. With the exception of a strict height limit of 45 meters due to a proximity of an airport, the Hong Kong government struggled to enforce any other building regulations" (Girard 74). Architects were not obliged to submit any drawings prior to construction; therefore most blocks were built using simple sketches, in order to save time and money.

Poor planning and usually unorganised construction resulted in many inconsistencies between neighbouring buildings. Thus, buildings were noticeably different in size, color and even style, positioned on different levels, with misalignment of floors. Some buildings were “sandwiched” between existing apartment blocks, with the only way to expand being vertically (Girard 74).

The ground level was a narrow network of “30 streets and alleys, some not more than a metre wide, which became collective spaces for broken things and rubbish”. There was electricity and water supply; this is why pipes and cables were “running through the alleys over the ceiling, walls and floors” (Girard 88). The Kowloon City was a great example of “volumetric circulation,” where additional pathways and staircases were built when they were required, to allow for easy access between buildings. As such, “under constant extrusion of structures, ground level could not accommodate heavy circulation”; this is why an “additional movement system was added”, providing access to different levels.

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22. "Rooftop of The Kowloon Walled City"
- Elite Readers.

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23. "Rooftop of The Kowloon Walled City 2"
- Elite Readers.

A single staircase could link up to “3 to 4 buildings”. The internal web of corridors had multiple functions; it was often used as a marketplace or even a place for a business. Kowloon was a home to 700 small businesses, including a “temple, grocery stores, butcheries and even musical club.” Some flats were refurbished to accommodate primary schools and kindergartens. There were “even a candy and a metal factory” (Girard 117).

As described by Gorard Greg, there were also negative implications to the place. Thus, the Kowloon City was a home to more than 150 illegal dental practitioners. Over time, it had become the place for “drugs, prostitution, gambling and even drug trafficking” (117). Tenants describe the place as “dirty, dark and unsafe”, filled with “rats running around,” water dripping from the ceiling and myriad of cables and pipes which used to spread through narrow corridors. Natural light penetrated to streets only in the places where there were narrow gaps between buildings. People would throw rubbish from windows; no one was cleaning it up (“Kowloon Walled City”).

By its peak in 1980, the Walled City was home to 35,000 people and was demolished in 1987. As the demolition was proposed, most of the residents took it very emotionally ("Kowloon Walled City"). Greg Girard argues that, although Kowloon was always considered to be a slum, there was a real sense of community among the local residents, and a "more considerable view reveals a fully functional community" with its own shops, productive enterprises, water supplies and businesses, concluding that "the city was a victim of oversimplification" (Girard 172).

Kowloon city is a great example of a dystopian society and vernacular architecture. Among all the things that were wrong, there are design qualities that could be very successful if implemented in the right way.

Examination of precedents allows to see dystopia in real time, proving that it does not represent a futuristic possibility, but rather embodies a consequence of inflicting conditions.



[chapter 4]

The selected site is located in Hong Kong - a collective place for structures with dystopian characteristics. The chapter discusses the captivating architecture of Hong Kong, which resembles a futuristic version of a modern city, raising theories and speculations towards the idea that Hong Kong is already moving towards a proto-dystopia.

THE FUTURE IS NOW

ARCHITECTURE OF HONG KONG

Although the architecture of Hong Kong is considered a successful representation of contemporary movements, increasing urban density exposes problems within the city structure. As suggested by Anthony Yeh, Hong Kong has one of the highest urban densities in the world. Thus, some areas have population densities of more than "400,000 people per square kilometer." Architects of Hong Kong currently seek solutions for rapid urban expansion within the current city structure and have developed design guidance to improve its living environments. One of the measures proposed is a creation of additional spaces by "utilising the already-existing areas within buildings, such as roof tops and podiums," and "transforming them into livable spaces" ("High-Density Living In Hong Kong").

Hong Kong is a place where architecture was an act, a reactive event, rather than a designed city space. Structures of Hong Kong are a collection of spatial and temporal elements, where architecture needs to be seen through a different perspective, for its unstable nature. There is no particular style or identity to it, as under a constant struggle of political pressure and lack of buildable land, the city never had a chance to be planned.

Most of the buildings were designed under the pressure of economical and political factors, resulting in devotion to cultural or community contexts (Chung 18).

Each decade architecture emerged in response to historical implications, representing a political and economical state relevant to a particular time. As a result of such adaptations, the architecture of Hong Kong has a temporal nature, implying that it emerges depending on the changing conditions of each time period. As an author of *Contemporary Architecture Today* Chung Wah Nan concludes, Hong Kong is “lacking architectural identity, due to its cultural complex history of eastern culture being in constant conflict with western influence.” He calls Hong Kong a “borrowed place” with a “temporary philosophy” to architecture (10).

The city is always under construction, as there is a constant demand for new livable spaces. “From 1962 to 1966” the urban form of Hong Kong was “significantly transformed when 5-6 storey buildings were displaced by 20 storey apartment blocks”, which later became a dominant characteristic of the city (Magnago 112). Thus, contemporary architecture of the city suggests a constant development.

SITE

The site is located in the urban area in the Yau Ma Tei district. The chosen location has been inspired by the near future vision of its urban space. Yau Ma Tei district is located in Kowloon City, Hong Kong. According to Chung Wah Nan, the area was built between the 1950s and early 1960s; those were years of “tremendously vigorous construction”; this is why buildings from that era would dominate the character of most streets (99-100). Most of the parasitic rooftop houses are located in this district.

The site itself has many tenement buildings, which potentially are able to respond to increasing density and support light (small-scale) urban structures. Thus, the site offers buildable rooftops, alleys or other spaces to accommodate the future design. It has a visual and physical potential for adaptation, inspiring interaction between old and new, now and then.

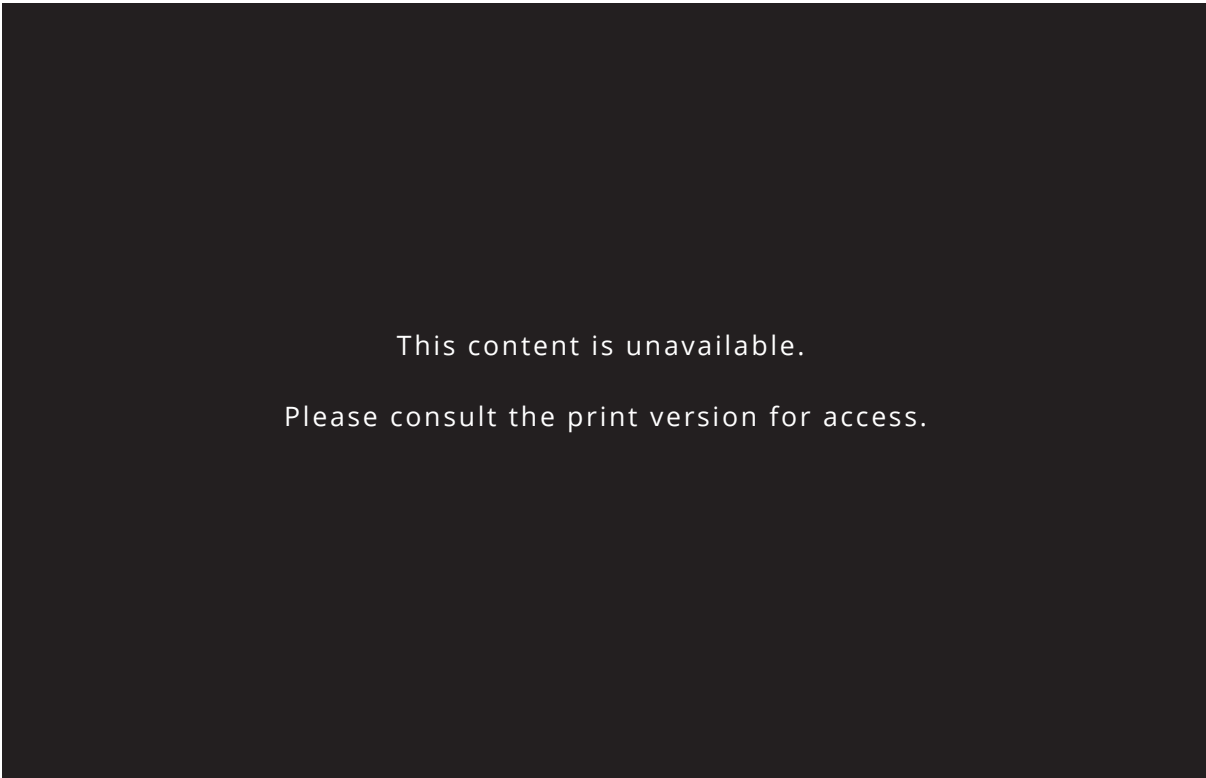
The site is located along Temple Street, starting from Ning Po Street to Nankin Street. The site was selected mainly due to its visual representation of a dystopian vision of the city and its ability to support parasitic structures.



24. "Yau Ma Tei District"
- Authors Own.

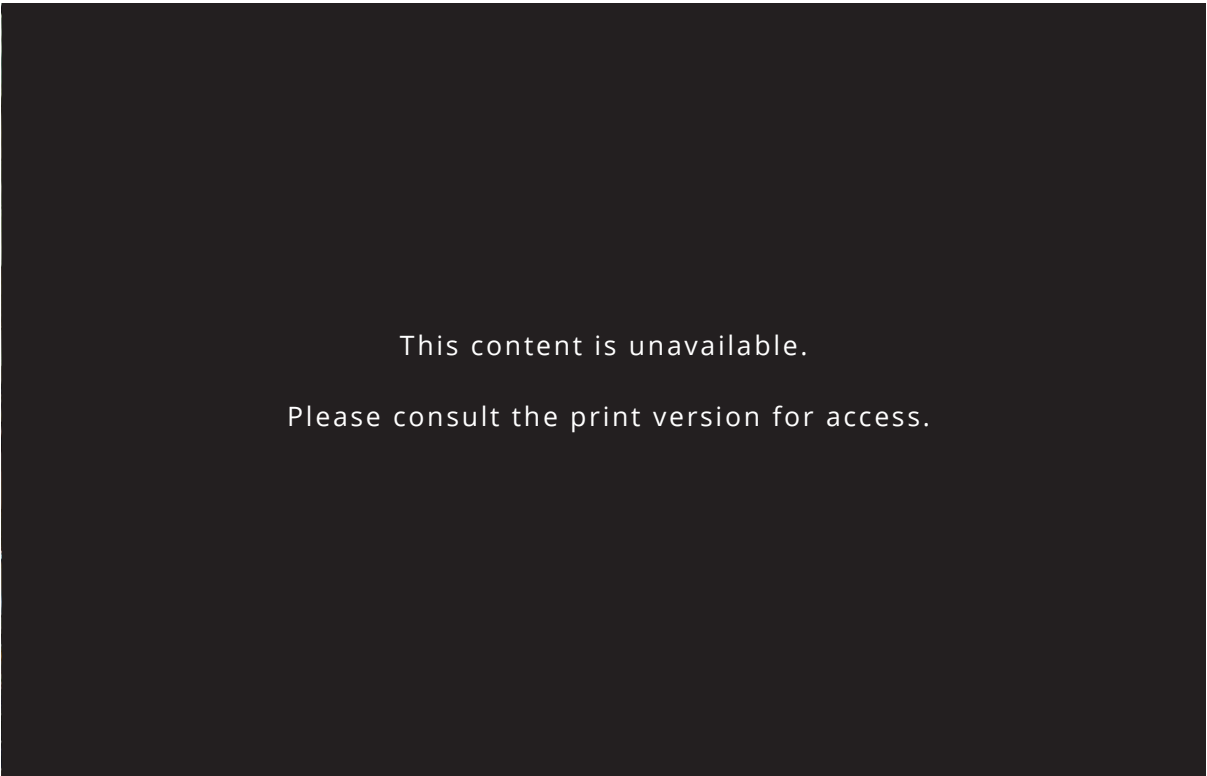


25. "Kowloon Peninsula"
- Authors Own.



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26. " Selected Site, View from Nong Po St."
- Goggle maps.



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27. " Selected Site, View from Nanking St."
- Goggle maps.

Most buildings of the site are 7 to 9 storeys high; some of them “were initially built with allowance to add a few extra levels”. Cantilevered floors of the building are due to a “maximizing usage of space” as land area dedicated for a building was quite small; as per regulations, buildings could project on the street (Chung 99-100). They provide weather protection over the sidewalk and additional floor area.

Quite often people would try to expand the interior spaces by adding structure where it was possible. Recesses between building blocks were designed to allow for natural lighting at the staircase, which also provided more natural lighting and a visual sense of extra space.

Analysis of the selected site helped to create not necessarily better, but a more functional, flexible and responsive architecture for urban areas of the city.



28. " Site Analysis"
- Author's Own.

The street transforms into a market space at night time and becomes the only shared common space, blurring boundaries between inside and outside, private and public.

Garage doors will be open during business hours visually transforming quiet street into a busy market space. The ground floor is usually designed specifically for small businesses, shops and restaurants.



29. " Site Analysis 2"
- Author's Own.

[part 3]

VISUAL EXPLORATION AND EXPERIMENTATION

This part addresses research through experimentation and visual exploration. Using results from studying precedents and site analysis, this part is focusing on testing of ideas and their implementation to the design, which is examined through visual speculation by sketches, hand drawings and 3d modeling.



[chapter 5]

EXPERIMENTATION

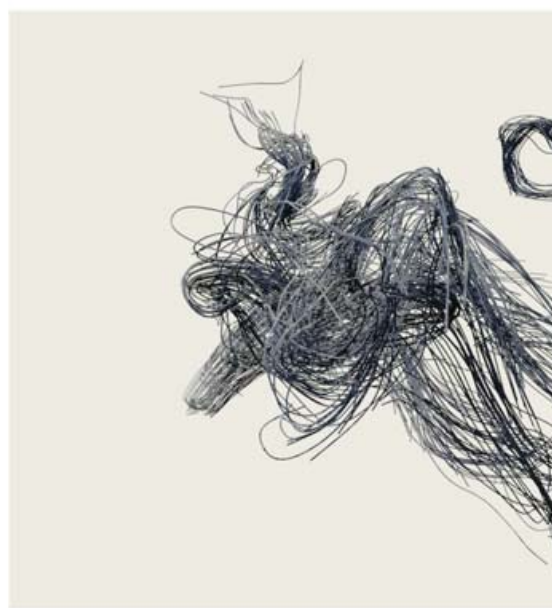
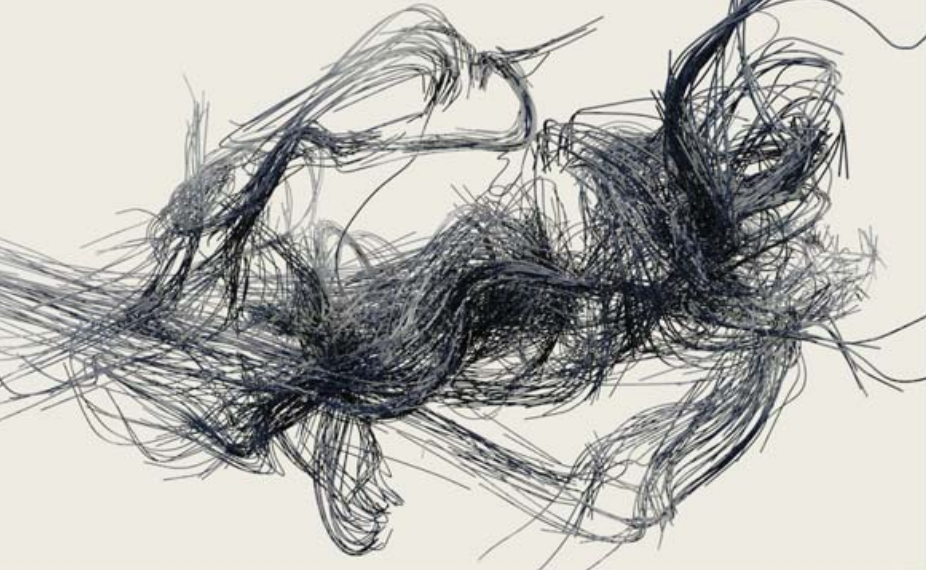
This chapter moves from fictional ideas to a productive speculation, focusing on the examination of parasitic behavior borrowed from the strangler fig and its adaptation to architecture. This chapter tests the transition of researched survival strategies to a material world, studying the development and responsive evolution of structure through time, capturing moments of change.

Outcomes received from studying parasites and parasitic strategies suggested that the behavior of a strangler fig was more “suitable” for the development of adaptive structures and potentially had a higher probability of transition to architecture.

Experimental methods conducted have been accomplished by digitally stimulating the parasitic growth and behavior. Digital testing has allowed the examination of parasitic development against simply speculating about it, as it helped to create an organic structure, which resembled the behaviour of strangler figs, resulting in better understanding of a parasitic growth. Another reason for using software for this experiment was to learn and expand the knowledge of 3D modeling and animation. The chosen method was a final result of few conducted methods, in search of one that could allow the creation of an organic shape and animation of its growth and expansion in more or less realistic conditions. As a result, it has been decided to use Maya software for this particular test. An actual experiment included modeling the shape, which would imitate the strangler fig growth and its animation, which was later captured to show the deformations of the parasite over time.

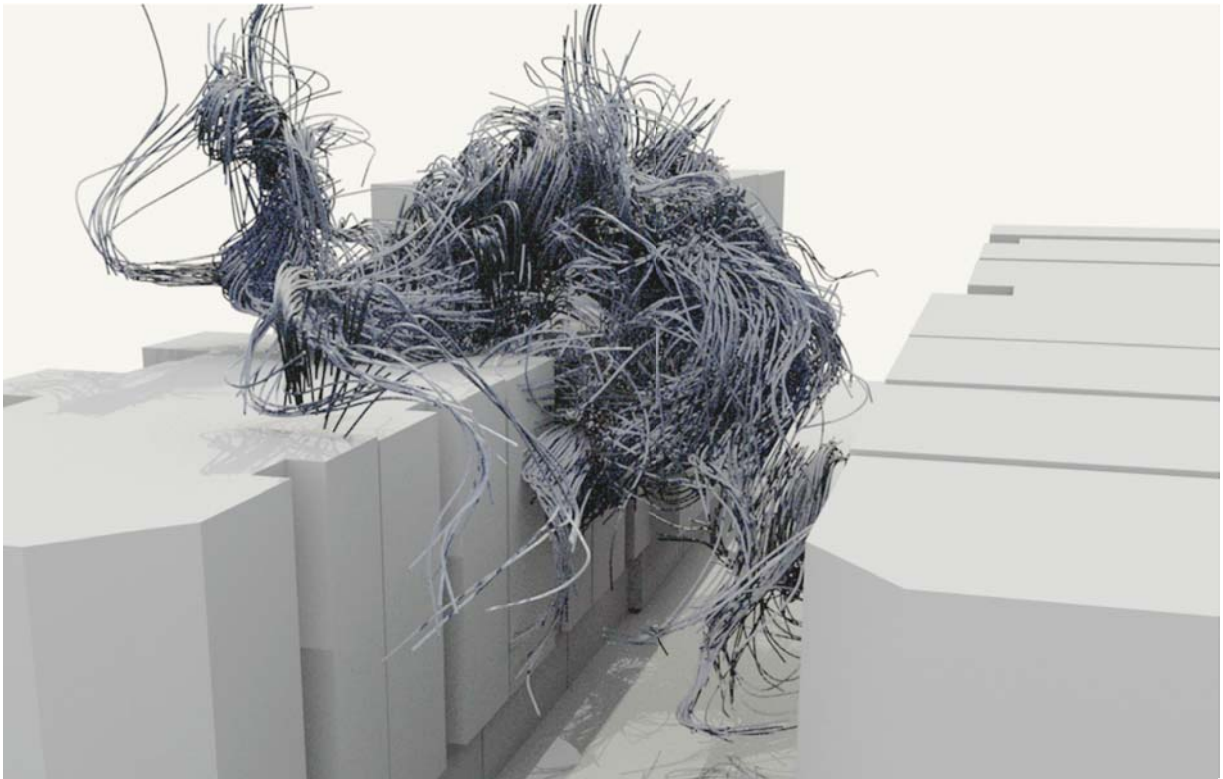
To imitate the behavior of a strangler fig, firstly, the “invisible” path has been modeled on the simplified site, which defined the route along which the structure would grow. Thus, the generated shape was mostly random, but the direction of a growth was determined by the path, which led along elevations of the existing building; it was also determined by natural forces such as gravity. Consequently, the growth of the structure was partly generated, partly controlled by the modeling technique, which was made to test the behavior of a structure which is being built by tenants, but still behaves as a living organism, in particular, unpredictably.

The digital structure started as a single point on the roof of the building, from where it grew its roots in different directions, imitating the behavior of a strangler fig, which starts its life as a single seed, eventually growing and spreading its roots along the tree trunk. In the digital representation of the site, ‘the roots’ would spread along facades of the site facing the street. This method helped to determine how the strangler fig would possibly behave on the selected site, and what kind of shapes it could take, suggesting where the future design should potentially start from (refer fig. 31-32).

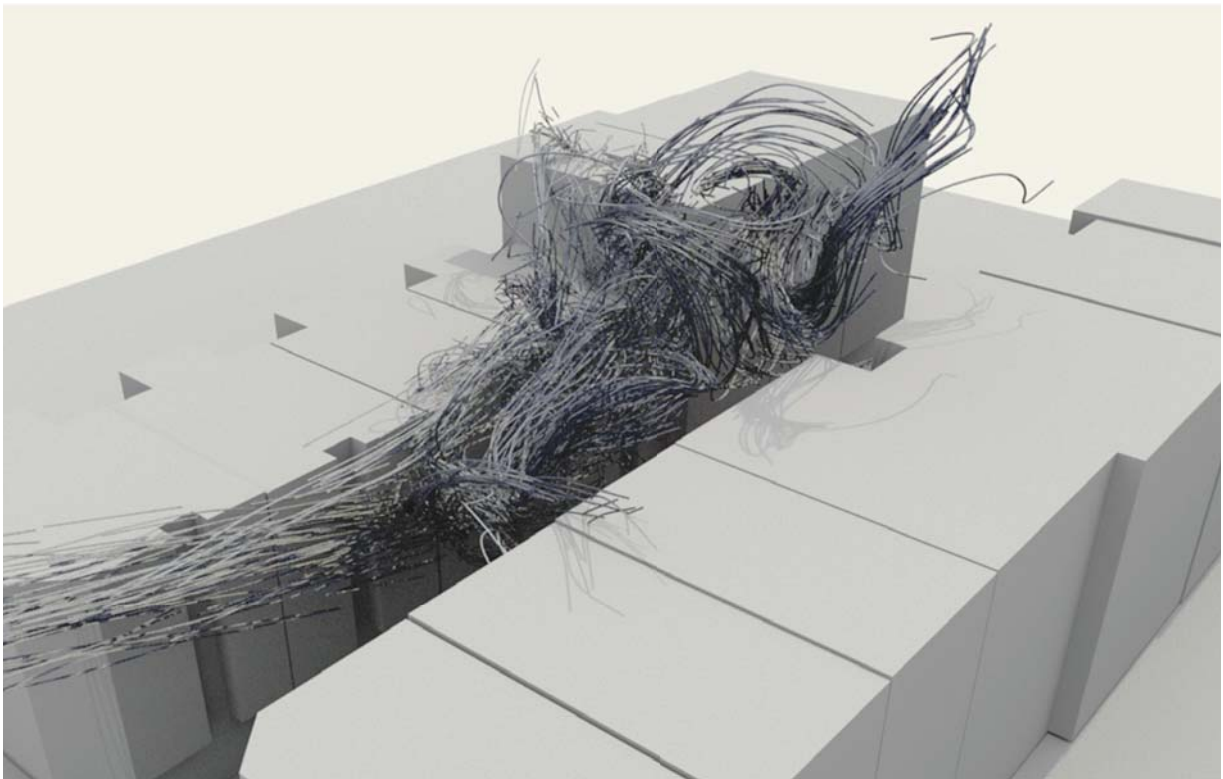




30. " Experimentation with Organic structure"
- Author's Own.



31. " Experimentation with Organic structure on the site"
-Author's Own.

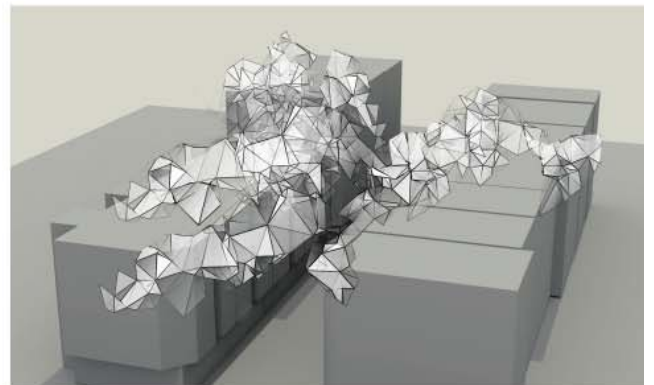
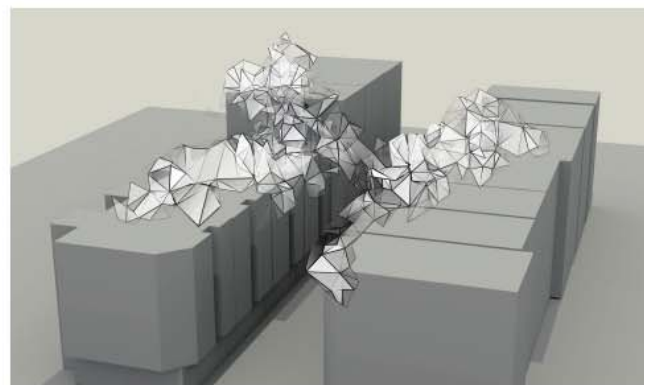
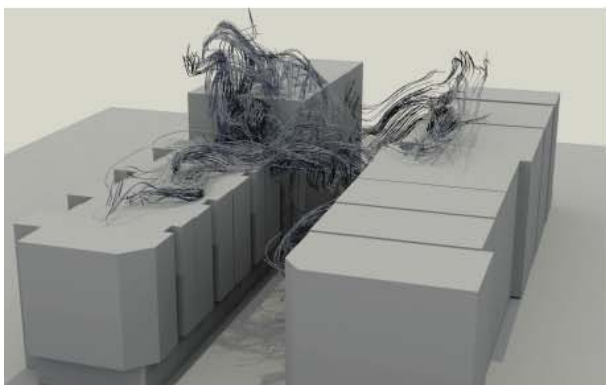
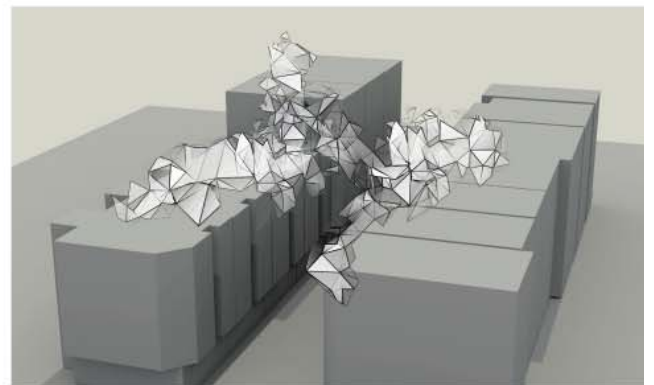
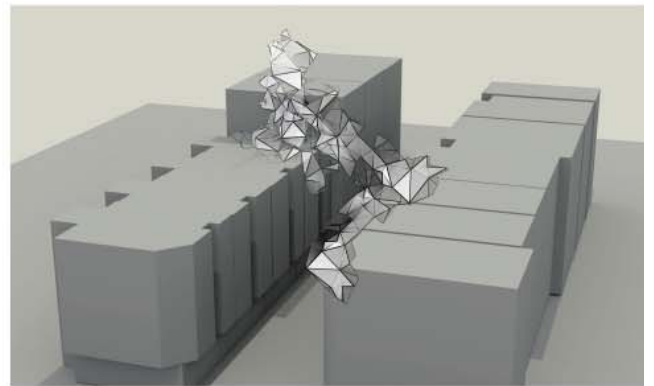
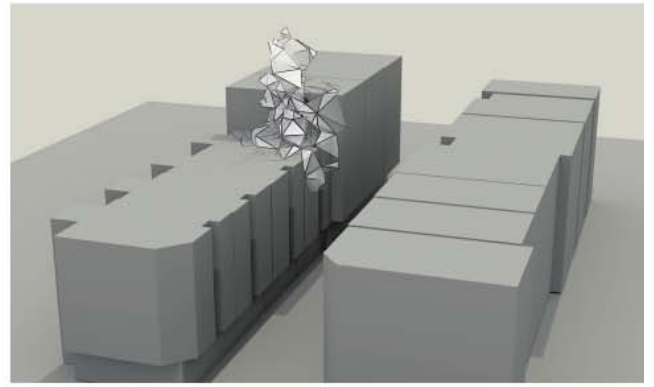
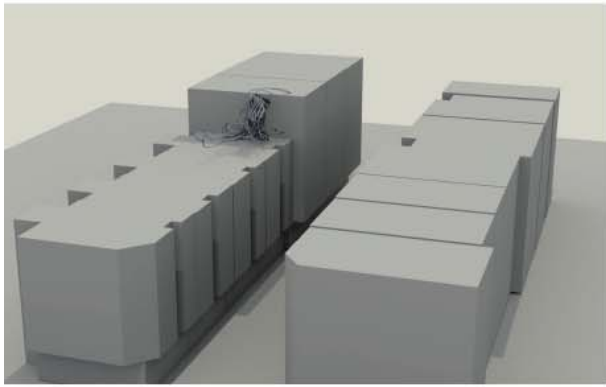


32. " Experimentation with Organic structure on the site 2"
-Author's Own.

The purpose of the following exercise was to examine how parasite growth could be translated into an architectural form. It has been achieved through converting organic shapes into geometric forms with Photoshop by drawing geometric shapes over the 'parasite' to give it depth and test the interaction along the facade of the building. This test helped to understand the future possibilities of such a structure, as it visually suggested that the structure could not suspend or cantilever far without additional supports. Therefore, when translated to residential dwellings, the structure would not be able to support more than just one apartment or room as it would fall out of balance.

On the other hand, the test also implied that if a parasitic structure starts growing on one side, eventually spreading on the opposite side of the site, two parts eventually would merge together forming a bridge, that would allow circulation between different buildings and also would provide additional supports for future expansion.

In order to ensure a future parasitic expansion, the test visually suggests there have to be extended and exposed structural elements, allowing for additional spaces to be build in the future (refer fig. 33-34).

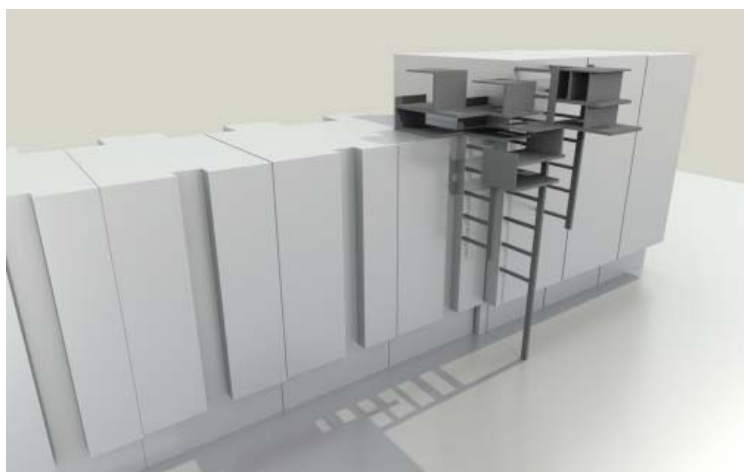
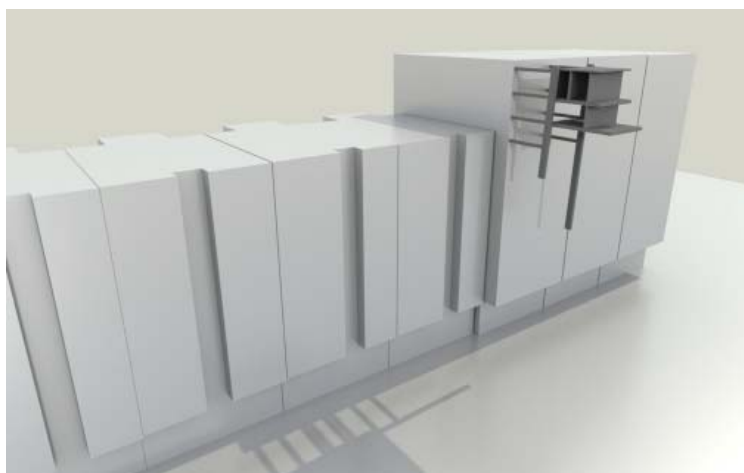
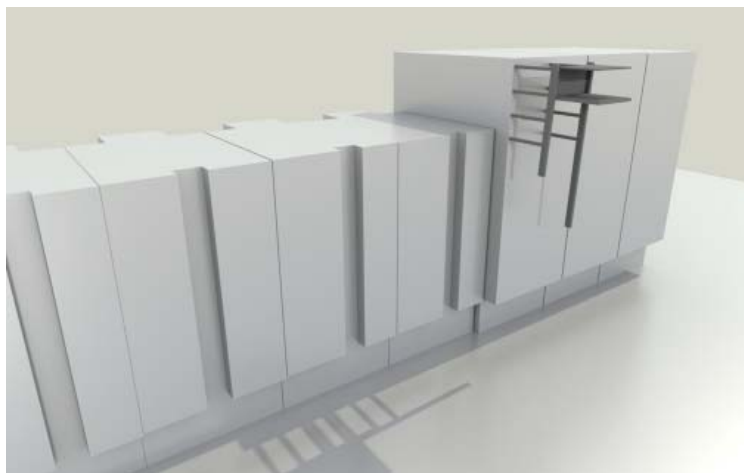
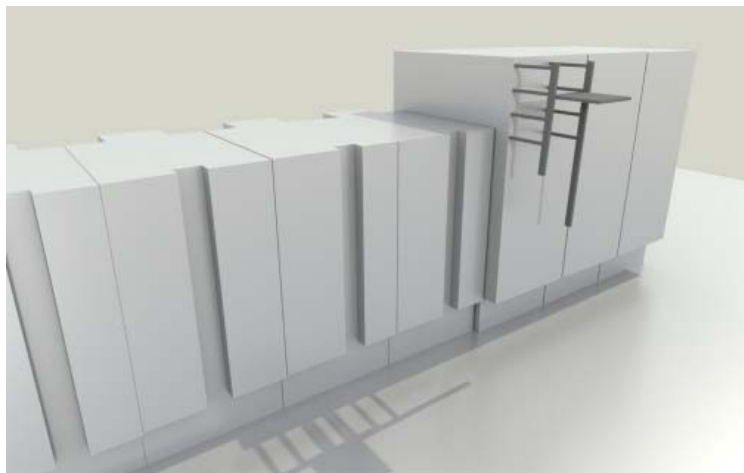


On the Left:
33. "Digital Exploration of the Parasitic
Behaviour"
- Author's Own.

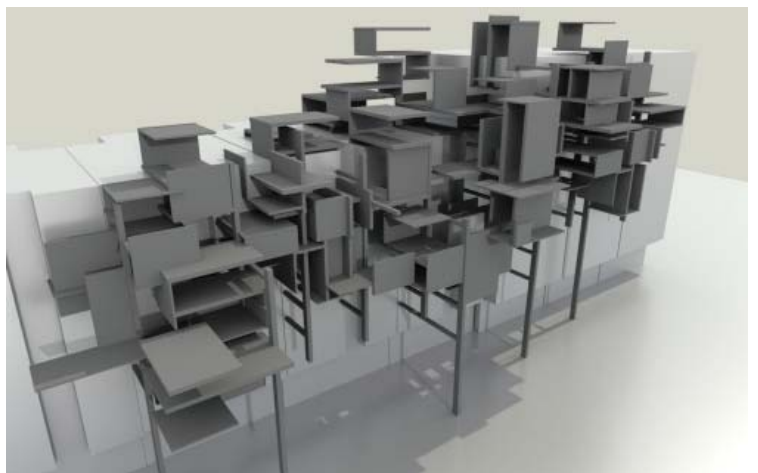
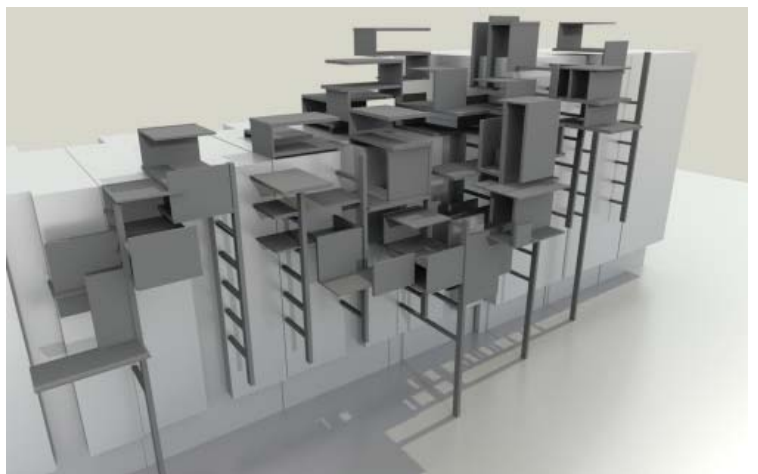
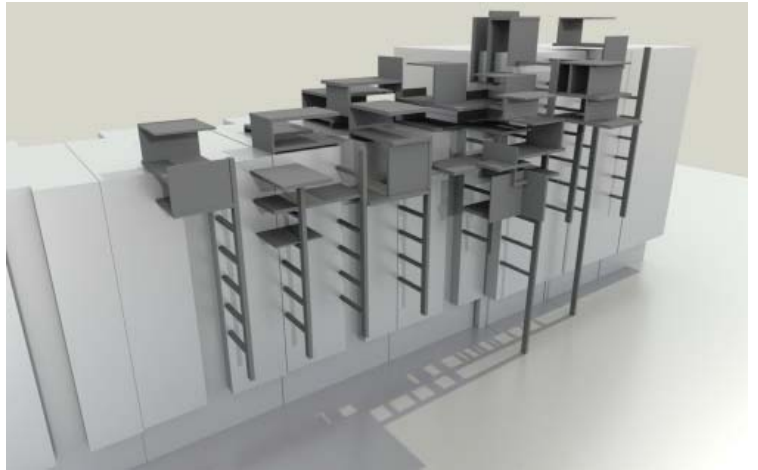
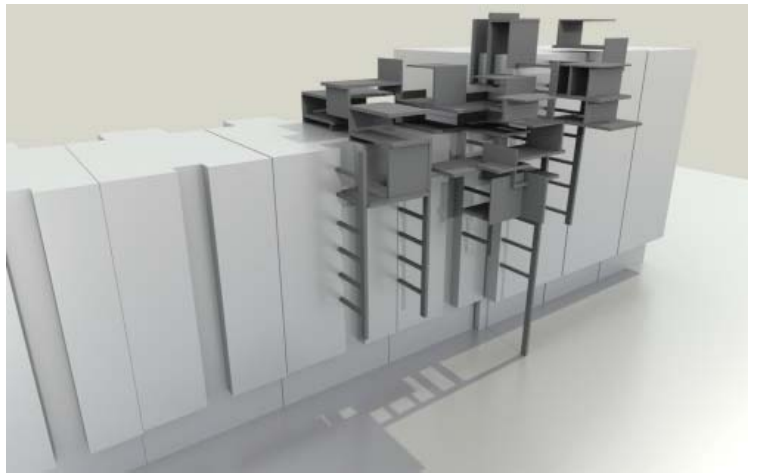
On the Right:
34. " Translation of the Parasite to
Architecture"
- Author's Own.

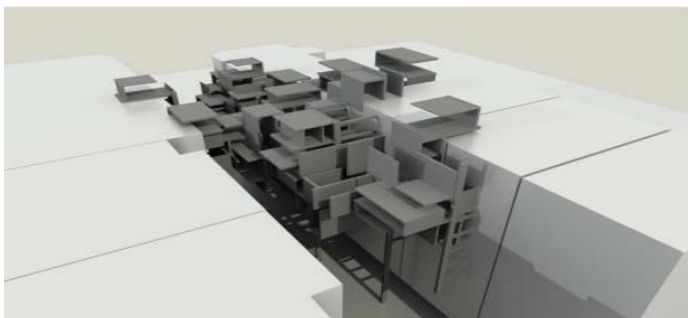
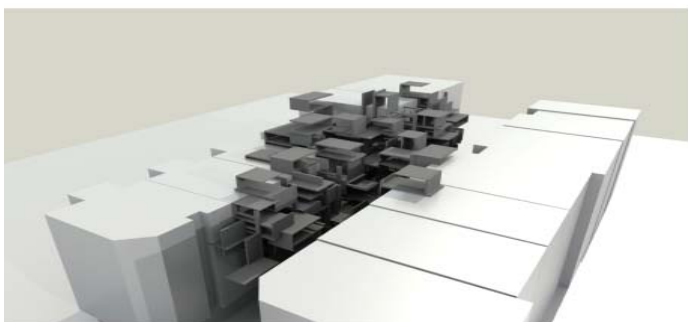
The next exercise was created to test the adaptation and relevance of parasitic structures to the selected site. The initial design consisted of a grid type support structure, which would be positioned in the distance from existing buildings. The purpose was to provide enough lighting for existing apartments. To test the idea, the simplified version of a grid has been modeled and tested digitally. The aim was to create a structure that would serve as a carcass, allowing for apartments to be built within the grid.

Testing suggested potential unsuccessfulness and non-applicability of such an approach, as it did not truly represent a parasitic behavior and required too much control. Moreover, the design of a structural grid, which was purposely placed in the distance from the existing buildings, contradicted the nature of parasitic behaviours. More specifically, a parasite cannot be designed with consideration of benefits for existing buildings, as it negates with its own definition. The test also illustrated that instead of establishing a parasite - host relationship, such a structure suggested presence of an additional "organism" between host and parasite, consequently suggesting that parasitic dwellings would no longer sit on the host, but rather on top of that additional structure. Thus, the exercise suggested that not the buildings, but the structure itself should behave as a parasite in order to establish a successful host parasite relationship to ensure co-evolution (refer fig. 35-37).



35. "Adaptation to the Site"
- Author's Own.





36. "Adaptation to the Site 2"
- Author's Own.

On the Right: 37. "Adaptation to the Site 3"
- Author's Own.





[chapter 6]

VISUAL EXPLORATION

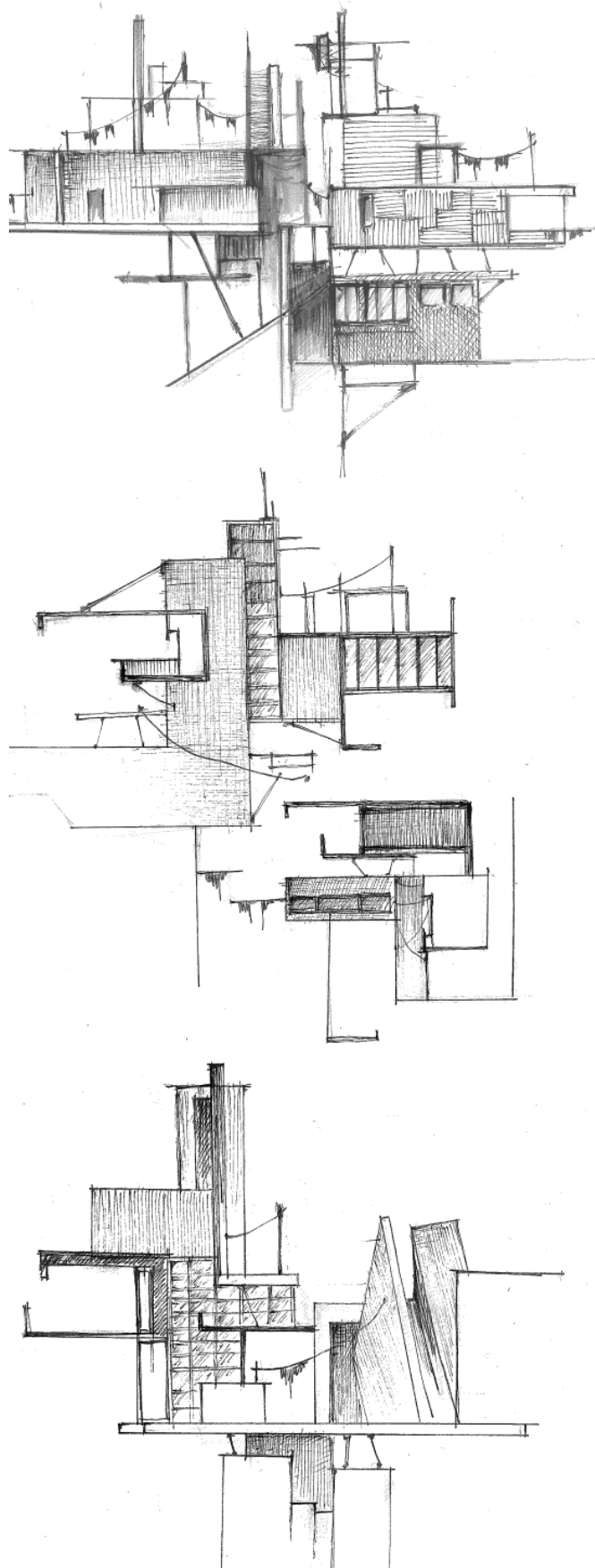
This chapter includes drawings reflecting visual experimentation and exploration, which have been inspired by the outcomes from searching dystopian precedents, fictional and non-fictional. Although the process was purely experimental, it helped to understand the character of parasitic dwellings.

VISUAL CONCEPT DEVELOPMENT

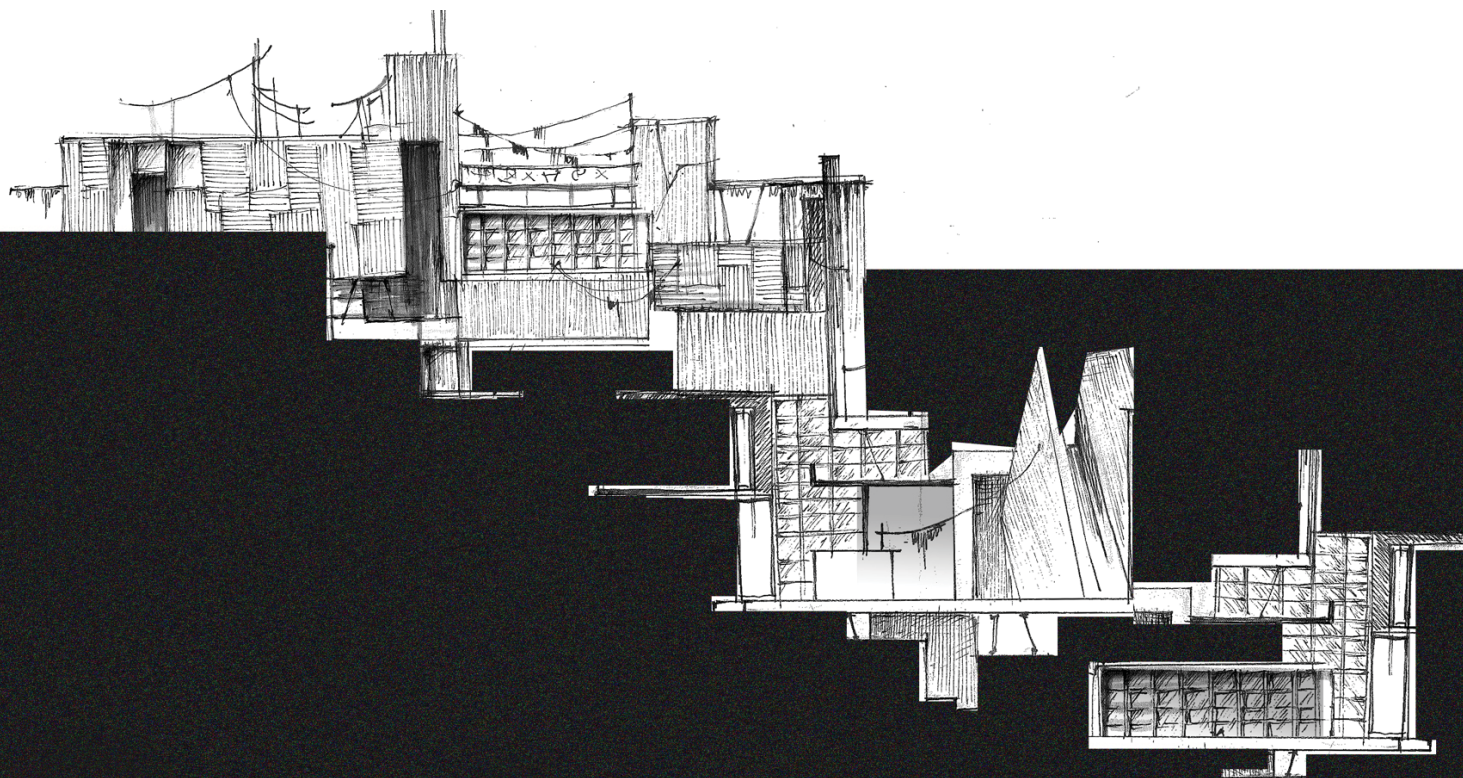
Experimentation began with sketching random elements of the site and precedents. Elements were then combined, merged together and developed. Although the process was purely experimental, it helped to understand the character of parasitic dwellings and their behaviour in habitable architecture.

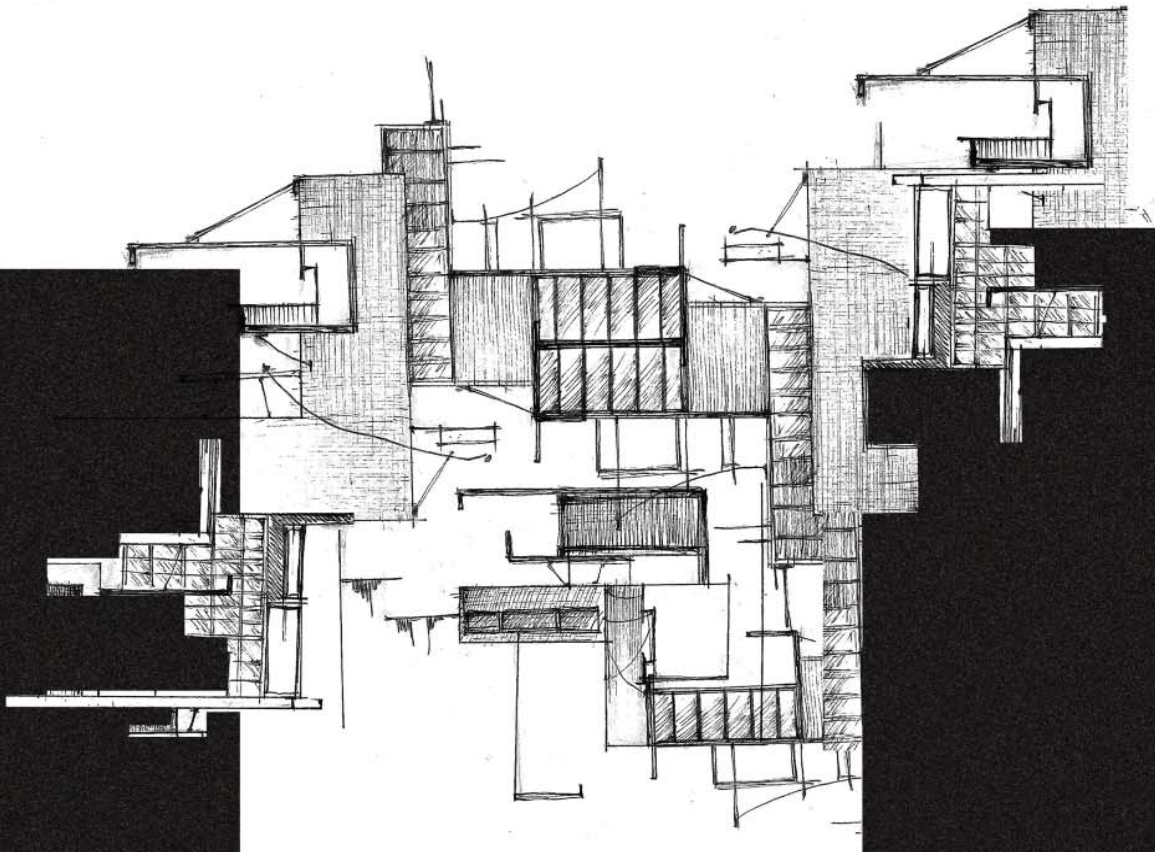
Visual speculation has been achieved through sketches, hand drawings and Photoshop software. Such methods of productive speculation helped to visualise researched ideas and to understand how spaces might be shaped depending on their location and utilisation. Thus, more private spaces would be smaller and sheltered, while common places would be open and easily accessible. Sketching also helped with speculation of how buildings might be connected to each other and how apartments can be connected through different levels.

Below is a series of sketches representing visual concept development and visual speculation.

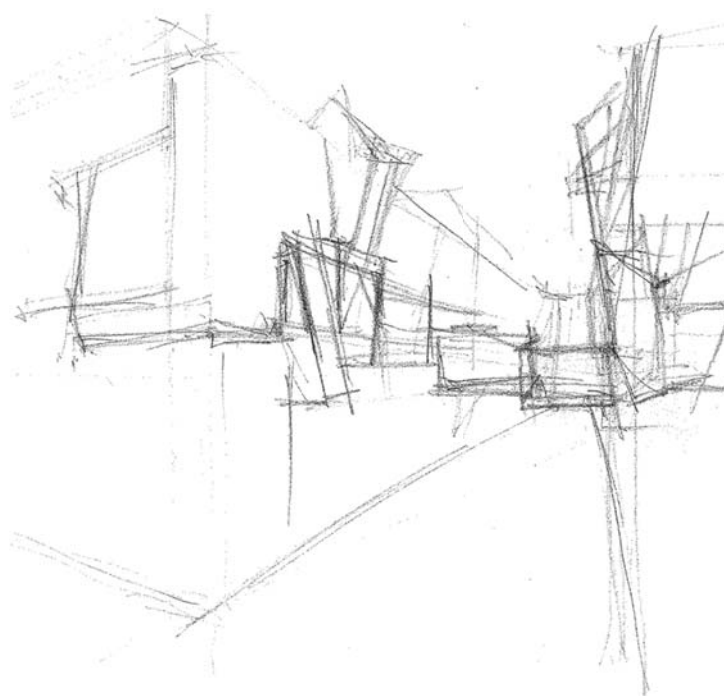


38. " Visual Development - Initial Sketches"
- Author's Own.

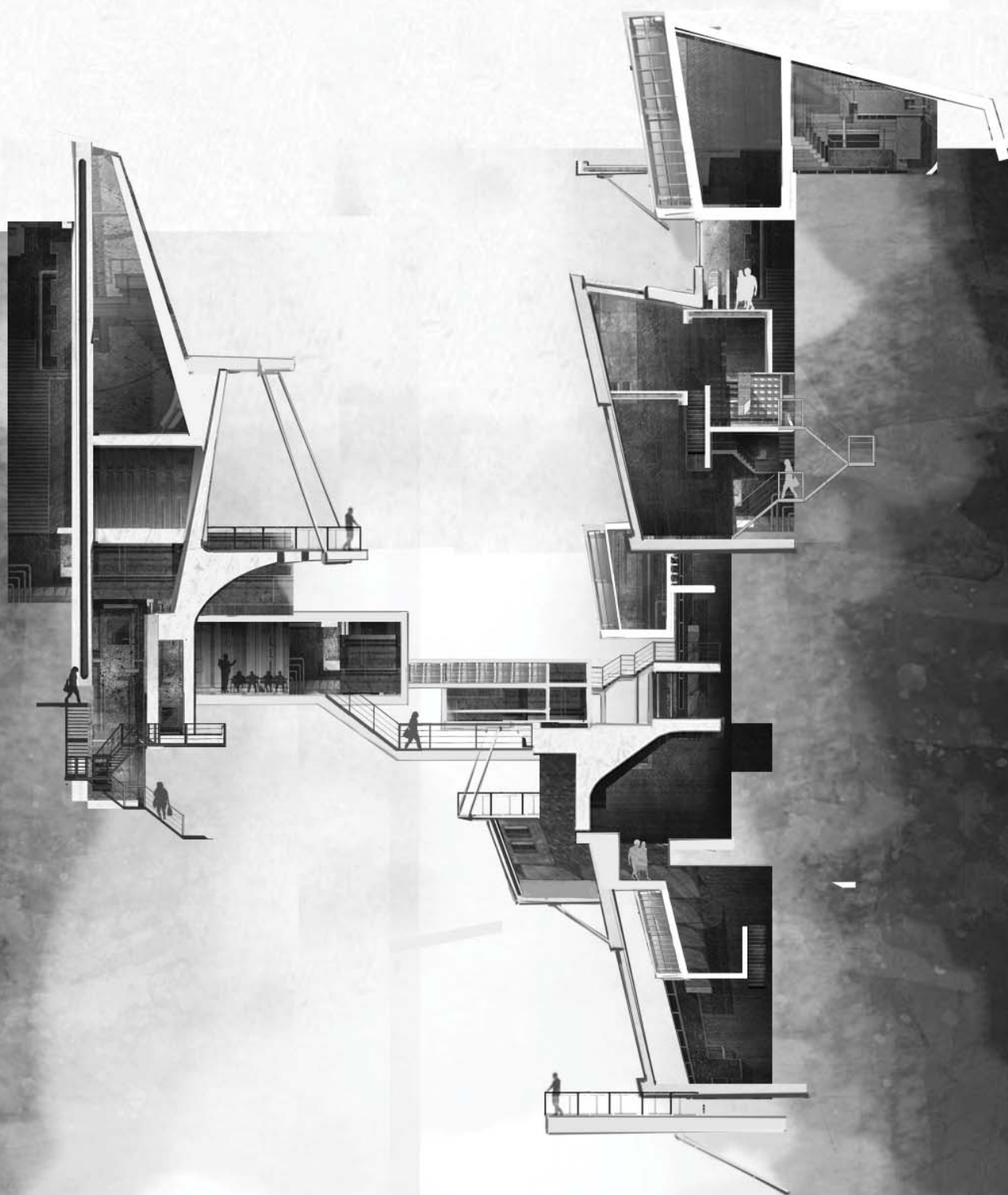




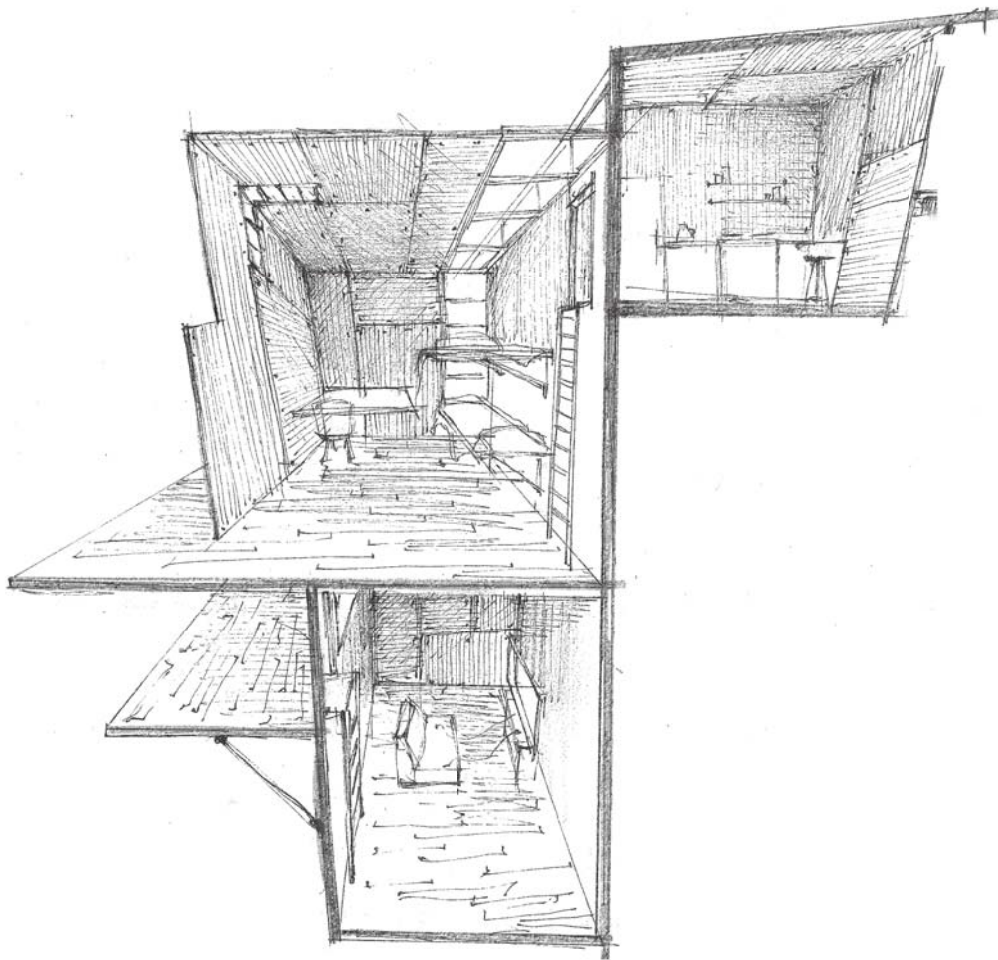
39. " Visual Development - Initial Sketches 2"
- Author's Own.



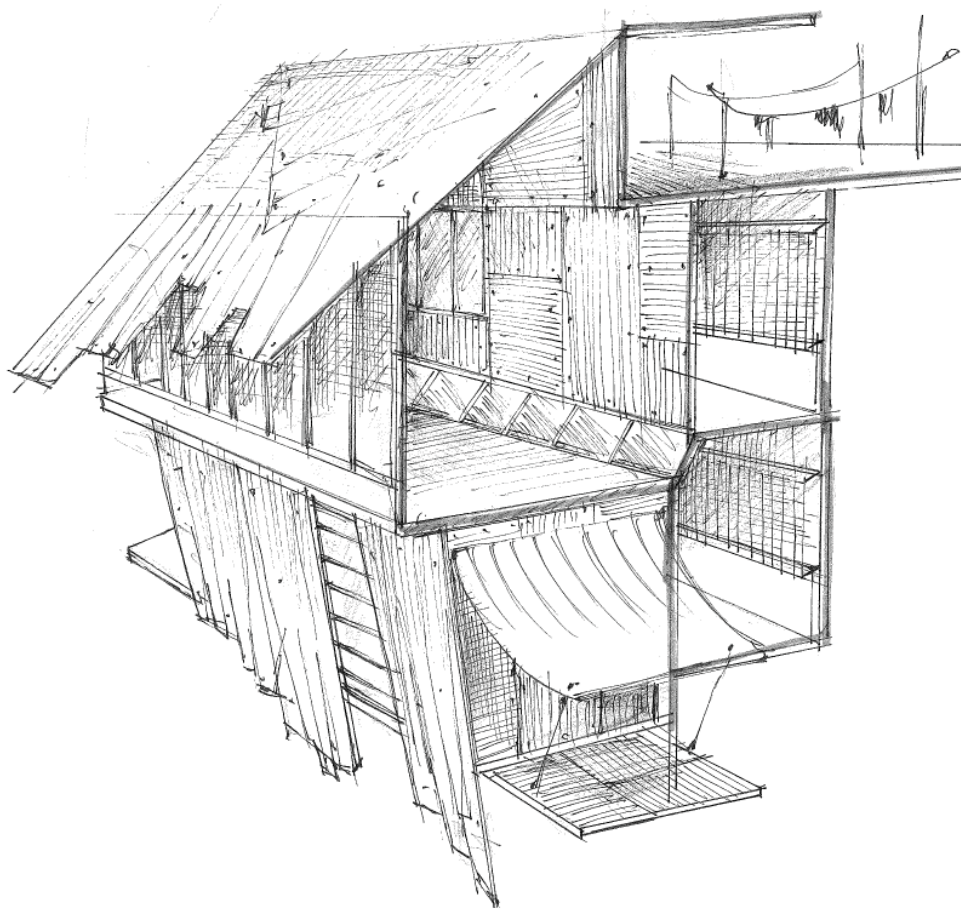
40. "Initial Sketch Of Section Through Site"
- Author's Own.



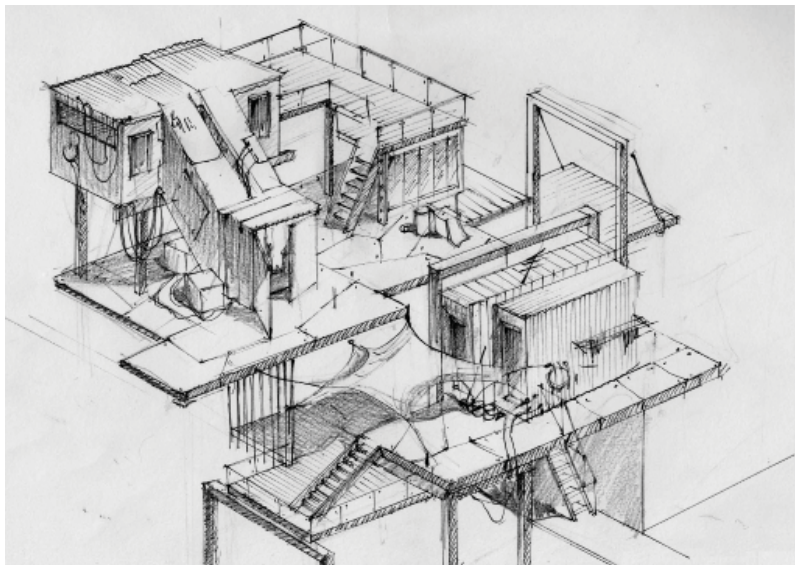
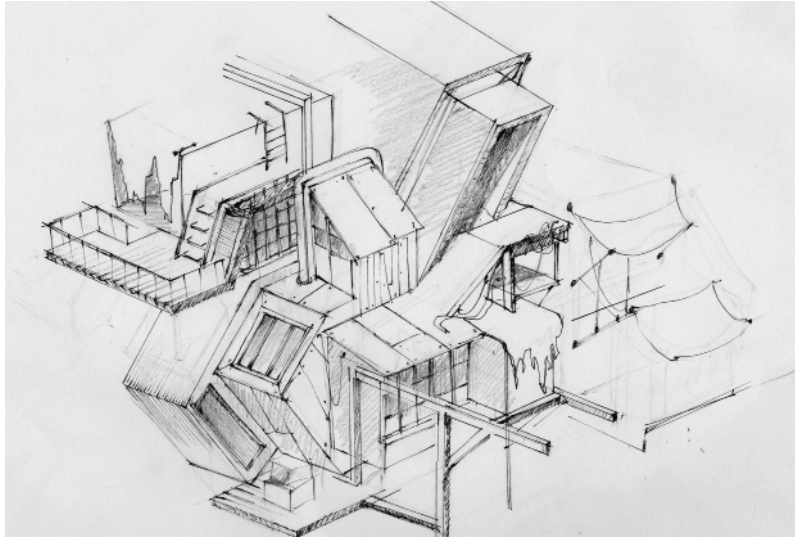
41. " Concept Design- Section"
- Author's Own.



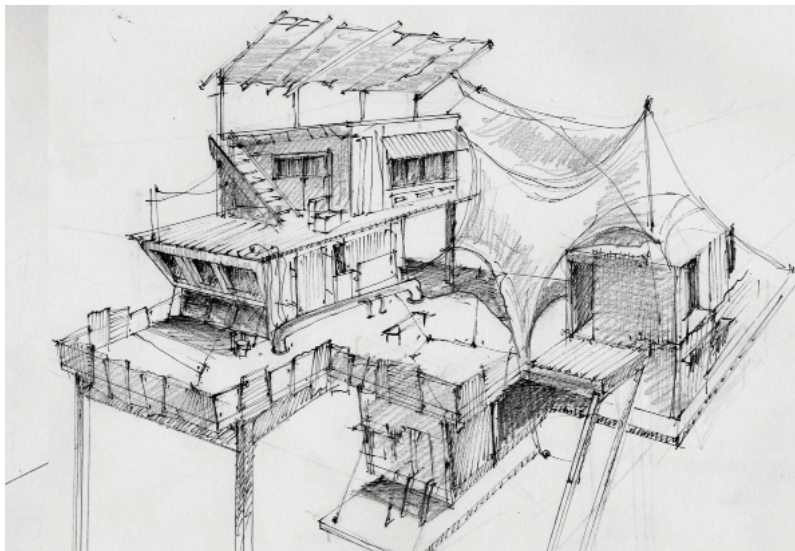
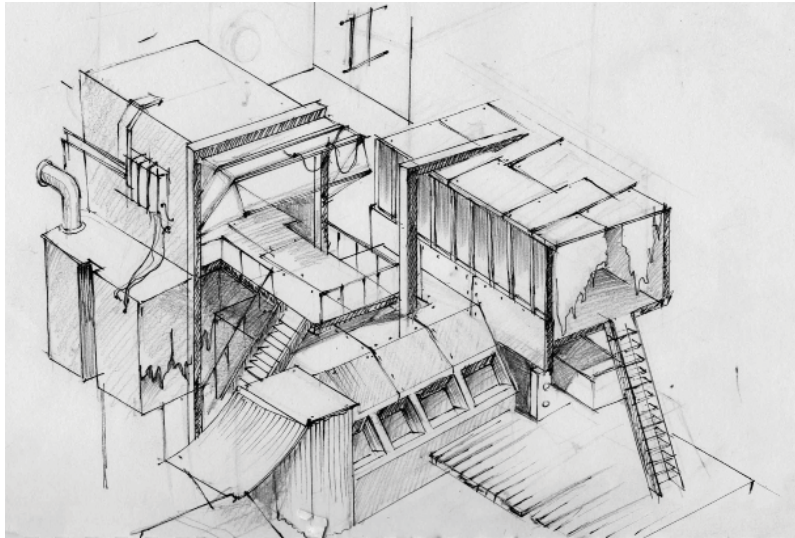
42. " Concept- Individual Unit 1"
- Author's Own.



43. " Concept- Individual Unit 2"
- Author's Own.



44. " Concept Development, Units"
- Author's Own.



45. " Concept Development, Units 2"
- Author's Own.

[part 4]

FINAL DESIGN AND CONCLUSIONS

The last part of the thesis describes the final design, visually representing the way researched ideas, outcomes of the experimentation and testing have been implemented. Following the design description, this chapter summarises all the ideas learned and how they reflected the main research question.



[chapter 7]

FINAL DESIGN

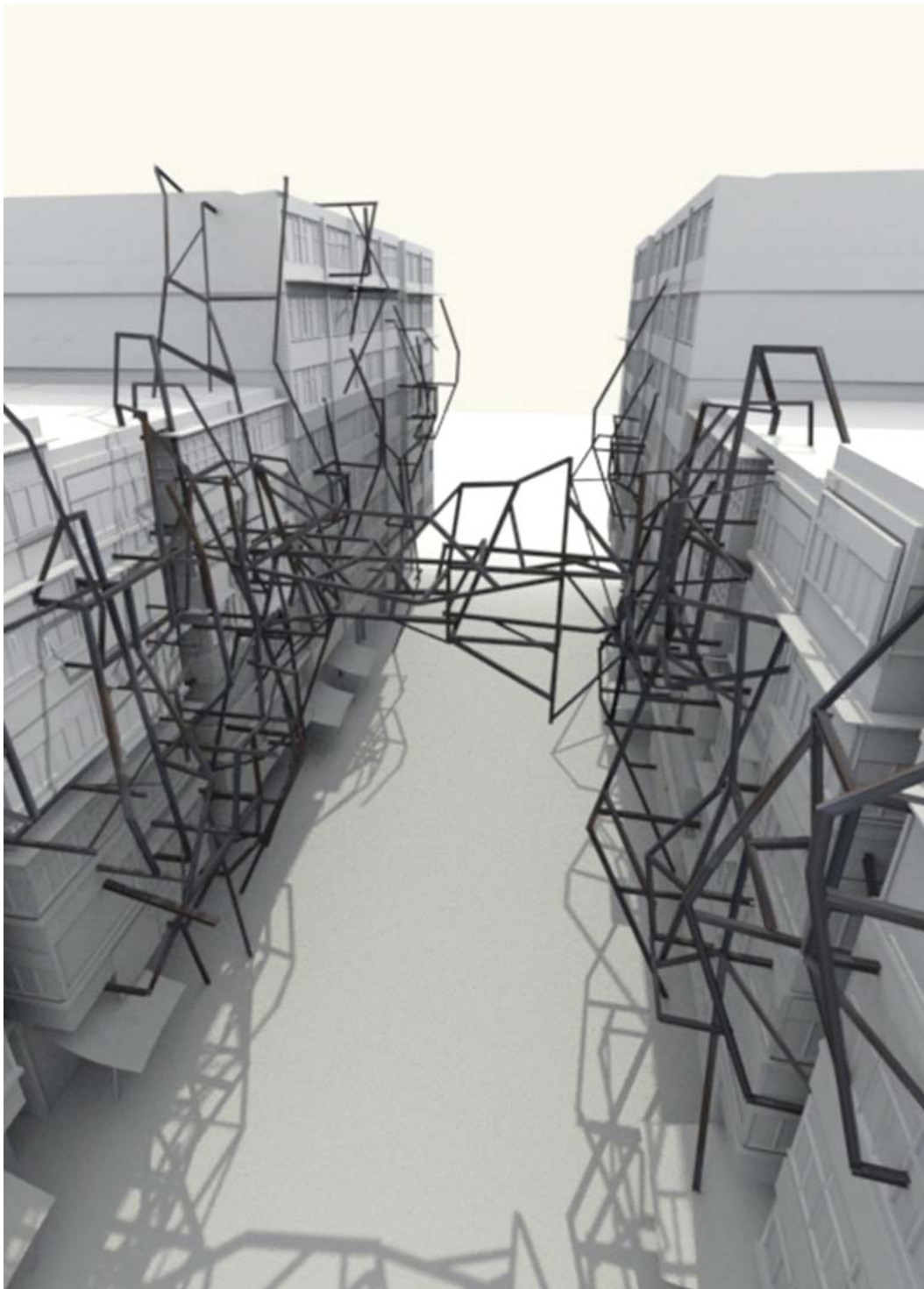
This chapter explains the main design and how it reflects the research objectives. It also describes the parasitic nature of structures and their adaptive strategy.

A productive speculation process began with the translation of parasitic stages in architecture, determined in the previous chapters; thus, the final concept was born as a result of testing and visual exploration. The idea was to create a structure that will be fixed to the existing buildings and be able to support residential dwellings.

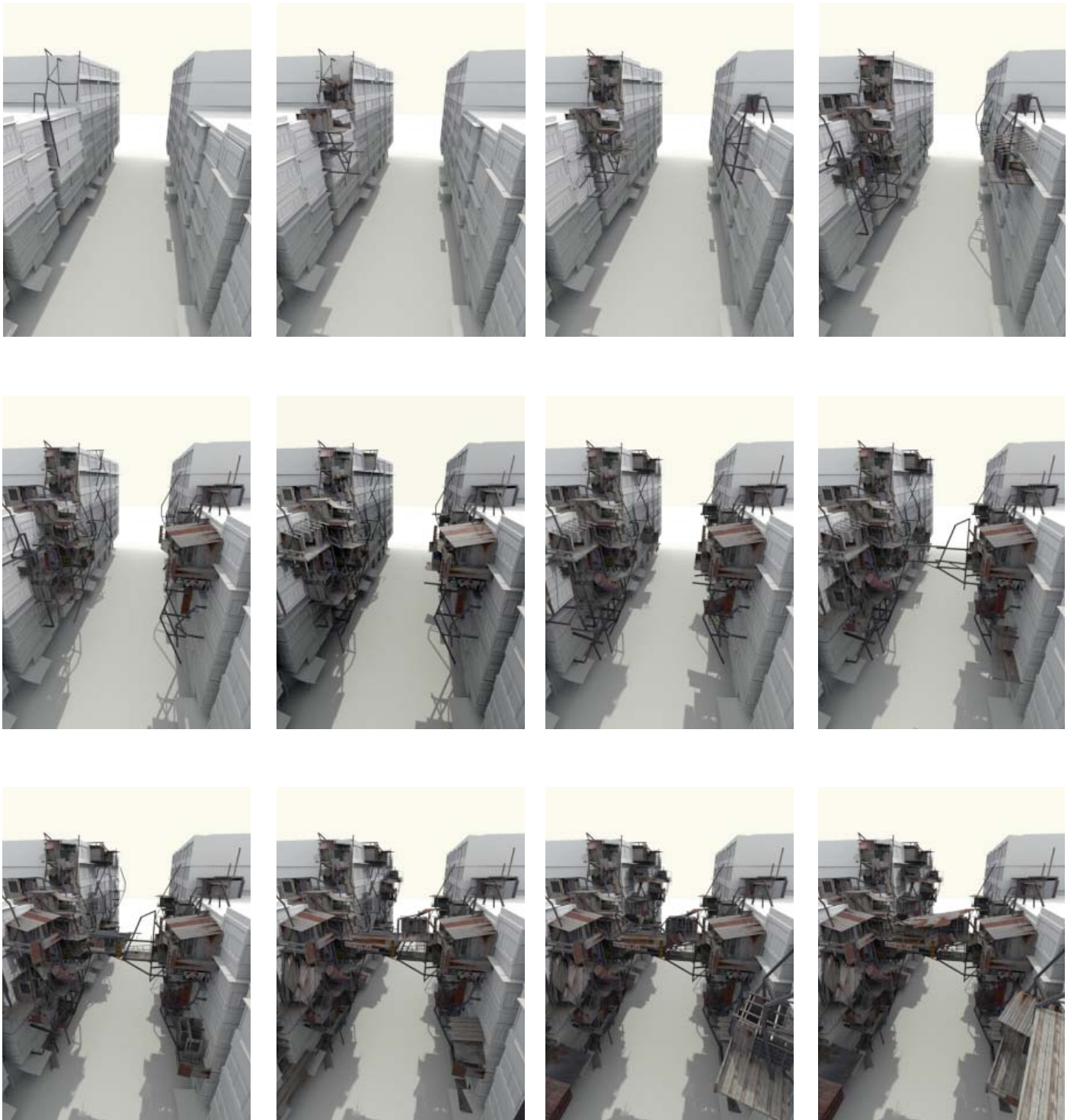
Following researched parasitic strategies, at first the intruder needs to find a suitable safe place to ensure successful establishment. Therefore, a structure begins its life on the roof of the building, where a parasite can hide for awhile.

To ensure a further development, a parasite needs to start feeding on the host. In such a case, the structure starts spreading its branches towards places rich in resources and beneficial for future expansion. Therefore, the structural parasite spreads towards the main staircase from there, where it has access to many levels and can start spreading its roots over the different floors.

Staircases are also usually a place for drainage pipes and electrical cables, which are essential for formation of new dwellings and apartment expansions. Thus, when the parasite reaches the main staircase, the structures start forming on different levels, depending on which residents decide to expand their apartments. New spaces could potentially have a mixed use function, as they will be built by existing residents in order to build additions to their apartments for decks, shops or to establish businesses.



46. "Parasitic Steel Structure"
- Author's Own.

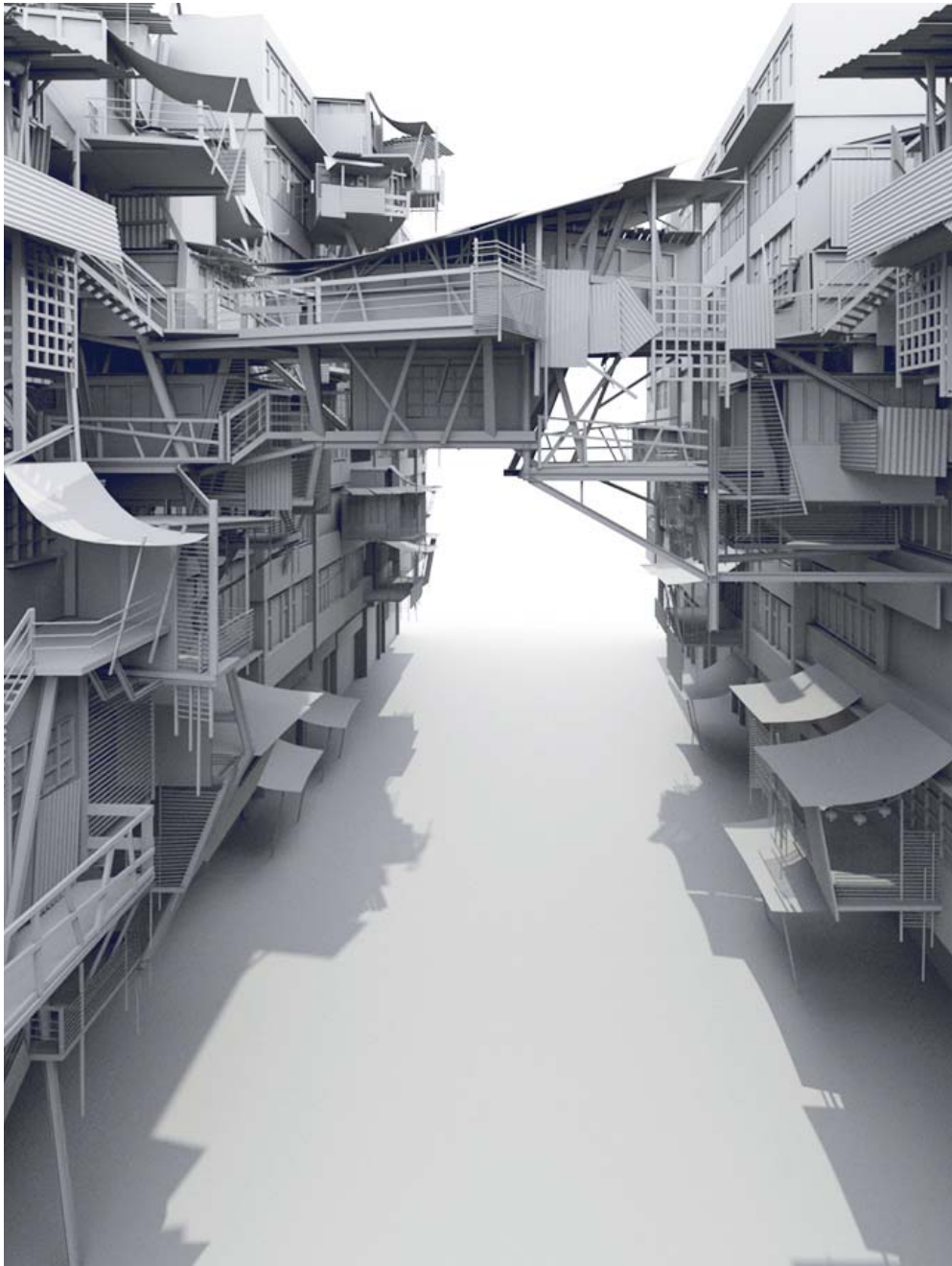


47. " Evolution of the parasite"
- Author's Own.

The design represents parasitic structures hosted mainly on the facades of the buildings facing the street. Spaces are connected together by bridges and pathways.

The growth of a parasite and formation of new spaces can be easily observed. Such a sequence of images [Fig. 47] shows the construction in process and how dwellings start taking shape, eventually forming apartments. It visually illustrates how the “disease” spreads across the street infecting another side of the site, eventually bridging structures together, first through one level and afterwards through another, forming a bridge that provides not only the connection between structures, but additional living areas for future businesses.

The purpose of the design was to potentially provide more spaces for business, common spaces and allow expansion of existing apartments. The aim was to create new living spaces and spaces that would bring people together, creating a stronger community, blending boundaries between outside and inside, private and public.



48. " Architectural Section"
- Author's Own.



49. " Architectural Plan"
- Author's Own.



50. "Enlarged Architectural Plan."
- Author's Own.

The final design balances on a fine line between the beautiful and the horrific. The main parasitic structure suggestively is being built of steel beams and columns of different shapes and sizes, which are bolted and welded together by tenants. Individual units and apartment extensions are being built within the parasitic structure; thus parasitic supportive structures will spread where occupants will build new spaces. Such a design suggests that new dwellings are built from any material that people could gather from the streets; thus there always will be something from which to build. Such construction ensures a co-evolution of buildings as it allows a parasite to grow and expand while existing buildings also are being expanded outward to the street until they eventually meet each other.

Theoretically, the structure may become independent if it expands into the interior spaces of the building, starting with the invasion of public/main areas, and moving into the occupation of residential apartments. This could happen if a parasite could introduce more livable spaces and extension of existing units, through utilisation of common spaces such as staircases or additional semi-levels within the skeleton of a building, creating loft apartments.

The final design solution introduces new ways of space perception by offering a non-conventional strategy for exploiting buildable space, where a speculative approach of architecture of 'what if' has been conducted through artistic methods to anticipate the buildable and functional features of human-centered constantly evolving development.

This self-evolving, self-organised dwelling negotiates the boundaries between private and public, inside and outside, static and active, representing not a building, but the entire urban infrastructure that can engage with the surroundings. As such, the project embodies the contradictory nature of an evolving organism that is always complete, yet is always unfinished. It expands over time adapting to constantly changing conditions and needs of the occupants; thus it always seems to suggest further development and growth. It is an organism in which growth is driven by individual and community needs resulting in creation of a variety of spaces and quite successful interrelation between them. Such a flexible structure can always adapt to new tendencies, building methods or innovative materials; therefore it can always stay relevant and depending on the size of expansion, when existing buildings die of decay, it can completely "swallow" any structure that is left and eventually become a self-standing community, which is never static.

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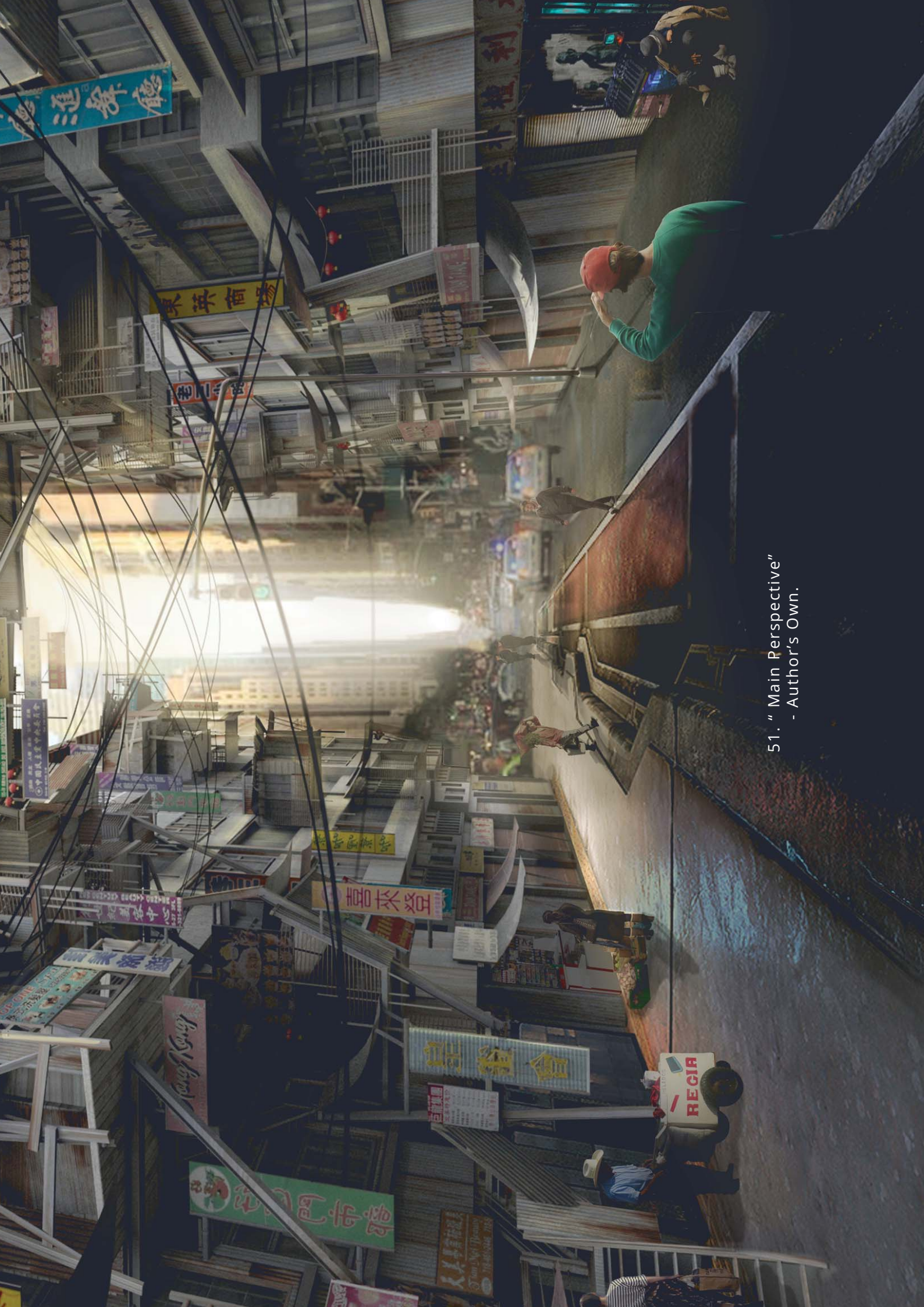
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51. "Main Perspective"
- Author's Own.





On the Left: 52. " Main Perspective"
- Author's Own.

53. " Captures of Individual Units"
- Author's Own.





54. "Parasitic Bridge"
- Author's Own.





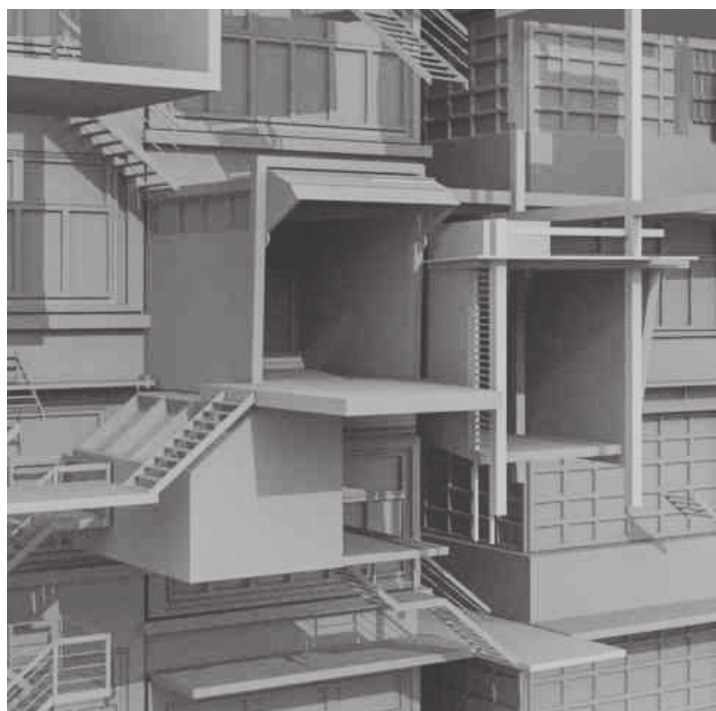
55. "Bridge - Enclosed View"
- Author's Own.





56. "Bridge - Enclosed View - Rear"
- Author's Own.

[part 5]



57. "Concept Development - Parasitic Slums"
- Author's own.



[reflective summary]

The primary questions this thesis aimed to address are:

How can parasitic dwellings be reimagined through futuristic ideas and become an emerging architectural solution for increasing density in urban areas?

What is the importance of understanding dystopia in order to reimagine architecture? What can be learned from contemporary dystopian precedents? How can these ideas be materialised in the architecture of a hypothetical future scenario?

What defines parasite and how parasitic survival tactics can be applied to architecture? What defines parasitic architecture and how relevant are those types of structures to dystopia? How can parasitic architecture and dystopia be perceived in a functional or productive way, turning what are seemingly negative, reactive phenomena into positive proactive ones?

The thesis has studied aims and objectives, such as analysis of parasitic relationships and has speculated upon and tested how such strategies can be applied to architecture. In order to create adaptive architectural solutions, modern architectural conceptions have been reconsidered through the analysis of dystopian science fiction and parasitic behaviour. The thesis reimagined architectural objectives, such as structure, envelope, functionality and construction methods, which have been reflected in the final design, mimicking parasitic behaviour under harsh dystopian conditions.

Through research, analysis of case studies and experimentation, this thesis has explored methods to design architectural alternatives, negotiating possibilities of the unconventional in architecture. The thesis tested and examined an innovative residential solution by tracing the evolutionary behaviour of organisms in order to speculate on how architecture would behave under harsh conditions. Thus, the final design became an embodiment of researched ideas and their adaptation. Furthermore, through acknowledgement of the role and place of science fiction and the parasitic nature in the architectural field, this thesis investigated how parasitic residential dwellings could be reimagined through dystopian reality and become an emerging architectural solution for high density urban areas.

Through analysis of precedents, such as Kowloon City and rooftops in Hong Kong structures, the thesis negotiated 'suitable' conditions that can enforce architecture to develop and adapt to changing environments using its own survival strategies. Thus, the thesis explored the image of architecture that constantly needs to evolve, changing over time, responding to constantly changing surroundings and adapting to new tendencies and needs of the occupants and how they tend to transform space around them in search of a better or alternative way of living.

The final design represents a self-build parasitic structure, a self-sustained architectural form that evolves through response and adaptation to the changing environment. Thus, it creates flexible architectural forms, capable of adapting to the built environment, which can become a low cost self-sustaining alternative solution for dense urban areas with limited space. This thesis examined how architectural interventions can be designed to actively create a better environment.



[conclusion]

An architectural space is a product of a constant interaction of tensions and contradictions, where the physical is in a continuous relation with social, political and cultural dimensions. This thesis advocated for innovative solutions in architecture, arguing that traditional approaches may no longer be relevant, aiming to address and exaggerate issues of the present through analysis of precedents and fictions in order to reflect back and create a design that is a more successful and adaptive type of structures.

Through the research, methodology and experimentation the thesis allowed the reader to mentally travel to an alternative reality, where dwellings exist without architects, where architecture could mutate and alter itself driven by community needs and the creativity of its tenants. The thesis was driven by the intention to create a space where architecture could evolve to levels where it is behaving as a living organism and it is hard to tell whether it is being built or if it has developed its own consciousness. Through experimentation and visual exploration, this thesis has tested if parasitic types of dwellings could be a solution for urban areas of the futuristic dystopian reality alternatively providing more livable spaces. Through speculation and researched ideas this thesis tested architecture to its limits, creating types of structures that are always relevant.

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LIST OF FIGURES

All images presented as part of the November Review are marked with an asterisk.

Fig 01.* "The Main Perspective." Author's Own.

Fig 02. "Concept Development." Author's Own.

Fig 03.* "Concept Development." Author's Own.

Fig 04. "The City of the Blade Runner." Rogers, SA. "Inside Blade Runner 2049: Miniature Sets of Los Angeles by Weta Workshop", Sculpture & Craft in the Art category, Web Urbanist, <<https://weburbanist.com/2017/11/20/inside-blade-runner-2049-miniature-sets-of-los-angeles-by-weta-workshop/#>>.

Fig 05. "The City of the Total Recall." "Environments and Imagery in Chung Kuo", Of Gifts and Stones, 25 Sep. 2012 <<http://www.ofgiftsandstones.com/environments-and-imagery-in-chung-kuo/>>.

Fig.06. "The City of Ghost in the Shell." Behans, <<https://www.behance.net/gallery/48849457/Ghost-in-the-shell>>.

Fig.07. "The Stacks of the Ready Player One." "Columbus is central to Steven Spielberg's latest blockbuster, Ready Player One," Movies, Columbus Navigator, <<https://www.columbus-navigator.com/ready-player-one-columbus/>>.

Fig. 08.* "Sketch Inspired by Barnacles." Author's Own.

Fig. 09.* "Sketch Inspired by Parasitic Mushrooms." Author's Own.

Fig. 10.* "Sketch Inspired by Galls." Author's Own.

Fig. 11.* "Sketch Inspired by Stranger Fig." Author's Own.

Fig. 12.* "Simplified Exploration of Parasitic strategies." Author's Own.

Fig 13.* "Evasion." Author's Own.

Fig 14.* "Occupation." Author's Own.

Fig 15.* "Expansion." Author's Own.

Fig 16.* "Sovereignty." Author's Own.

Fig. 17. "Rooftop Slums." "Slums with penthouse views highlight Hong Kong's wealth divide," By Shadbolt Peter, CNN, 2 Nov. 2011, <<https://edition.cnn.com/2011/11/01/world/asia/hongkong-rooftop-slums/index.html>>.

Fig. 18.* "Rooftop Slums Study." Author's Own.

Fig. 19.* "Rooftop Slums Study 2." Author's Own.

Fig. 20.* "Rooftop Slums Study 3." Author's Own.

Fig. 21.* "The Kowloon Walled City." The densest settlement in the world, CNN 31 Mar. 2014, <<https://edition.cnn.com/travel/gallery/kowloon-walled-city/index.html>>.

Fig. 22. "Rooftop of the Kowloon Walled City."Shoking Photoes of China's Lawless Kowloon Walled City, Elite Readers, <<https://www.elitereaders.com/photos-lawless-kowloon-walled-city/>>.

Fig. 23. "Rooftop of the Kowloon Walled City 2."Shoking Photoes of China's Lawless Kowloon Walled City, Elite Readers, <<https://www.elitereaders.com/photos-lawless-kowloon-walled-city/>>.

Fig. 24.* "Yau Ma Tei District." Author's Own.

Fig. 25.* "Kowloon Peninsula." Author's Own.

Fig.26.* " Selected Site, View from Nong Po St." View on the Temple St. from the intersection of Temple St. and Nong Po St., Google maps.

Fig.27.* " Selected Site, View from Nanking St." View on the Temple St. from the intersection of Temple St. and Nanking St., Google maps.

Fig. 28.* " Site Analysis." Author's Own.

Fig. 29.* " Site Analysis 2." Author's Own.

Fig. 30.* " Experimentation with Organic structure." Author's Own.

Fig. 31.* " Experimentation with Organic structure on the site ." Author's Own.

Fig. 32.* " Experimentation with Organic structure on the site 2." Author's Own.

Fig. 33.* "Digital Exploration of the Parasitic Behaviour." Author's Own.

Fig. 34.* " Translation of the Parasite to Architecture." Author's Own.

Fig. 35.* "Adaptation to the Site." Author's Own.

Fig. 36.* "Adaptation to the Site 2." Author's Own.

Fig. 37.* "Adaptation to the Site 3." Author's Own.

Fig. 38.* " Visual Development - Initial Sketches." Author's Own.

Fig. 39.* " Visual Development - Initial Sketches 2." Author's Own.

Fig. 40.* "Initial Sketch of Section Through Site." Author's Own.

Fig. 41.* "Concept Design - Section." Author's Own.

Fig.42.* " Concept Design - Individual Unit 1." Author's Own.

Fig. 43.* " Concept Design - Individual Unit 2." Author's Own.

Fig. 44.* " Concept Development, Units." Author's Own.

Fig. 45.* " Concept Development, Units 2." Author's Own.

Fig. 46.* " Parasitic Steel Structure." Author's Own.

Fig. 47.* " Evolution of the parasite." Author's Own.

Fig. 48.* " Architectural Section." Author's Own.

Fig. 49.* " Architectural Plan." Author's Own.

Fig. 50. " Enlarged Architectural Plan." Author's Own.

Fig. 51.* " Main Perspective. " Author's Own.

Fig. 52.* " Main Perspective. " Author's Own.

Fig. 53.* " Captures of Individual Units." Author's Own.

Fig. 54.* " Parasitic Bridge." Author's Own.

Fig. 55.* " Bridge - Enclosed View." Author's Own.

Fig. 56.* " Bridge - Enclosed View - Rear." Author's Own.

Fig. 57. Concept Development - Parasitic Slums." Author's Own.

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2018

PARASITIC ARCHITECTURE

EMBODIMENT OF DYSTOPIA