

Playful architecture

Constructing sociality

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#### **Title Page**

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#### Abstract

This thesis explores themes of playful architecture, and how activated, adaptable, and dynamic spaces can be created through embracing the inherent instability of social space.

The exploration focuses on the social aspects of space and on an architecture that is capable of encouraging connection and interaction, an architecture that can adapt and promote skills development and sharing, and an architecture that provides identity – one that acts as an attractor rather than an object.

Social spaces are unpredictable and dynamic in the interactions and the events that it allows for. Spaces are also full of paradoxes - of disjunction between space and event. This means that architecture and space is constantly unstable and on the verge of change. It is these dynamic and chaotic elements that, if held properly, allow for social, creative, and playful spaces and events.

The project is situated within an imagined future fabric of District 6 in Cape Town, on a site with existing activities to be plugged into and reinforced. This allowed for the testing of how a playful architecture that is community and socially driven sits within the developing context of South Africa. The programme revolves around a city living room. The city living room is comprised of accessible social hubs for gathering and waiting, and more controlled work hubs providing space and facilities for working, learning, and teaching.

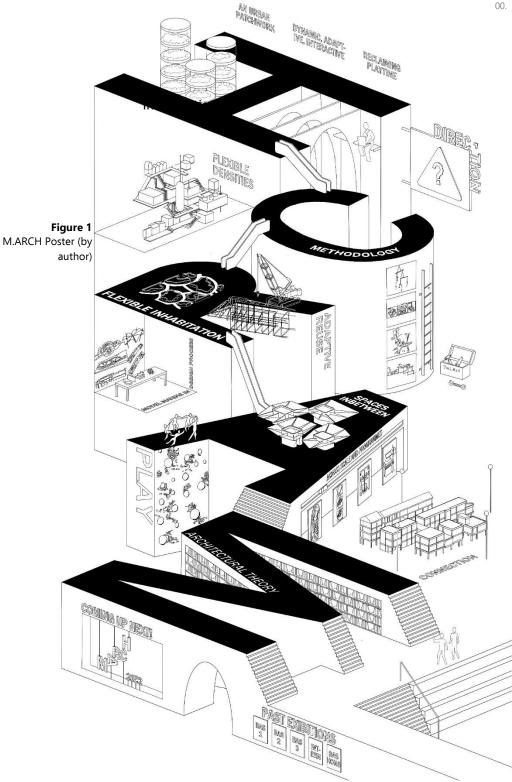
This city living room ties into the events and programme of a larger urban proposal, with the functions and programmes on the site working together and weaving activity across the site.

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#### 00. Introduction

#### **Playful Architecture**

I am interested in themes of playful architecture, and how activated, adaptable, and dynamic spaces can be created through embracing the inherent instability of social space.

Playful architecture will be employed as both a concept and as a tool in the design process.

My exploration will focus on the social aspects of space and will be held in the space of architecture by engaging with projects and writings of different architects. I will explore an architecture that is capable of encouraging connection and interaction, an architecture that is able to adapt and to promote skills development and sharing, and an architecture that provides identity – one that acts as an attractor rather than an object.

M.ARCH (Figure 1) represents my initial ideas on themes as well as reflections on past projects. It highlights my interests of an architecture that promotes connection, movement, and enjoyment.

Social spaces are unpredictable and dynamic in the interactions and the events that it allows for. Spaces are also full of paradoxes - of disjunction between space and event. This means that architecture and space is constantly unstable and on the verge of change.

In order for space to accommodate this instability, and to allow for its ever-changing interaction and use, it needs to be able to adapt. However, designing a space that is completely non-specific and over-flexible could lead to indeterminacy, and a lack of identity. In a space where nothing is determined or constant, no clear character can develop, and no relation or connection can be established between the space and its users.

It is the fine balance of stability and instability, and the interplay between these aspects that provides the foundation and context for an exciting exploration.

Inherent to the social and stable/unstable aspects of space is movement, mobility, and collision. This exploration will also consider the importance of physical and visual connections within social spaces.

Identity and atmosphere -elements that also play with instability and tensions- are aspects that will be further explored. The aim is to establish how these elements contribute to the creation of playful and dynamic spaces, and the effect that identity and atmosphere have on the way in which people relate to and experience a space.

My research will look at activating of spaces through interventions of in-between spaces: in-between in terms of adaptive re-use approaches or through using under-utilised space, and the richness of event that can be realised within a margin space.

Throughout the study I will unpack the contradictions, paradoxes, and tensions within space. This will inform explorations and questions as to how these contradictions and disjunctions are embraced and mediated, and how this can lead to the potential of an architecture of pleasure.

I will engage with the works and theories of architects, notably Cedric Price, Rem Koolhaas - one of founders the architectural firm OMA (office for Metropolitan Architecture), Bernard Tschumi, and SANAA (Sejima and Nishizawa and Associates), an architectural firm founded by Kazuyo Sejima and Ryue Nishizawa.

This paper engages and references these architects throughout, as their work and ideas collectively embody a search for playfulness and delight within the social. Their work explores new and exciting approaches to social space, all reflecting a certain level of openendedness and adaptability aimed at activating space and encouraging event.

In order to engage with the research on both theoretical and technical levels, I will employ the use of case study analyses. Some case studies will be explored on more theoretical grounds, while others will follow a more technical analysis. These technical analyses will engage with the technology of the physical making of space, and how it relates to engaging with the social.

The case studies selected for the explorations of "technology and/of space" relate directly to the theoretical concepts being discussed. These case studies deal with technical analysis by unpacking the components employed in the physical manifestation and solutions of a theoretical concept.

Case studies relating to the "technology and/of space" include OMA's Seattle Library and SANAA's Shibaura House, which reflect the ingenious mediation of stable and instable spaces both programmatically and technically, while ensuring social collision and connection through the exciting use of planes and compartmentalised flexibility.

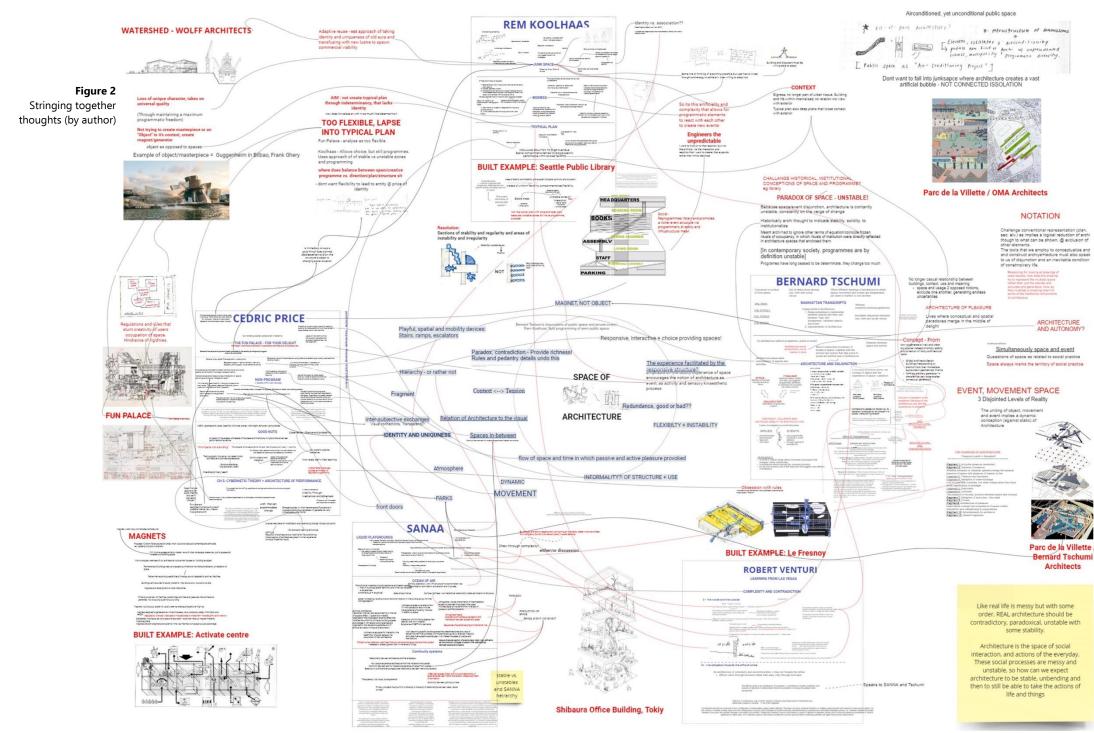
SANAA's 2009 serpentine pavilion will be looked at in relation to atmosphere, and how a playful atmosphere and experience is evoked through abstracting and distorting scales of structure. Bernard Tschumi's Le Fresnoy Arts centre will be analysed in relation to spaces of the in-between, and the technological interventions that allow for an in-between space to be created and activated.

The theoretical and technical explorations will remain at an abstract level, with no reference to site or context. It is in design that the findings from the exploration will be applied to site to test how a playful architecture, that is community and socially driven, sits within the developing context of South Africa.

It will be in locating my design exploration in a developing context that an understanding of what the socio-political relationship to a playful architecture is and exploring how it can produce a sociality and allow for a sense of identity and place.

As a starting point I would like to engage with Cedric Price's Fun Palace. This exploration of a project that is inspired and driven by social spaces and processes will act as an imaginative springboard to stimulate and inspire thinking about an architecture of pleasure and delight.

What is the experience of contemporary social space? How does architecture facilitate or inhibit the events of social space? What is required of a space for it to be social? How is this social space made to be playful and exciting?



Case Study - A

## My Imaginative Springboard - The Fun Palace Cedric Price

London, England Unrealised | Designed 1961-1963



Figure 3
Interpreted
portrait of Cedric
Price

## **Figure 4 a-c**Development of fixed and flexible in plans

a. conceptual plan of zonal activities

b. diagrammatic plan with fixed and flexible

c. Typical plan layout

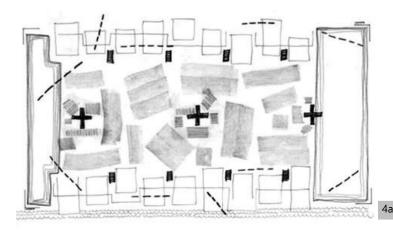
An analysis of the Fun Palace is employed as an imaginative springboard with which to explore the world of experimental and playful thinking. How can this theoretical exploration kickstart further thinking into methods of invigorating social space?

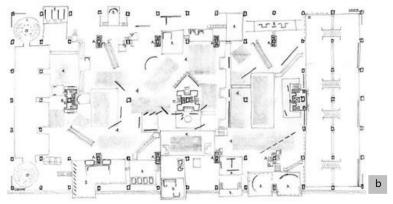
The Fun Palace was a project designed by architect Cedric Price for Joan Littlewood, a theatre director and founder of the innovative Theatre Workshop in east London. The intention and vision for the project was to create a 'university of the streets', an interactive environment that would put the users in charge.

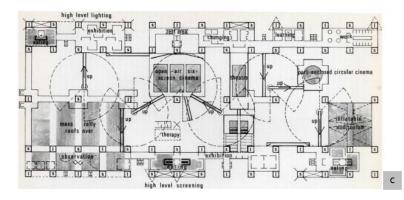
Designed between 1961 and 1963, this unbuilt project was to be a short-life toy of dimension and organisations, neither restricted by nor specific to a particular site.<sup>1</sup> This 'laboratory of pleasure'<sup>2</sup> was a device through which Price developed his ideas for an anticipatory architecture that would be capable of adapting to the needs and desires of its users.<sup>3</sup>

Price built very little, but his prescient thinking resulted in a lasting influence on contemporary architects. His work employed innovative ideas and approaches that responded to the social and economic context of post-war Britain in the 1960's.

My fascination with the Fun Palace lies in its objective to create a space that could accommodate as many forms of fun, activity, and interaction as possible, and to emphasise movement in all directions and in all manners. It was designed as a space fuelled by the social, in encouraging interaction, collision, connection, conflict, and sharing of knowledge and skills. It was intended as a







<sup>&</sup>lt;sup>3</sup> Goldhagen, S. W. and R. j. Legault (2000). <u>Anxious modernisms: experimentation in</u> postwar architectural culture. Montréal, Canadian Centre for Arc hitecture.

Littlewood, C. P. a. J. (1968). "The Fun Palace - For your Delight." The Drama Review: TDR

<sup>&</sup>lt;sup>2</sup> Littlewood, C. P. a. J. (1968). "The Fun Palace - For your Delight." <u>The Drama Review: TDR</u> **12**: 127-134.

#### Figure 5 Concept perspective sketch of the fun palace and its levels

#### Figure 6 Fun Palace

perspective showing levels, connection and moving elements space where pleasure in learning as well as in wasting time could be achieved. Price stated the challenge as:

> To provide conditions which make everyone part of the total activity and to exploit drinking, necking, looking, listening, shouting, and resting.... in the hopes of an eruption or explosion of unimagined sociality through pleasure.4

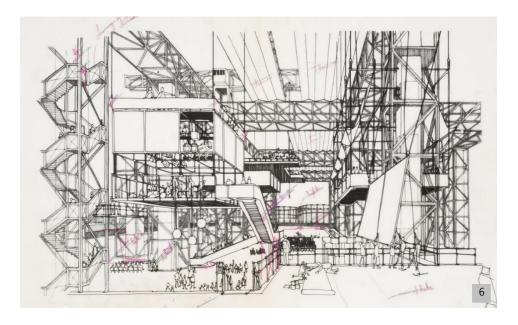
The activities of the site would be accommodated within an everadapting environment, with the structure and spaces being expandable and changeable. The very essence of the Fun Palace was it being an architecture that could accommodate change.

The Fun Palace would be a machine that, only when activated by the user, would function, and allow for the production and processing of information (Figure 3).

The spaces and programmes would be interconnected and socially charged. This would wrestle the subject free from the suffocating repetitions of everyday conventions and encourage an emergent individuality of the user, and their perception and identity with the world about them<sup>5</sup>.

The organisation of the programmes would challenge and develop the mental and physical skills of the user, and space and activities would provoke active and passive pleasure.<sup>6</sup> Passive pleasure would take place in zones of quiet and respite - where enjoyment in wasting time could be found.<sup>7</sup>

Emphasis was placed on media, news feeds, big screens, and mass communication and its role in communication and interaction within the spaces. These methods are commonly employed in contemporary spaces, but in 1963 it was prescient thinking. The Fun Palace would provide spaces where users could exercise choice, and effectively apply control within uncensored networks



<sup>&</sup>lt;sup>4</sup> Unpaginated document (anti-architect document) price archive, Cedric Price

<sup>&</sup>lt;sup>5</sup> Cedric Price, P. H. a. R. B. (1969). Non-Plan: an Experiment in Freedom. New Society. 338

<sup>&</sup>lt;sup>6</sup> Cedric Price, P. H. a. R. B. (1969). Non-Plan: an Experiment in Freedom. New Society. 338.

<sup>&</sup>lt;sup>7</sup> Cedric Price, P. H. a. R. B. (1969). Non-Plan: an Experiment in Freedom. New Society. **338**.

Figure 7
Fun Palace: typical short section

Figure 8
Fun Palace: perspective
for the Lea River site on
photomontage

of communication<sup>8</sup>. This new mentality would allow for self-willed activity and provide the user with agency.

Cybernetics was employed in the design, using chance and probability to pre-empt the needs and actions of users. It was a tool in exploring how systems organise themselves to understand how the architecture would need to adapt to these requirements.

The Fun Palace would be an inherently impermanent structure where nothing would be mandatory and where anything could be possible.

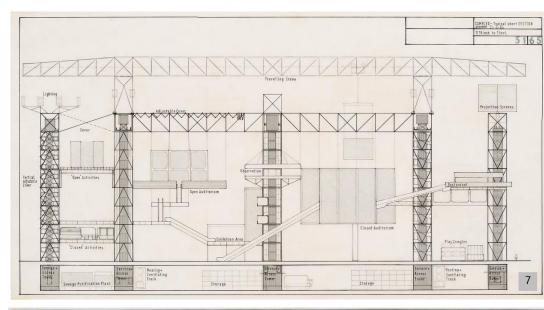
With informality goes flexibility. The entire plan would be open, but on many levels, which would also allow for connections through social observation. Price's flexible floor plans and the exploration with radial escalators (Figure 4c) highlights the goal of interconnected space and levels where the user would create their own route depending on where they wanted to go. In this Price notes:

The greatest pleasure of traditional parks is preserved - the pleasure of strolling casually <sup>9</sup>

The Fun Palace was designed to have a maximum lifespan of ten years. This planned obsolescence was to challenge institutional hierarchy and permanence, and for the structure to remain relevant to the time, technology, and social use that it was intended for.

Price was inspired by the assembly of lightweight, temporary cranes and towers of Japanese shipyards<sup>10</sup> (Figure 7 & 8). This prompted his exploration into the constructional logic of an adaptable, kit-of-parts architecture for the Fun Palace. This would allow for an ephemeral nature of the architecture and use materials and techniques that, during that time, were disregarded in the building industry.<sup>11</sup>

<sup>8</sup> Goldhagen, S. W. and R. j. Legault (2000). <u>Anxious modernisms: experimentation in</u> postwar architectural culture. Montréal, Canadian Centre for Architecture.





<sup>&</sup>lt;sup>10</sup> Hardingham, S. (2005). Experiments in architecture. Good Nuts

<sup>&</sup>lt;sup>9</sup> Cedric Price, P. H. a. R. B. (1969). Non-Plan: an Experiment in Freedom. New Society. 338.

<sup>&</sup>lt;sup>11</sup> Cedric Price, P. H. a. R. B. (1969). Non-Plan: an Experiment in Freedom. <u>New Society</u>. 338.

**Figure 9**Diagram of ideal site situation

The Fun Palace was envisioned as having the potential to be sited anywhere within a metropolitan region. What was required of the site was that it would need to be able to utilize existing communication and transportation networks passing by the site, to increase mobility, access, and connection (Figure 6).

Price noted that an issue with replanning the city were heritage and zoning regulations that prevented the scraping and adapting of existing forms to enable this fuller, more random, and sophisticated use of urban facilities.<sup>12</sup> He stated that:

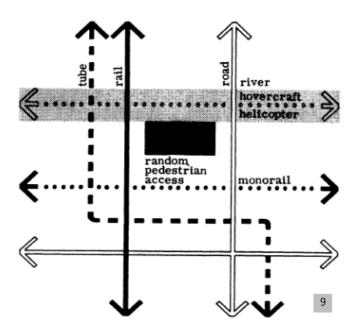
The legacy of redundant buildings and the resultant use patterns acts as straitjacket to total use and enjoyment.<sup>13</sup>

One of the many issues and pushbacks that the project faced in its attempts to be realised was council requirements and regulations that were unable to agree on how to classify the Fun Palace and its spaces.

Although the project was designed over 60 years ago, it is still an exciting and thought-provoking project to engage with in the exploration of playful architecture that up-ends social space, and to plant the seed of thinking of a revitalised, social centred approach to space.

What I appreciate in the design of the Fun Palace is the aim to allow for change and adaptability in the way spaces are used, and how this accommodates for the fluctuating requirements as well as paradoxes of social space. Social space is constantly evolving, with inherent tensions and complexities. The design put the user experience at the forefront and embraced new technologies in its programmes and construction.

I am also inspired by the spirit of his ideas, and the experimentation and pushing of established conventions to create an architecture that is responsive to people's needs.



 $<sup>^{12}</sup>$  Littlewood, C. P. a. J. (1968). "The Fun Palace - For your Delight." <u>The Drama Review: TDR</u> 12: 127-134.

 $<sup>^{\</sup>rm 13}$  Littlewood, C. P. a. J. (1968). "The Fun Palace - For your Delight." <u>The Drama Review: TDR</u> 12: 127-134.

#### 01. Embracing contradictions of space

By using the Fun Palace as an imaginative springboard to kickstart thinking of social space, I have started to generate questions about contemporary architecture and its social spaces.

How do we embrace the contradictions of space? How do we design in a way that breaks from regulations and hierarchies that act as straightjacket to creativity and interaction? How do we design good social spaces, as opposed to junkspace?

Analyses of Rem Koolhaas's *Junkspace* essay and Bernard Tschumi's theory of *space, event, and movement* will be used to understand the complexities of space, as well as to engage with theories of space written by architects. This will hold the exploration in the space of architecture, to remain focused on the social aspect of space and its relation to architecture. I will also discuss rules that hinder the unpredictability and paradoxes of space, and how this can reduce the social capacity of space.

#### Working through junkspace

Junkspace, an essay written by Rem Koolhaas, is a critical and somewhat cynical commentary on the state of contemporary architectural works, and the space it creates and offers to its users.

How can Rem Koolhaas's conception of junkspace allow for a more critical reading and understanding of contemporary architecture and its social spaces? And, in understanding junkspace and its consequences, can an exploration of "good space" be better positioned?

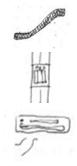
In the unpacking of junkspace, I have included my own illustrations that help to articulate the ideas and concepts being discussed.

Junkspace is a space of extreme contradictions which compete relentlessly. It is a space that fuses highs and lows, public and

private – "it is overbearing yet lacking" <sup>14</sup>. Junkspace is produced by a stagnant architecture which caters to immediate, consumerist and trend obsessed motives and spaces. <sup>15</sup> As Koolhaas expressively puts it:

There is no progress; like a crab on LSD, culture staggers endlessly sideways.<sup>16</sup>

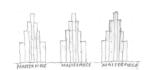
In Junkspace Koolhaas discusses the "infrastructure of seamlessness" which include escalators, elevators, and airconditioning. These are inventions that enable expansion and produce a new kind of architecture with degrees of diversity and programmatic variety never seen before. However, they are exploited. These inventions costs money, so the space where they are implemented is no longer free – it is conditional space.



This endangers the public domain that incorporates this infrastructure of seamlessness and becomes increasingly interiorised, where spaces are replaced by entertaining forms of the private<sup>17</sup>. The space might suggest that it is open to all, but it comes at a cost.

Can this "infrastructure of seamlessness" be employed without inhibiting the socialness and publicness of a space?

In junkspace, every building is designed to be an iconic masterpiece which leads to architecture that no longer has a unique character or identity. Architecture thus becomes authorless. In this junkspace that is anonymous and characterless, the user within that space suffers the same fate. 18



How do you prevent the loss of identity of both architecture and the user?

Junkspace is an architecture of the convoluted and over engineered. It is an architecture marked by flashiness and

<sup>&</sup>lt;sup>14</sup> Koolhaas, R. (2002). "Junkspace." October **100**: 175-190.

<sup>15</sup> Ibid

<sup>16</sup> Ibid

<sup>17</sup> Ibid

<sup>18</sup> Ihid

unremarkable interest, but at the end of the day it is unmemorable and soon forgotten.

Movement in junkspace is dictated by convoluted signs with overcomplicated journeys, where individuals are numbly herded past every mode of over-stimulation like TV's, noise and shopfront displays. Movement in junkspace is easily destabilised in areas where unsynchronised movement is suddenly funnelled, like at escalators and near exits, leading to traffic and congestion. This is evidence of the awkward fit between the interior world of junkspace and the happenings of the world outside.<sup>19</sup>

Junkspace also takes no care to interact with its surrounding context and the space has no relation to site – instead the architecture rather creates an artificial bubble. Junkspace is a place of "connected isolation".<sup>20</sup>

At the same time, junkspace is over-flexible and undetermined. It balances precariously between being trendy and slipping into obsolescence. Paired with detailing that favours transient coupling rather than a permanent coming together, junkspace is volatile and can become irrelevant or run-down rapidly.<sup>21</sup>

How is a planned obsolescence such as Prices Fun Palace different from an unplanned, sudden slip into obsolescence? Is it not more important to design a building that can adapt and change with technological and social use over time rather than designing one destined for eventual irrelevance?

Junkspace is a collection of impermanent subsystems without superstructure - "orphaned particles in search of a framework or pattern".<sup>22</sup> The only certainty of junkspace is that of conversion and reconfiguration. Junkspace expands with its economy, but its footprint cannot shrink when it is no longer needed or used. Instead, it thins. This weak viability means that more and more programmes must be added for junkspace to remain viable.

<sup>19</sup> Koolhaas, R. (2002). "Junkspace." <u>October</u> **100**: 175-190.

20 Ibid

21 Ihid

22 Ibid

#### Contradictions of space

As made evident in the contradictions of junkspace, space is full of paradoxes. However, junkspace tries to conceal or supress the paradoxes, resulting in their extreme mutations.

For social space to allow rich activity and interactions, these paradoxes must be recognised and embraced, rather than disguised and rejected.

The contradictions of space relate to the paradoxical relationship between the concept of space, and the experience of space. It relates to the impossibility of questioning the nature of space [ontological form] and at the same time making or experiencing a real space [sensual experience]. <sup>23</sup>

Contradictions also lie in the disjunction between spaces and events and the order, collisions, and unpredictability in architecture that this disjunction creates. It must be recognised that in contemporary society, programmes are inherently unstable.<sup>24</sup>

An architecture of pleasure "lives where conceptual and spatial paradoxes merge in the middle of delight". <sup>25</sup>

To create spaces of pleasure, this disjunction between space and event needs to be understood and embraced. Architecture is constantly on the verge of change, so to frame and expect architecture to be stable and pre-determined, as has been done historically, stifles "architecture's pleasurable confrontation of spaces and activities".

How do you design an architecture of pleasure and delight that mediates conceptual and spatial paradoxes? How does this approach embrace the social?



<sup>&</sup>lt;sup>23</sup> B. Tschumi (1994) Architecture and disjunction

<sup>&</sup>lt;sup>24</sup> B. Tschumi (1994) Architecture and disjunction

<sup>&</sup>lt;sup>25</sup> B. Tschumi (1994) Architecture and disjunction

#### Space, event, and movement

Figure 10 Bernard Tschumi's space, event and movement from the Manhattan Transcripts

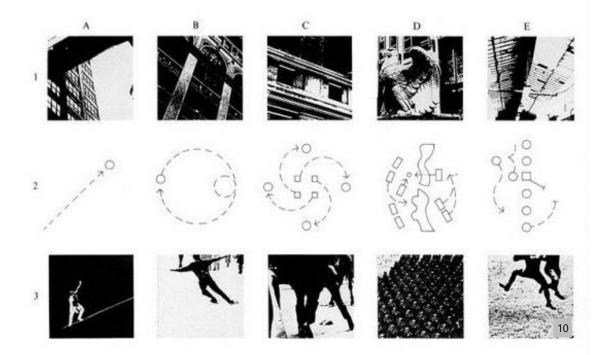
Space, event, and movement relates to Bernard Tschumi's three disjointed levels of reality and their role in the production of space. The uniting of the object, movement and event works against static architecture, and implies a dynamic conception of space and architecture. Space always marks the territory of social practice, so the questions of space as related to social practice must embrace the simultaneity of space and event.<sup>26</sup>

There is no architecture without programme, action, or event – it is the most dynamic and reactive parts of their disjunction and intersection that have the potential to define and create a playful architecture.

Understanding the disjunction of space could help to rewrite the movement of bodies in space, together with the events and actions that take place in the social and political space of architecture<sup>27</sup>.

Tschumi illustrates his conceptual investigation of the disjunction of space in the Manhattan Transcripts (1978-82). Images are taken from scenes of movies and are arranged in sequences of space, event and movement. These sequences convey an architectural metaphor for the city's potential (Figure 10). In this way Tschumi relates cinematography to architectural space, a tool he employs in many of his projects.

Does an architecture of complete pleasure and socialness lie in mediating conceptual and spatial paradoxes, and uniting the disjointed trilogy of space, event and movement?



 $<sup>^{\</sup>rm 26}$  B. Tschumi (1994) Architecture and disjunction

<sup>&</sup>lt;sup>27</sup> B. Tschumi (1994) Architecture and disjunction

#### 02. The Beauty of Instability

# Figure 11 Upending the typical plan- concept image (by author)

Social spaces are unstable and unpredictable due to the disjunctions between space, movement, and event. It is however in the mediating and uniting of the disjointed trilogy that an architecture of pleasure can be found.

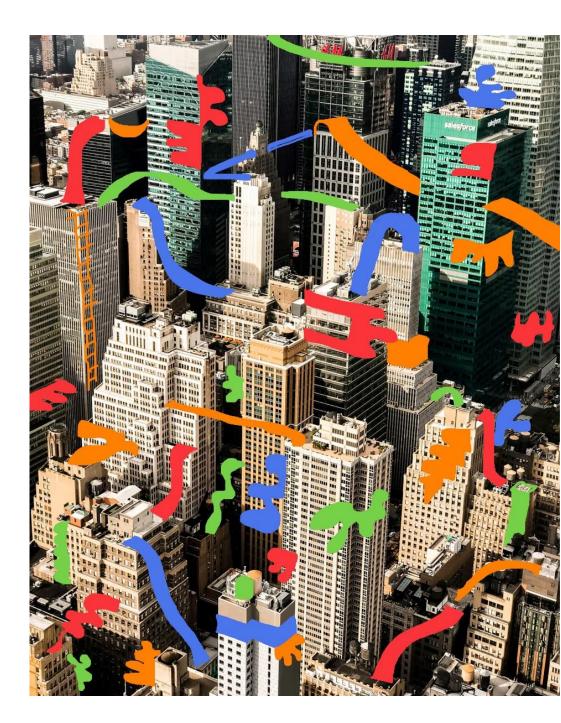
Therefore, I will explore an approach that facilitates the intersections of event and movement in space, achieved through the mediation of programmatic stability and instability that can lead to the production of a social, playful architecture.

Rem Koolhaas's concepts of the typical plan and compartmentalised flexibility provide an understanding as to how this can be programmatically and spatially mediated.

Technical analysis of OMA's Seattle library and SANAA's Shibaura Office Building will be brought in as examples of projects that have used innovative programmatic and technical approaches to create inherently social spaces that are flexible yet still have programmatic specificity, and the ability to encourage interaction and connection.

The purpose of the technical analysis is to understand how these buildings are spatially and technically constructed.

This will be addressed through a process of unpacking, exploring, exploding, and redrawing to illustrate how different planes and their junctions that accommodate for social open-endedness are achieved – like unpacking floor plates, enclosure and connection through void.



#### Indeterminacy and flexibility-The good and bad of the typical plan

Figure 12
Typical plan layouts
taken from Koolhaas's
Typical plan essay in
S, M, L, XL

Adaptability and multi-functional spaces are important requirements for social spaces to accommodate the inherently unstable and constantly changing nature of events. Space that is unable to adapt limits its own capacity for events, as well as the potential richness and depth of interaction within the space.

However, in another extreme, over-flexibility leads to vague and unidentifiable spaces.

In exploring the fine line between over-determined and over-flexible, Rem Koolhaas's 'typical plan' poses interesting ideas. Koolhaas explains the concept as:

Typical plan is an American invention. It is zero-degree architecture, architecture stripped of all traces of uniqueness and specificity. It belongs to the new world.<sup>28</sup>

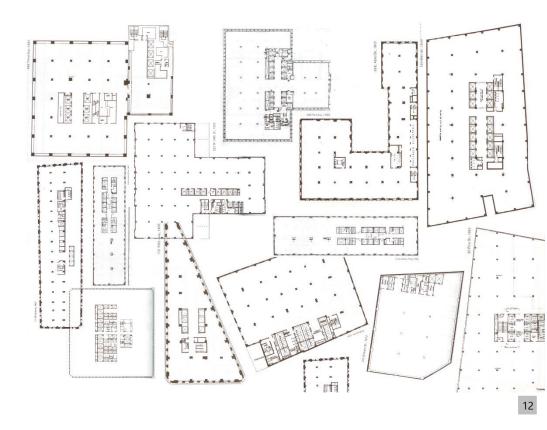
The typical plan comes with its own complexities and contradictions of the balance between flexibility and fixity. The typical plan arose from Koolhaas's investigations and interest in Manhattan skyscrapers and their planning with fixed and stable cores supporting flexible and open floor plans that are repeated on every level. The invention of the skyscraper created flexibility and allowed for programmatic freedom and richness. At the same time, it is programmatically undetermined with generic layouts on every level, which leads to a loss of identity.

'Typical plan' implies repetition and indeterminacy: to be typical it must be sufficiently undefined in that:

All other architecture is about inclusion, accommodation, incident, and event. Typical plan is about exclusion, evacuation, and non-event. <sup>29</sup>

Koolhaas takes the potential that the typical plan allows for in its richness and freedom of space and event, but reworks it to counteract the indeterminacy, over-flexibility and loss of uniqueness and identity that the typical plan also produces.

To achieve this, he shifts and re-shapes the concept of the typical plan in that there are still fixed and stable zones (like the core) and flexible and instable zones (like the perimeter floorplan). However, these are not stacked one on top of the other, and all zonesincluding the instable zones - have a tailored flexibility which still allows for freedom and interaction. This produces a compartmentalised flexibility.



<sup>&</sup>lt;sup>28</sup> Koolhaas, R. (1998). S, M, L, XL: O.M.A, TASCHEN - Typical plan 335

<sup>&</sup>lt;sup>29</sup> Koolhaas, R. (1998). S, M, L, XL: O.M.A, TASCHEN - Typical plan

#### Programmatic approach of instability

In order to create spaces that can hold and facilitate the unpredictable events of social space without hindering them, Rem Koolhaas developed an approach of compartmentalised flexibility which aims to balance indeterminacy and over-rigidity.

#### Figure 13 Compartmentalised flexibility. Grey as stable zones, blue as instable (by author)

# Compartmentalised flexibility is based on spatial separation between stable areas and unstable zones. It differs from the approach of the "typical plan" (with its central core and open plan perimeter) in that the stable and unstable zones are planned with programme and purpose, but still allow choice and levels of adaptability.

## Figure 14 Typical plan with

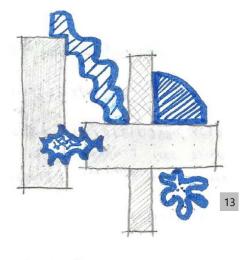
stable core and generic instable floors (by author) The scheme involves spatial compartments defined for a more specific performance within tailored flexibility (Figure 13), instead of just flexible and repeated multi-functional space as with the typical plan (Figure 12).

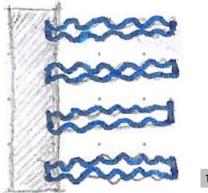
While the stable zones- the zones that are constant- hold together the instable zones, it is the instable and social zones (the fun) that give life and activity to the arrangement.

A project that employs the method of compartmentalised flexibility is Rem Koolhaas's Seattle Public Library. This project is analysed to understand how compartmentalised flexibility is approached, programmatically organised, and layered. It is to explore how these stable and unstable spaces work with one another and are connected, and how this approach of compartmentalised flexibility enhances and protects the tailored flexibility of the social spaces – like preventing growing book collections from overflowing into these dedicated social spaces.

The Seattle library is also analysed on a technical level, as to how the stacking and offsetting of the components is structurally achieved with different planes and compartments, and how such a complex space is enclosed and detailed.

How do you structurally achieve a stacking, offsetting, and enclosure of compartmentalised flexibility?





Case Study - B

#### Seattle Public Library

OMA — Rem Koolhaas & Joshua Ramus Seattle, USA 2004

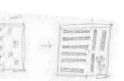


Figure 15
Consolidation of

Figure 16 Reshuffling of program

program types

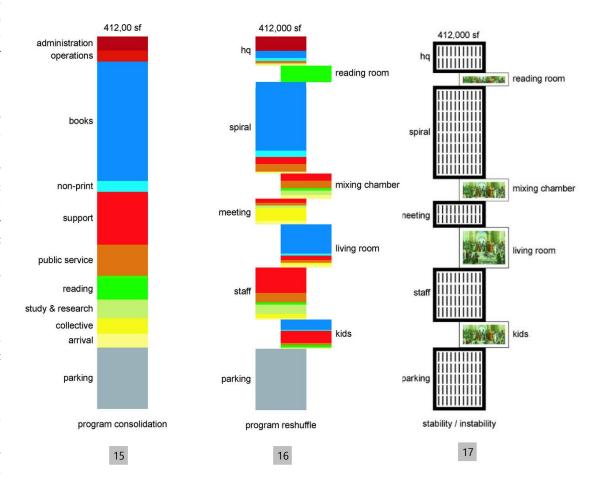
required by brief

Figure 17 Shifting of stable/instable zones informed by program In libraries, the employment of the typical plan layout does nothing to prevent growing collections and bookshelves on generic floors from encroaching on the spaces dedicated to interaction and activity. Programmes are not separated, rooms or individual spaces are not given unique character, and departments are organised separately on different floors.

The approach of compartmentalised flexibility was therefore employed in the Seattle Library to protect the social areas and to make sure that the space remains intact in the future, even with growing collections. To achieve this compartmentalised flexibility where each section is dedicated to, and equipped for specific duties, many programmatic and media requirements were examined, where programmatic clusters were grouped by identifying like-for-like uses (Figure 15).<sup>30</sup> This programmatic clustering and compartmentalised flexibility results in the reshuffling of the library to promote a richer event-structure through programmatic diversity and infrastructural means (Figure 16).

To combat the growth of collections in social spaces, as well as prevent flatness through separating programmes by different floors, a "book spiral" was created. The book spiral is arranged along a continuous ramp travelling up the building, from 000-999.

The grouping of programmatic clusters resulted in splitting the volume into **five stable platforms** that are zones of regularity, and **four instable, floating planes** that are zones of irregularity (Figure 17). The stable zones comprised of programmes like the collection and offices whose use and layout would remain relatively steady. The unstable zones are socially shared areas of



<sup>30</sup> Koolhaas, R. (2004). Content. Köln, Taschen.

#### Figure 18

Diagrammatic section of stable planes

#### Figure 19

Diagrammatic section of instable planes

#### Figure 20

Amalgamation of planes and programs

#### Figure 21

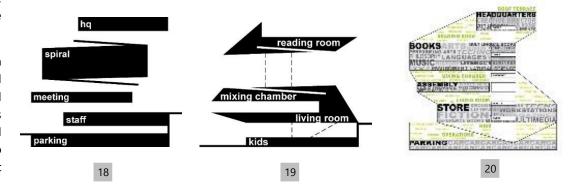
View of yellow escalator from book spiral interaction that are dynamic like the mixing chamber, reading room and kids space – spaces for work, interaction, and play. The unstable zones of interaction provide energy for the rest of the spaces (Figure 18-20).

The Seattle Library creates public space and promotes circulation and social encounter inside the building. The areas of stability and instability are held together with a system of spatial continuity and circulation. The core of the stable platforms is the continuous ramp that snakes up. The vertical interior boulevard was designed to pull social activity up through the spaces. Colour is used to indicate circulation in the library, an example being the bright yellow escalators that travel through the library (Figure 21).

The stable/instable platforms are not stacked directly on top of each other like typical high-rise building. Instead, they shift to respond to specific elemental conditions, of external views as well as how it affects the conditions of the interior spaces. This shifting considers the massing of the floating platforms, lateral forces, and seismic activity (Figure 22 - 23).<sup>31</sup>

Cities are inherently messy and filled with conflict and contradiction; it is these events that give it life. The Seattle Library embraces these contradictions and acts as a space that gathers and promotes the density, diversity, and stimulation of the urban, social experience. The library achieves this while simultaneously performing its function of organising, storing and dispensing knowledge to everyone<sup>32</sup>.

How are the stable platforms, instable floating planes, and enclosing "skin" that allow for this compartmentalised flexibility structurally achieved?





 $<sup>^{31}</sup>$  Böck, I. and R. Koolhaas (2015). Six Canonical Projects by Rem Koolhaas: Essays on the History of Ideas.

<sup>32</sup> Koolhaas, R. (2004). Content. Köln, Taschen.

#### Figure 22

Site plan and surrounding views

#### Figure 23

Indents and shifts respond to views and environment

#### Figure 24

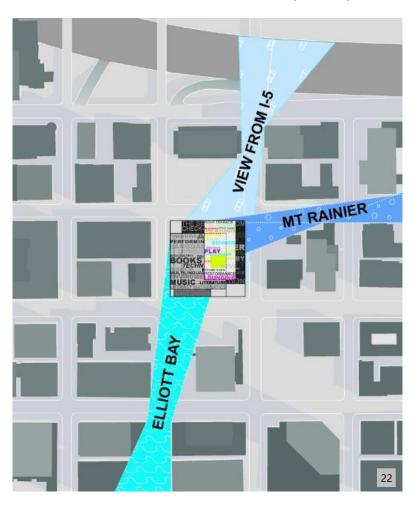
Interior view of Seattle Library

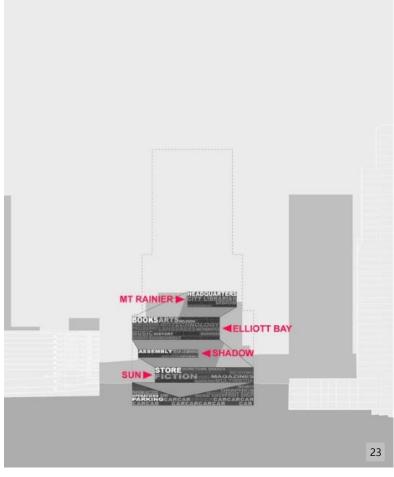
#### Figure 25

Internal View of Seattle Library

#### Figure 26

Exterior view of Seattle Library

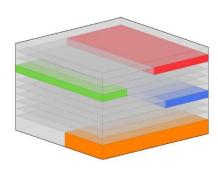








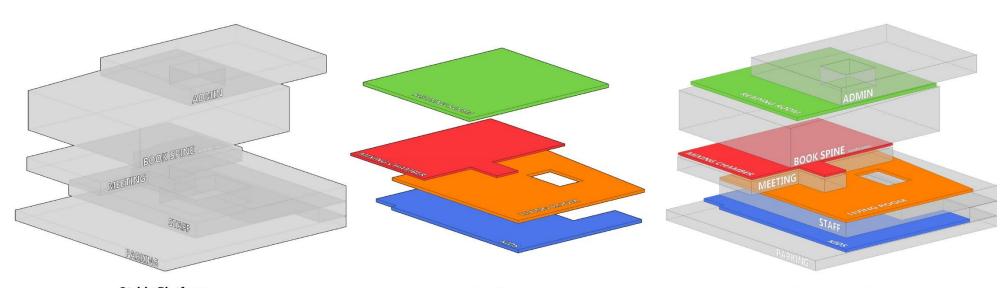




Most libraries employ a typical plan approach with generic floors that are stacked one on top of the other, and where the libraries growing collection often overflows into social spaces and programmes.

Book collections are also separated by department on different floors, meaning that accessing interdisciplinary resources is a process.

However, with the approach of compartmentalised flexibility, the programme and media were consolidated, and then grouped according to like use. This created dedicated spatial compartments with specific use. These spatial compartments consisted of 5 "stable" platforms and 4 "instable" trading floors. These were not stacked one on top of each other, but rather offset and cantilevered to create connected voids and to respond to environmental factors.



#### **Stable Platforms**

These house the administrative and fixed programmatic requirements.

This includes parking, staff spaces, storage, meeting areas, the book spine and administration offices

#### **Instable Platforms:**

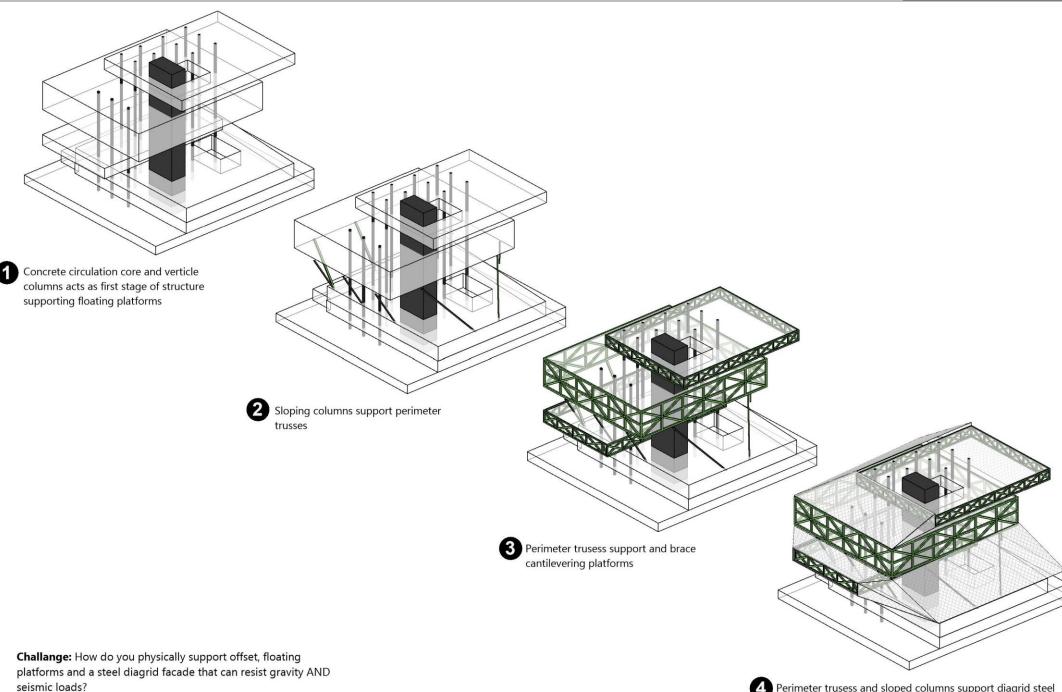
Social, active, and floating platforms. These are the fun!
This includes the kids' space, public living room, the
mixing chamber, and the reading room

#### **Instable and Stable platforms:**

The areas work together, but do not overflow into their neighbouring programme

Technical Analysis (Analysis by author)

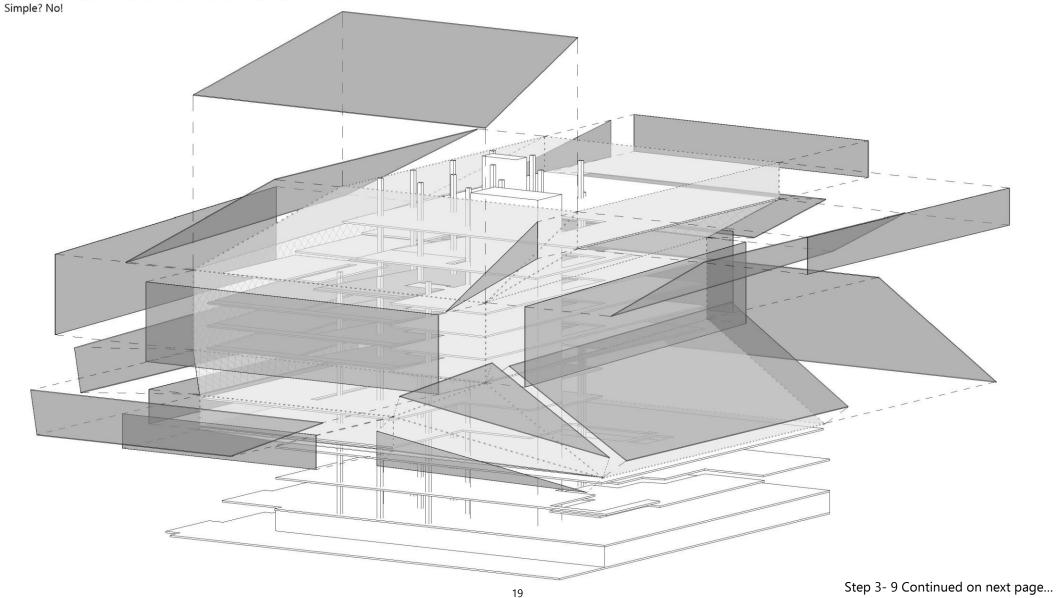
Loadbearing and Seismic Structural Systems



Solution: Refer to diagrams 1-4

Perimeter trusess and sloped columns support diagrid steel exoskeleton. This steel mesh interconnects the perimeter trusses (with slip conncetion). Resists wind and earthquake loads and supports glass curtain wall.

- Challange: How do you envelop the stable/instable platforms while retaining interconnected social spaces and voides, as well as mainaining visual connection to the outside? As well as creating a feeling of a transparent building that floats with no apparent support? (wow) Solution: With a folded, geometric, multi-sloped crazy facade.
- Challange: How do you actually, physically, detail and construct this facade?
  Solution: Through a skin system with thousands of glass panels in a multi-faceted steel web.

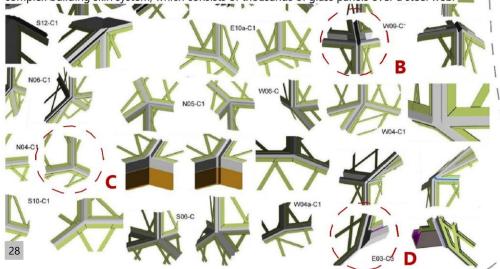




However, as we can see by the dramatic folds and planes of the Library's glass exterior, not many planes are vertical or have perpendicular junctions. This complicated and dramatic folding façade is able to accommodate and envelope the stacking and shifting of the programme and platforms.

So, how do you detail so many complex junctions that meet at numerous angles?

An interdisciplinary team of contractors, engineers and facade specialists worked with OMA to develop a "kit of parts" of to the junctions required. BIM was used to model the library's complex building skin system, which consists of thousands of glass panels over a steel web.



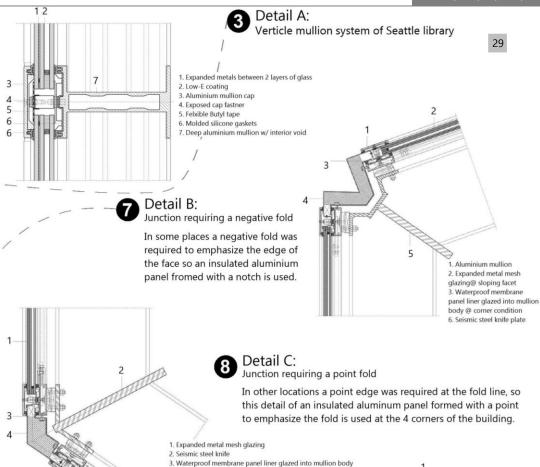
To take a closer look at the construction details of some of the junctions, refer to detail b, c and d

Figure 27 Folded facade Junctions

**Technical Analysis** 

Figure 28 BIM generated facade junctions by Hoffman Construction Company

Figure 29 Junction Details by LMN Architects

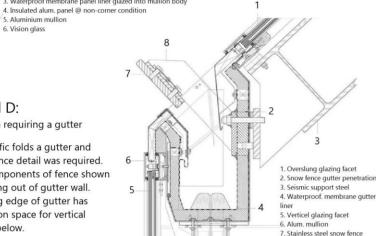


#### Detail D:

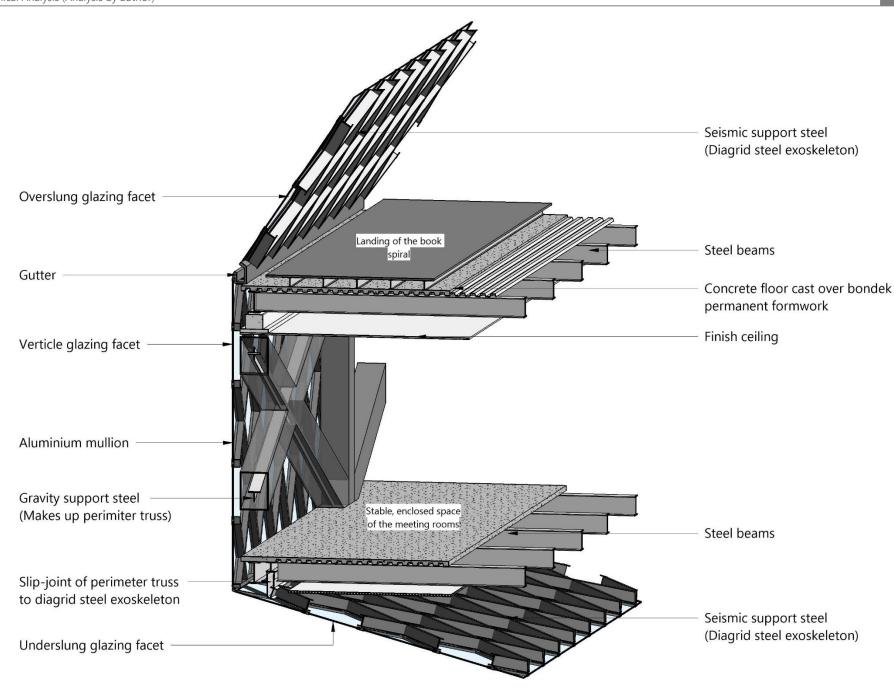
Junction requiring a gutter

5. Aluminium mullion 6. Vision glass

At specific folds a gutter and snow fence detail was required. -S/S components of fence shown extending out of gutter wall. -Leading edge of gutter has expansion space for vertical façade below.



8. Snow fence support armature



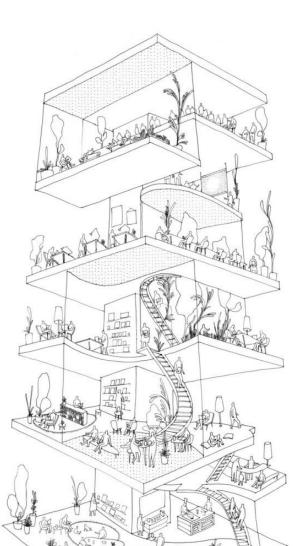


Figure 30
Shibaura Office Building
concept section
illustrating the social,
drawn by Jody Wong

Case Study - C

#### **Shibaura Office Building**

SANAA (Principal Agent: Kazuyo Sejima & Associates) Big Bay, Tokyo, Japan 2011

SANAA is the architectural office of Kazuyo Sejima and Ryue Nishizawa. Their work deals with the necessary tensions and contradictions of space, and in doing so they create buildings that appear harmonious. Their iterative design process chews through complexity, developing refined solutions that are seemingly abstract and simplistic. Yet, it still promotes complexity in social interactions and programme. SANAA approaches architecture as creating space for interaction and a chance to redefine social aspects and the conjunction of their connections.

SANAA creates a system of erasing and eroding the conventional hierarchy in the building along with their homogenisation - no element takes precedent or overpowers the other.

The Shibaura office building is located in the big bay area of Tokyo. The building houses a printing and advertisement company. It also has shared office spaces that can be rented out, a community events space and a public area that includes a café which acts as an extension of the street.

All spaces – public, private, and outdoor – are incorporated together to provide the feeling of a shared environment. Through the layering of different floor plates, spatial diversity and visual continuity between activities is created.<sup>33</sup> This is another approach of compartmentalised flexibility.

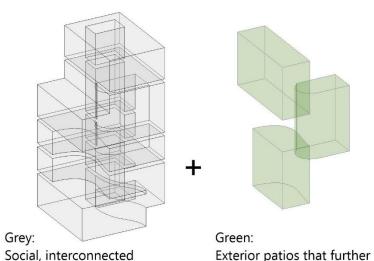
Strict zoning regulations limited the building to 5 floors, so SANAA worked with this creatively, approaching it as a 30m high volume to work within.

Within this envelope, each floor plate was shaped according to the

<sup>&</sup>lt;sup>33</sup> Márquez Cecilia, F., et al. (2015). SANAA, Kazuyo Sejima, Ryue Nishizawa, 2011 2015 : sistemas de continuidad = continuity systems. Madrid, El Croquis.

Figure 31 Internal and external voids and planes (by author)

Experience of connection between levels and visual link to context



connect the levels.

Each level seems to overlap the next, leading to the spatial experience of flow between the floors. 31

space of building

programme it would accommodate, and ceiling heights were varied. "The space is continuous but the distance between activities changes".<sup>34</sup>

Semi-outdoor terraced spaces that are clad in a light metal mesh connects the building to the surrounding context, and these terraces surround the shared office spaces. The activities within the volume are connected gently to each other and to the city.<sup>35</sup>

Connection to the surrounding context is achieved both spatially - through the ground floor public space, terraces, and viewpoints from the top – and visually through visual transparency and connection.

The simplicity and abstraction of SANAA's work is achieved through careful consideration of the structure and its monochromatism.<sup>36</sup>

It is also achieved through the carefully considered relationship between stability and instability, de-hierarchisation within the planning, atomisation of programming without isolating it, and movement and connection within the building. This culminates in the creation of a unique and social space.



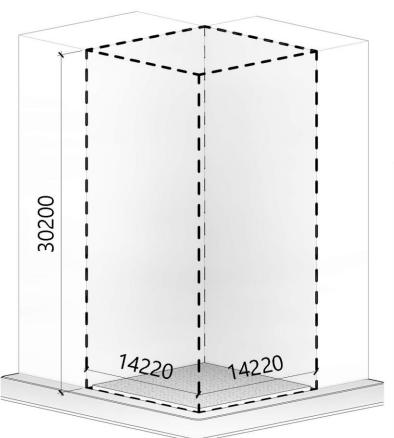
<sup>&</sup>lt;sup>36</sup> Sejima, K., et al. (2004). <u>SANAA, Kazuyo Sejima, Ryue Nishizawa, 1998 2004 : océano de aire = ocean of air</u>. Madrid, El Croquis.

<sup>34</sup> Ihid

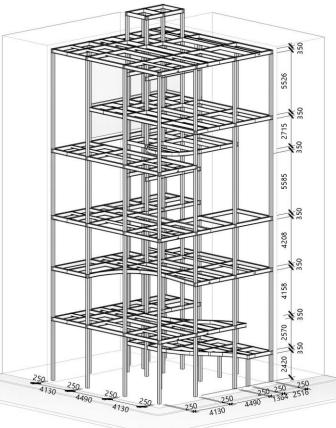
<sup>35</sup> Ibid

Technical Analysis (Analysis by author)

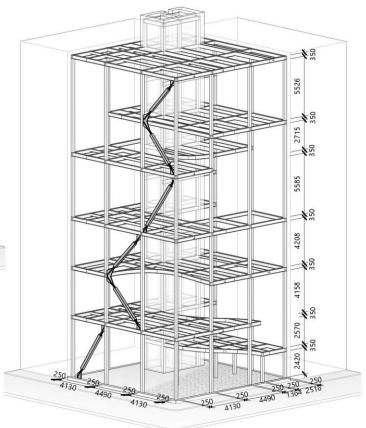
Structural Build-Up



A small corner site with a 30m height restriction dictates the void to be worked in

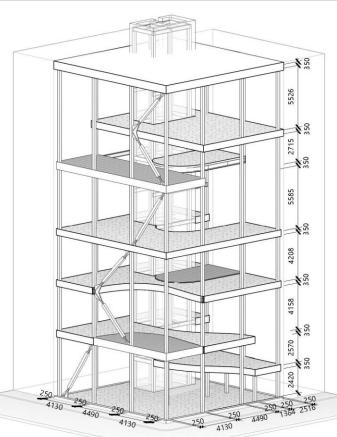


A steel structure is used to create a frame within which to create floor planes of different hights and shapes



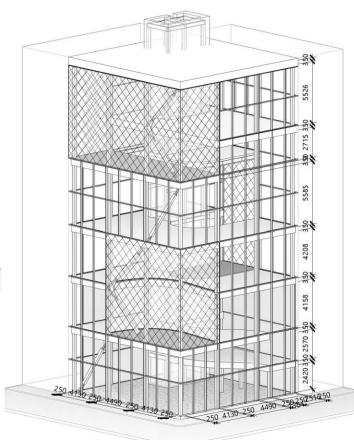
SHIBAURA HOUSE 02. The Beauty of Instability

Technical Analysis (Analysis by author)

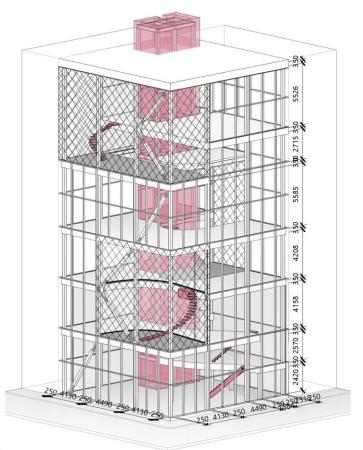


1 Floor planes of different heights are created, where each floor will have a specific program. Interior and exterior areas are created, as ell as voids that connect the spaces across levels.

Levels | Shapes | Inside-Outside | Voids

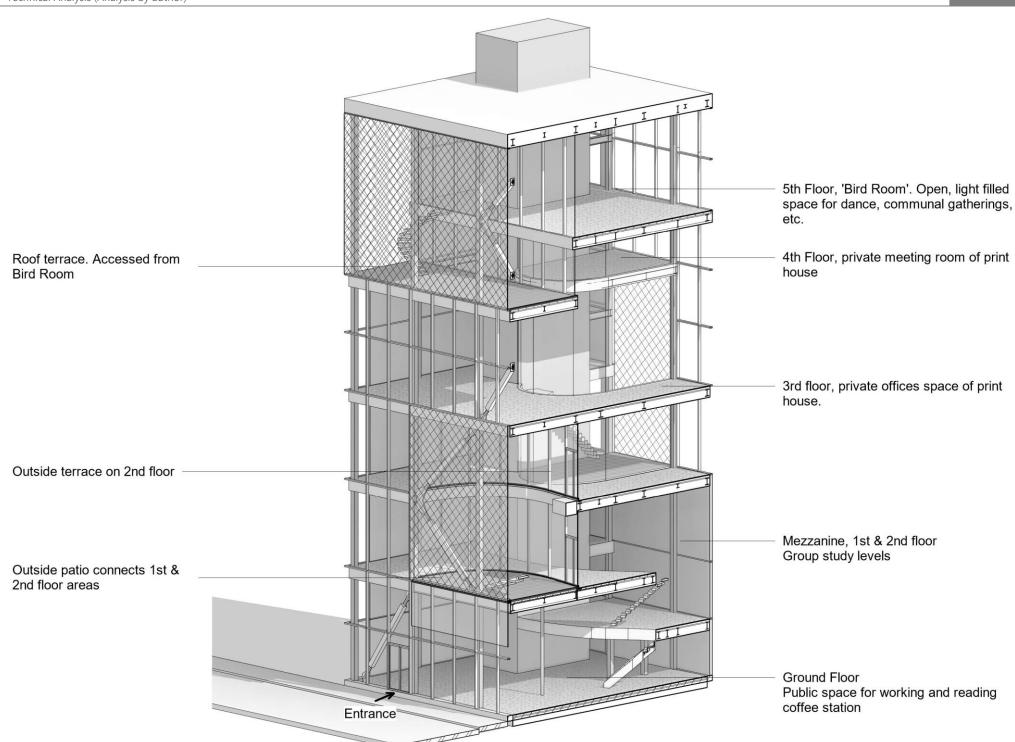


The interior spaces are enclosed with glazing and the exterior spaces are enclosed with a light wire mesh. Both materials maintain visual connection to the surrounding context.



3 Curved staircases (internal and external) allow for an experiential ascent through the building. A staircase and elevator core can be used for more direct access.

Technical Analysis (Analysis by author)



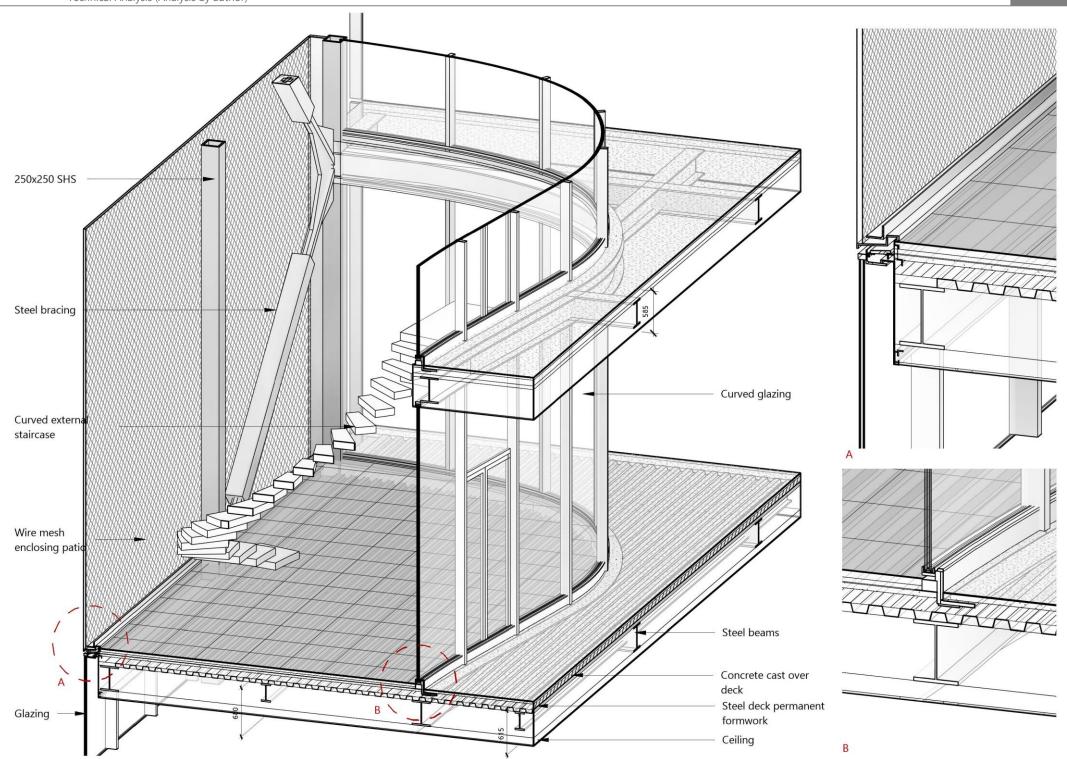


Figure 33
Shibaura House
Circulation
(Image by author)

## Figure 34 Seattle Library Circulation (Image by author)

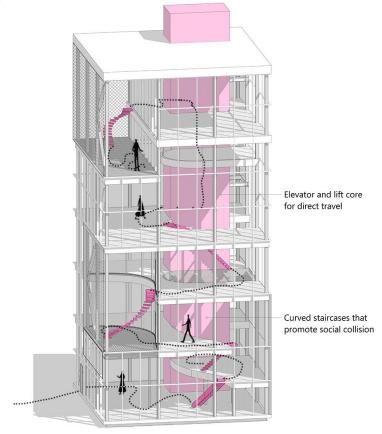
### Dynamic spaces – Connections and collisions, socially

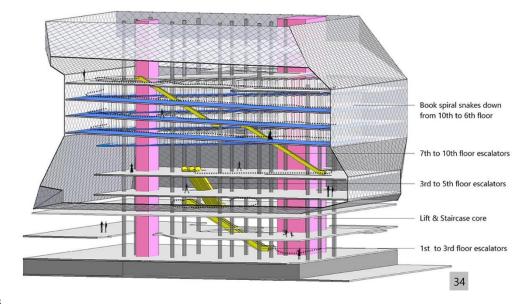
Both the Seattle Library and the Shibaura House projects place immense importance on the social aspect of space. One of the ways in which this is achieved is through unique programmatic approaches that work and engage across levels. Movement as well as physical and visual connections are paramount to the social interactions that occur within the buildings - each building has its own unique method of enhancing movement and collisions.

In the Seattle Library, the areas of stability and instability are linked via a system of spatial continuity and circulation. The vertical interior boulevard was designed to pull social activity up through the spaces, and all escalators are colour coded to distinguish circulation routes quickly and easily. The escalators in the Seattle Library move through different sections of the library, whilst maintaining transparency so that the user can still feel connected and see what is happening inside the building.

The Shibaura house has a circulation core with stairs and an elevator for more direct access, but it is the organic and light staircase that snakes between the levels which encourages rich opportunity for connections and collisions.

Is movement and connection – that is accessible to all forms of mobility – enough to create collisions and interaction?





33

#### New (non)hierarchies

Can historical and institutional conceptions of space and programme be unravelled through a design approach that embraces the inherent contradictions of space and that delicately balances flexibility and fixity in architecture?

The main goal of the Seattle Public library is to provide public space and access to resources. This is achieved with a responsive structure and a programmatic approach of grouping similar programmes that facilitate the experience within the space.

This reshuffling of traditional library spaces, coupled with the shifting of the stable/unstable platforms to respond to the internal and external context, challenges the hierarchical order of traditional libraries and produces new hierarchies to embrace the social space. This can be seen through the continuous ribbon of the book spine, or in the mixing chamber where librarians are not chained to their desk but are able to move freely within the mixing chamber to enable maximum interaction between librarian and patrons.<sup>37</sup>

SANAA's Shibaura Office Building tries to rethink the typology of an office block that caters to a single company and use, with programming that outlines - but not dictates - the way in which each floorplate within the volume is used. This approach defies existing hierarchies of the typology, and tries to incorporate public and social interaction within the space.

SANAA's work explores more relaxed and less concentrated ways of experiencing space, in a way that allows for a fluid relationship with architecture whilst still promoting complexity in social interactions. This process involves homogeneities and non-hierarchical relationships that order atomisation of the structure, producing a complex lightness.

Both buildings create new, playful, and connected (non)hierarchies within social space.

The discussion in new (non)hierarchies relates to a rethinking and reshuffling of traditional and conventional approaches in architecture. How can this same approach of rethinking prevent contemporary architectural trends of creating objects that are isolated from their context?

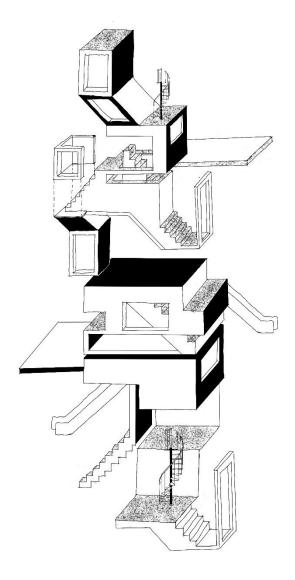


Figure 35 New (non) hierarchies (Image by author)

<sup>37</sup> Koolhaas, R. (2004). Content. Köln, Taschen.

#### 03. Magnet over object

**Figure 36**Magnet over object,
(Image by author)

a- Geometrical misfits that act as isolated icons

b- Forms that work within and engage with context, identity through collection. Stacking and connecting. Delight and fun! Contemporary architecture often places a stronger emphasis on form – on creating an icon - rather than focusing on the social capacity, the connections, and the urban value that could be made possible. This is when architecture is at danger of assuming a universal quality and acting in isolation from it surrounds, instead of acting as public and social space activators and attractors that embrace disjunction and instability. Case studies of Frank Gehry's Guggenheim in Bilbao and Cedric Price's unrealised "Magnets" project will be examined to highlight the intentions and functions of magnets over objects in space.

#### **Universal Quality**

As discussed in the notions of Junkspace and the typical plan, many contemporary architectural spaces assume a universal quality, with little to no identity or character with its context, to its users or in its programme. This results in built form that stands as an object in space.

A loss of unique character which leads to this universal quality is often the result of trying to maintain maximum programmatic flexibility, in the design of a structure as overall object or masterpiece with little consideration of the atmosphere or character of the spaces, both inside and surrounding the building.

Bernard Tschumi recognises this trend where global architects – starchitects – design free-standing buildings distinct from their immediate surroundings, "producing geometrical misfits"<sup>38</sup>. Tschumi discusses the idea of 'concept-form' in which he poses the question of how to create a lively and urban city quarter instead of adding to a collection of spectacular architectural icons. Rem Koolhaas also succinctly explains it as "the imposition of a theoretical average at the expense of both character and precision – entity at the price of identity."<sup>39</sup>





<sup>&</sup>lt;sup>38</sup> Tschumi, B. (2012). Architecture concepts: red is not a color. New York, Rizzoli.

#### Guggenheim in Bilbao

Frank Gehry

Bilbao, Spain 1997



**Figure 37** Guggenheim in Bilbao Concept sketch

Figure 38

context

Figure 39

context

Ariel View of Guggenheim and

dissociation with its

Guggenheim in its

A globally recognised and contested example of an object or masterpiece that is free standing and unconnected to its context is the Guggenheim in Bilbao. It is designed by Frank Gehry and construction was completed in 1997. In Junkspace, Rem Koolhaas uses the Guggenheim in Bilbao as an example of the condition of historical spaces and atmospheres that are transfused with shiny and grand additions to generate commercial viability. A capitalist-driven adaptive reuse goal that does little to respect the history and existing fabric of a space.<sup>40</sup>

The museum is seen as a symbol of gentrification and cultural imperialism which overlooks the opportunity to support the community and cultural life in the city.<sup>41</sup>

The building limits the role of architecture to merely an icon – an overpowering structure that interrupts the landscape, and which fails to create public space. The museum is too imposing, too spectacular, or too lacking in autonomy.<sup>42</sup>

It is not to say that it does not attract a lot of attention and generate income through tourism. However, it does not support the existing public space and contextual fabric. It is truly a masterpiece of isolation.

The Guggenheim in Bilbao is a good example of a fancy, freestanding object that does not enhance or engage with its context.



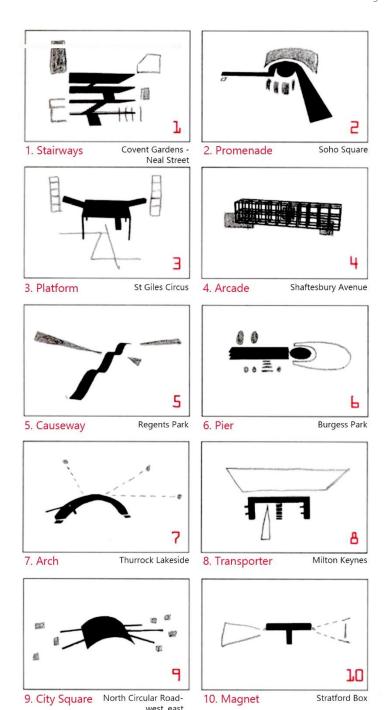


<sup>&</sup>lt;sup>40</sup> Koolhaas, R. (2002). "Junkspace." October **100**: 175-190.

 $<sup>^{41}</sup>$  Guy Hedgecoe, H. W. (2012). Bilbao's Guggenheim continues to divide.  $\underline{\text{DW}}.$ 

<sup>&</sup>lt;sup>42</sup> Guy Hedgecoe, H. W. (2012). Bilbao's Guggenheim continues to divide. <u>DW</u>.

Figure 40
Price's 10 Magnets &
Locations. Images taken
from 1997 exhibition
catalogue, edited by
author



#### **Public space activators**

How do you design an intervention that acts as an attractor that generates social and public space rather than an object or icon?

Instead of creating a masterpiece or an object which dominates its context, architecture that functions as a public space activator that produces activity, movement, and identity should be prioritised. In this, the public and social space must be most important, rather than the potential iconic status of the structure.

An experimental project that explored the potential of architecture as generators for social and public events was Cedric Price's "Magnets".

Case Study - E

### Magnets

#### Cedric Price

Exhibition arranged by The Architecture Foundation held in London 18th April to 8th June 1997

"Magnets", an exhibition held in 1997 at the Architecture Foundation in London, showcased Cedric Price's exploration of small structures that would act as generators of interest and activity.

The exhibition aimed to expose the weakness of contemporary architectural culture which focuses on building as an object. This phenomenon produces attention seeking blobs that are plopped into urban contexts to draw attention and fuel local redevelopment. These icons do not strengthen social cohesion, but rather focus on boosting status - as seen in the Guggenheim in Bilbao.

Price argued that the permanence of buildings lead to accepting constraints like the privatisation of space and institutionalisation, rather than exploring the possibilities of change and adaptability. To contradict this phenomenon, the "Magnets" would act as attractors rather than icons.



Figure 41 Sketch for Magnet no. 3 (Platform above the plaza at St. Giles'



Figure 43 Sketch for south end of Magnet no. 7 (Arch at Lakeside Shopping Centre in Thurrock)



Figure 45 Sketch for Magnet no. 8 (Transporter, Milton Keynes)



Figure 42 Montage for Magnet no. 6 (Burgess Park)



Figure 44 Sketch for north end of Magnet no. 7 (Arch at Lakeside Shopping Centre in Thurrock)



Figure 46 Sketch for Magnet no. 9 ('City Square' spanning the North Circular Road)

MAGNET

These magnets would be part of the urban mix rather than objects that overpowered their surroundings. Price was concerned with the activities, possibilities, and pleasures that architecture generates and not in the production of a glitzy, iconic building. He also notes that "Buildings cannot be cures for social problems they are too slow, too solid, too late"43

The Magnets proposed were ten short life structures that would provide public amenities and stimulate new patterns of public movement<sup>44</sup>. These structures included piers, arcades, promenades, and stairways (Figure 40).

The magnets would function to improve access, allow for better views of the urban landscape, create new public spaces, and increase the use of existing space.

The interventions would occupy space not usually seen as usable sites, like the airspace over a highway. This approach to occupation would insert delight and fun into underused or misused sites.

The magnets would be deliberately and inherently mobile to prevent redundancy; they were an attempt to re-arrange urban hierarchies. Price stated that:

> Magnets are both pragmatic and polemic in the way that they turn space to public advantage.45

How can the experimental ideas of Cedric Prices Magnets be used in an architectural design approach – within a context like Cape Town?

How do, or even can, magnets within a space provide greater identity and atmosphere to its users as well as its surrounding context?

<sup>&</sup>lt;sup>43</sup> Price, C. (1997). Cedric Price: Magnet. T. A. Foundation. London.

<sup>44</sup> Ibid

<sup>&</sup>lt;sup>45</sup> Ibid

# 04. Identity and Atmosphere

As discussed in the section magnet over object, how does creating social space activators that turn space to public advantage allow for greater connection, as well as identity and atmosphere?

Identity and atmosphere also contend with tensions and paradoxes. The lack of identity and uniqueness inhibits emotional cohesion and social interaction, while a fixed identity does not allow for change and growth.

In this section I will look at how to approach identity that is both recognisable, as well as can adapt. The case study of OMA's collaboration with PRADA will be examined, specifically looking at the PRADA epicentre in New York.

Atmosphere is about spatial experience - about event in space, and the users experience in that space. I will then explore how manipulation and abstraction of structure and material creates a spatial effect by looking at SANAA's 2009 Serpentine Pavilion.

# Architecture - an identity provider?

How does identity create and promote interaction within social space? How many types of identity are there, and is too fixed an identity a bad thing?

Identity can relate to national or corporate identity, or to the character of a site and its historical identity. Identity can relate directly to the identity of the user, or to the atmosphere and feeling that is created in a space. I am sure that many more aspects of identity can be added.

It is important to analyse not only how architecture expresses personal, community, civic, and national identity, but also how buildings and places increasingly need to contend with issues relating to ethnic or gender identity. However, in "Typical plan" Koolhaas discusses Zero-Degree architecture that represents "the plan without qualities". The typical plan has no uniqueness and specificity. <sup>46</sup> The typical plan marks a significant milestone because it primarily operates within the absence of content and identity.

However, to operate within the absence of content and identity hinders emotional cohesion and social interaction. These are created through the ideas of community association where members believe that they share something with one another- a unified identity.

There are also down sides to a well-determined, fixed identity because the stronger the identity, the more it imprisons and resists contradiction and adaptation.

How do you create a space that has identity and allows the user to express or develop their own, without it being so fixed that the space cannot adapt or change?

An interesting project to analyse in terms of its link to identity is Rem Koolhaas's work with the fashion house Prada. This case study could be regarded with a degree of scepticism as to the appropriateness of a connection between a luxury fashion brand and the exploration of a playful and social architecture, but interesting points about recognising and experimenting with identity can be gained. In a way, how architecture can act as an identity provider.

<sup>&</sup>lt;sup>46</sup> Koolhaas, "Typical Plan," 336.

Case Study - F

# **Prada Epicentre** OMA – Rem Koolhaas

New York, SOHO, USA 2001

Figure 47
Prada Epicentre's
concealed stage and
social stairs

OMA was commissioned by Prada to design flagship stores in New York, Los Angeles and San Francisco. Prada is a highly defined, commercial brand, so Koolhaas needed to come up with innovative and experimental ways in which to renew its identity and aura. For Koolhaas the collaboration with Prada offered the opportunity to reinvent a historic identity.

He achieved this by suggesting a strategy that would involve two components. The first was to use the **typical store** to express the recognised and stable features of the brand. The second was to create a unique store as an **epicentre** for the new identity.

The uniqueness of the epicentre stores would become devices to renew the brand by counteracting and destabilising any perceived notion of what Prada is and might become. The epicentres would also act to positively charge the larger mass of typical stores. <sup>47</sup> According to Koolhaas, the use of the different store types would do away with the imprisoning effect of a fixed brand identity. The epicentres brought in strangeness, rawness, and an unusual materiality to disrupt the brand image. This inconsistency and rupture is an essential part of the strategy of ensuring that the brand stays relevant. As Koolhaas describes it:

common is smooth, unique is rough. ... Typical is smooth, invention is rough. <sup>48</sup>

In these projects Koolhaas embraces the maximum assortment of options and typologies that are not typically commercial or linked to shopping. These include provisions for "public space" such as cultural events and in-between space without specific purpose.



<sup>&</sup>lt;sup>47</sup> Koolhaas, "Junk Space," 168.

<sup>&</sup>lt;sup>48</sup> Koolhaas et al., Projects for Prada, 60-4.

Figure 48 Prada Epicentre view up the stairs that act as social seating and display space

The New York Epicentre includes a runway, an elevator that doubles as a display, mirror walls and a large surface for wallpaper that changes every season. Using wallpaper as a changing element maintains a constant invention without affecting the structure. Adding to the options and user experience is a fold-out stage that is referred to as the 'shoe theatre' which doubles as a space for public performances.

Design tools previously identified with Prada like green walls and glass display cases have been employed in new and different ways.

Prada conveys luxury, and - as Koolhaas has noted - luxury is stable. So, excitement needs to be generated. In this way the store does not want to provide shopping alone, but rather draw attention, intelligence and even irregularity. In this way the unique store function generates surprise, mystery, and multiple identities. As Koolhaas says:

> massive change makes stability exciting. In order to incorporate stability into a system of continuous innovation (fashion), adopt a model of dynamic equilibrium, maximizing both dimensions to realize paradoxical ambitions. The more stable the brand, the more you change.49

and of the state of the second 

<sup>49</sup> Koolhaas et al., Projects for Prada, 60–4.

Figure 49 Prada Epicentre dynamic components that counteract stable identity

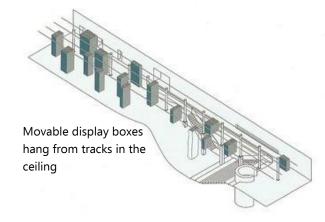
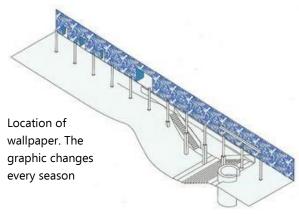
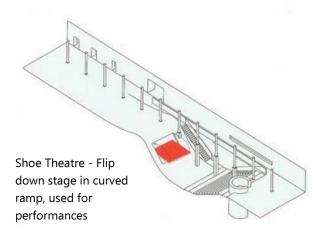


Figure 50 Prada Epicentre Wallpapers by 2x4 Design Studio over the years











CANCELLATION, 2002



GUILT INC., 2005



NOTORIOUS WOMEN, 2006



FLORID, 2007



MASKED/HOODED WOMEN, 2007



ALMOST BLUE, 2010



**Figure 51** Atmosphere collage



#### Atmosphere

Atmosphere relates to spatial experience; it is about the sensory qualities and how this is shaped through intersubjective interactions and event.

If atmosphere is a phenomenon of the reaction between subject and object, is there atmosphere without a component of the social?

Atmosphere is a distinguishing event of the reaction between subject and object, and how that is mediated. This event involves the viewer at the same time in the task of the perception of space and its production. The sequences of experiences also plays a fundamental role in the event in the interplay between space, activity, and user.

Atmosphere relates to the feeling created in space when considering simultaneous perception and interrelation between subject and object.<sup>50</sup>

SANAA's work is exemplary in how architecture and its structure is manipulated to create a spatial affect - atmosphere.

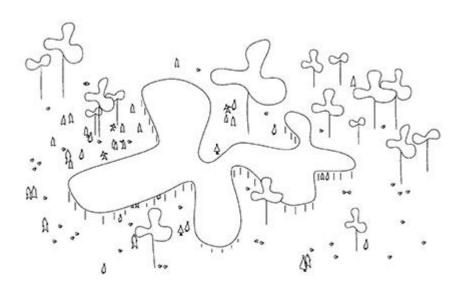
The objective of SANAA's architectural work has similarities with the theories of Bernard Tschumi's in that it "aims to reinscribe movement of bodies in space, together with the actions and events that take place in social and political realm of architecture."<sup>51</sup>

In SANAA's work, they are acutely aware that space and social practice are inseparable. Their architecture becomes a specific exchange area that creates free zones, and ways of perceiving them, that contrasts with those that structure our everyday lives. These contrasting structures stimulate inter-subjective exchange.

<sup>&</sup>lt;sup>50</sup> Sejima, K., et al. (2004). <u>SANAA, Kazuyo Sejima, Ryue Nishizawa, 1998 2004 : ocean of</u> air. Madrid, El Croquis.

<sup>&</sup>lt;sup>51</sup> Tschumi, B. (1981). <u>The Manhattan Transcripts</u>. London, Wiley; 2nd edition (April 29, 1994).

Figure 52 SANAA Serpentine Pavilion concept sketch



Their work functions as an instrument that can activate a spatial effect. The spatial and material organisation creates an external effect that alters the stability of the surrounding spaces and charges it with tension, properties, and structure which create events and perceptions. In this, architecture takes on an immersive form where "perception involves the experience of locating the body in relation to space." <sup>52</sup>

The physical resistance and bearer capacity of materials play a role in the building's spatial definition, as does the way in which these are set up to affect the way the space is experienced.<sup>53</sup>

In SANAA's work, a serene and harmonious atmosphere is achieved through an ambiguity of scale, and by minimising the objects main features - like the site, form and materials. This leads to the experience of depth being fundamental. As the attention to thickness distorts, the visitor is subjected to a somewhat altered state of perception through changes to what is normally experienced.

This design methodology creates spaces where there are feelings of uninterrupted volumes - a blurring between boundaries that liberates the user from standard spatial hierarchies and perceptions, thus enabling connected and ethereal social spaces.

How is this spatial effect, that relies on a distorting of depth and barriers to create ambiguity, detailed, and constructed?

In further exploring this question, a technical analysis of the construction of SANNA's 2009 Serpentine Pavilion will be analysed and redrawn.

 $<sup>^{52}</sup>$  Sejima, K., et al. (2004). SANAA, Kazuyo Sejima, Ryue Nishizawa, 1998 2004 : ocean of  $\underline{air}.$  Madrid, El Croquis.

<sup>&</sup>lt;sup>53</sup> Sejima, K., et al. (2004). <u>SANAA, Kazuyo Sejima, Ryue Nishizawa, 1998 2004 : ocean of air</u>. Madrid, El Croquis.

Case Study - G

# Serpentine Pavilion

SANAA | ENGINEER: ARUP

Serpentine Gallery Museum, London

**Figure 53**Blurring between ground and sky

**Figure 54**Visual connection through pavilion

**Figure 55** Pavilion from above







The Serpentine Pavilion is a series of temporary structures set within the gardens of the Serpentine Gallery in London from June to October each year.

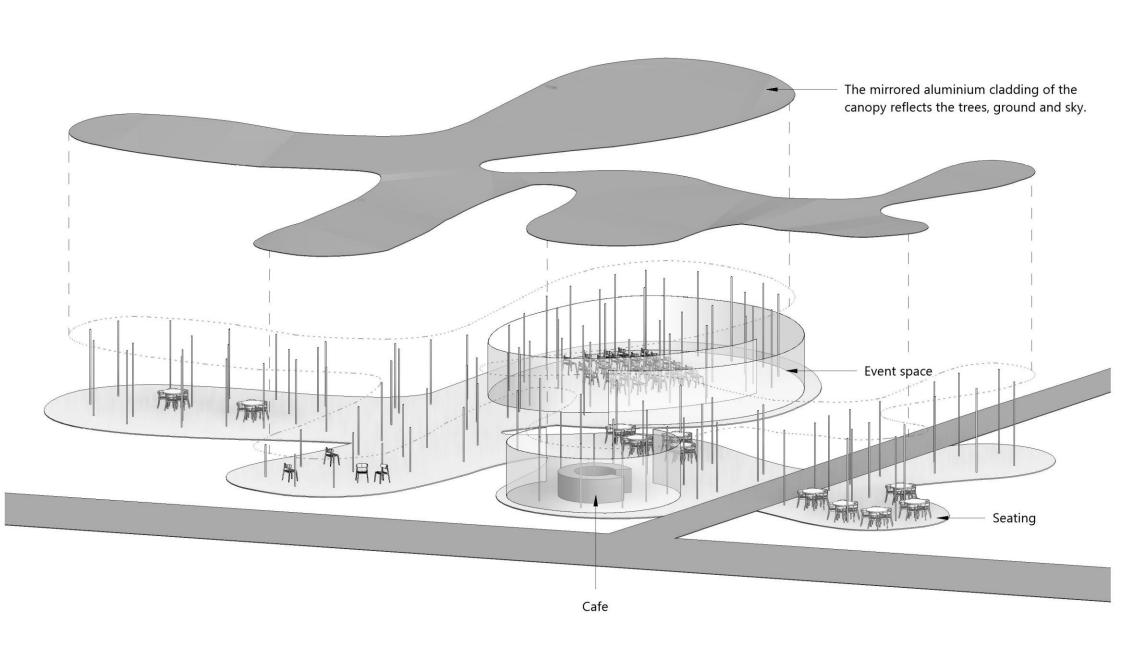
Every year a prominent architectural firm is commissioned to design the Pavilion, with SANNA being chosen as the 2009 recipients.

SANAA designed a structure that appears to float freely, like smoke amongst the trees. It is in this project that SANAA's manipulation of the actual physical resistance and bearer capacity of material, along with the translation into the spatial definition and the experiential quality, can be seen.

The amoeba-shaped reflective canopy undulates across the site and blurs the boundary between enclosure and sky by reflecting its surroundings. The structures appearance changes with the weather, melting into its surroundings and operating as a field of activity with no walls or boundaries.

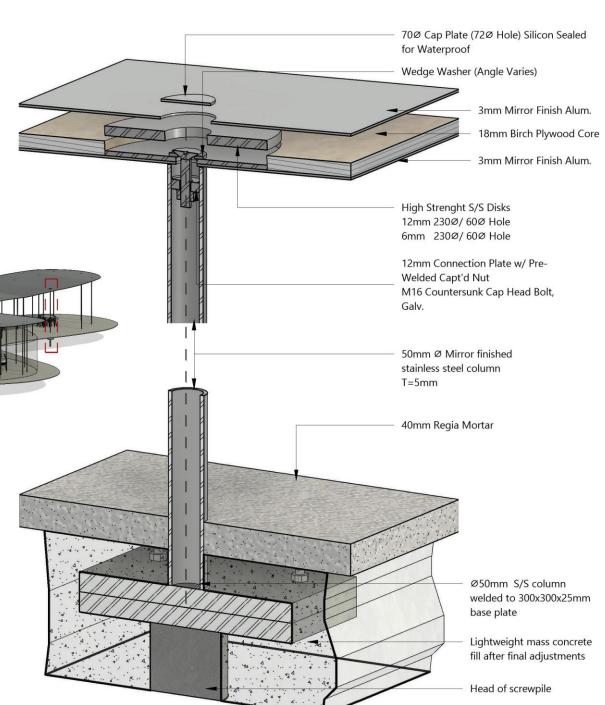
The roofline covers an events space, a café, and rest spaces. Curved acrylic partitions provide shelter for the events space and café while retaining transparency and creating ambiguous borders.

The birch plywood canopy that is clad in mirrored aluminium sits on the numerous columns which are randomly distributed. The support columns are stainless steel and are only 50mm in diameter. SANAA reduces the size of the structural components while increasing the frequency of support required. The reflectiveness and reduced thickness of the column and roof structure makes it seem like it is floating and allows for transparency and continuous visual connection through the structure.



**Solution:** Through minimising the thickness of the structure but increasing the frequency of its placement, and through the reflective stainless-steel and aluminium material that assists with reflecting and blurring into the surrounds.

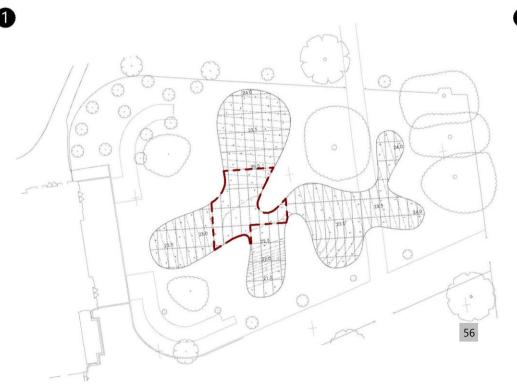
Refer to the adjacent detail that unpacks the technical make up of each stainless steel tube column:



Challenge: How do you create a large, organic shaped roof made up of plywood and aluminium cladding that appears seamless and undulates in height? **Solution:** Through a modular panel system, with interlocking and overlapping joints which are whole or cut according to the shape of the roof.

Figure 56 Roof Plan of 2009 Pavilion. Edited by author

Figure 57 Roof panel shape and junctions detail plan by author





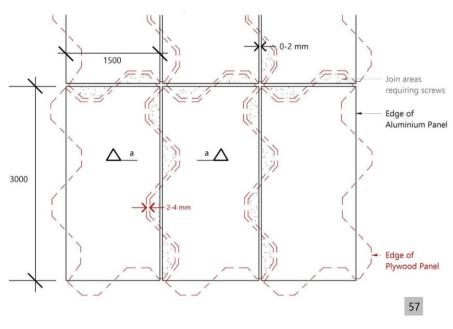
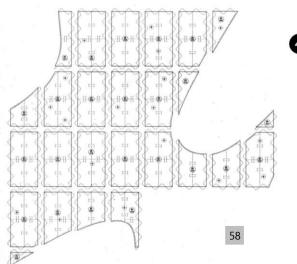


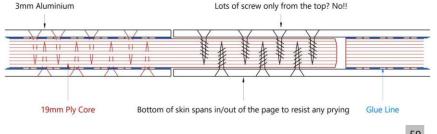
Figure 58 Roof plan detail

Figure 59 Section a-a through roof panels by author



#### **SECTION A-A**

Section a-a further highlights the interlocking and layering of the joints, and where glue versus screws are used.



# 05. Adaptability and Agency

How does adaptability and agency promote the social? How do we balance adaptability and the potential of falling into junkspace; or not enough and the space being like a straitjacket?

What is the link between adaptability, agency and identity in a user taking ownership of the spaces and their actions within the space?

Adaptability and flexibility are discussed throughout the paper, and that the mediation between flexibility and fixity must be considered.

I would like to explore how choice and interaction that is created within a programmed adaptability provides agency to the user, and whether this agency and choice creates richer events through interaction and sharing of knowledge.

To do this I will unpack the case study of Cedric Price's InterAction centre, one of the few of his realised projects.

### Adaptability and Agency

I want to explore adaptability - not as a non-descript junkspace, but as an approach that allows for variety within a space where program is suggested.

What adaptability does allow for is choice of how the user requires the space to change. In this choice the user takes ownership and actively engages within the space.

It is also a social act, the space is modified and adapted, which affects everyone in that space. It is a social confrontation, a collision and encounter which spurs on new events and reactions.

The importance of responsive, interactive, and choice providing spaces - that are inherently social - has been highlighted in case studies throughout this paper. The role of architecture is to provide a responsive structure that facilitates user experience and

social interaction within space, provoking active and passive pleasure. I will also look at how emphasis placed on the bodily experience of space encourages the notion of architecture as event, as activity and as a sensory kinaesthetic process.

How can play be used as a concept to promote interaction, choice, and agency?

The case study of Cedric Price's InterAction centre is looked at as an example that provides the user with choice in how they use the space, and it embodies an adaptable and changing approach to architecture. Case Study - H

# InterAction Centre Cedric Price

London, England Constructed: 1972, Discontinued 1997, Demolished 2003

In 1972, Cedric Price designed a small community centre in London called the InterAction Centre. It was the closest built project to the ideas of the Fun Palace, and employed concepts of facilitating programmatic expansion and flexibility, encouraging skills development, and planned obsolescence - a design that was motivated by the social aspects of the spaces.

It was designed as a building that is not finished, but that revolves around a plug-in system that could be manipulated according to user requirements and demand. The building constituted of an open framework into which prefabricated elements could be added and removed as needed and where the interior spaces were independent from the roof and exterior walls.

Functional areas included assembly halls, classrooms, rehearsal rooms, studios, areas for performance, lounging and dining areas, and a nursery.

The InterAction centre embodies Price's belief that buildings should serve the needs of the people and that these should be radically transformed or demolished when no longer serving these needs. The centre was open and accessible to all, providing a social and supportive program, as well as giving choice and providing agency to the user in them being able to change the space as it was required.

The InterAction Centre illustrates Price's insistence that buildings should not be monumental but mutable.<sup>54</sup>

Price's approach drew from a myriad of contemporary discourses, and situated architecture centrally within the most socially relevant





**Figure 60**Aerial view of InterAction Centre.



Figure 61 InterAction Centre: view of main hall/theatre, with electric doorway half opened

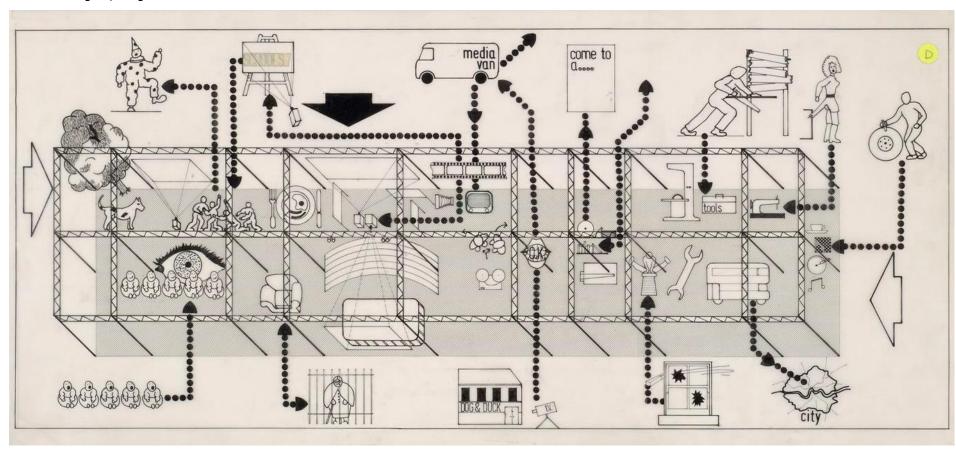


**Figure 62**Exterior view of
InterAction Centre.

positions of the 1960's. The concept of undirected and spontaneous playfulness that informed the Fun Palace, and then the InterAction centre "was an attempt to realize Marcuse's vision of social emancipation through play and non-alienated labour".<sup>55</sup>

Price recognised the strategic importance of play in the Fun Palace to allow users to reclaim agency, and to promote critical reflection of what they required of the space, rather than a passive acceptance. Price's diagram mapping the programme and community for the interaction centre represents this intention, showing a wide range of activities and engagements, and how this sat within the modular structural matrix and engaged with different user groups (Figure 63).

Figure 63
Price's Diagram
mapping programme
and community for
Inter-Action Centre



#### 06. The In-Between

In embracing the disjunctions of space, event, and movement how can engaging with an in-between space allow for a rich "Architecture of event"?<sup>56</sup>

How does working with space of the in-between act as a tool for activating social space, and how does it reshuffle spatial hierarchies? What new identities and atmospheres will this approach allow for?

To gain insight into activating and adapting of underused or inbetween spaces I will explore Bernard Tschumi's Les Fresnoy Studio for Contemporary Arts, as a project that creates and engages with the in-between to encourage social event and interaction.

#### Adapt-ivating the In-Between

Adapt-ivating is my own Frankenstein world that amalgamates adapting and activating which, in my view, are the main goals when working with the concept of in-between space.

Activating and adapting the in-between works with juxtaposition and layering: of structure and program, old and new. Working with the in-between raises questions such as how to insert an original programme inside the old and new structure simultaneously, and how to merge clarity and organisation with multiplicity?

Spaces of the in-between are heterogeneous and are not derived from a singular logic. In this approach of the in-between, the intervals between existing parts are what is important, rather than the parts themselves - the intervals being the voids and interstices. As Tschumi describes it:

In-between space – space where anything might happen, a place of experimentation, a place located on the margins<sup>57</sup>

Both Koolhaas and Tschumi discuss the concept of margins; spaces usually neglected in architecture, but that can be inbetween spaces that involve alteration and extra programming possibilities of a space.

SANAA discusses that the in-between spaces are the direct continuity and relationship of experience between interior and exterior: it is a gradual approach of connection, and a continuity between public and private.<sup>58</sup>

Is it the in-between space - the excess of space - that provides the most flexible spaces that can accommodate future adaptations?

Bernard Tschumi's design of the Le Fresnoy Studio of the Contemporary Arts employs his strategies of the in-between, which I will further unpack and use as a tool in exploring the concepts and technical approaches of engaging with the in-between.

<sup>&</sup>lt;sup>56</sup> Tschumi, B. (2012). <u>Architecture concepts: red is not a color</u>. New York, Rizzoli.

<sup>&</sup>lt;sup>57</sup> Tschumi, B. (2012). Architecture concepts: red is not a color. New York, Rizzoli.

<sup>&</sup>lt;sup>58</sup> Márquez Cecilia, F., et al. (2015). <u>SANAA, Kazuyo Sejima, Ryue Nishizawa, 2011 2015</u>: continuity systems. Madrid, El Croquis.

# Le Fresnoy Studio for Contemporary Arts

Bernard Tschumi

Tourcoing, northern France Competition 1991 | Completion 1997

The competition for Le Fresnoy, located in Tourcoing, aimed to create an interdisciplinary facility with performance, exhibition, and production spaces for practices in film, video, and electronic media.

The programme includes a library, exhibition gallery, performance spaces, two cinemas, workshops, and a restaurant. At the back is student housing that connects to other facilities through the inbetween space.

Tschumi considers cinematographic techniques to be effectively architectural ones because they deal with the relationship between programme (events), architectural space, and movement.

In designing Le Fresnoy, Tschumi employs the cinematographic techniques as a concept that deals with the disjunctions of space. This approach looked at how an in-between space is activated by the movement of bodies in that space, and that architecture is about recognizing and facilitating the potential events within a site, programme, or social context.<sup>59</sup> (Figure 64)

Tourcoing is an industrial town in northern France. The site was an abandoned leisure park dating back to the 1920's which comprises of a complex of buildings that once accommodated ballroom dancing, cinemas, and horse-riding facilities.

By the 1990's it had been abandoned for 20 years and was dilapidated but still utilised by groups of artists as a space for instillations, appropriating the unusual and still majestic spaces.<sup>60</sup>

The options of either a costly extensive renovation or complete demolition to start with a clean slate did not incite an interesting architectural solution for Tschumi.

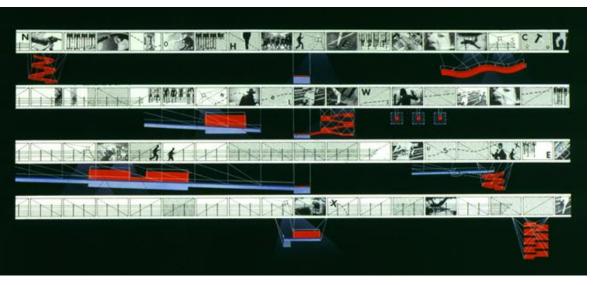


Figure 64
Bernard Tschumi
Cinematic beams
elevation for Le
Fresnoy

<sup>&</sup>lt;sup>59</sup> Tschumi, Architecture in/of Motion, 21.

<sup>&</sup>lt;sup>60</sup> Tschumi, B. (2012). <u>Architecture concepts: red is not a color</u>. New York, Rizzoli.

**Figure 65** Walkway concept illustrated

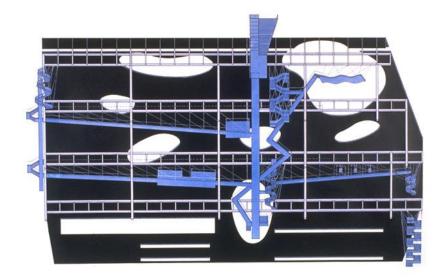
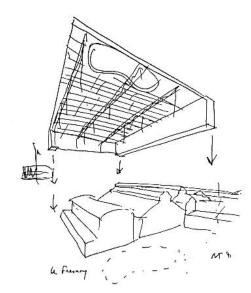


Figure 66
Concept sketch of placing technological roof over existing complex



<sup>61</sup> Tschumi, B. (2012). <u>Architecture concepts: red is not a color</u>. New York, Rizzoli.

Tschumi also wanted to avoid the "preservationist attitude often evident in Anglo Saxon countries, which tries to make renovated vestiges into exact replicas of the past".<sup>61</sup>

As a solution, the design approach focused on the retention of the existing grand buildings and incorporating them into a larger complex that could accommodate the new programme. The budget would also not allow for the repetition of the large, grand spaces, so instead, they were kept.

The roof at the level of concept is a succession of boxes inside a box and relates to the 'problematic of the hanger', asserting tension between event inside the box and the box as container of the event. In this the hanger (roof) serves as a frame for the event.<sup>62</sup>

However, there were issues and contradictions between the old buildings and the highly detailed acoustical and service requirements of the new programmes.

As a solution, Tschumi decided to place a large technological roof, pierced with organic-shaped openings, over the existing structures. The roof accommodated up-to-date infrastructure and services, which allowed for the installation of services previously incompatible with old buildings, ultimately uniting the disparate elements in a form of cross programming. The organic cut outs in the roof sheeting are covered with glazing panels to allow natural light to enter the in-between space.

By adding the roof, an in-between space in the middle of the old and new roofs is generated. The in-between space expands the event-structure of performance and promotes social activities that exceed the initial programme description. Architecture as event rather than architecture as an object is achieved at Le Fresnoy in that it is not only the action, function or use that becomes event, but the architecture itself. The interstitial spaces between the new

<sup>62</sup> Tschumi, B. (2012). Architecture concepts: red is not a color. New York, Rizzoli.

Figure 67
Bernard Tschumi's axonometric showing the old, new and in-between

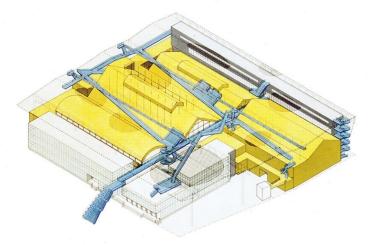
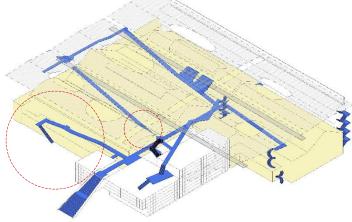


Figure 68
Authors
Axonometric
showing
differences
between drawings
and what is built

(Image by author)



The most obvious changes in the built versus initial design is the reduced size of the new structure in the front of the buildings, as well as a reduction in the number of suspended seating platforms along the walkway. This illustrates that even in reducing the extent of some areas, the complex still fulfils the conceptual goal, and the identity and function of the main idea is retained.

and old roofs are activated and becomes a place of interaction and experiments. As Tschumi explains it:

The juxtaposition and superposition of old and new are in dialogue with one another.<sup>63</sup>

The roof is not just there to keep the rain out, but it acts as an autonomous envelope with its own specificity and utility. The new roof is practical in its function, as well as doubles up on uses like supporting hanging seating for performances. (Refer to Technical Analysis)

Several walkways are positioned amid the roofs to mediate between different levels, as well as to create space for social interaction by engaging the users travelling between them.

Le Fresnoy is a heterogeneous space that was not developed from a singular logic.<sup>64</sup> The new programme juxtaposes and organises production, display, and learning in a single space. This multiplicity and interchangeability means that there is no hierarchy in the spaces or programmes.

This approach did not merely save old buildings, but rather created a new building type that combines the old and new in an unexpected manner to support new functions.

More important than the parts themselves are the intervals between them - the voids and interstices. The in-between space of Le Fresnoy becomes its foundation as it serves as a new plane organising everything above and below. This space is made possible by the addition of the roof that represents cross programming in which diverse and disparate elements— in construction, styles, uses and functions — can co-exist and accelerate chance events The whole is precise and rational in its concept and varied and poetic in the resulting spatial richness. 66

<sup>&</sup>lt;sup>63</sup> Tschumi, B. (2012). <u>Architecture concepts: red is not a color</u>. New York, Rizzoli.

<sup>&</sup>lt;sup>64</sup> Tschumi, B. (2012). Architecture concepts: red is not a color. New York, Rizzoli.

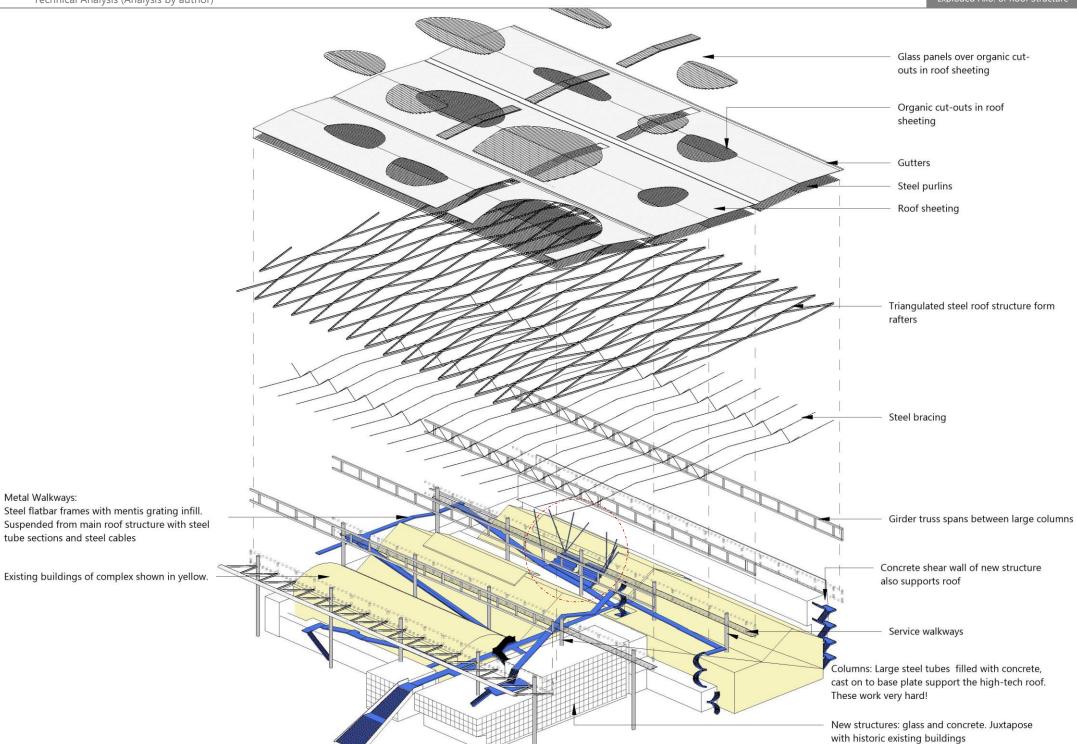
<sup>&</sup>lt;sup>65</sup> Tschumi, B. (2012). <u>Architecture concepts: red is not a color</u>. New York, Rizzoli.

<sup>&</sup>lt;sup>66</sup> Tschumi, B. (2012). Architecture concepts: red is not a color. New York, Rizzoli.

Metal Walkways:

tube sections and steel cables

Technical Analysis (Analysis by author)





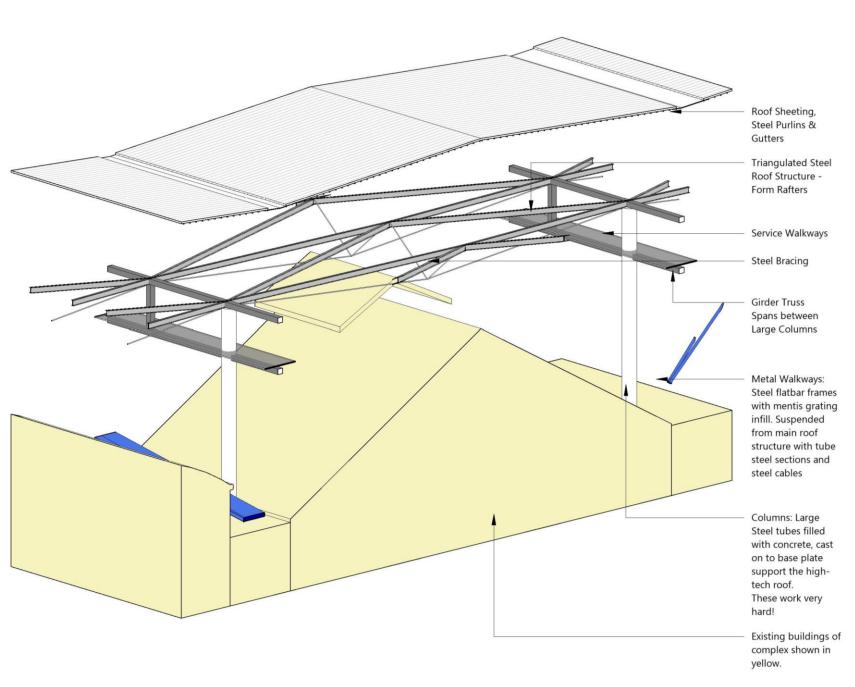
**Figure 69**View of open end of complex juxtaposing old and new



**Figure 70**Girder truss spanning between large columns



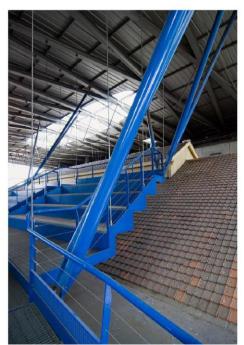
Figure 71
View on walkways in in-between space



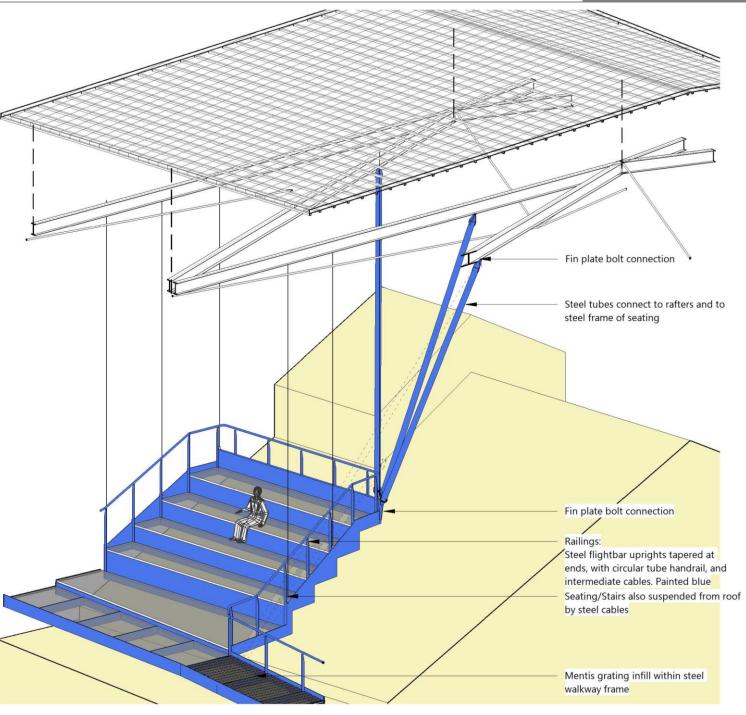
Technical Analysis (Analysis by author)

In order to create further event and interaction along the social walkway of the in-between space, a stepped structure located off of the walkway was introduced. This structure, like the walkways, is suspended off of the roof structure and acts as meeting, performance or rest space.

This stair structure that works with the walkway adds further richness to the social event created within the space of the inbetween, in that it is not only a space where interaction through collision in moving through the space is created, but the space is further engaged with through occupying it for whatever action the user chooses.



**Figure 72**Social performance/seating/meeting place off of walkway, suspended from roof structure



Case Study - H

#### The V&A Watershed

#### **Wolff Architects**

Cape Town, South Africa 2014

#### Figure 73

Social stairs and pedestrian street of North Entrance (Image by author)

#### Figure 74

Stairs and social street of south entrance (Image by author)

#### Figure 75

View from ground social street through floor opening to business incubator level (Image by author)

#### Figure 76

View from business incubator level through opening to ground floor social street and market (Image by author)

Another project that has worked with underused and in-between space is the V&A Watershed by Wollf architects. This project engages with the in-between to create opportunities for social relations and activities, frictions, collisions, and encounter.

When Wolff architects were first approached to adaptively reuse the old dock electrical repair shed at the V&A Waterfront, they were asked to accommodate a business incubator in a portion of the existing shed. However, they recognised the potential richness and social impact that could be created in the space, and instead they proposed another plan.

Wolff proposed that the whole shed be set up to accommodate an urban pedestrian street that cuts straight through the building and creates a channel that connects the activity of the surrounding areas of the V&A Waterfront. Along this social street a market is set up that allows for economic opportunity for small businesses. Through this, reclamation of public spaces as well as economic opportunity is created, far exceeding the activity and benefit of the space had it been developed as a business incubator alone.

The Watershed houses the market, an exhibition venue, rentable office spaces along with the space for the business incubator. This varied programme increases social interaction, as well as promotes the diversity of these interactions.

The Watershed is a busy, lively space with high foot traffic allowing for abundant commercial opportunities. The market was set up to support micro tenancies, which aids emerging businesses that would otherwise not have found a foot hold in the sought-after commercial V&A Waterfront precinct. The Watershed strives to facilitate commercial









Figure 77 Cross-section through Watershed by Wolff Architects

patterns like those found in street-based businesses in urban settings.<sup>67</sup>

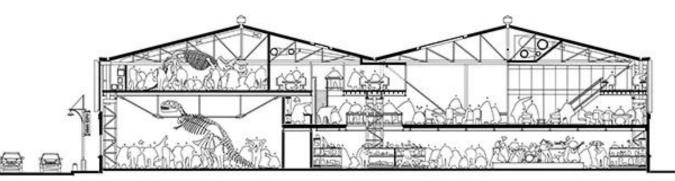
The market stalls are set up in a manner that allows tenants to customise and adapt their own stalls and are planned in such a way that the focus remains on the internal street rather than on the stalls.

A steel floor is suspended over the market area. The steel floor has large openings to allow for connections between all of the spaces and across the levels. The top floor that houses the offices and business incubator is made up of a series of mezzanines.

The interactions facilitated between the small businesses of the market and the growing business of the incubator promotes the sharing of knowledge and skills.

The steel floor was structurally achieved through adaptively reusing the gantry crane of the shed. The gantry crane provided structural support for the suspended steel floor.

The Watershed is a project in which the public and social realms are truly embraced, and it is a space where skills sharing, and economic empowerment are facilitated.



<sup>67 (</sup>Wolff and Wolff, n.d.)

# Figure 78 Les Fresnoy suspended performance steps along walkway

# Figure 79 Watershed stairs and seating (image by author)

#### Stringing activity, allowing for pause

In Le Fresnoy and the V&A Watershed, importance is placed on social movement. This is done through the inclusion of pedestrian avenues or paths that pull activity through and activate the spaces. This is demonstrated in the in-between walkway system of Les Fresnoy and in the urban pedestrian street of the Watershed.

Along these active routes, it is also important to provide spaces for occupation, pause and further interaction. This is seen in the hanging performance steps of Le Fresnoy (Figure 79), and in the stepped seating of the Watershed (Figure 80).

These interventions allow users to occupy space and further interact and engage with other as well as their surrounds. Users can actively engage, or even engage passively by being spectators to the activity and movement around them.





#### 07. Play and Techne

Figure 81 Marble run 3D (Image by author)

Figure 80
Playful elevation
(Image by author)

As a way to unpack the explorations and ideas surfaced during the theoretical and technical exploration, conceptual model making was employed.

These short and sharp model making exercises, set up as an "archimaki" and an en-loge, allowed for a refining and testing of conceptual ideas covered in the paper, as well as acted as first experiments in developing initial design principles to be explored and carried forward into the design phase.

#### **Up-ending social space**

How can an elaboration and extension of the Archi-Maki task aid in distilling and implementing the ideas explored in the paper?

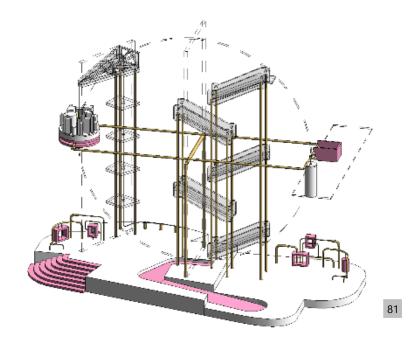
In my Archi-Maki task I aimed to create a model that conceptually embodies the paradoxes, instability, and collisions of active social spaces. I wanted to create something in which interaction and movement was evident, and which embodied the concept of Bernard Tschumi's ideas of "Architecture as event" where there is no architecture without space, event, and movement.

To do so I designed and assembled my interpretation of a marble run. The marble run comprises static and stable objects, and then instable and dynamic components, with neither having real meaning nor the ability to function without the other.

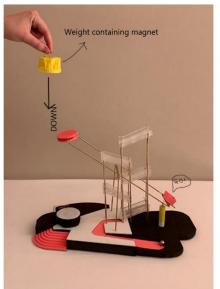
I envisioned the model to have the potential to grow and to accommodate added elements. Even though the run would become more complex as different elements are added, it would function towards the same initial goal - get the marble to travel through the run all the way to the end.

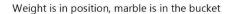
I engaged and extended my design toolkit and employed methods such as sketches and diagrams, computer modelling, 3D printing, laser cutting, bending and cutting brass, and processes of trial and error in order to achieve a system that allowed for the run to function.

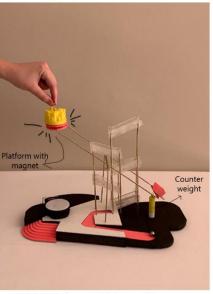




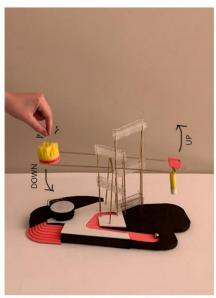
**Figure 82**Marble run sequence (Image by author)







Weight is lowered into position, and connected to the magnet in the platform



Weight is released, and the platform lowers. Marble bucket & counter-weight moves up



As the platform & weight hit the stopper, the marble is flung from the bucket



Ready to take travel down the ramps









GO!

The marble then leaves the last ramp and travels down the slope to its resting stop.

AT

IT



#### Dimensions of fun

The en-loge workshop was titled "Distillate of the superimposed" and was led by Mo Krag from the Aarhus school of Architecture. The goal of the en-loge was to bridge the gap between knowledge in research and design tools and principles, through the imposition of extracted knowledge.

The task aimed to refine thinking's of site and host-building, programme, and intention. Although the en-loge was intended as an approach to uncovering pragmatic research findings with some abstractions, my artefact was still more abstract.

What I did further explore in the model was the approach of the in-between through engaging and activating margin and underutilised space, and how this can create richness in event. This approach helped me to engage with thinking across levels, and within solids and voids. The white polystyrene represented the solid, with the voids as the in-between to be engaged with.

In experimenting with the in-between from a planning and programmatic approach, I used a process of superimposition to distil, subtract and add to create spatial hierarchy, as well as to enforce links and friction.

I aimed to convey the aspects of identity and atmosphere in the superimposition by looking at how these factors play into the creation of playful and dynamic spaces and, in turn, how people relate to, and experience these spaces.

Considering design tools and principles, I explored and questioned to following:

What does the archi-maki offcut image look like with levels and depth - as something 3 dimensional? (Figure 84 and 85) How would these levels and dimensions occupy and bridge space of the in-between?

How are vertical and horizontal connections that promotes dynamic and social spaces represented?

How does the model engage with concepts of fixed and flexible?









Figure 83
Process of superimposition
(Image by author)

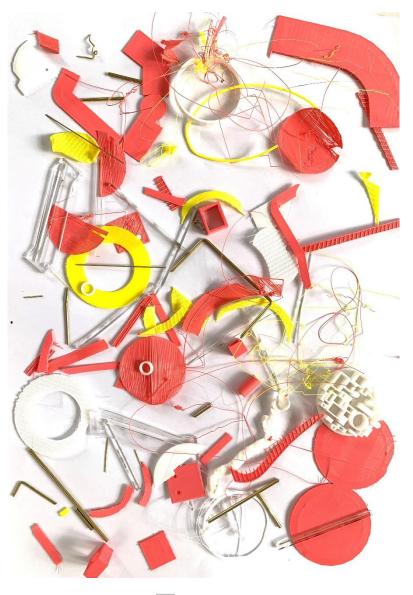


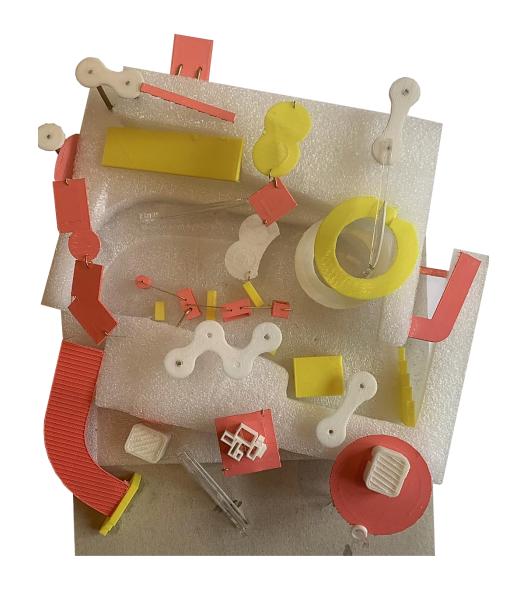


Figure 84 Playful explorations (Image by author)

Figure 85 Off-cut layer of archi-maki exploration

Figure 86 Off-cut with dimension, working with the in-between





85

86

#### 08. Conclusion

#### Part 1 - Ideas to take forward

In my exploration of a playful architecture that aims to embrace the unpredictability of social space I have engaged with studies on theoretical and technical levels. These explorations have not been conducted in reference to a specific site or programme at this stage, in order to engage with a more playful exploration.

I found the incorporation of the technical analysis through-out the paper, which explores the physical making of social space, as well as the physical manifestation or solution of theoretical explorations, to be very insightful.

Analysing Cedric Price's Fun Palace encouraged the notion of exciting possibilities that can arise through prescient thinking that challenges the conventions of social space and - in a way -trying to upturn and revive it. His work shows the possibilities and delight that can be created by embracing the instability and collisions of a fundamentally social and dynamic space.

In order to understand contemporary architectural spaces, and contemplating whether they are good or bad, an understanding of the current state of these spaces is needed. Junkspace provided a clue into this understanding. The unpacking of Bernard Tschumi's space, event, and movement allows for a greater understanding of the paradoxes of spaces, what these are, and that an architecture of pleasure lies where these disjunctions intersect. A stagnant architecture arises when these paradoxes are suppressed, as is the case with indeterminate and over-flexible spaces.

This led to questions of how embracing the disjunctions of space and its instability is spatially achieved. The analysis of OMA's Seattle Library and SANAA's Shibaura House provided a better understanding of the approach of compartmentalised flexibility as a tool to mediate between over flexible and over determined spaces. This translates into a design principle of ensuring that all

spaces have a level of programmatic specificity, but still allow for adaptability and flexibility within those zones. This also allows for the identity of the space to be retained.

To create a social and lively space is also not about creating flashy or convoluted icons or masterpieces, but it is rather about focusing on how architecture can engage and act as an attractor within its context - an architecture that first and foremost performs a public and social role.

Working with an in-between space allows for an activation of underused or misused space and allows for dynamic, rich, and adaptable spaces and activity. Bernard Tschumi's Le Fresnoy illustrated how engaging with a margin space can create rich event through promoting movement and interaction.

The importance of movement and connection within space and across levels, and its role in social interaction and collision, was uncovered as a design principle throughout the paper.

Social space is messy, complex, and full of paradoxes. It is these dynamic and chaotic elements that, if held properly, allow for social, creative, and playful spaces and events.

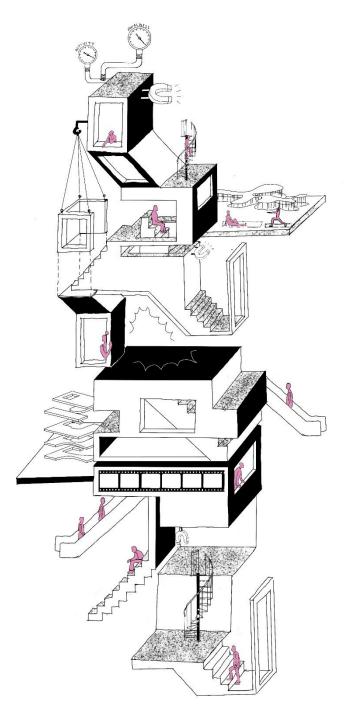


Figure 87 Play?

#### Play?

Through the theoretical and technical analysis of an architecture of playful and social spaces, what is meant when referring to play, and how will a 'playfulness' be explored in design?

The playfulness lies in embracing and mediating the fluctuations and contradictions within a social space. It is an architecture that promotes pleasure and delight and where fun and activity can be created.

It is in this sense that I discuss a playful architecture. Not only playful in the physical act of playing, but playful in creating a sociality through connections, intrigue and the embracing of paradoxes.

The following design principles will be used as guides in starting to explore site and programme:

- 1. **Programmed flexibility** that can allow for adaptability without being generic or non-descript.
- 2. **Connections** across levels and scales, promoting social encounter and collision.
- 3. Engaging with **in-between space** to activate under used spaces and allow for richness by encouraging event.
- 4. An architecture that acts as a **social attractor** and works with its context.
- 5. An architecture that allows for **identity and a sense of** place.

To this point the exploration has been held in the abstract with no relation to site or context. Locating this concept and how it can be applied to a developing context, such as South Africa, is a challenge that will be grappled with in design.

It is in locating my design exploration in a developing context that an understanding of what the socio-political relationship to a playful architecture is and exploring how it can produce a sociality and allow for a sense of identity and place.

#### PART TWO - SITUATING

# 09. Siting



**Figure 88** Locating site

# **Exploring**

Moving into the design phase, I needed to explore where my architectural intervention could be situated.

A site that could hold the design principles and ideas around a playful and social architecture, and a site that held an existing activity that could be plugged into and promoted was needed.

The site needed to be able to hold a dynamic architecture and enable existing and new users to benefit from the experience of pleasure and delight brought about by a fundamentally social architecture.

These requirements led to an exploration of District 6, located to the east of Cape Town's city centre.

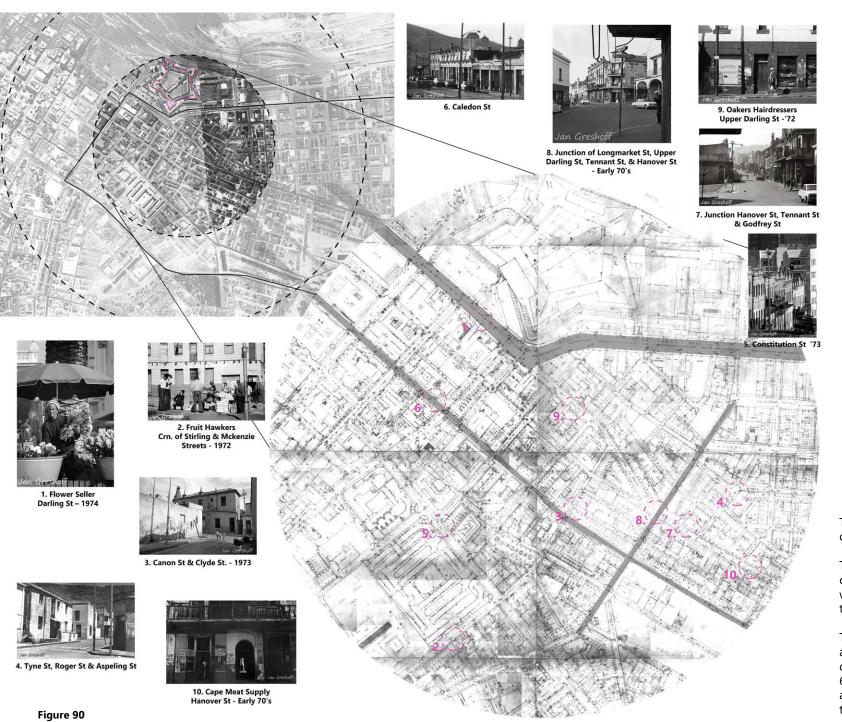
# Streetscape as play-space

District 6 is a space scared from forced removals. Both physical scars in its landscape, as well as physiological scars of previous residents.

District 6 held this condition where the streetscape and the cityscape were very active and social spaces, spaces in which to play and interact. District 6 also had a strong sense of community amongst the residents of the area.

This very social and dynamic relationship that once existed between the city, the street and the community is what I would like to reflect on and is a condition that I want to hold my project to.



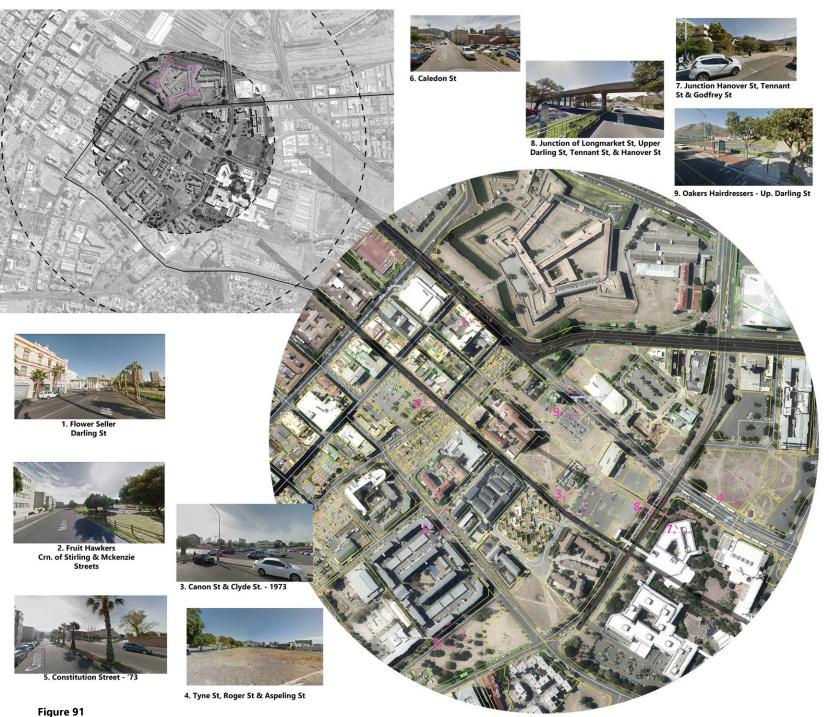


#### Historical fabric

The historical urban fabric of District 6 was dense and fine grained.

To understand this density and the street condition, photographs taken by Jan Greshoff were located in relation to a city survey plan of the area from 1944-1966.

This exploration of grain and fabric on plan and in relation to photographs provides an understanding of the feeling and scale of District 6, especially at the level of street. The photos also reveal activity and events of daily life like the flower sellers and fruit hawkers.



#### **Current fabric**

A similar exercise conducted on the current fabric of District 6 shows a vast and empty scale, rather than a dense fabric that holds and promotes activity.

Spatial priority is given to wide streets, cars, and parking. The street is no longer a social space, but rather a dead space.

How can an urban proposal respond to the current and future fabric of District 6 and re-activate a space whilst still being respectful to the scale and history of District 6?

# NEW HANOVER ST. Figure 92 Uses & users

#### Uses & users

District 6 contains many institutions which bring activity and different users into the space.

These institutions include:

- Tertiary education institutions like CPUT and Cape Town Collage
- Primary, secondary, and pre-primary schools
- Religious and cultural institutions
- A community clinic

The Grand Parade and Cape Town Main Station, which are important transport and collection nodes in the city, have also been indicated.

The dashed circles have a radius with a distance indicative of a 5-minute walk and represent the proximity of the different institutions to each other, as well as the proximity of the different institutions to the Main Station which would be the first point of entry into the city for many users.

This busy station is however a far walk along busy vehicular routes for most users, especially for primary and secondary school users.

City blocks that have been consumed by parking have also been indicated in white to emphasise the amount of unused and inactive space currently in the east city.



## **Activity & routes**

In wanting to plug in to existing activity in the area, a better understanding of this had to be documented. Here routes and activity in the area according to specific users are mapped.

The exploration starts to uncover desire lines and used and unused routes at an urban scale. It provides an understanding of the flows and frequencies of existing movement in the area.

## **Development frameworks**

The project will be positioned within an imagined future fabric of District 6. To understand what this future fabric might look like, multiple development frameworks set out for the area were looked at.

These frameworks included Lucien le Grange's Heritage Impact Assessment (2003), NM & Associates and Lucien le Grange's District 6 Indicative Framework Plan (2012) and CNdV Africa's District 6 Implementation Framework (2012)

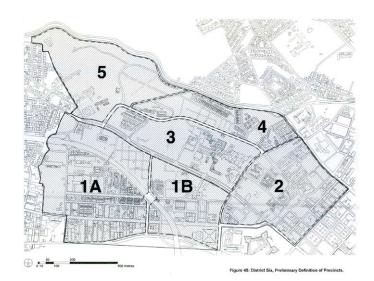


Figure 94
District 6 Preliminary definition of Precincts
H.I.A, Lucien le Grange, 2003

Definition of precincts within District 6, new Hanover street as a commercial spine.



Figure 95
District 6 Indicative Framework Plan
NM & Associates and Lucien le Grange, 2012

Further definition and enforcing of new Hanover street as commercial spine.

Indication of grain and placement of massing and fabric.

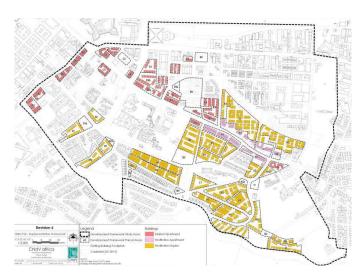
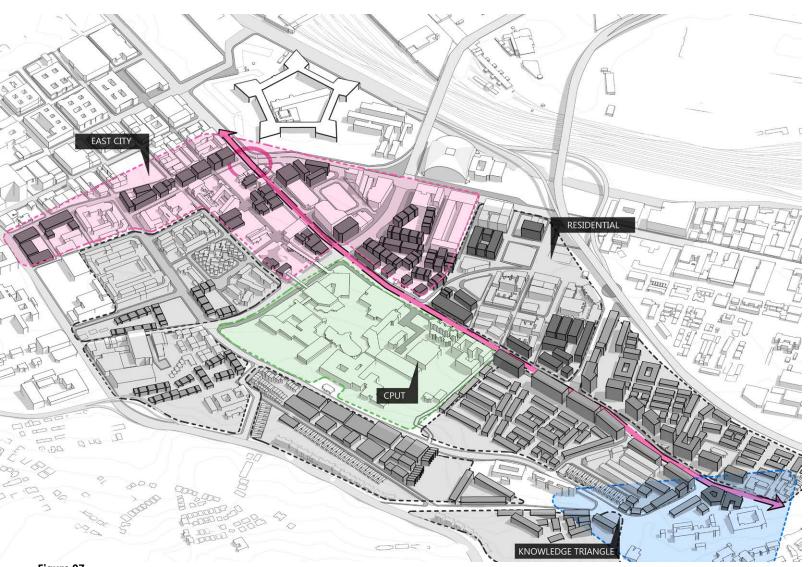


Figure 96
District 6 Implementation Framework
CNdV africa, 2012

Massing & placement of restitution duplexes, restitution apartments and market apartments.



**Figure 97** Imagined future fabric of District 6

## Imagined future fabric

The information from these frameworks was used to develop an imagined future framework for District 6 within which to work.

It is within this future fabric and density that an urban and architectural response will be situated.

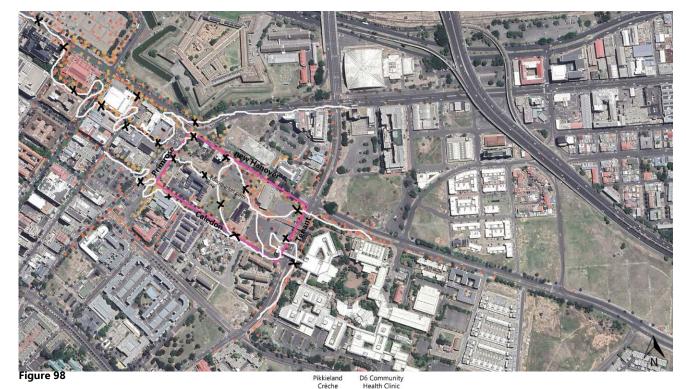
### Zones

The zones that make up a future District 6 include the **east city** precinct which contains more commercial activity and market apartments. This precinct acts as a link between the city centre and District 6. **Residential neighbourhood** zones are sites of existing homes, and they are areas where most restitution duplexes and apartments are located. There is also the **CPUT** zone and the **knowledge triangle** in which many schools of the area are located.

New Hanover Street will be reinforced as an active commercial spine, with the corner of new Hanover Street and Darling Street acting as a gateway into District 6.

The east city precinct will be explored in more detail as a zone where a site could be located. This area is a space that mediates between the city centre and District 6. This means that it is a space that can cater to users of the city, the surrounding institutions, as well as cater to and support the increased imagined future community within District 6.

With an influx of residents and users due to restitution housing and market apartments, what space is provided that can produce and hold a sociality?



CPUT: District 6 CPUT Pedestrian Bridge ACVV Old Age Home Support Supp

Figure 99 Ikamva Building 104 Darling StreetDepartment of Public Works

The Old Granary Cape Town College

## Locating site

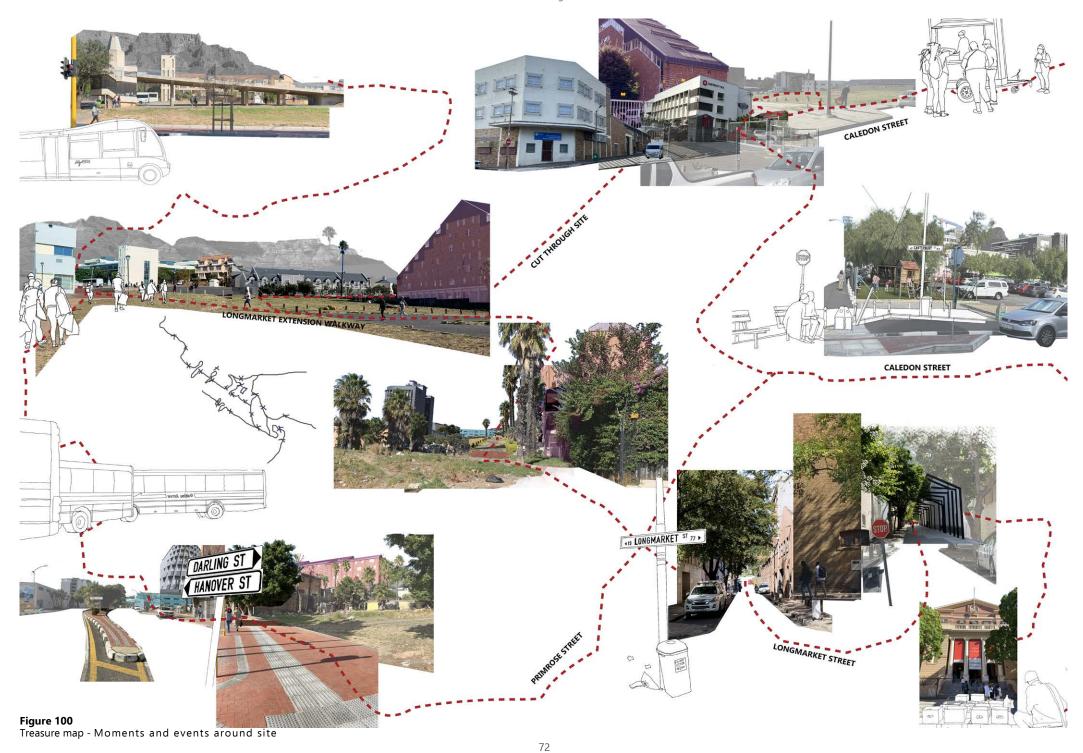
In refining my site investigation to the east city precinct, as well as in response to the frequency and activity map explored, I focused in on the area adjacent to CPUT defined by the edges of new Hanover Street on the north side, Caledon Street to the south, Primrose Street to the west and Tenant Street to the east. (Figure 98)

The site is bisected by an inactive pedestrianised section of Longmarket Street that ends at a fenced off and unused pedestrian bridge that leads to the CPUT campus.

Activities already established on the site include an old age home and a creche. Many CPUT students also traverse the site to reach the institutions campus.

Surrounding the site are important facilities that also draw activity and users to the area such as the District 6 community clinic, student residences, offices, The Old Granary building and Cape Town Collage.

Figure 100 on the following page represent the feeling of the site and its surroundings from the level of street. The collage comprises of a collection of images and sketches that were stitched together, and responds to a route walked as indicated in figure 98.



## PART THREE - Testing principles

## 10. Play-space

## Testing in the play-space

In looking for a way to test design principles developed from the theoretical and technical investigations, a highly conceptual exploration that unpacks initial intuitions and ideas of how play, activity and colour could be applied to site and design will be employed.

This abstract level of initial engagement with design will be used to develop and refine a conceptual architectural approach, as well as to play with design principles and how that might inform ideas of how they could be architecturally and programmatically applied to site.

It is in this exploration that initial ideas around programme and its relation to site must also be considered. In this, exploring how to create spaces that provide the community and users around the site a place for release, for play and space that promotes interaction and a sense of place.

How can a conceptual and playful exploration enrich or inform further design and investigation into site and programme?

The challenge and questioning of how my exploration of a playful architecture responds to the socio-political context of my chosen site must be considered in this play-space exploration too.

## Initial ideas around programme

I have spoken to an energy removed, an existing energy as well as started to think of a future energy. The task is now how that is programmatically responded to.

The users in the area include students, clinic patients, residents, commuters, and school children.

Figure 101 on the following page illustrates an unpacking of the different users and what the activities needed to benefit each group are.

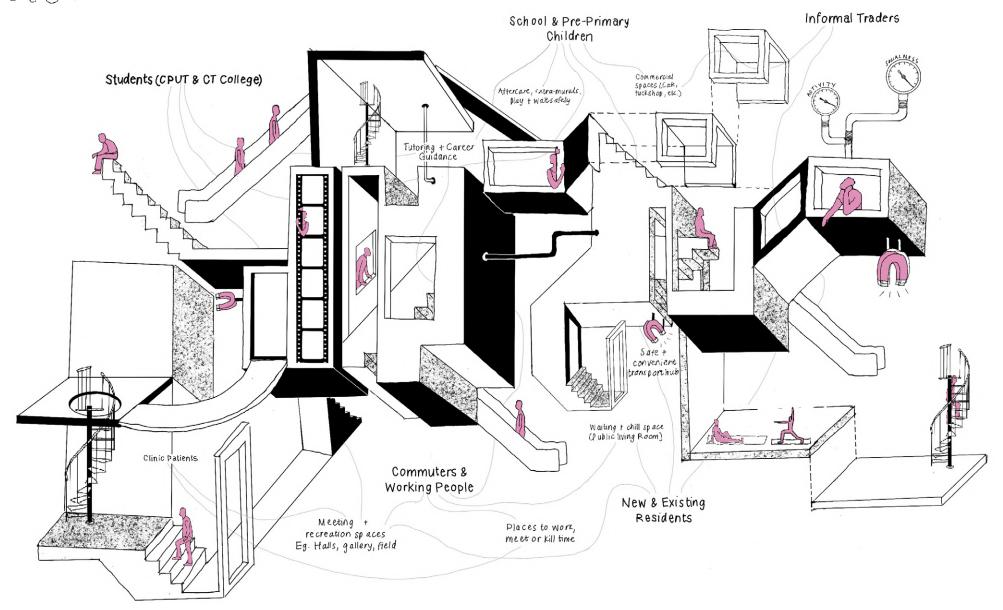
The site needs to allow for activities that benefit each group, with programme that can also overlap and interlink. In this understanding that it will be a varied programme that focuses on skills development, support, interaction, and play.

## A programmatic starting point

Programme will include a space that functions as social filter which provides space to work or meet for students and commuters passing through site - in this it can be a space where simply wasting time can be enjoyed too.

The programme will also include school support and care across ages, from childhood development and after care (that also supports working parents) to homework help and tutoring.





**Figure 101** playfully unpacking users & uses - a programmatic starting point

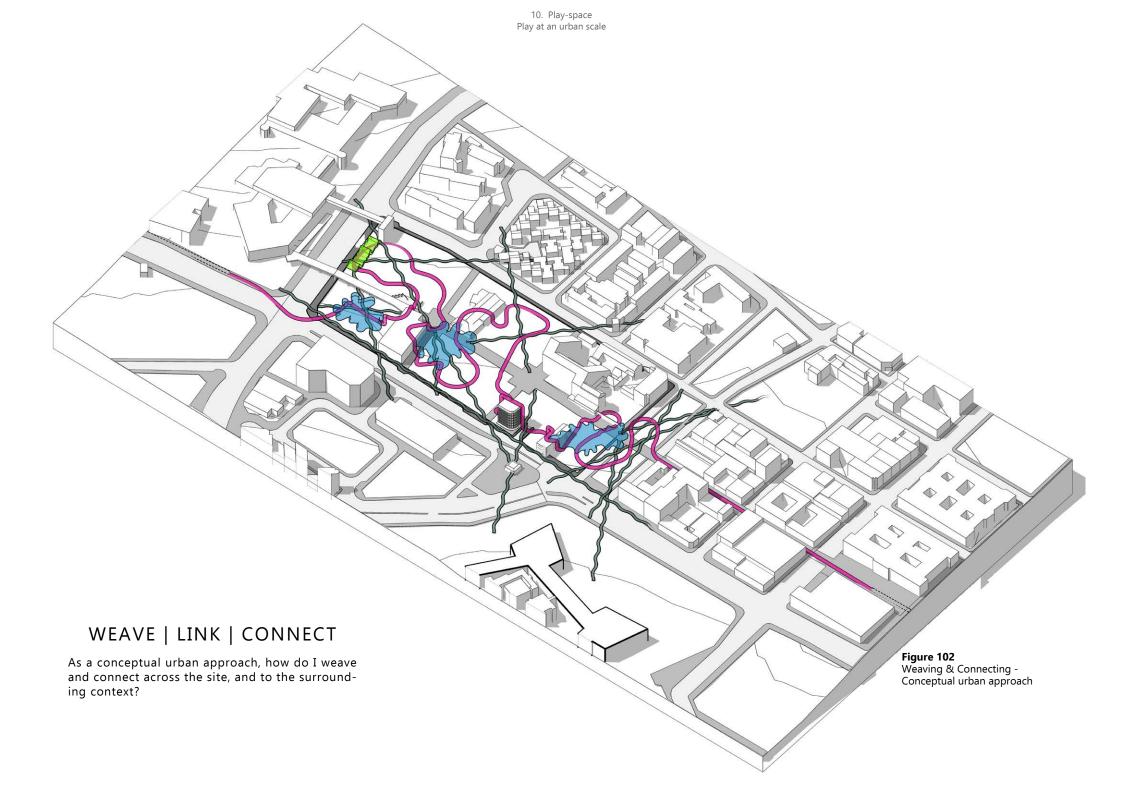




Figure 103 Urban concept model

This concept model deals with ideas around initial urban design principles, playing with how to approach site at an urban scale.

How can energy be held and tethered across the site? How do people move across the site? Where will magnets or attractors be required to draw and hold activity?

10. Play-space Play at an urban scale







Figure 104 (All) Urban concept model

How do people access the site? What community facilities and public spaces would benefit the surrounding users? How can an urban proposal work with the surrounding fabric of the city?

## Urban concept [playfully] decoded

With connecting and weaving as conceptual drivers, and through employing the findings of my site analysis and initial ideas around programme, I set up conceptual urban design principles to apply to the site.

### 1. Longmarket Pedestrian Route:

Pedestrianise and activate the route from Cape Town College Plaza to the transport hub, including the CPUT pedestrian bridge



### 2. Transport Hub:

This will be pedestrian friendly, with commercial activity and spaces to wait and meet.



### 3. Outdoor Play Spaces:

These will include playgrounds, skate parks, and sport fields.



### 4. Intersecting Pathways:

These will draw activity through the site with pathways that relate to the old and existing fabric of District 6.



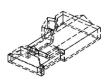
### 5. Public Green Space:

This is to be located at the site of existing congregation space and it will acts as public breathing space from the dense future fabric.



### 6. Remove:

Fabric that hinders good urban relationships will be removed. These included the ruins of the UCT owned Ikamva building and back sections of the Western Cape cultural affairs and sports building.



### 7. Activators:

Public space activators (or magnets) will be situated along key routes. These will act as commercial and social activity promoters. Examples include market stalls, seating and coffee kiosks.



### 8. New Connecting Path:

A path will be created that connects the District 6 community clinic and Sir Lowry park. This will draw activity and connect the clinic and the gateway into District 6.



### 9. Testing Site:

The urban principles that are applied to site inform a site of exploration at the corner of Primrose and new Hanover Street. This testing site is where architectural design principles can be conceptually tested.

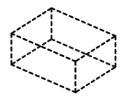
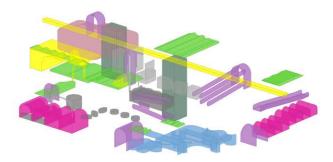
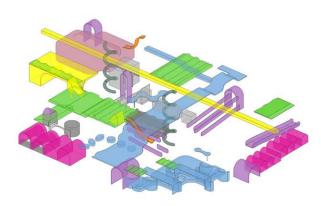
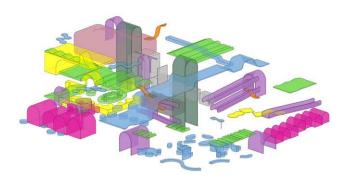


Figure 106
Playing with activities & connection







## Testing design principles in the play-space

The design principles for siting and design, which came from the theoretical and technical investigation, that have already been discussed include:

Programmed flexibility | connections | in-between space | architecture as social attractor

In establishing a site for my design and in the conceptual urban exploration, additional and more site-specific design principles have also been surfaced:

- Plugging into existing active routes
- Building as a social filter
- · Providing spaces to hold different levels of energy
- · Playing with the relationship between inside and outside

As an open-ended conceptual exploration, I wanted to engage with the 'testing site' identified in the urban exploration to play with the design principles in relation to site and initial ideas around programme, and how that might start to uncover ways of translating them architecturally.

How do the design principles of an activated and dynamic world actually apply when linked to site within a developing country? Do the design principles need to adjust in relation to the socio-political context of District 6?

The images of figure 106 relate to an ongoing exploration of energies and activities in relation to site, as well as testing and exploring connections across levels and planes.

On the following page, an active ground plane drawing tries to highlight activity and connection and how that sits on site. It also explores how that activity might filter out into the context.

To hold the exploration at a conceptual level means that the focus can be on the social aspect and the energy that it creates, without getting stuck on planning and programming at this stage. What it does also allow for is the start of an initial thinking about access and connection, about movement through the site and about key nodal points that might help to string and maintain activity along the site.

Similar coding as the conceptual urban exploration is employed in the ground plane drawing like the pink representing activity generators, purple representing circulation and intersecting pathways, green amoeboid shapes as outdoor play space interventions and yellow as the pedestrian Longmarket route.



Figure 108 Vignette 01 - inside & outside

## **Vignettes - concept anchors**

To further engage with the testing of principles in creating and exploring a play-scape, vignettes were used to capture moments of what the energies, activities and interactions of the space might be.

The vignettes were also used to explore questions and challenges that had started to be uncovered. These included questions around how spaces on different levels might be joined or separated, where the main activity could sit and how levels could be used to make play spaces underneath and through them.

Ideas around connections, routes and portals were also explored.

## **Considerations surfaced**

Considerations of issues like access and control were surfaced during the explorations in the play-space.

Another consideration is whether it would be more beneficial to think about and explore programme at the level of site first and then see how that thinking might influence how the building is positioned. In other words - maybe one building that holds all the programmes is not what will work best for the site.

My challenge will lie in conveying that a playful architecture is not one of extravagance, but that it is a way of prioritising the social and allowing for interaction and event in architecture and the urban realm. I want to show how a playful architecture can be a tool to allow for engagement across the site and amongst users, making it especially applicable for a community and skills centred programme.



Vignette 02 - interaction & activity



Figure 110 Vignette 03 - playful connections

## PART FOUR - Emplacing concept

## 11. Design development

## **Emplacing concept to site**

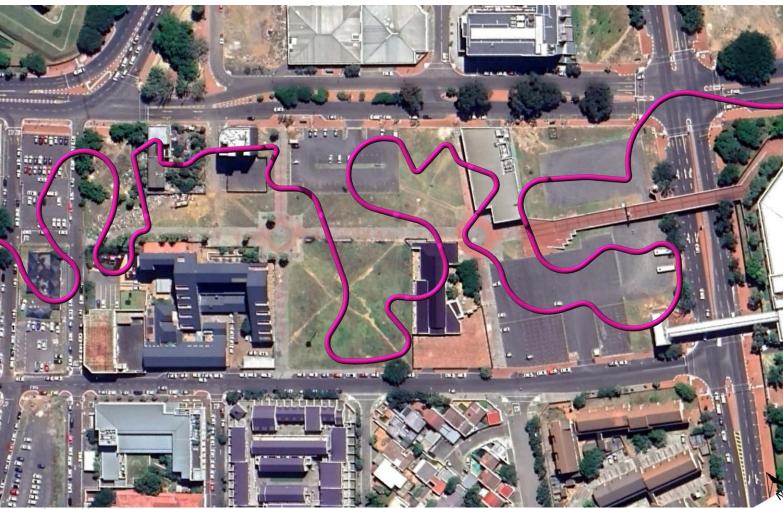
Exploring in the play-space allowed for the freedom to conceptually test design principles and thinking around a playful architecture. The play-space approach aided in the testing of ideas around connection, movement and the layering of activity. To not be restricted by planning and set ideas around programme, whilst still considering the users and connections around the site, allowed for a necessary malleability in the exploration.

It is in design development that these ideas and principles must be grounded into a considered and responsive architectural and urban approach.

The task now lies in employing the conceptual ideas in the design development, and designing an architecture that expresses a playfulness and sociality, with a programme that can enrich and support the existing and future residents and users of District 6.

How do the explorations in the play-space help and inform design development? How do I ensure that the life, activity and playfulness surfaced in the play-space remains in the design development space?

## **Urban Proposal**



**Figure 111**Aerial image of site of urban proposal

## Site of urban proposal

An urban proposal is needed within which to position an architectural response. This proposal will be informed by the conceptual urban exploration and urban design principles developed in the playspace.

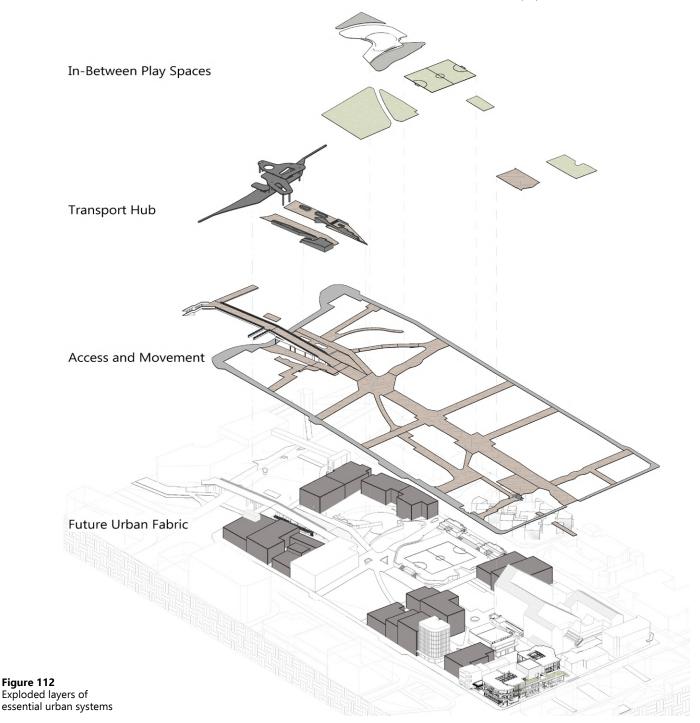


Figure 112

## **Essential systems**

The urban proposal is generated by essential systems which are overlayed onto the site. These systems inform space and guide movement and activity.

The overlaying of the elements creates tensions and generates areas of intense interest which provide the activity, play and delight within the urban realm.

These systems consist of:

### 1. Future Urban Fabric

In this imagined future of District 6, massing is placed that follows principles of:

- Street activating facades (especially along new Hanover Street)
- Building footprints and layout that allow for passive design, a finer grain, and human scale (4-5 stories)

This fabric will act as mixed-use restitution apartments, allowing for commercial space and accommodation on the site.

### 2. Access and movement

This system channels activity through and across the site

### It includes:

- The main pedestrianised Longmarket route to the CPUT
- Intersecting pathways that respond to the surrounding fabric.
- Meandering paths that carry slower movement and feed into the main routes.

### 3. Transport hub

The transport hub allows for access to the whole site, and acts as a more convenient satellite transport node to the main station. It is reinforced by commercial spaces and spaces to wait and meet.

## 4. In-between playscapes

These will be programmatically determined in-between spaces of community surfaces and interventions that draw and hold activity. These include a skate park, a playground, park space, a 5-a-side soccer field and an outdoor gym.

These interventions also allow for breathing space and a relief from the density of the imagined future fabric.



Figure 113 Urban proposal plan

## Urban proposal

This image shows the urban plan that is produced through the superimposition of the essential urban systems.

It is within this urban proposal that programme will be located to support and tether activity and interaction across the site.

The challenge now lies in refining programme and looking at how that can be placed across the site to reinforce the urban activity and interventions.

**Figure 114** Vignette of urban realm

## Vignettes of the urban realm

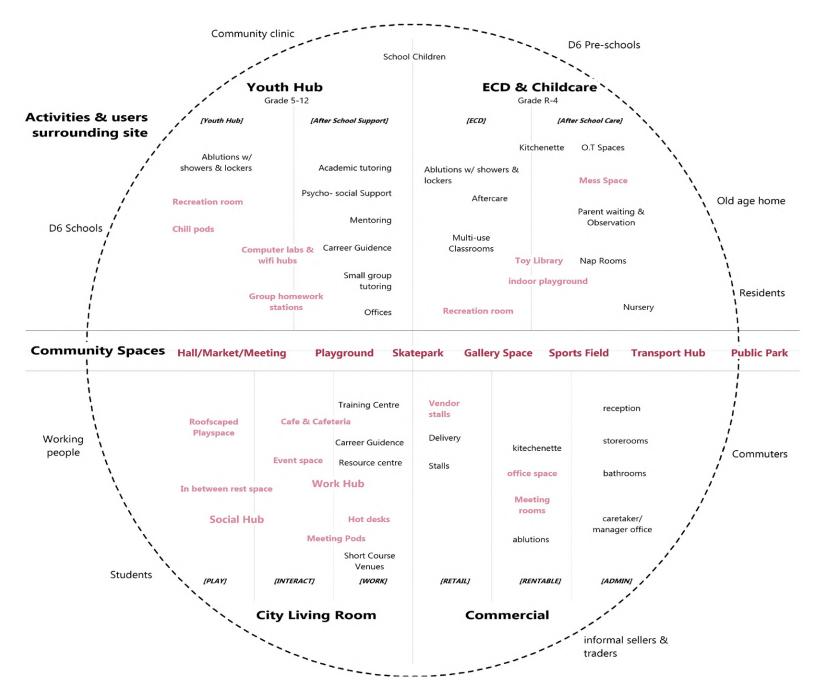
The vignettes capture moments in the space of the urban proposal.

The first image captures a view as if standing just before the bridge that leads over tenant street to CPUT, looking towards the transport hub.

The second image captures a view as if standing under the cover of the transport hub and looking down the Longmarket pedestrian path.



**Figure 115** Vignette of urban realm



## Programme of the site

The programme represented in figure 116 is one that will be applied to the site.

The programme is broken up into four main components.

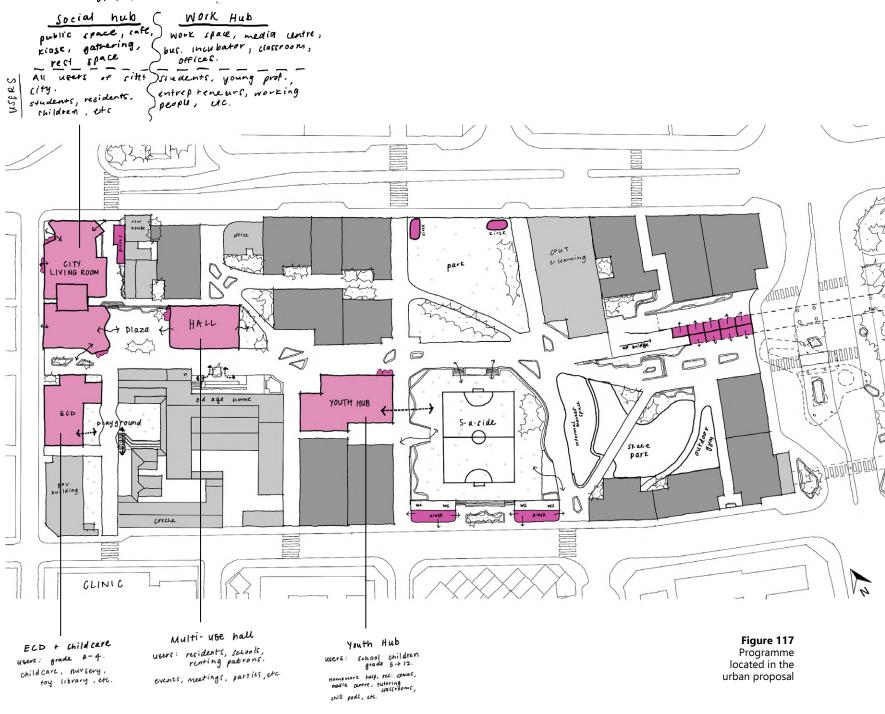
A youth hub providing after school support, an ECD providing childcare, a city living room that acts as a social filter and provides space to work and meet, and lastly commercial components that will support and work with these programmes.

The commercial aspect will provide spaces that allow for formal and informal trade.

Community spaces are placed across the site and will cater to all users. They will act as elements that connect the programmes to each other and they will act as anchor points and attractors of the site.

More specific requirements of each programme contain spaces that are fixed and stable (in black) as well as spaces that have a programmed flexibility (in light pink) which provide energy and excitement to the programme.

**Figure 116**Diagram of components of programme to be applied to site



# Programme across the site

The different programmatic components are placed within the urban proposal to reinforce events and activities of the site.

The city living room is bordered by new Hanover Street, Primrose Street and the Longmarket pedestrian path, and it will catch and create activity at this important knuckle. This programme will have a varied user group. The more active and social areas of the building will be accessible to all users filtering through the site. The more controlled area of the building will provide workspace and access to resources for students and working people.

A community hall will act as a multi-functional space for events, services, and meetings.

The hall and city living room work with a plaza, which will act as public gathering and event space.

The ECD will work with a playground which will also be used by the existing creche on the site. The ECD will cater to younger users from Grade R to Grade 4.

The youth hub will cater to school children from Grade 5 until Grade

The commercial components scattered across the site are highlighted in darker pink.

The city living room will be focused on for further architectural development.

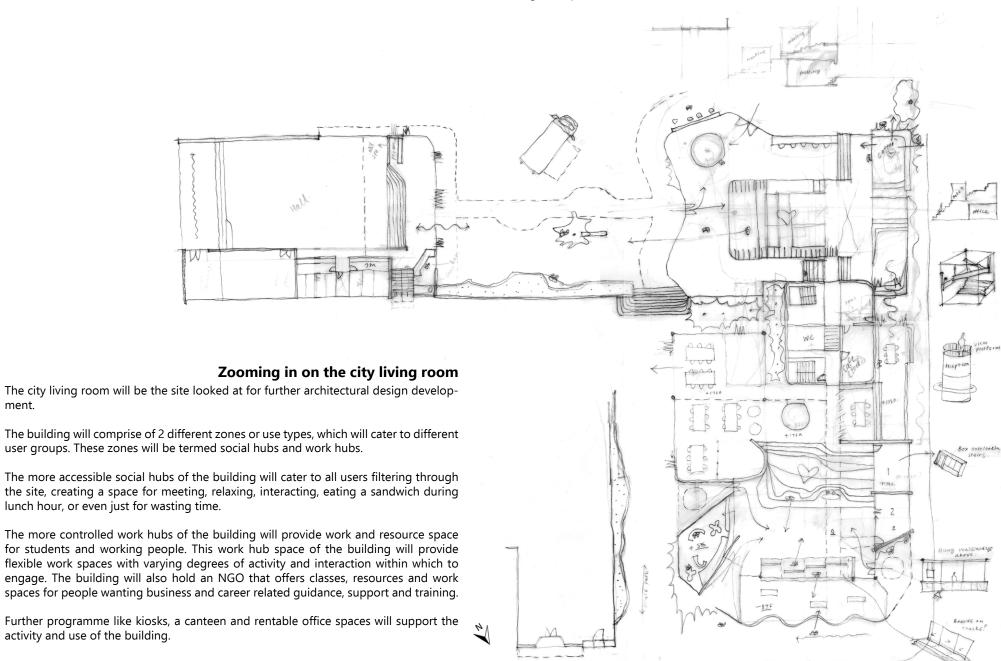


Figure 118 Initial plan sketch of city living room

New Hanover

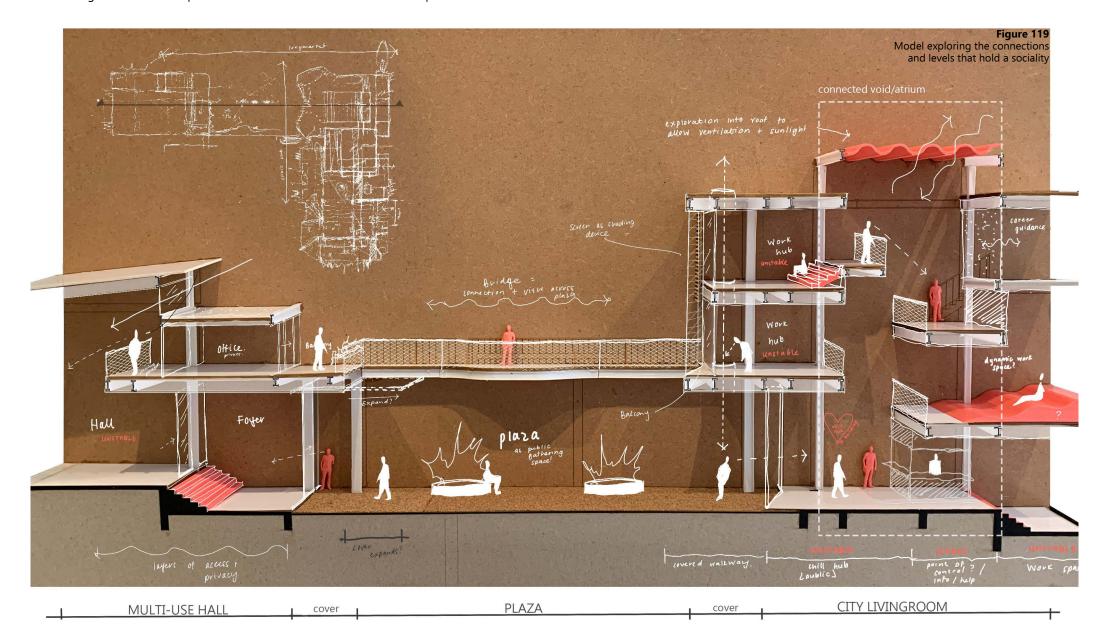
ment.

## **Exploration of space through model making**

To kick start design development, a process of working (technically) in section was employed to test how connections and levels that hold a sociality are physically constructed and enclosed.

The exercise explores connections between the hall, plaza and city living room. It also allowed for a testing of the relationship and balance between stable and unstable spaces.

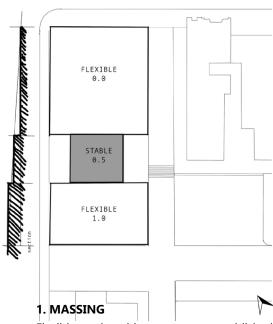
Challenges and considerations surfaced through the process include playing with the complexity of structure, whilst still foregrounding the social activity and interaction, and that experience in the space. Another challenge lies in privacy and levels of access, and how to mediate between accessible and controlled spaces.



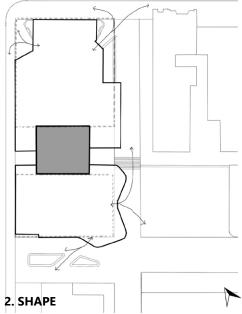
## Order of main conceptual approach

The following diagrams represent the sequences of thinking that order the conceptual architectural approach of the city living room.

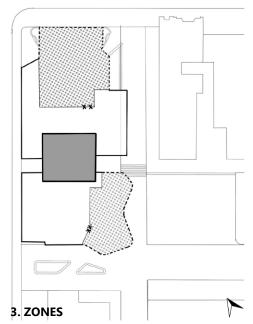
The site is located on the corner of new Hanover & Primrose street and is bordered by the clinic path and the pedestrian Longmarket path.



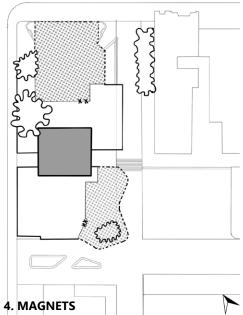
Flexible and stable zones are established, which also step up with the gradient of site.



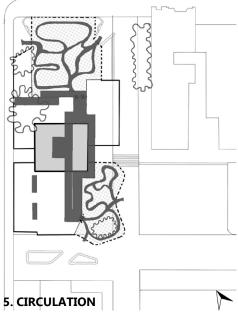
Massing is manipulated to accept and funnel movement.



The flexible zones are further defined by accessible **social hubs**, and a controlled **work hub** space with specific points of access.



Magnets are placed to draw and hold activity. These include cafe's, kiosks, and a canteen



Circulation through the social hubs is more filtered, and circulation through the work hub is more defined.

## Ground plane cut

The ground plane cut on the following page shows activity in and around the building and illustrates how the spaces step up and work with the slope of the site.

The social hubs are unstable, accessible zones that provide spaces to meet, kill time and interact.

The northern social hub has entrances from the clinic path side and from the corner of new Hanover and Primrose Street. There is a kiosk located against the rowhouse on the clinic path side, and a kiosk that opens onto the northern social space.

The southern social space is accessible from the Longmarket pedestrian path and from the plaza. This space contains a coffee kiosk.

There are controlled access points from the social hubs into the work hub area. Control points have key card access and administration desks located alongside them. Entering the work hub allows for access to the facilities of the stable core, as well as the spaces for working and meeting that have various degrees of activity, noise and privacy.

There is a canteen that is accessible from Primrose Street, and which also opens onto the northern free space. Rentable office spaces are accessed from Primrose Street.

## Levels above

These basic plans show the layout of the levels above the ground plane. These levels are accessed using the staircase or a lift that are located in the stable core.

The programme of the levels above comprise of meeting pods, classrooms, a media and resource center, bathrooms, office space, chill spaces, roof gardens, and work spaces.

Administration and office spaces for the business and career guidance NGO are located on the 3rd storey.



**Figure 122** 1st Storey plan



Figure 123 2nd Storey plan



3rd Storey plan

## **Cross section**

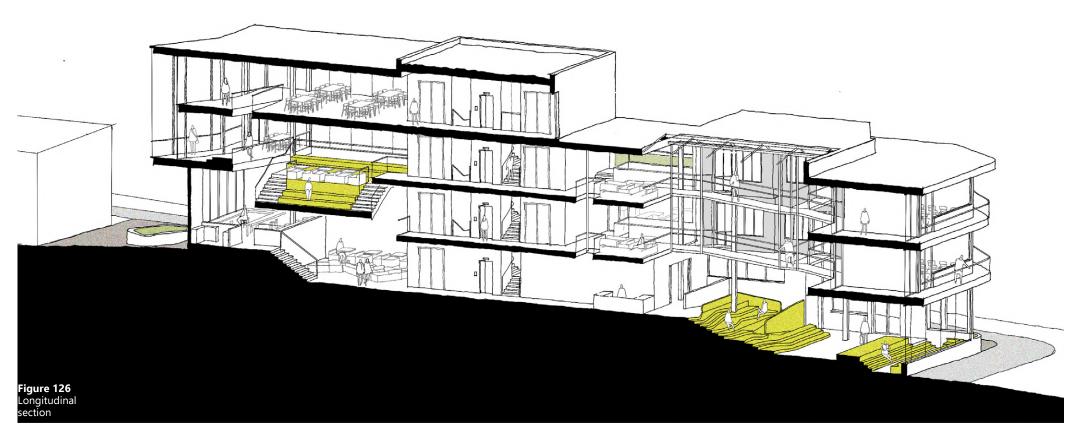
This sectional perspective cuts through the southern social space and shows the social stairscape. There is a visual connection between users occupying the stairscape in the social hub and users in the work hub, which is accessed using a control point that sits behind the stairsacpe.

One of the biggest design considerations still needing to be tackled is the roof. Explorations of how that sits and is constructed is still required. Requirements of the roof include a section over the social hub that allows light into that space, and sections of



## Longitudinal section

This sectional perspective cuts through the middle of the building, revealing the northern and southern social spaces. The view highlights how the flexible areas of the work and social hubs work with the stable core. In this view one can see the meeting pods that are accessed using suspended walkways. Classroom spaces on the northern side function for short courses and workshops held by the training NGO in the building.



## Experience as an imagined user

To aid in an explanation of how this building functions and might be used, a tour through the building as an imagined user will be taken.

This user could be a young entrepreneur, but someone who doesn't have their own work space, resources and equipment, which they are able to find in this building.

Today they have a big meeting in the afternoon, so they will work and then have the meeting in the work hub of the city living room.

They enter off of New Hanover street, stopping to buy a cooldrink and chips at the kiosk. They look up the path that leads to the clinic and see people walking along the Longmarket pedestrian path. They then walk towards the entrance that leads into the northern social hub.



Figure 127 View up clinic cut path



## North social hub

They enter the building and are in the northern social hub. There are school children waiting before school, students meeting up and commuters who got into the city early and are killing time before work.

They look up to the meeting pods (in grey) which they will book for the big meeting. They move towards the administration desk, to ask the person behind the counter to reserve their meeting pod time slot.

To enter the work hub, they swipe their keycard at the control point at the administration desk. Once through, they use the stairs to go up to the media and resource centre where they will use the computers and printers. When they are done, they will continue to prepare for the meeting in one of the more flexible workspaces.

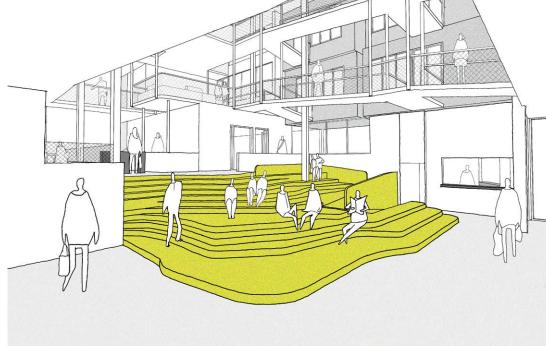
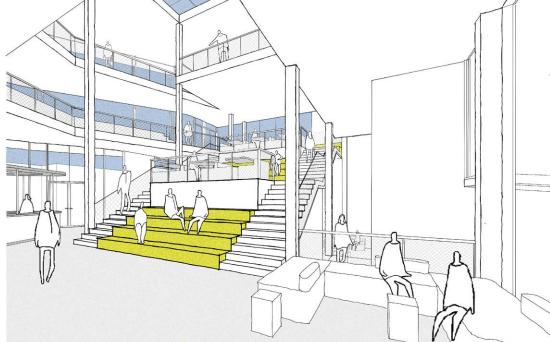


Figure 129

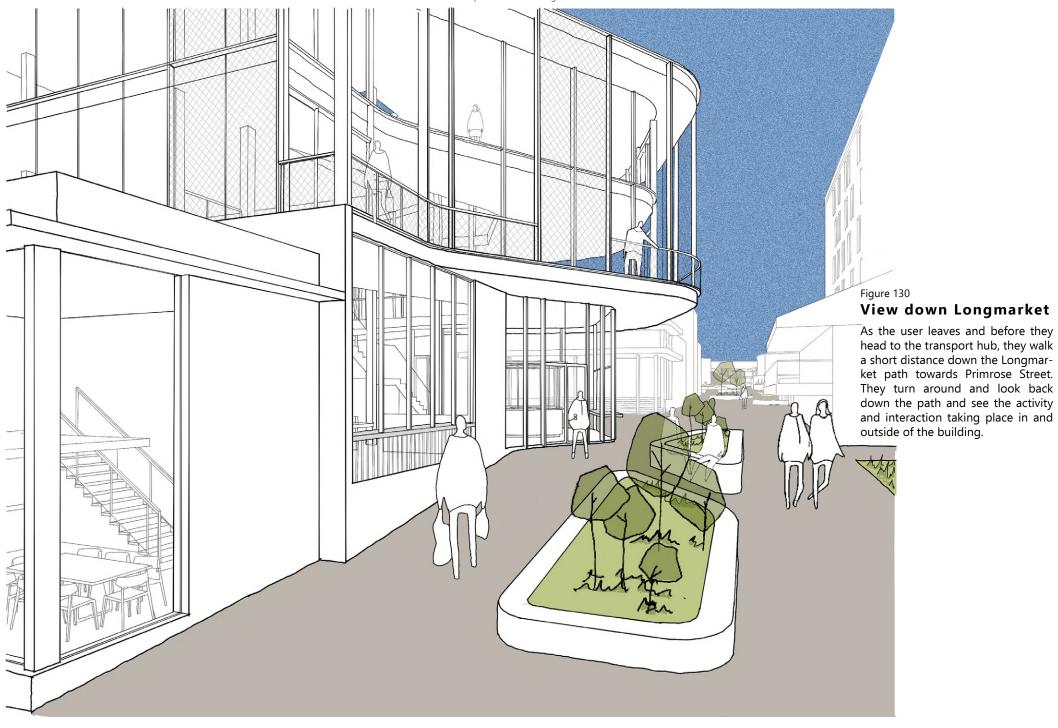
### South social hub

As evening approaches and a successful meeting has been had, they decided to get a hot chocolate for the journey home from the south social hub kiosk.

As they wait, they see a friend chilling on the stairs. The friend is killing time here after work while they wait for the CV writing workshop that takes place in the evening in one of the work hub classrooms. The class is one of the many courses and training programmes run by the NGO in the building.



11. Design development Experience as an imagined user



## Challenges moving forward

Moving into the final design phase and technical resolution of the building, there are some key challenges that will need to be addressed.

These include further resolution and design of the roof scape of the building.

How does the roof work? What areas are accessible? What areas of the roof need to allow light in?

Careful consideration and design of the roofscape in key areas of the building can provide gathering and social spaces that have a connection with what is happening inside the building, as well as allowing for a connection and vantage point outside to the rest of the city.

Refinement of my plan and thinking around the use and functioning of each space must be pushed further, to ensure that spaces that allow for flexibility also have a clear use and purpose.

The plaza that sits between the city living room and hall space requires more detail, thinking about how cover, planting and urban interventions in this space can allow for the southern social hub to extend into the space, and facilitate larger scale gatherings and activities. External cover and weather protection must also be considered for the main routes of the rest of the site.

There will be a big focus on materiality and refinement of the constructional logic of the building, really focusing on how the building is put together.

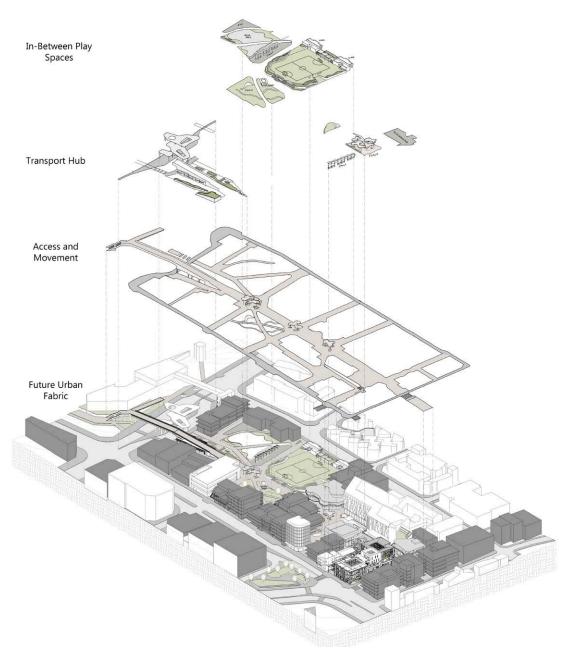
Finally, ensuring that I hold the project to the definition of a playful architecture that I have crafted throughout the research, of ensuring it is a socially focused space that is activated, adaptable, and dynamic. That it is an architecture that embraces the inherent instability of social space, that it is capable of encouraging connection and interaction, that it is an architecture that can adapt and promote skills development and sharing, and that it is an architecture that acts as an attractor rather than an object.

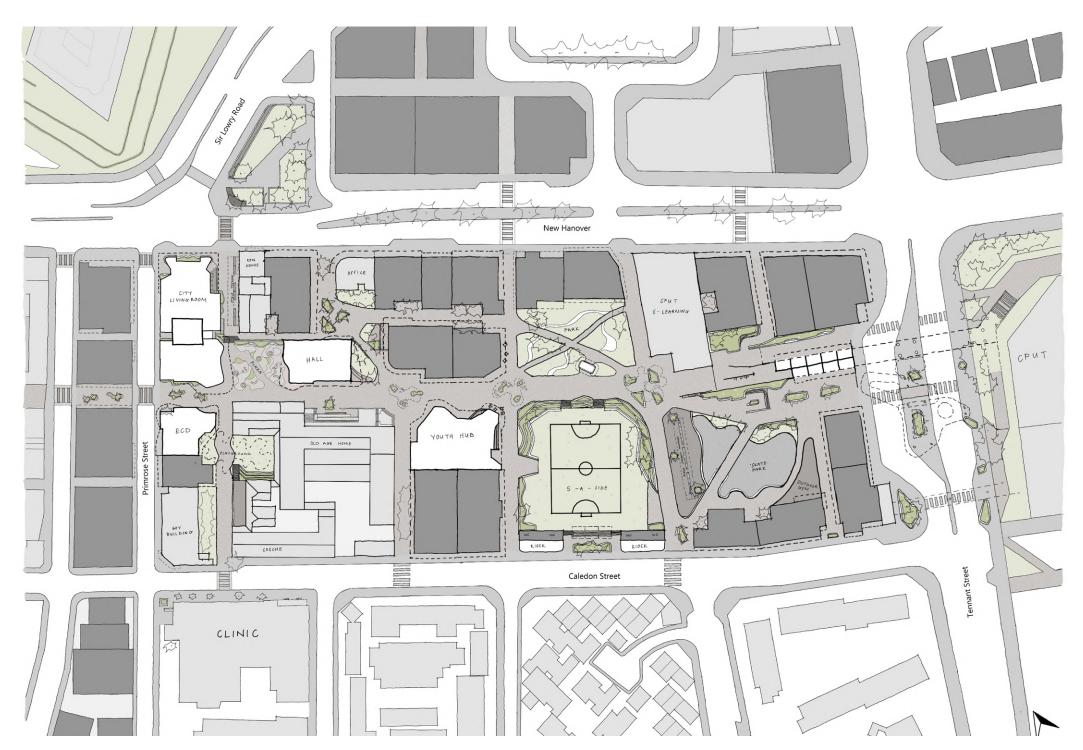


Figure 131 View of city living room from plaza

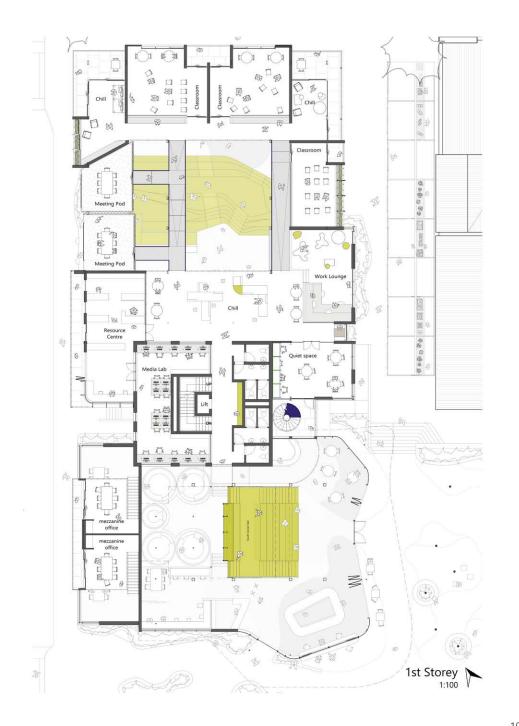
## PART FIVE - Design resolution

# 12. Final Representation

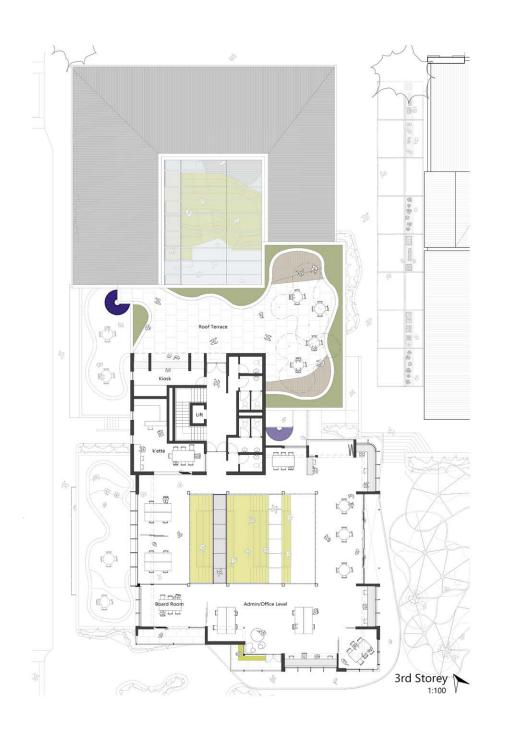




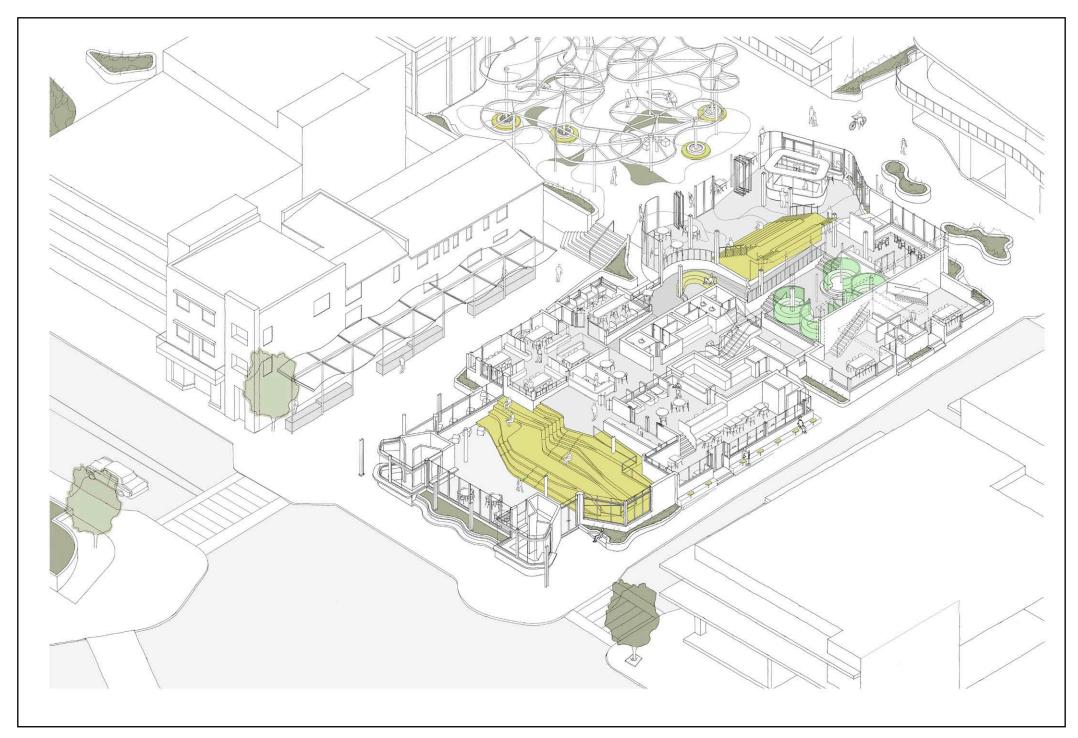






















#### 12. References

## **Bibliography**

Aragüez, M. (2021). "Building Calculated Uncertainty: Cedric Price's Interaction Centre." <u>Architectural Research Quarterly</u> **25**(2): 108-124.

Architecture, H. "InterAction Centre." Hidden Architecture.

Awan, N., et al. (2011). <u>Spatial agency: other ways of doing</u> architecture. London, Routledge.

Böck, I. and R. Koolhaas (2015). <u>Six Canonical Projects by Rem</u> Koolhaas: Essays on the History of Ideas. Berlin, Jovis Berlin.

Bonet-Miró, A. (2021). "Authorship and the Archive: The Reception of the Fun Palace Project." <u>Revista de arquitectura (Pamplona, Spain)</u>: 32-49.

Brand, S. (1994). <u>How buildings learn: what happens after they're built</u>. New York, NY, Viking.

Buchanan, P. (1993). <u>Renzo Piano Building Workshop: complete works</u>. London, Phaidon.

Butragueño Díaz Guerra, B., et al. (2020). "On how communication transforms architectural perception. Seattle Library, OMA = De cómo la comunicación trasforma la percepción de la arquitectura. Biblioteca de Seattle, OMA." <u>Advances in building education</u> **4**(1): 57-72.

Cheek, L. (2005). On Architecture: New library is defining Seattle's urban vitality. <u>Seattle Post-Intelligencer</u>.

Dagenhart, R. (1989). "Urban architectural theory and the contemporary city: Tschumi and Koolhaas at the Parc de la Villette." <a href="Ekistics"><u>Ekistics</u></a> **56**(334/335): 84-92.

Duffy, F. and K. Powell (1997). <u>The new office</u>. London, Conran Octopus.

Eisenschmidt, A. (2012). "Importing the City into Architecture: An Interview with Bernard Tschumi." <u>Architectural design</u> **82**(5): 130-135.

Goldhagen, S. W. and R. j. Legault (2000). <u>Anxious modernisms:</u> experimentation in postwar architectural culture. Montréal, Canadian Centre for Architecture.

Goldhagen, S. W. and R. j. Legault (2000). <u>Anxious modernisms : experimentation in postwar architectural culture</u>. Montréal, Canadian Centre for Architecture.

Gordon, A. (2008). "Spaced-Out Spaces." <u>Interior design</u> **79**(4): 219-219.

Guy Hedgecoe, H. W. (2012). Bilbao's Guggenheim continues to divide.  ${\sf DW}.$ 

Hardingham, S. (2005). Experiments in architecture. London, August.

Koolhaas, R. (1998). S, M, L, XL: O.M.A, TASCHEN.

Koolhaas, R. (2002). "Junkspace." October 100: 175-190.

Koolhaas, R. (2004). Content. Köln, Taschen.

Koolhaas, R. and A. Cuito (2002). <u>Rem Koolhaas/OMA</u>. Düsseldorf ;, Te Neues.

Koolhaas, R., et al. (1997). <u>Small, medium, large, extra-large</u>. Köln, Benedikt Taschen Verlag.

Littlewood, C. P. a. J. (1968). "The Fun Palace - For your Delight." <u>The Drama Review: TDR</u> **12**: 127-134.

Márquez Cecilia, F., et al. (2010). <u>SANAA, Kazuyo Sejima, Ryue Nishizawa, 2008 2011 : arquitectura inorgánica = inorganic architecture</u>. Madrid, El Croquis.

Márquez Cecilia, F., et al. (2015). <u>SANAA, Kazuyo Sejima, Ryue</u> <u>Nishizawa, 2011 2015</u>: continuity systems. Madrid, El Croquis.

Mathews, S. (2006). "The Fun Palace as Virtual Architecture: Cedric Price and the Practices of Indeterminacy." <u>Journal of architectural</u> education (1984) **59**(3): 39-48.

Mathews, S. (2006). "The Fun Palace as Virtual Architecture: Cedric Price and the Practices of Indeterminacy." <u>Journal of Architectural</u> Education **59**.

Miro, A. B. (2018). "From filmed pleasure to Fun Palace." Arq (London, England) **22**(3): 215-224.

Price, C. (1997). Cedric Price: Magnet. T. A. Foundation. London.

Price, C. and J. Littlewood (1968). "The Fun Palace." <u>The Drama review</u> **12**(3): 127-134.

Price, C. H. a. R. B. (1969). Non-Plan: an Experiment in Freedom. <u>New Society</u>. **338**.

Rufford, J. (2011). "'What Have We Got to Do with Fun?': Littlewood, Price, and the Policy Makers." New theatre quarterly 27(4): 313-328.

Schmidt, R. and S. A. Austin (2016). <u>Adaptable architecture: theory and practice</u>. London;, Routledge, Taylor & Francis Group.

Sejima, K., et al. (2004). <u>SANAA, Kazuyo Sejima, Ryue Nishizawa, 1998</u> 2004: océano de aire = ocean of air. Madrid, El Croquis.

Stierli, M., 2016. 'Complexity and Contradiction changed how we look at, think and talk about architecture' - Architectural Review. [online] Architectural Review. Available at: <a href="https://www.architecturalreview.com/essays/books/compleity-and-contradiction-changed-how-we-look-at-think-and-talkabout-architecture">https://www.architecturalreview.com/essays/books/compleity-and-contradiction-changed-how-we-look-at-think-and-talkabout-architecture</a>

Tschumi, B. (1981). <u>The Manhattan Transcripts</u>. London, Wiley; 2nd edition (April 29, 1994).

Tschumi, B. (1990). <u>Questions of space: lectures on architecture</u>. London, Bernard Tschumi and the Architectural Association.

Tschumi, B. (1994). <u>Architecture and disjunction</u>. Cambridge, Mass, MIT Press.

Tschumi, B. (2012). <u>Architecture concepts: red is not a color</u>. New York, Rizzoli.

Venturi, R. (2002). <u>Complexity and contradiction in architecture</u>. New York, Museum of Modern Art.

(2003). District Six: heritage impact assessment. Mowbray [South Africa, Lucien le Grange, Architects & Urban Planners.

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### **ETHICS APPLICATION FORM**

#### Please Note:

Any person planning to undertake research in the Faculty of Engineering and the Built Environment (EBE) at the University of Cape Town is required to complete this form before collecting or analysing data. The objective of submitting this application prior to embarking on research is to ensure that the highest ethical standards in research, conducted under the auspices of the EBE Faculty, are met. Please ensure that you have read, and understood the EBE Ethics in Research Handbook (available from the UCT EBE, Research Ethics website) prior to completing this application form: <a href="https://www.ebe.uct.ac.za/ebe/research/ethics1">https://www.ebe.uct.ac.za/ebe/research/ethics1</a>

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If Student e.g Cre Rei 60/ Nai	Your Degree: e.g., MSc, PhD, etc.	M. ARCH (Professional)
	Credit Value of Research: e.g., 60/120/180/360 etc.	120
	Name of Supervisor (if supervised):	ALTA STEENKAMP
	earchcontract, indicate the ling/sponsorship	N/A
Project Title		PLAYFUL ARMITECTURE

#### I hereby undertake to carry out my research in such a way that:

- there is no apparent legal objection to the nature or the method of research; and
- the research will not compromise staff or students or the other responsibilities of the University;
- the stated objective will be achieved, and the findings will have a high degree of validity;
- limitations and alternative interpretations will be considered;
- · the findings could be subject to peer review and publicly available; and
- . I will comply with the conventions of copyright and avoid any practice that would constitute plagiarism.

APPLICATION BY	Full name	Signature	Date
Principal Researcher/ Student/External applicant	KATHERINE VAN WYNGAARDEN		13/06/2022
SUPPORTED BY	Full name	Signature	Date
Supervisor (where applicable)	Associate Professor Alta Steenkamp		20/06/2022

APPROVED BY	Full name	Signature	Date
HOD (or delegated nominee) Final authority for all applicants who have answered NO to all questions in Section 1; and for all Undergraduate research (Including Honours).	Nancy Odendaal (Prof)		6 July 2022
Chair: Faculty EIR Committee For applicants other than undergraduate students who have answered YES to any of the questions in Section 1.			