milieu

Democratising Quality Urban Housing

by Corey Wilson

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Abstract

This design led research advocates for mutually beneficial architecture indicative of its context; that balances the needs of the individual equally with those of the community. Developed through shifting scales and media, the thesis explores how urban architecture can best respond to context. Milieu, addresses issues of spatial, social and cultural context across four research phases intertwined under the design criteria of domain and sanctuary, a contemporary take on the public and private realm. Through a process of design and critique a design evolves which breaks the mould of traditional apartment models by contributing to its context as well as responding to it. The final design outcome is the result of a correlational design methodology. The design methodology examines the techniques of precedent extracting those successful and applying them to the subject site.

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1. ▲

Figure 1 - Authors Representation of Local Apartment Typologies

Introduction

Problem Statement

During my last 5 years in Wellington I have seen an increasing production of medium and high-density housing developments. A large proportion of these follow the same generic model, with little to no consideration of their social, spatial and historic context. This is a huge missed opportunity.

Hunch

By putting people at the forefront of design decisions a higher quality contextualised design solution can be reached

Aim/Objectives

To find ways an urban precinct can more effectively respond and contribute to its social, spatial and historical context effectively.

To create mid-high density units which encourage more people to live within an urban centre

How can urban architecture respond and contribute more effectively to context?

Portfolio Structure

This thesis follows an iterative design-led research process in the creation of a high-density urban precinct. The configuration of this thesis works sequentially, intersecting relevant case studies and literature where appropriate. While this research responds to the context of Wellington; it also raises the question of how it can be applied to similar urban contexts within New Zealand.

The thesis is structured in three research phases and three design phases, operating between scales and reflecting at each phase. This is followed by a presentation of the final design and brief conclusion of key research findings and possible future steps.

Research phase one, “Background”, explores relevant architectural theories towards forming a framework for design as well as methods for analysis and comparison.

Research phase two, “Site”, investigates the site from various perspectives establishing a strong foundation of wider and immediate context. The architectural and social issues specific to my site can be extracted from the research, to be used in comparison for subsequent case study research.

Research phase three, “Domain”, examines how an urban precinct can best respond to its context through an examination of precedent.

Design phase one, “Respond & Contribute” translates key findings gathered from urban scale precedents and applies them to my site.

Research phase four, “Sanctuary”, examines various housing units against an intimacy gradient, thus identifying the successful/unsuccessful design tactics applied by these precedents.

Design phase two “Respond & Contribute II”, translates key findings gathered from Sanctuary precedents and applies them to my site on the micro scale.

Final Design Phase is an amalgamation of all previous phases in a demonstrating research strategies applied within a resolved design

The final section concludes how the design responds to the initial problem and establishes the steps that are required to create more contextually responsible housing precincts in Wellington and New Zealand.

Methodology Diagram

1. Background**01.**

This section highlights key problems and how they will be addressed. Literature Reviews on Proxemics, Navigation Design and Intimacy Gradient will all contribute to the research umbrella of Aleatoric Milieu.

2. Site Context**02.**

Given context is at the forefront of research and design establishing a strong foundation of knowledge around my selected site will be vital. Key thoroughfares, urban grain, historical significance, existing character of place will all need to be extracted before design can commence.

3. Domain**03.**

The design test on the urban scale. Application of things learnt in site analysis combined with research theories and compared against urban precinct precedents. This will be followed by a reflection on the preliminary design outcome.

4. Sanctuary**04.**

The design test on the apartment scale. A critical analysis of people-orientated precedents along with research theories will be applied to a building framework outlined in the previous domain design testing.

5. Final Design**05.**

Collectively representing the two scales blended as an entire housing scheme. Floor-plans, , renders and diagrams illustrate a cohesive solution for my site.

6. Conclusion**06.**

Reflection of my process, how I would approach things differently in the future and how my research could benefit the construction industry

*“All homes should provide opportunities for connection and retreat, with
carefully curated spaces for living”
(Hayball Architects)*

Domain + Sanctuary

Thesis Structure Origin

Richard Dunbar and Philip McDermott identify three levels of spatial resolution in their report, “Improving the Design, Quality and Affordability of Residential Intensification in New Zealand”.

These are as follows;

Accessibility to city or regional amenities, like how convenient it is to get to work, higher-order services, cultural events, and the like. This can be viewed as a necessary condition in certain respects, although the degree of accessibility needed may differ depending on the household characteristics.

Domain, which encompasses the environment where every day social interactions are formed and where daily or recreational happenings take place. This generally corresponds to the neighbourhood or the urban block, and often includes elements within and beyond the housing precinct.

Sanctuary which refers to the dwelling, and its relationship within and between the dwelling, the precinct and often the surrounding context. (Dunbar & McDermott, 2011)

Each level has several characteristics that have the responsibilities divided. It is therefore beyond the reach of this thesis that qualities such as road access, suburban health, access to services and medical care as

they are the responsibility of local and national governments. The division between domain and sanctuary is critical because it reflects the division in responsibilities between professions. (Dunbar & McDermott, 2011)

Domain quality is traditionally a collective responsibility of the local government, developers, and corporate bodies. It is informed by decisions about urban and landscape design, growth and construction economics, and policy, management, and public space funding in and around developments. However, this thesis proposes this responsibility be shifted toward the architect in order to be in closer proximity to the end-user. This technique has been successfully applied by various architecture firms via the Nightingale Model (McLeod, 2019).

Quality of Sanctuary is also always a joint responsibility on the part of developers, urban planners, architects, and body corporates. It is affected by the internal design of the residences and how they communicate with their neighbours and the public domain visually or physically via footpaths and/or internal circulation space.

background.

Research Context & Methods

Jan Gehl + The Aleatoric Milieu

Chapter One

- 1.1 Jan Gehls Framework
- 1.2 Aleatoric Milieu
- 1.3 Proxemics
- 1.4 Navigation Design
- 1.5 Intimacy Gradient
- 1.6 Prospect - Refuge
- 1.7 Research Summary & Proposition

‘Making Cities for People’

Jan Gehl Master Planning Framework

Jan Gehl is a Danish architect and is seen as a visionary in the urban design field. With several decades of experience, he and his team have developed a framework for balancing idealism with pragmatism and ensured their working is focussed around ‘making cities for people’. For decades, urban planning has concentrated on reorganising human life to reduce the possibility of confrontation. Instead, Gehl Architects aims to embrace diversity, enabling social interaction through understanding the interplay of life, space and buildings

Their framework aims to create an urban symbiosis where each benefits from the other. A vibrant urban landscape where people are well linked to each other and the world around them. Thus experiencing a greater quality of life every day. (Gehl, Masterplanning Frameworks).

Strong master-plans are not just a terraced house, a business park, a campus or a shopping mall but a dynamic, mixed neighbourhood with spaces for a larger range of activity, functions, space, people, types of buildings, tenures, and affordability. The public spaces drive, “...social interactions, local economy, connectivity, mobility, and culture and a place’s memory”. (Gehl, Masterplanning Frameworks)

Specific details and details of buildings are important to people. Active ground levels, edge fields, household numbers per stair and doors to a street are critical factors for creating a sense of community. The human scale, as well as the total mass and density of developments, must respond and contribute to each other.

Figure 2 - Authors Representation of Gehls Masterplan Framework

Life

Space

Buildings

The Aleatoric Milieu

- + a process of thought that can organize a space and its structures in a way that increases one's awareness of their surroundings and motivates one to a specific location.
- + It is inclusive through its principle of visible nodes, preserves human dignity by providing choice through a narrative, and hospitable by accommodating a spatial scale that is reflective of the intended purpose of the space

3. ▲

Figure 3 - Authors Written Aleatoric Definition
Figure 4 - Aleatoric Word Diagram

Aleatoric Milieu

Research Background

My research led me to a recent architectural theory by master’s student, Elaine Yan Ling Lui, out the University of Waterloo, Canada. Her theory entitled, Aleatoric Milieu, combines the space people require to feel at ease with instinctual wayfinding behaviour. (Lui). By examining how buildings or cities naturally embody these practices we can prioritise creating inclusive and liveable architecture.

The theory provides a contemporary understanding of space that promotes user-friendly spaces within buildings and cities. The theory aims to encourage healthy transitions between social relationships,

connecting people intuitively to the functions offered by the building, therefore increasing legibility. She refers to this as a ‘hospitable design language”, reinforcing understanding around the relationship between the human body and dimensions of public, social and personal scale (Lui). Her theory can be better understood when broken into its respective parts; proxemics and navigation design with intimacy gradient acting as a third organisational element.

5. ►

Intimate

Social

Public

Proxemics and Navigation Design

Aleotoric Milieu

The anthropologist Edward T. Hall published *The Hidden Dimensions* in 1966, coining the word “proxemics” to explain how both ‘man and his environment engage in moulding one another.’ (Hall). He defines a ‘Silent Language’ where social communication simultaneously happens across various stages of consciousness. Proxemics depict the unconscious and overt perceptions of space, describing the physical dimensions of the respective sensory environments.

Similar to how the research of ethnography tries to provide a holistic guide to understanding people in their social context, the research of proxemics aims to diagram the hidden aspects of how humans experience their sensory environment. As humans we have a sensory existence, Finnish architect Juhani Pallasmaa, outlines these senses as, sight, sound, taste, touch, scent, muscles and bones. (Pallasmaa) Though our emotions, interactions, and perceptions that occur as a response to our senses are undoubtedly more complicated. Hall split these inputs into distanced receptors and immediate receptors; immediate being those able to be experienced through touch and distance being those that cannot. It is recognised that the way these senses are screened is varied across culture and personality. In Hall's own words, proxemic research

[...] describes how people from different cultures not only speak different languages but, what is possibly more important, inhabit different sensory worlds. Selective screening of sensory data admits some things while filtering out others, so that experience as it is perceived though one set of culturally patterned sensory screens is quite different from experience perceived through another. The architectural and urban environments that people create are expressions of this filtering screening process. (Hall)

His studies led him to four informal classifications of social distance.

Intimate (0-0.5m), Personal (0.5-1.2m), Social – Consultative (1.2-1.6m close, 1.6-3m not close) and Public from there beyond. This is diagrammatically expressed overleaf (Figure 5)

Proxemics Visualised

*Proxemics. n; the interrelated
observations and theories of man's
use of space as a specialised*

As it is common for a standing person to turn their heads to the left or the right or even turn a full 360 degrees, we can infer that the social dimensions of a stationary person propagate as a dome around the individual. A visualisation of what is often referred to as a personal bubble can be seen in figures 7 & 8. Halls analysis of the intimate, private, social and public dimensions can be clearly illustrated on an architectural scale to understand the relationship between the physical. I have extrapolated the social consequences of scale for these scenarios.

The notion of a personal bubble is only drawn out when these invisible lines have seemingly been crossed. This is often when a sense of discomfort and overcrowding is felt. (Lui, 2015). Overcrowding is a trait we seek to minimise or organise within architectural practice. Hall observes the negative connection,

“as stress rises, the vulnerability to crowding rises – people get more on the edge – so that more and more space is required when less and less room is available.” (Hall, 1966).

The intention then is to build spatial awareness, allowing a universal comprehension of hidden spatial communications as if they were spoken directly to us.

Given that the initial guide to Halls distancing was sound, the most accurate representation of them is a stationary person. However, when movement is considered the perception and understanding of space shifts in the direction in which one moves. In his book, *Cities for People*,

Urban Planner Jan Gehl refers to a motion-induced forward head tilt, as illustrated in Figure 8. It is important to consider this as areas of congregation will have different spatial requirements than thoroughfares in terms of human comfort.

Gehl was responsible for redesigning large areas of Copenhagen based on proxemics and human preference for slopes and edge conditions. His books on urban design, most notably, *Cities for People* and *Life Between Buildings* are regularly referred to as being the guidelines for socially focussed city design. His techniques included flexible seating, bollards with leaning options, covered back seating, vibrant streets with soft edges. His well-documented diagram on vertical dimensions can be seen in Figure 6 where he looks to understand the vertical constraints of successful social contact and observation. His work is analogous to Halls and his referenced throughout. His thresholds of social and public sit at 6.5m and 13.4 which is very similar to those seen in Halls work.

When applying these findings to my design I must understand both the intention, orientation and closeness of the individual to others. This will allow me to apply techniques that Hall and Gehl have learned and inspired to build comfortable design environments

Figure 6 - Jan Gehls Diagram of Vertical Proxemics

Images Redacted
See List of Figures for Source

Figure 7 - Authors Representation of Proxemics scale in common urban scenarios

Close Phase
Footpath Scenario

Social Phase
Podium / Park

Public Phase
Veranda Scenario

Close Phase
Alley Scenario

Social Phase
Balcony Scenario

Pubic Phase
Plaza Scenario

Figure 8 - Authors Representation of Proxemic 'bubble' in motion

Stationary

Walking Head

Cone of Perception

Stationary

Walking

Cone of Perception

“The job of the designer is to use other tools to explain the story. The moulding of space should take the visitor by the hand, taking them the through, without them realising whats happening, but it feels effortless”

- Dinah Casson

Proxemics and Navigation Design

Aleatoric Milieu

When used in its proper ways, Hall's proxemics and hidden dimensions follow unusually pragmatic conventions of physical design. In addition to the physical construct of space, there exist memories and moments associated with experiencing the narratives embedded within the built world.

With that notion Lui discusses narrative and how an understanding of spatial scale and configuration impacts our movement and eventual impressing's of space. She explores this under the term navigational design. (Lui, 2015)

Navigation Design is described as having a narthex, path and node and has been extrapolated from Margaret Visser, church space and Kevin Lynch's, wayfinding theories. Visser refers to the narthex as transitional entry space, reinforcing a clear path toward a desirable node. Using illumination, sound and textures, the node metaphysically compels the senses whilst remaining within line of sight from the narthex. Linked via a path from the narthex to the node, the aisle consists of a guided collection of visual stimuli that reveals additional information about the node. Lynch's studies were of a city-wide scale, deriving urban navigation as a product of paths, edges, districts, nodes and landmarks. Paths are the streets or sidewalks that are the transportation paths, while edges are viewed as

borders—walls, houses, and shorelines. Districts are parts of a city which share common characteristics. Nodes are focal points, intersections and lastly, Landmarks are visible objects and function as public reference points. (Lynch, 1960) It is the challenge then to apply this historical working aesthetic in a way which balances architectures purpose with its experience.

Lynch has aptly noted that in navigating a city:
“...nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of past experiences.” (Lynch, 1960)

Combining the wayfinding theory of Lynch with the church ideals of Visser, navigation design is defined as a physical space composed of a narthex, route and node. The navigating experience of narthex, paths and nodes becomes a friendly and hospitable atmosphere by having a corresponding proxemic scale which suits the type of activities. Urban environments can integrate the depth of meaning, thus becoming successful hubs for people's daily lives.

Intimacy Gradient

Aleotoric Milieu

As more people move into cities, transitioning the CBD into thriving mixed-use hubs, the development of new design methods operating beyond the explicitly binary definitions of “personal” and “public” is essential. Understanding of a more in-depth, fine-grained gradient allows the designer to design for a wider array of daily activities.

An integration of Edward Hall and Margaret Visser’s ideas can be seen within the theories of Christopher Alexander. His book, *A Pattern Language*, illustrates patterns around the human experience, historical reference and recognised observations. One of its sections, Pattern 127 Intimacy Gradient, advises arranging a building’s spaces such that public areas are nearest to the entry and private areas are remote. Following this trend produces what is considered an “intimacy gradient” as the intimacy of neighbouring spaces decreases when one progresses to places needing more privacy. The purpose of such an arrangement is to escape the uncomfortable feeling of standing close to a room you just shouldn’t be near.

and private spaces within the city. Though this binary division of “private” and “public” falls short in describing one’s feeling while enjoying the sun in a public park or courtyard, sitting on a balcony, or reading in a bedroom. Maksym Rokmaniko of Studio Anarcitects discusses the idea of mapping these activities on a gradient of values that represent different activities of daily life in a workshop for Future Architecture Platform.

Similar to the Nolli map, black is used for private spaces. The higher the value, the more public space or the activity. The architectural thresholds (e.g., walls, doors, partitions) are the inputs that help to frame the gradient. Figure 9 establishes a guide that represents everyday living situations and their corresponding colour value. By using this as a reference, case studies can be mapped to see whether their intimacy value matches the intended programme. Comparing these various dwelling scenarios will reveal the common practices in the creation of comfortable spaces.

Rome’s classic Nolli Map has been the staple representation of public

Figure 9 - Authors Representation of Intimacy Gradient According to Activity

11. ▼

Images Redacted
See List of Figures for Source

Figure 10 - Authors Representation of Prospect/Refuge
Figure 11 - Rustic Mountain Window Seat with view representing
Prospect/Refuge

Prospect - Refuge

Primitive Architectural Design Theory

The theory of Prospect and Refuge was initially proposed by landscape architect Jay Appleton. His theory attempts to explain why specific settings feel secure and thus satisfy the basic psychological needs of humans. (Appleton)

He proposes that people have an innate desire to seek refuge while prospecting and vice versa and that this stems from our primitive hunting instincts. Often in nature, prospect and refuge conflict, as a prospect, tends to be expansive and bright, whereas a refuge is small and dark. However, there are many cases within the built environment where they occur within one place. This duality is represented in figure 10 where the enclosure and screening provided by the tree and raised patio allow the user to seek refuge while simultaneously having the opportunity to explore the prospect of the street-scape. Other examples of prospects include deep terraces and balconies in human-created settings and extensive use of windows and glass doorways. Refuge is created with alcoves with lowered ceilings and exterior thresholds, such as gates and fences

The theory of prospect-refuge implies that people prefer edges rather than mid-spaces; spaces with floors or overheads; spaces with few points of access (protected at the back or side); spaces that provide unhindered views from various points of view; and spaces that provide a

sense of protection and concealment. The preference for these elements is increased when the environment is perceived as potentially dangerous. This notion aligns with Kevin Lynch's earlier way-finding theories as edge conditions encourage people to sit and survey, whereas open spaces discourage occupation due to vulnerability. (Sugimoto)

The design objective of prospect-refuge can be described as the creation of spaces where people can see without being seen. Some typical examples of prospect-refuge being applied are; creation of multiple vantage points within a space. Additionally, making wide, open areas more appealing by building partial side and back-barrier shelters while preserving clear sight-lines (e.g., shrubbery, screens).

The most desirable are areas that strike a balance between prospect and refuge. Combine the use of prospect and escape features for optimum effect — e.g., external loggias, or sunken floors and ceilings that open to wider spaces enclosed by windows and glass doors.

That urban architecture
can have a
positive response
and contribution to context
via Jan Gehl's Framework,
and application of
Aleatoric Milieu
and Prospect / Refuge
principles.

Research Summary

Jan Gehl's Masterplan Framework takes you through a journey of discovery, vision, concept, and implementation. The structural breakdown of context in three parts allows spatial identity, and functions to emerge in a digestible fashion, such that the causal relationship of design can be identified and traced back to its source. The division of life, space and buildings does not in any way suggest that each can be developed independently of the other, but rather that each informs the next.

As the built environment is an accumulation of these parts, Aleatoric Milieu demonstrates a language of understanding of humans relationship with the built environment.

The Aleatoric Milieu consists of two principal components: first, it is sensitive to how social dynamics are facilitated or deterred through spatial arrangements, and secondly, it possesses an environment that incentivises human engagement by provoking atmosphere of place. Through gradation of intimacy and consideration of social density within a designated area, the architect can influence how a person chooses to move between locations. As the coordinator, Intimacy Gradient attempts to engage in a richer discourse between private space, shared space, and public space. As a result, a new problem-specific architectural language emerges which operates beyond the threshold of utter binary inputs

The prospect refuge theory provides a rudimentary understanding

around degrees of enclosure, and many parallels can be drawn between the intimacy gradient and the likes. The application of principles of prospect and refuge will be critical in desirable, comfortable spaces.

The key research principles discussed are as follows.

- Through simple and intuitive wayfinding, guide people through a narrative that is larger than themselves.
- Assure personal, social, and public dimensions facilitate positive opportunities for human interaction.
- Assure arrangement of a program, seating, lighting, and material to correspond to the specific navigational speed and proxemics dimension.
- Engage in a more fruitful discussion between the private, public, and shared space.
- Assure there is ample opportunity for prospect within retreat and vice versa.

Figure 12- Authors 3D isometric of Wellington

the site.

Urban Context

An examination of the chosen site

Chapter Two

- 2.1 Establishing Wider Context
- 2.2 Te Aro Suburb Overview
- 2.3 Connectivity
- 2.4 Land Use
- 2.5 Historical Context
- 2.6 Urban Grain
- 2.7 Site Photos
- 2.8 Sun Study
- 2.9 Moments & Details

1900

1940

2000

14. ◀

Site Placement

Te Aro , Wellington City

The physical context of Wellington is dramatic, with low-density residential areas that scatter picturesquely amongst amphitheatres overlooking the harbour on the surrounding hillsides. The city is defined by the ground and waters relationships between residents and visitors. The core of the city is restricted to a plateau with the central business district centred around the area of Lambton Quay.

A large green belt borders the city within easy walking distance and is filled with mature trees and gardens. As a result of the topography, urban sprawl stretches only where it can, northward towards the Hutt Valley (Fig 14). Instead of exacerbating pollution by relying on transit links through these areas, Wellington is reconsidering its suburban layout by intensifying the city centre.

Until the early 1990s, Wellington embraced a suburb lifestyle based on vehicles, the central city residential population sitting at a little over 400 was almost non-existent. (Wellington City Council). Now with over 17,000, the city is struggling to intensify at a quick enough pace. About two-thirds of this population exist in Te Aro, a flat suburb with a diverse mixture of commercial, industrial, residential and shopping. The eclectic suburb has high intensification potential due to currently being largely low-rise.

Figure 13 - Authors Map of Cook Strait New Zealand

Figure 14 - Authors Representation of Urban Sprawl In Wellington NZ

Street Context

Taranaki Street

In early 2019 I was informed that the site at 97 Taranaki Street was being earmarked for residential development. The site presented 3 street frontages each with varying scales of urban grain. Ebor Street being a small tree-lined laneway, Jessie Street a one-way semi-industrial zone and then the main arterial route of Taranaki Street. The street bisects Te Aro sitting halfway between the villas of Mount Victoria and the high-rises of the CBD, providing an opportunity for a mid-scale mixed-use precinct. The scale of the site linked well with my research findings as there was enough room to create a small precinct with gradations of intimacy as well as various pedestrian thoroughfares.

In Jan Gehl's 2004 report Taranaki street was identified to have high-quality pedestrian linkages with the water as well as a high potential. Areas identified as low, were activity, design quality, road crossings and existing priority. Since that report, many streets have improved their pedestrian friendliness, but Taranaki is not one of those. The joint initiative between Wellington City Council, Greater Wellington Regional Council, and NZ Transport Agency, "Let's Get Wellington Moving", outlines that Taranaki street is a key focus in reducing lanes, adding a light rail and decreasing the amount of traffic along the route. (New Zealand Transport Authority).

Figure 15 - Aerial Overview of Te Aro and Wellington City

Victoria University

Central Business District

Waterfront

Te Papa

101 Taranaki Street

Taranaki Street

War Memorial

Basin Reserve

NOTE: Plans have been modified from original 2004 records to reflect updated routes etc.

City-wide Connections

Overlaying Gehls Maps

Using Jan Gehl's connectivity maps as a base, I have modified them based on changes within the public network. It can be seen in all three maps that Taranaki Street sits as a secondary route for both car and bus transport. Pedestrian traffic falls short as its urban vibrancy does not match those of neighbouring Courtenay Place or Cuba Street. It is then the challenge to create a destination in which the remainder of the street would follow suits in the coming years.

Vehicular Routes

	=	Primary Route		=	Bars/Cafes
	=	Secondary Route		=	Site Location
	=	Tertiary Route			

Figure 16 - Gehls Map of Vehicular Routes

Figure 17 - Gehls Map of Pedestrian Routes

Figure 18 - Gehls Map of Bus Routes

17.

Pedestrian Routes

18.

Bus Routes

Land Use Map

Programme and Building Analysis

Overlaying and adapting Jan Gehl's maps gave a sense of how the site related to its wider context, its main thoroughfares and its overall potential.

As the majority of human activities, such as employment, leisure or residence, are related to land. Thus, it's important to study the use of land to understand what human behaviour is likely to be and how modification or addition of new human activities may affect the urban landscape. Looking at the maps we can see the diverse nature of Te Aro as a suburb. Equal parts, mixed-use, commercial and residential cluster around my site whereas entertainment is limited to the western or northern extents of my map. If you were a resident of Wellington you immediately recognise those as Cuba Street and Courtney Place.

Creation of another entertainment venue could help facilitate another branch of urban vibrancy as seen in these respective streets. Seven Sisters Brewing and Prefab just top-left and bottom-right of my site in navy could be linked through my site via laneway of some sorts.

Figure 19 - Authors Land Use Map of Site Surroundings

Historical Context

Jessie - Ebor - Taranaki St Block

Response to context must extend beyond the present. The singularities of the site often extend back in time as layers of urban renewal concurrently shape each other. Although the primary focus is around people and how they will inhabit the site, it is essential for architecture to represent any history that precedes.

The original 1901 Thomas Ward Maps illustrate the first significant records of urban planning as Te Aro expanded beyond its Maori Pa site roots. Ebor street originally planned to run through to Taranaki Street. However, this never came to fruition as the Ford Motor Company built out most of the site for the 20th Century, of which many renovations,

relocations, and expansions occurred. Ebor Street linked up to Jessie Street in the early 2000s as the current lane-way of mews houses were built.

Jessie Street maintained a tight urban grain predominantly made up of post-war state housing. The existing grain is currently being lost as they make way for larger commercial or residential addresses. Given the scale of the street, it is important to embody the original urban grain so that the character of place is not totally lost in time.

20. ▲

Figure 20 - Thomas Ward 1901 Map of Wellington

1938

21. ▼

Figure 21 - Aerial photo circa 1938

1951

22. ▼

Figure 22 - Aerial photo circa 1951

1963

23. ▼

Figure 23 - Aerial photo circa 1963

1972

24. ▼

Figure 24 - Aerial photo circa 1972

1986

25. ▼

Figure 25 - Aerial photo circa 1986

2018

26. ▼

Figure 26 - Aerial photo circa 2018

27. ▲

Jessie Street Elevations

28. ▲

29. ▲

Taranaki Street Elevations

30. ▲

Figure 27 - Jessie Street Northern Side (Site side)
Figure 28 - Jessie Street South Side
Figure 29 - Taranaki Street East Side (Site Side)
Figure 30 - Taranaki Street West Side

Urban Grain

Taranaki Streetscape

Based on land use and historical mapping, there has been a substantial shift in urban grain and building scale. A street length building elevation collage was created to understand the context in terms of relative building scale. Both the vertical and horizontal dimensions affect the grain of the street, and in a best-case, scenario adjacent buildings should not contrast each other too drastically. The opposite side of each road has been mirrored so that the direction of the street runs the same direction; therefore, the lower photo collage for each street is simply a representation, not reality.

For the majority of Jessie Street, the scale is low with only mid-high rise apartments at the right hand Tory Street end. There is still strong evidence of the original plot sizes in the central areas. It will be important to represent this small plot size within the site, either with form or materiality changes.

The Taranaki Street perspective is on a slightly larger scale with large scale buildings also at the far extremes. The location of my site is bookended by a six storey office/hotel and a two storey colonial style art gallery. Transitioning between these scales will be vital in integrating within context. The grain of character is also varied as a church, modernism, colonial New Zealand, contemporary are all represented within the short stretch of road. The opposing Briscoe’s homewares carpark does not offer much in terms of design influence.

Figure 31 - Taranaki Street Looking North

Figure 32 - Aerial Drone Shot Looking North Site at Bottom of Frame

Figure 33 - Northern Sector of Site Looking North

Figure 34 - Jessie Street Site Facade

Shadow and Sunlight

Site Brainstorm

The mapping of shadows and sun exposure showed the effects on the site by Sanctum Apartments and the Sharp Tower. Thus, highlighting unsuitable locations for courtyards and private residencies. The summer solstice shadow mapping showed that for summer activities most of the site would get sun apart from the very northern boundary. The Winter analysis gave more information in regard to keeping congregation spaces away from the base of Sanctum Apartments.

35. ▲

36. ▲

37. ▲

Figure 35 - Summer Solstice Whole Day Shadow Path

Figure 36 - Winter Solstice Whole Day Shadow Path

Figure 37 - Combined Average Yearly Shadow Path

Figure 38- Architectural Details in Close Proximity to Site

Moments

Architectural Details

Coming down in scale from the urban are the small architectural elements that contribute heavily to the identity of a place. Here are 18 of the key moments I noticed throughout my initial site visits.

1. On the roof of the new Seven Sisters Brewery are this set of chimneys and a New Zealand flag pole unusually patriotic. The stainless steel chimneys add an industrial character.
2. The facade of the King and Dawson building on the corner of Ghuznee and Taranaki brings a strong sense of art deco to the site.
3. The stairs of the now Wrestler Co. building next to prefab have been tastefully renovated in concrete and timber.
4. The Eastern faced of that same Wrestler and Co. building borders a lane-way shared with Prefab eatery . It creates an elegant greenery link between Jessie and Vivian Streets
5. The corner of the Sanctum Apartments car parking building has been given an architectural touch through use of material. Stone tiles reflect a certain sense of higher quality.
6. Across Taranaki Street behind the Briscoe's Homewares is some semi dilapidated buildings with a mansard roof, unusual for Wellington.
7. The veranda for the Seven Sisters Brewing co. gently curves around the corner. Made out of a white corrugated metal the veranda is dotted with small incandescent fairy lights.
8. A similar style of mansard roof is seen here on the backside of the Salvation Army theatre. Opposite my site on Jessie Street it has an asphalt shingle roof with a timber soffit.
9. On the opposite site of the Wrestler Co. green wall is the prefab eatery pergola which balances white steel with established hedges and planting.
10. The Ebor street townhouses are a hybrid of the contemporary and art deco style.
11. Considering the presence of the Ford Motor Company it is not a surprise to see the logo nearby. Some of the remaining factory sheds along Ebor Street have had their façades preserved as Town-houses were built behind.
12. In between Briscoes and Seven Sisters Brewery is a typical factory saw-tooth roof line and reflects the commercial roots of the site.
13. Built in 1880 the Wesley Methodist church sits north of my site and has its front spires neatly framed by large established trees.
14. Opposite my site on Jessie Street is a currently empty lot of which many industrial brick and steel windows look into.
15. The gable roof of Prefab Eatery on Jessie Street site.
16. Neighbouring the Ford Factory are modern townhouses which tastefully match the Ford facade with a monochrome material palette.

Laneways

39.

40.

Figure 39 - Ebor Street Laneway looking North
Figure 40 - Ebor Street Laneway looking West
Figure 41 - Prefab Laneway Looking North

Common to the likes of Melbourne the laneway is often a pedestrian focussed connecting thoroughfare which, due to its size and positioning, often develops an eclectic character where creativity is encouraged. The laneways surrounding the site are not the traditional brick alleys strewn with graffiti but functionally they act much the same. Ebor street on the facing page balances its functional industrial roots with an intimate tree-lined aesthetic. Recent in the context of the surrounding fabric Prefab Laneway boasts an array of greenery as it runs parallel to Prefab Eatery and a function space on the right-hand side. Qualities observed in both of these will need to be reflected in the final design outcome.

domain

Design Phase One

Design on the Urban Scale

Chapter Three

3.1	The Paddington A Critique	3.10	Precedents on Site
3.2	Design Hunch & Case Study Selection	3.11	Development Skecthes
3.3	BIGYard	3.12	Vision Concepts
3.4	Vinegar Lane	3.13	Massing Iteration
3.5	PA1925	3.14	Programme Design
3.6	Wynyard Central East	3.13	Connectivity (Vehicular + Pedestrian)
3.7	Commonshares		
3.8	Aro living		
3.9	Reflection + Key Techniques		

Critique of Current Proposal

The Paddington

Proposed Development

Wellington, New Zealand

2021

After my research commenced a plan for the development of 152 freehold homes was revealed for my subject site. Developed by Thames Pacific in conjunction with A+ Architects out of Sydney and their marketing campaign states,

“Inspired by the terraces of Paddington in Sydney, these Freehold homes epitomise the best in inner city living. You will have your own urban oasis, within a charismatic and cosmopolitan neighbourhood.” (Thames Pacific)

From a density perspective, the 152 units are estimated to house 300-400 people on an 8,150 m2 site. This lack of density has been heavily criticised by public and council members who have openly admitted they are not within their rights to stop the project despite its lack of foresight for the density needs of the city. Central Councillor Nicola Young said this was an embarrassment because the development was a “waste of space”. (Cropp)

The Paddington claims to,

“Redefine this prized harbour enclave. The lines of these town-houses echo a time when homes were built for communities and built to last.” (Thames Pacific).

It is yet to be determined whether this will be the case. But based on artists impressions and site plans, the development lacks any outdoor space with minimal street activation. The Taranaki Street strip being marketed as Live x Work seems to lack market research as the ground floor space targets a very niche commercial tenant.

Internal laneways are gated narrow with small plant beds and seating right up against tenants’ front doorsteps. Impressions such as Figure 43 show a hive of activity when in reality they will likely be awkward dead spaces whom only purpose is a thoroughfare between inner and outer community

3 story terrace-style houses seen in Figure 45 overleaf are the only beacon of hope amongst a sea of delusional design. Generous in size and with third-floor balconies they seem to offer the vibrant city lifestyle that is advertised. The catch is that they only occupy a small portion of the 152 lots.

The rest of the site follows a cookie-cutter approach as it is set across predominantly 2 stories, the resultant lack of diversity in character and form shows a lack of care toward the surrounding urban landscape.

42. ▲

Figure 42 - The Paddington Jessie/Taranaki Perspective

43. ▲

Figure 43 - The Paddington Artists Impression of Internal Laneway

Site Coverage: 75%
Unit Density (DU): 95 units/m²

Floor Area Ration (FAR): 1.96
Population Density (POP): 373.1 p/Ha

Sketch Perspective Viewpoint

Figure 44 - The Paddington Site Plan

Figure 45 - Paddington Sketch by Tony Leung

Dynamic Form Manipulation

Semi-private Roof Deck

Direct Entry + No front porch

45. ▲

Preliminary Design and Case Studies

Parti Diagram, Massing and Case Study Selection

Hunch: The previous chapter provides an in-depth contextual analysis of the immediate and wider site. This design research phase builds upon a preliminary design hunch extracting techniques from other urban case studies to further develop the form, circulation, and program arrangement of the site.

Preliminary design hunches were predominantly informed by the site rather than the research context as the research will be fed through case studies to filter out the techniques which apply to my specific site.

The initial parti diagram outlines both existing thoroughfares in dashed lines and planned thoroughfares in solid lines. Initial massings are annotated regarding their main design intention.

Case studies were selected from Berlin, Norway and Auckland as comparative cities.

These were selected based that their spatial solutions would be transferable to Wellington's social, and cultural context. The two european cities were selected due to their historical experience of intensification and low-rise high density design approach

"Viewing an architectural site can be compared to consulting a map before heading off on a journey. The site like an enormous map, communicates both current surroundings and ultimate destination, perhaps offering simultaneous views at macro and micro levels."

(Tanijiri and Yoshida)

Figure 46 - Initial iso PARTI Diagram

47.

Figure 47 - Design Hunch One

48.

Figure 48 - Design Hunch Two

BIG Yard

Zanderroth Architekten

Berlin Germany

2010

This five-story housing scheme targeted at families as a compact urban option. An effective mix of open spaces and housing typologies are used in creating individual homes within a high-density environment. The interior row of the building features garden houses and loft rooms. The front row includes narrow four-storey townhouses that are accessed from the street. The shared car park lifts the garden in the courtyard to the first floor, providing a focal point for the community. This central garden allows children to play unsupervised in a large, healthy, protected setting. Additional private outdoor spaces enhance the individual feel of the home and allow residents to regulate their privacy. The shared rooftop terrace, summer kitchen, sauna and apartments for guests, would further aid in developing a building-wide community.

“The great thing about Berlin’s self-made culture is its [architectural] diversity. Locally grown projects are tailored specifically to the people that make them, and to the neighbourhoods in which they are built” (Ring)

Where the development falls short is in its linear nature. Its rigid form isn’t dynamic enough in the encouragement of movement to the outdoors, line of sight is often short and directly into a neighbour’s window. Given the context of having three tall perimeter walls, it is a creative solution.

49. ▲

Figure 49 - BIG Yard Cross Sectional

Figure 50 - BIG Yard Street Elevation

50. ▲

Looking Over Roof Decks

51. ▲

52. ▲

Figure 51 - BIG Yard Urban Aerial

Figure 52 - BIG Yard Courtyard from Balcony

53. ▲

= Sketch Perspective Viewpoint

Figure 53 - BIG Yard Street Sketch

Figure 54 - BIG Yard Urban Plan

Site Coverage: 66% or 100% if raised courtyard considered
Unit Density (DU): 49.5 units/m²

Floor Area Ratio (FAR): 3.01
Population Density (POP): 416.6 p/Ha

Vinegar Lane

Isthmus

Ponsonby, New Zealand

2017

Vinegar Lane is a development in Ponsonby, Auckland. Led by Brady Nixon alongside Architects Isthmus the goal was not to sell or develop the land as one large scale lot., Nixon referring to this in an interview with Justine Harvey as, “... someone will build a big eyesore of an apartment building and, most likely, it will be a crap offering”. (Harvey)

The focus of this analysis is on the northern terraces, but it must be noted that this development is part of a larger supermarket complex to the southern side.

His vision works in favour of both the developer, the client, the architects and ultimately the public. By subdividing into small freehold, fee simple lots it meant the developer got more than three times the price as if he had sold it as one or two large plots. Small plots allowed for diversification in design as many architects were all able to work alongside each other in terms of building placement. Strict guidelines around floor heights, volume and balconies ensured that a certain degree of cohesivity and design quality was upheld.

“One of the things that turns Kiwis off intensification is that it’s all same-same. They want something more bespoke, that has its own identity and looks interesting – that is the most powerful characteristic of the development. It is going to be a very eclectic precinct of properties” (Harvey).

Marketed as, “Do it your way, design your own home, design your own office space” the complex aimed to create a village atmosphere where owners can live and work in the same building. The private courtyard created a large light well at the rear of the apartments, working to create a safe social space within. Many lots have also opted for roof terraces as their private outdoor living spaces.

Based on photographs the development feels dynamic, however as it is still under construction its yet to be seen whether a mixed material palette will be enough to break up the facade. The inclusion of cars within the laneway allows for off-street parking but decreases social opportunity as it is predominantly viewed as road.

Figure 55 - <https://architecturenow.co.nz/articles/eclectic-precinct-vinegar-lane-ponsonby/>

Figure 56 - <https://architecturenow.co.nz/articles/eclectic-precinct-vinegar-lane-ponsonby/>

Figure 57 - http://isthmus.co.nz/wp-content/uploads/2017/08/ISO19_Vinegar-Lane_21B-

55. ▲

Rear of Apartments

56. ▲

57. ▲

▲ = Sketch Perspective Viewpoint

Figure 58 - Vinegar Lane Elevation Sketch

Figure 59 - Vinegar Lane Urban Plan

Site Coverage: 59% (incl laneway)
Unit Density (DU): 186.7 units/m²

Floor Area Ratio (FAR): 1.92
Population Density (POP): 510 p/Ha *

* = Estimated as no exact value available

PA 1925

Zanderroth Architekten

Berlin, Germany

2017

60. ▲

Situated in the quiet Böttzowkiez neighbourhood of Prenzlauer Berg, pa1925 displays another strong example of Zanderroth Architekten's work in Berlin. Built as a joint venture between its future residents, the ensemble consists of four buildings of varying sizes and incorporates the previously independent supermarket into the building's street frontage. Integration of such services has proven to be successful; another example is the Brunswick centre by Neave Brown which also incorporated a supermarket.

"Towns which adhere to no formal geometry can be re-ordered by the imposition of new major enclaves. Control is less rigid but the contrast which towns thrive on is more immediate" (Hodgkinson)

The street side frontage is merged with existing historical urban grain with the ground floor supermarket tastefully integrated with the contemporary apartments above. Collaboration between developers, architects and future tenants likely key to this seamless transition with context. This can be seen in a quote from the architects below.

A contextual approach was taken to better integrate the complex with its surroundings: the existing neighbourhood, in effect, was simply built further, with the complex adopting the building lines, materials, and colours of its context. - (Zander and Roth)

Behind the street side units are three garden houses. These cluster around a large central courtyard which is built on top of the ground floor supermarket. Four smaller courtyards sit a level below this and integrate with surrounding properties' existing courtyards. Five courtyards, all differing in scale, shape and use, result in a unique spatial experience.

The precinct uses a combination of light and dark materials in conjunction with shutters this create a semi ambiguous appearance, "...somewhere between open and closed, light and heavy, bright and dark..." (Zander and Roth)

The four buildings feature varying living styles and apartment sizes. The key advantage being the versatility through which their floor plans can be subdivided, thereby meeting occupants' individual needs. The basic construction layout gives plenty of leeway for tenants to plan the spaces themselves before moving in, which also offers the ability to later adapt the apartments to changing uses which needs. Ranging from 60 to 200 square metres, the units offer generous proportions with some 5-bedroom apartments spanning 3 floors. Floor-to-ceiling windows mean well-lit rooms and outdoor contact. Every apartment also has access to a private outdoor area (be it balcony, a terrace or a rooftop deck).

Figure 60 - Pa1925 Courtyard

central raised courtyard

Figure 61 - PA1925 Shared Courtyard Space above the Ground Floor Supermarket.

61. ▲

62. ▲

Figure 62 - PA1925 Apartment Balcony

63. ▲

Figure 63 - Main Street Frontage

Different Facade Styles

Fully Covered Private Outdoor Area

Partially Screened Balconies

Thoroughfare Adjacent to Building and Public Areas

Vegetation Softens Edge

64. ▲

Figure 64 - Pa1925 Courtyard Sketch
Figure 65 - PA1925 Urban Plan

Wynyard Central East

Architectus
Auckland, New Zealand
2019

66. ▲

In the heart of the regenerating Wynyard Quarter of Auckland, Wynyard Central East sits as a lively residential complex. Consisting of three housing typologies, a twelve-storey tower block, five-storey pavilions and a collection of 14 mews houses the complex is a diverse range of housing options. Each with their distinct style. The juxtaposition of the artisan-style concrete and steel tower against the brick and timber clad housing below breaks up the project into informal districts. Interestingly the developer is seen to have been responsible for the site's architectural breakthrough. Mark McGuinness, managing director of developer Willis Bond, threw something of a curveball. He asked: "What if you put the bigger piece of building to the eastern side of the site and it looked across some lower buildings to Daldy Street? Would there be any benefit in that?" (Barton, 2019)

This went against the references designs set by architects, Architectus which saw a larger scale perimeter block pushed right up to the western park side of the site. Instead of an internal courtyard, a semi-public laneway was opted for. Parking occupies the lower 2 floors of the tower which is masked by the mews houses within the central laneway and by ground-floor retail on the eastern site boundary.

With the pavilion and mews Houses Accessed at ground level the transition from public to private is quite abrupt, it is assumed once the surrounding precinct gets further built up that the ground floor level will become less desirable. The tower block supports 3 cores facilitating social interaction within small community size.

All apartments and townhouses are individually built with a wide variety of configurations. Public spaces are celebrated, and the edges of the ground floor are activated. In a vibrant waterfront background, Wynyard Central uses well orientated flexible design techniques encourage a mosaic of interwoven life and design.

The result would be a precinct "many layers, integrated yet flexible".
- Patrick Clifford

Figure 66 - Site Section West to East
Figure 67 - Aerial Perspective Looking Southwest
Figure 68 - Pavillions
Figure 69 - Mews Houses

Tower Block

Images Redacted
See List of Figures for Source

67.▲

Pavillions

Images Redacted
See List of Figures for Source

68.▲

Mews Houses

Images Redacted
See List of Figures for Source

69.▲

Site Coverage:	62%	Floor Area Ration (FAR):	4.48
Unit Density (DU):	84.4 units/m ²	Population Density (POP):	1362.89 p/Ha

▲ = Sketch Perspective Viewpoint

Figure 70 - Wynyard Central Urban Plan

Figure 71- Wynyard Central Sketch

71. ▲

Common Shares

LCC + Anarcitecture

Bergen, Norway

2015

This project aims to achieve an intertwined network of owned & shared, private & public spaces, designed at varying scales, and with varying dynamics of collaboration, cooperation, and negotiation embedded within them.

Inspired by the New York Highline the goal was to give the concept of sharing a tangible, spatial anchor while building upon the heritage of the existing park. The roots of the existing park were well linked to the city and this project is as much about maintaining these strong links between the space and the citizens. “t is about setting up a process of allowing the park’s classic qualities to perform in a modern manner. Anna Pikovska, Cem Kayatekin Architects on the project dicuss that the park must evolve like any natural system, yet learn from its past like all cultural space: Evolutionary Heritage. (Anarcitects)

Split into a publicly owned podium and privately-owned apartments, this allows the city to maintain in control of the public realm. The Units above designed at varying scales to accommodate multiple tenants. These various building types purposely have ‘leftover’ spaces such as balconies, rooftop spaces which are owned by multiple tenants. The spatial inhabitation of these must be resolved by the tenants and allows for flexible uses over time.

The podium hosts an array of programs such as parking, restaurants, day-care facilities, retail, gyms and much more. Not all spaces can be owned and much like the private units this allows for flexible use over time. The spaces at the edges against the public spaces accommodate more public programs for more community focused use.

The natural progression up onto the podium and gradually shifting along the site adds mystery and would be further improved with a place to gather beyond an open plaza. Apartment units are appropriately proportioned but have minimal diversity in material palette and character.

Images Redacted
See List of Figures for Source

Figure 72 - Commonshares Axonometric

Figure 73 - Commonshares River Perspective Representation

Figure 74 - Commonshares Section

75. ▲

= Sketch Perspective Viewpoint

Figure 75 - Commonshare Courtyard Sketch

Figure 76 - Commonshare UrbanPlan

76.

Site Coverage: 95%
Unit Density (DU): N/A

Floor Area Ration (FAR): 2.9
Population Density (POP): N/A

Aro Living

The Wellington Company

Architecture +

Wellington, New Zealand

77. ▲

Approximately 500m North West of my Taranaki street site an empty carpark lot has been earmarked for a premium low-rise residential development. With 48 Apartments and 61 various freehold terrace houses, the complex is designed for the modern tenant. Labelled, “Aro Living”, the development aims to create an urban home,

*“A place to relax; intimate but with flexibility for entertainment too.
It’s a place inspired by its surroundings; built on the dynamic personality
distinctive to Te Aro” (The Wellington Company).*

A varied material palette in combination with form manipulation is successful in reducing visual impact and bringing the complex down to a human scale. Intensive planting also softens edges as corners and laneways blend into one another. Similar to my site it has 3 street frontages and a large-scale building on the northern boundary. The site plan shows the apartments to be directed up against this northern building. Sunlight exposure would be minimal unless they were at the

eastern/western extremities. The three street frontages have been set back some 5-10 metres from the street as they are all busy roads, one of which is state highway one. I believe this inlays the main issue with the development. Lack of ground floor activation & mixed-use program. The purely residential ground floor would not only suffer from lack of privacy but will likely become a dead zone during business hours. This is most likely due to the fee-simple lots and the lack of space for a ground floor café tenant to facilitate social interaction.

Figure 77 - Victoria Street Elevation

Figure 78 - View from Terrace Balcony

Figure 79 - Laneway perspective of Apartments

Figure 80 - Victoria Street Perspective Looking Northwest

Images Redacted
See List of Figures for Source

78. ▲

Images Redacted
See List of Figures for Source

79. ▲

victoria street facade

Images Redacted
See List of Figures for Source

80. ▲

81.▲

▲ = Sketch Perspective Viewpoint

Figure 81 - Aro Living Laneway Sketch

Figure 82 - Aro Living Urban Plan

Site Coverage: 64%
Unit Density (DU): 125.2 units/m²

Floor Area Ration (FAR): 2.22
Population Density (POP): 695.86 p/Ha

Indirect Access

Ground Floor Activation

Internal Atrium

Material Zoning

Visual Interest through
Form Variation

Laneway Creation

Length of Line of Sight

Mixed Use

Social Space
Tangential to Path

Matching Urban Grain

Architectural Quality

Activating Roof

83. ▲

Figure 83 - (Above) Pictograms of Design Qualities Analysed against Case Studies

Precedent Analysis Reflection

Research Elements to Consider within Design... What worked, what didn't and where to next?

Studying various case studies on an urban level highlighted some common strategies in regard to response and contribution to context. When examined against the research principles a correlational relationship with architectural intention was discovered.

Some successful key strategies are outlined below.

- Refuge within a space can be enhanced by assuring windows do not look directly into another dwelling.
- Planting can be used as a social barrier which allows for comfortable social scale. It can also be used to soften the transition from public to private.
- Angled indirect thoroughfares can add to a sense of mystery, strengthening narrative journey within a space.
- Distinctive architectural treatment can act as a node point.
- Partially enclosed balconies allow for degrees of social dimensions to be achieved, be it fully enclosed and intimate or open and public.
- Material change can create distinctive character which creates nodes along a building façade.
- Large public thoroughfares to address contextual scale of streetscape.
- Light can be effective in creating a nodal point of interest.
- Reference to human scale draws attention to the social aspects of place rather than the buildings.
- Plans arranged at different heights add to the visual interest and mystery of a space.
- Public spaces aspect of prospect and refuge is more legible when revealed using an angled or curved wall.
- Congregation and gathering nodes occur best within spaces which lie tangentially to the path
- Reducing visual barriers that inhibit sufficient depth

Figure 84 - Comparison Diagram for Urban Precedents

Respond & Contribute.

Preliminary design at the macro scale, considering wider context and applying key design strategies from case studies.

Precedent + Site

Combining Research into Design

Figure 85 - Proposed Paddington Development

Figure 86 - Vinegar Lane on the Site

Figure 87 - Wynyard Central on the Site

Figure 88 - PA1925 on the Site

Bridging the gap between identifying research strategies and applying them within design was a brief comparative study. Replication of the Paddington model alongside three of my precedents on the site gave further insight into weighting of the strategies identified. For example case studies identified that a raised ground floor plane (supermarket + carpark) was a successful strategies in creating public space above. However this technique would likely dominate the surrounding low-rise buildings of my site and limit ground activation

The three case studies were selected based on their similar site footprints. The exercise further emphasised ideas around site responsiveness and diversity of massing within urban design.

The shortfalls of the suburban cookie-cutter method exacerbated as the scale goes up. In the next step forms will be contextually articulated and sketched out.

85. ▲

86. ▲

87. ▲

88. ▲

Sketch Development

Articulating the Building Form

Varying in degrees of resolution the sketchy design phase was to bridge the gap between research and massing. Exploratory form and function sketches gave a quick insight into propositions of form, informed by streetscape and research principles. Unexplored design routes were still included as preliminary concepts.

Some key issues explored were;

- Manipulation of form with reference to human scale.
- Transition from High to Low-rise scale on Taranaki St
- Historical reference to Fords factories through roof-lines
- Addressing the many corner conditions within the site.
- Developing a terrace House design which bridged architectural era
- Circulation, Sunlight and Aspect Considerations
- Pedestrian and Vehicular Parking
- Separating the Ground Floor retail from the upper residential.

Figure 90 - Terrace House Sketch Articulation

90. ▲

Vision Concepts

Place Making

The concept for the Ebor Street laneway was one of intervention amongst preservation. The current tree-lined laneway will be mirrored in terms of urban grain plot size and typology. Increased to likely 2.5 or 3 storeys the terrace house will provide a bridge between the art deco of the right hand side and the contemporary of my site. Front courtyards will also mirror the opposing street edge. Based on prospect refuge and intimacy gradient the courtyard calls to be raised to increase the potential of a privacy threshold forming.

The ability to see whilst not being seen is key to creating a balanced space where one feels comfortable. Materiality choices will likely be monochrome to match the context and will allow attention to be drawn to the greenery.

Ebor Street Vision Concept

Figure 91- Sketch Vision of Ebor Street Laneway with proposed Mews Houses on the left

Taranaki Street Vision Concept

The concept for Taranaki Street aligns with the Wellington Councils “lets get moving” campaign as the introduction of a light rail and extensive planting will seek to tame the bustling nature of the street. A loggia of sorts will create a sense of refuge from the bustling street, activating the ground floor with retail and internal covered laneways.

Figure 93 - Sketch Vision looking North on Taranaki Street

Massing Development

Bringing together things learnt from case studies and design sketches the design hunch was developed through massing Phase 1. As Taranaki and Ebor streets were the most defined in terms of their urban context they acted as a cornerstone from which to develop from. As noted in design sketches some key decision decisions were as follows,

- Transitioning scale along Taranaki Street
- Allowing permeability through the larger scale Taranaki Street Form
- Creating areas for social congregation at a tangent to thoroughfare
- Maintaining quaint character of Ebor Street laneway
- Assuring ample sunlight to these areas
- Moving residential access off main roads

Massing Phase two reduced the impact of the Northern building allowing for a more visceral entry route into the central courtyard. The western Taranaki street building has been increased in height in some places as to accommodate more apartments.

The Jessie Street facade has been turned into a mid scale building which transitions the Prefab Laneway into Ebor Street through angling of the facade. This results in an increase in north aspect floor space due to views across the central building.

Massing phase 3 removes the curve of the Northern building increasing the visibility into the central courtyard and the creates an opportunity for an entry plaza off Taranaki street. The depth of the western Taranaki Street building has been further increased as to accommodate deeper apartments. The Jessie Street entrance to courtyard has been developed into a singular form that will likely be broken up with materiality changes. The Townhouses remain as they were in massing phase 2

Figure 94 - Authors Diagrams of Massing Progression

Typologies

Programme Map

Following the creation of the last massing phase. Building typologies were established.

Residential units were kept off the ground floor with the exception of the terrace houses. This creates a separation between the public and the private residences and allows for further activation the ground plane.

Commercial and Retail zones were predominately designated to the ground floor with the exception of the northern multi storey office tower. This has been designed as the neighbouring mid-rise building would shadow the site and was deemed unsuitable for residential use.

Entertainment zones were placed adjacent to open courtyard spaces, promoting social gathering and allowing flexible spaces for events etc.

Circulation has been designed to either express an external wall in the case of the northern building or border an internal lightwell. This has two benefits as it allows light into the lobbys on each floor but also shifts the apartments main entry points off the bustling main streets.

Figure 95 - Proposed Programme Diagram

Pedestrian and Vehicular Access

Following the development of the building typologies the public spaces were established along side vehicular and pedestrian access. Spaces have been slowly revealed using angled or curved walls, proceeding through a decreasing proxemic scale as to promote a memorable narrative for both visitors and occupants. The following is an outline of each entry point and their intended use.

1. At the base of the south wall of Sanctum Apartments sits small intimate courtyards which high fences. By introducing hedges, the original Ebor street layout has resurfaced as secondary thoroughfare. This will be predominantly for pedestrian use but will be paved for event access and as a secondary bar supply access.
2. Tucked next to the terrace houses a ground floor bicycle access will lead into a large bike storage underneath the central lightwell. Direct access to the lobby will be provided from this area.
3. Off Jessie street and aided by an angled wall pedestrians are

invited into the central courtyard with via a long northern view shaft.

4. An existing ramp system that wraps around the Sharp building will be renovated and extended as access to an underground carpark that extends underneath the site on the Taranaki Street side.
5. Originally planned as a narrow Laneway a large plaza lawn has been opened up to encourage public entry and flood the internal courtyard with light.
6. Small covered laneway 1 which provides access to lobby and internal retail stores.
7. Small covered laneway 2 which provides access to lobby and internal retail stores.

Figure 96 - Proposed Public Access and Gathering Areas

sanctuary.

Design Phase Two

Research through Design on the Intimate Scale

Chapter Four

4.1	Social Context	4.10	Translation of Scales
4.2	Alexandra Road Park	4.11	Optimisation
4.3	Unite d'Habitation	4.12	Apartment Iterations
4.4	DXN and Aro living	4.13	Selected Floor Plans
4.5	Light-House		
4.6	The Commons		
4.7	Reflections + Key Strategies		
4.8	Translation		
4.9	Reflection + Key Techniques		

Home and Sanctuary

Intimacy Gradient as an Organisation Tool

The previous chapter has developed the domain, developing form, access, and programme arrangements around the needs of the people as a collective. The shift in scale must now move from the dwellings relationship to context to its relationship with people.

When studying a building's sanctuary, we are not specifically looking at the contextual conditions and the causal relationships that influenced it. Instead, the concern is with the qualities of individual experience within the building, and how the research relates to the experiences we are feeling.

Case studies will be analysed using an intimacy gradient from either lobby or front door entry point. Techniques related to threshold, orientation and scale will be comparatively analysed between case studies and background research. Successful and non successful techniques will then be identified and applied to a set of plans available to be slightly modified within my site constraints.

Case studies were selected in three separate sections. Historical case studies gave a grounded perspective in terms of how spaces have evolved over time. Historical significant housing exemplars such as Alexandra Road and the Unite allowed for further references to the body of architecture to be drawn out.

Local Contemporary Examples were selected as a control to the current contemporary solutions. DXN and Aro Living were selected as they sat within close proximity to each other but with very different design agenda.

Lastly International Contemporary examples were selected based on their attention to social issues.

“Architecture is a plan, a strategy of organisation to fulfil human actions. It is amoral; Its indifference provides the conditions for life to occur. Success is not in what the architecture is but rather what it is able to do.” (Marullo)

Historical Examples

Alexandra Road Park

Neave Brown Architects

Camden, United Kingdom

1978

97. ▲

Alexandra Road Park consists of 520 apartments, a school and multiple community centres/workshop spaces, it is truly a grand project in all senses. Architect Neave Brown designed Alexandra Road to push against the contractor-led building system whose shortfalls, even in 1960's Britain, were becoming increasingly visible. Driven by a distaste toward generic tower and slab block housing solutions of the time, Alexandra Road along with Brown's other designs were seen as a beacon of hope. (Karakusevic, 2017).

Completed in 1978 the estate is defined as high-density, low-rise. A 300m stretch of tiered units forms a ziggurat structure which both physically and audibly protects from the adjacent railway lines. A pedestrian precinct emerges which encourages community interaction giving a sense of security and neighbourliness at the cost of some privacy. Brown describes everything on Alexandra Road as,

"... a notion of continuous, mutually enhancing function. It sounds pretentious but it's just the idea of making things work together." (Testado, 2018)

I have selected an upper two-bedroom unit from Block A for my visual analysis. The promenade at this level is of much closer scale to my project rather than the main 'street'. The abstraction of Brown's ideas through intimacy gradient shows an understanding of threshold and programme.

Arriving at the ground floor level we reach a sudden moment of detachment where two bedrooms and a bathroom sit off a small circulation space. With both bedrooms orientated toward the railway lit with small but private inset windows. Leading upstairs we see an open plan (for 1960's standards) living, dining and kitchen. A large balcony sets the living back and allows for varying levels of privacy to be achieved within the same room.

Figure 97 - (Above) Cross Section of Alexandra Road Park with Unit A highlighted

Figure 98 - Intimacy Gradient of Unit A
Alexandra Road park

Images Redacted
See List of Figures for Source

Figure 99 - Layered Thresholds of Alexandra Road Park

Images Redacted
See List of Figures for Source

Figure 100 - Social Street Perspective

Unite D'Habitation

Le Corbusier

Marseille, France

1978

101. ◀

Unite d'Habitation was a housing project commissioned by the French government to account for post-World War Housing shortages. Architect Le Corbusier was encouraged to “demonstrate a new art of building to transform housing”. (Brillion, 2016). Housed inside an 18-story slab block the building comprises of 337 units which can accommodate over 1,500 residents. Some four additional Unite were constructed across France and Germany all with the same concept, but each with subtle differences due to local regulations, they were all aligned on a north-south axis (Denzer, 2013).

Based on this theory that a house is ‘a machine for living in’, the Unite aimed to create ‘streets in the sky’ packing necessary shops, sports and recreational areas within the building and leaving expansive green areas surrounding, as well as freeing the ground level of the building up for pedestrian movement. Unfortunately, this neighbourhood concept wasn’t sustained for a long time as they currently exist primarily as residential complexes.

Within the building there is 23 different residences varying from small one-bedroom units to generous family units, each with their own balcony. All of them used the same configuration with 3 floors allocated to each hallway, this was efficient use of space and allowed for most apartments to be both double height and dual aspect.

I have selected the 3-bedroom duplex style apartment for my visual analysis as It provides a unique insight compared to the single-story single bedroom units.

Figure 101- (Above) Cross Section of Unite D'Habitation

Figure 104 - Intimacy Gradient of Unit within Unite

Images Redacted
See List of Figures for Source

Figure 102 - Cité Radieuse Duplex w/ Modern Fitout

Images Redacted
See List of Figures for Source

Figure 103 - Cité Radieuse Aerial Perspective

Local Contemporary Examples

DXN Apartments

Archaus
Wellington, New Zealand
2019

In contrast to my research and similar to The Paddington DXN apartments focusses highly on financial gain and the maximisation of rental income. Containing 228 apartments broken up into 114 titles this dual-key system flouts minimum apartment size regulations splits the title into separate units under one title. In this example a one-bedroom and a studio apartment.

Each level contains 12 apartments which over half do not have a balcony and those who do protrude out from the building, exposed to the infamous Wellington weather. These balconies along with a lack of apartment depth create a very small area of perceived privacy. What this building does achieve is a small community size, with its 3 cores, hallways are minimised and getting to know everyone within your floor level lobby would be easy.

Figure 106 - DXN Apartments

105.

Figure 105 - DXN Living Intimacy Gradient in 1 Bedroom Apartments

Aro Living

The Wellington Company / Architecture +
Wellington, New Zealand
2021

I chose the L2.5 terrace house option to analyse from Aro Living. There are larger 3 bedroom options as well as Dual-key residences but the 2.5 seems to offer more degrees of privacy. With its semi-private ground floor courtyard, it does a good job of remedying the issue of designating ground floor to residential (Bathroom in Dual-Key Options). The second floor flexible space could be an office, second living, kids room and the top floor deck allows enough entertaining space whilst being separated from the bustling street below. The layout of keeping the bathrooms internal and a staircase on entry is effective within a terrace or townhouse typology so I will bear that in mind when designing my terrace plans.

109.

107.

Figure 107 - L2.5 Open Plan Living

108.

Figure 108 - L2.5 Second Living

Figure 109 - L2.5 Floor Plans

Overseas Contemporary Examples

Light-House

Shen Ting Tseng Architects

Hsinchu County, Taiwan

2016

110. ▲

Light-House is based in Taiwan's Hsinchu County. This multi-story residential block is built as common Taiwanese terrace houses. The goal of this project was to rebuild the roots of the housing model and reinvigorate its fundamental concepts of connecting people and the land. The architect refers to "Lian-dong"; (describing a continuous housing block) and "Tou-tian" (terrace houses describing buildings with roof spaces open to the sky) in their design approach. (Tseng)

The complex facilitates spatial interaction by creating pockets between spaces and within each level: courtyards, balconies, terraces and light wells all provide a glimpse to the outdoors or the sky. Figure 111

Constructed in relation to their internal staircases, rooms and open spaces to create a layered spatial relationship within each multi-level structure vertically and horizontally. Thus, creating a sense of escape inside a vast area, through a diverse array of open and private spaces.

Small lightwells and large windows allow natural light to spread throughout the building, enabling indoor greenery and creating spaces which feel larger than they are. The facade recedes from the street creating a visible distance between the public realm, whilst still retaining places for a chance between adjacent property - establishing a homely, neighbourly environment where "within as outside as within." (Tseng)

The design is a direct reflection of what is possible when attention to detail is applied to spatial planning. The ability for the user to find spaces of prospect and retreat are evident as they align with the architect's original vision of connecting with the sky and surrounding land.

Figure 110 - Light-House Section with Unit Highlighted

Figure 111 - Light House Intimacy Gradient Analysis Across 5 Floors

Images Redacted
See List of Figures for Source

Figure 112 - Light House Corner

Images Redacted
See List of Figures for Source

Figure 113 - One of the many balcony spaces

The Commons

Breathe Architecture

Melbourne, Australia

2013

The Commons is a mixed-use building composed of twenty-four residences. Based in the industrial East Brunswick, the ground floor includes stores, studio spaces and a lobby, while shared facilities such as vegetable gardens and laundry area in the building. Such features cultivate a cooperative and welcoming way of living in which people know their neighbours and engage in common life.

The project is the cornerstone in what would become the Nightingale project, which aims to create socially, ecologically and financially sustainable residential intensification. The apartment model puts people at the forefront of design decisions, giving people what they want, but asking first. (Sorthe) Led by Jeremy McCleod of Breathe Architecture questions such as Balcony, Laundry or Garden preferences were all put forward to gather an understanding of exactly what people want, rather than assuming what they need.

As a result, the house opposes traditional features such as air conditioning, en-suites, and basement car parking. Also excluded from the process are real estate brokers, marketing departments, and display suites. Instead, funds are designated to extra living space, generous

ceiling heights, double-glazing and high-quality materiality, many of which local apartments frequently ignore.

Sustainable and financially the apartments are designed for reduction, stripping back the layers back to a cohesive, warm, yet raw material palette, with no suspended ceilings cavities. Socially the apartments use a combination of small community size, in tandem with community rooftop garden and laundry to facilitate human interaction.

“I think that the Commons is great because of the community and the laundry is probably the most successful part in terms of building community. When you’re washing your smalls together it doesn’t take long to break down social barriers to socialise together” (Heart Foundation)

Inside the Commons, the apartments are built around a central circulation centre in long, thin bars. This linear layout avoids the cramped feel of modern apartments and represents the spatial charms of traditional terrace houses. Albeit inefficient, the layout with its long hallways creates depth and allows for retreat within a reasonably small footprint. Figure 118. Outdoor spaces are semi-enclosed with established vegetation creating a flexible threshold between the apartment and the street below.

Figure 115 - Street Facade with Cafe

Figure 116 - Internal Lightwell Filtering Light Through Core into Green Space

Figure 117 - Typical Apartment Interior

Sanctuary Analysis Reflection

Research Elements to Consider within Design... What worked, what didn't and where to next?

Studying various case studies at the dwelling scale highlighted some common strategies in regard to response and contribution to context. When examined against the research principles a correlational relationship with architectural intention was discovered.

Some successful key strategies are outlined below.

- Use dramatic Light and Shadow to enhance curiosity
- Optimise Visual Access between indoor and outdoor vistas through orientation.
- Reduce visual barriers that lack sufficient depth by creating floor to ceiling light portals.
- Locate stairwells on external walls/internal atriums to form dual prospect.
- Reduce or eliminate ceiling cavity as not to waste building volume.
- Extend apartment proportions to infer directionality and create a sense of depth within a small space.
- Use of warm materials in creating an inviting space of retreat.
- Consideration of spatial hierarchy; public spaces are open and spacious allowing for multiple degrees of social interaction. whereas bedrooms are intimate are appropriately sized.
- Addition of a transitional entry space, a corridor lit by a lightwell provides a greater sense of comfort and retreat than an entry which opens directly into the living space.
- Outdoor areas contain considerable depth so that various degrees of retreat can be achieved. (See but not be seen)
- Outdoor Areas are covered sufficient so that they are usable spaces in all weather.

Figure 118 - (Above) Sanctuary Pictograms of Key Design Strategies

Respond & Contribute.

Exploring various design outcomes at a micro scale, considering research framework principles and dimensions laid out at the macro scale

Images Redacted
See List of Figures for Source

Figure 119 - Bernard Leupans Zoning Diagrams

Translation into Unit Scale

Establishing Zoning

In *Housing Design: A Manual*, Bernard Leupen distinguishes three factors that characterize the proportioning and spatial association of the loft. These are size, direction and all out façade surface territory (91). Size decides the quantity of discrete spaces conceivable; direction, directs which sides can be presented to regular light, figuring out where spaces are assembled; all out façade surface territory decides the greatest amount of characteristic light entering the home (91).

Zoning as a type of spatial association isolates the floor plan into various useful territories, accomplishing a continuous course of individual capacities next to each other (Leupen 96). This characterizes which exercises are completed where and how they identify with one another (Leupen 63). Graphically Leupen characterizes this framework in its most fundamental structure (Fig 6.7). This technique gives adequate constraints to decide the base zones a family could serenely live in. For every one of the zoning types it is then conceivable to work out a progression of ideal arrangements.

122. ▲

Figure 120 - sm

Unit Proportions Optimisation

Integrating Leupen's zoning types and sanctuary case study analysis, a series of basic unit proportions were developed. Zones considered were those that remained one storey and could be developed around a central core. The diagrams remain simplistic, organising space as not to waste space while maintaining inclusion, orientation and access to light. The units are not given an definitive measurement but the grid in Figure 114 is set in 1m increments for scale purposes.

Apartment Plan Iterations

123. ▼

Figure 121 - Unit Plan Brainstorm

Selected Apartments 1 + 2 Bedroom

= Potential Entrance Location
= Potential Window Placement

124. ▲ **A** One Bedroom 45m² + 9m²

One-bedroom apartment, with large glazing area in living / dining space. The placement of the bedroom is not ideal in terms of privacy gradient but makes sense for light and views

125. ▲ **B** Two Bedroom 70m² + 11m²

Two-bedroom apartment, with large L shape living / dining space. The small hallway between the bedrooms and living acts as a threshold and is a good transition to the more private spaces

NOTE: Plans are subject to slight variations in door and window placement depending on final orientation on the site. Walls may also be slightly modified in placement and thickness.

Figure 126 - Unit A Plan
Figure 127 - Unit B Plan
Figure 128 - Unit C Plan
Figure 129 - Unit D Plan

126. ▲ **C** Two Bedroom 79m² + 13m²

Two-bedroom apartment, similar to the last but with entry foyer / desk space. Lengthened living area gives deeper sense of space and allows for retreat within

127. ▲ **D** Two Bedroom 83m² + 8m²

Larger two-bedroom apartment, shallower in depth the apartment presents more of itself to the facade and will be suited for the upper storey apartments.

Selected Apartments 1 + 2 Bedroom

= Potential Entrance Location
 = Potential Window Placement

128. ▲ **E** Studio 40m² + 6m²

One-bedroom studio apartment. With generous living the bedroom nook could be sectioned of for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming of the living area

129. ▲ **F** Two Bedroom 77m² + 20m²

Two-bedroom apartment, with very shallow depth it will gain lots of sunlight and due to its width has a very large outdoor space. The entryway is partially screened to allow transition between lobby and living. Bedrooms at opposite ends lend themselves toward flattening situation.

NOTE: Plans are subject to slight variations in door and window placement depending on final orientation on the site. Walls may also be slightly modified in placement and thickness.

Figure 133 - Unit E Plan
Figure 134 - Unit F Plan
Figure 135 - Unit G Plan

130. ▲ **G** Two Bedroom 71m² + 18m²

Two-bedroom apartment, with large wide corridor. Potential for desk usage but could be modified for larger bedrooms. Large enclosed balcony with access from all bedrooms.

Selected Apartments 3 + 4 Bedroom

= Potential Entrance Location
= Potential Window Placement

131. ▲

Three Bedroom 94m² + 18m²

Three bedroom Apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony

NOTE: Plans are subject to slight variations in door and window placement depending on final orientation on the site. Walls may also be slightly modified in placement and thickness.

Figure 138 - Unit H Plan
Figure 139 - Unit I Plan

132. ▲

Four Bedroom 142m² + 22m²

Four Bedroom Apartment with two bathrooms and a large open plan living/dining/kitchen. Master opens out to large balcony and partition wall helps separate the bedrooms from main living.

Terrace Houses Floor Plans

Street Entrance

Potential Window Placement

Ground Floor

133. ▲

J

Four Bedroom 157m² + 50m²

The Terrace Houses have been designed on a partially raised first floor to create a separation from the street. Four bedrooms accompanied with 2 bathrooms and a spacious gallery kitchen which extends the propostions of the overall space. 50m2 of outdoor space is split into a back deck, front courtyard and roof balcony for flexibility.

NOTE: Plans are subject to slight variations in door and window placement depending on final orientation on the site. Walls may also be slightly modified in placement and thickness.

Figure 141 - Ground Floor Terrace Plan

Figure 142 - First Floor Terrace Plan

Figure 143 - Second Floor Terrace Plan

134. ▲ Second Floor

135. ▲ First Floor

final design

Final Design Phase

Integration of Design Scales

Chapter Five

- 5.1 Floorplans
- 5.2 Interior Spaces
- 5.3 Exterior Spaces

B.

Basement Level

Summary

Vehicle Bays x 20
Electric Car Bays x 12
Rubbish Room x2

- 1. Entrance to Taranaki Street lobby
- 2. Taranaki Street apartments rubbish room
- 3. Entrance to Northern Commerical building lobby
- 4. Entrance to underground carpark beneath Northern Corporate Building
- 5. Carpark access ramp off intersection at Taranaki and Ghuznee Streets
- 6. Electric car charging bays

Ground Floor

Summary

Retail Space x 7
Commercial Space x 4
Cafe / Bar / Restaurant x 4
Mews Houses x 6
Bicycle Storage x 140

1. Primary apartment lobby access of Jessie Street.
2. Retail space on corner of Jessie and Ebor Street, medium sized space that has a store room. Access to the courtyard through rear doors.
3. Retail space boutique size. Access to the courtyard through rear doors.
4. Small commercial office space. Access to the courtyard through rear doors.
5. Full height atrium/courtyard space.
6. Medium sized corner retail space.
7. Shared co-working space for the residents, promoting social interaction through shared facilities
8. The lane way entrance off Taranaki Street. This allows the building to act as acoustic barrier to the road noise. The lane way creates a moment of compression and release as you enter the block and leads you into the main plaza.
9. Large corner retail space.
10. Small Corner Retail Space with a store room.
11. Ground Floor of Mews House. Elevated front courtyard protected by trees then leads through open living area. Rear courtyard separated by hedges and a large ivy strewn brick wall.
12. Bike storage to encourage sustainable city living, these space could also include additional ground floor storage for each apartment.
13. Pathway continuing from the Taranaki Street entrance creates direct route to vertical access core.
14. Small boutique retail space.
15. Access core, including elevator and stairwell. Single stair access therefore apartments are sprinkled for fire safety.
16. Small Boutique retail space. Glass wrap around curtain wall with access from within covered colonnade.
17. Main Plaza. Overflow for restaurant/café.
18. Small boutique retail space.
19. Bicycle Storage.
20. Second pathway continuing from the Taranaki Street entrance creates direct route to vertical access core.
21. Double Height Restaurant/Bar Space
22. Access from Ebor Street
23. Small boutique retail space.
24. Small Boutique retail space. Glass wrap around curtain wall with access from within covered colonnade.
25. Corner Cafe/Retail Space.
26. Main Lawn to be used as pocket park kept open for future events.

1.

First Floor

Summary

Apartments x25
Mews Houses x 6
Commercial Spaces x 2

1. Two bedroom Apartment with dual aspect living area and partially enclosed balcony. (78m²+11m² Terrace)
2. One-bedroom studio apartment. With generous living the bedroom nook could be sectioned of for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming of the living area. (42m²+10m² Terrace)
3. Three bedroom Apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Two Bedrooms have large windows opening into internal atrium. (98m²+12m² Terrace)
4. Same as above but mirrored.
5. Two-bedroom apartment, with angled living / dining space. The small nook between the bedrooms and living acts as a threshold and is a good transition to the more private spaces. Juliet Balcony on corner (68m²)
6. Two-bedroom apartment, with large L shape living / dining space. (74m²+12m² Terrace)
7. Two-bedroom apartment, similar to the lastbut with entry foyer / desk space.

- Lengthened living area allows for retreat within. (76m²+12m² Terrace)
8. Two-bedroom apartment, with large wide corridor. Potential for desk usage. Large enclosed balcony with access from all bedrooms. (68m²+13m² Terrace)
 9. Two-bedroom apartment with north east dual aspect. (71m²+11m² Terrace)
 10. One-bedroom apartment with northern balcony. (47m²+7m² Terrace)
 11. Second Floor of the Mews houses large landings accommodate office space. two large bedrooms both have small balconies to the east and west.
 12. One-bedroom apartment with eastern Juliet balcony. (47m²)
 13. Three bedroom apartment with dual north west aspect. Living room orients itself toward afternoon sun. (85m²+12m² Terrace)
 14. Two-bedroom apartment places its bedrooms at either ends for possible two couple scenario. (70m²+13m² Terrace)
 15. One-bedroom studio apartment. With generous living the large bedroom nook could be sectioned of for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming of the living area. (42m²+10m² Terrace)
 16. Three bedroom Apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (94m²+18m² Terrace)
 17. Double Height Restaurant Space.
 18. Large Commercial Area with large outdoor balcony overlooking pocket park.
 19. Medium Commercial Area with large outdoor balcony overlooking park.

2.

Second Floor

Summary

Apartments x25
Mews Houses x 6
Commercial Spaces x 2
Function Spaces x 2

1. One bedroom Apartment with dual aspect living area and corner balcony. (60m²+11m² Terrace)
2. One-bedroom apartment. (42m²+10m² Terrace)
3. Two bedroom apartment. Two door separation bedroom and living despite compact plan. (68m²+12m² Terrace)
4. Four bedroom family apartment with large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (140m²+20m² Terrace)
5. Two-bedroom apartment, with angled living / dining space. The small nook between the bedrooms and living acts as a threshold and is a good transition to the more private spaces. (68m² + 8m² Terrace)
6. Two-bedroom apartment, with large L shape living / dining space. (74m²+12m² Terrace)
7. Two-bedroom apartment with separate bedroom wing (72m² + 14m² terrace)
8. Two-bedroom apartment, with open entry foyer/office. Large enclosed

- balcony with access from all bedrooms. (68m²+13m² Terrace)
9. Two-bedroom apartment with north aspect. 68m²+11m² Terrace)
 10. One-bedroom apartment with eastern balcony. (48m²+8m² Terrace)
 11. Third Floor of the Mews houses. Two large bedrooms both have small balconies to the east and west. Master bathroom on eastern wall
 12. Large Function Space with dividing wall (510m²+ 90m² Terrace)
 13. Three bedroom apartment with dual north west aspect. Living room orients itself toward afternoon sun. (85m²+12m² Terrace)
 14. Two-bedroom apartment places its bedrooms at either ends for possible two couple scenario. (70m²+13m² Terrace)
 15. One-bedroom studio apartment. With generous living the large bedroom nook could be sectioned of for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming of the living area. (42m²+10m² Terrace)
 16. Three bedroom Apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (94m²+18m² Terrace)
 17. Internal Atrium Space
 18. Large Commercial Area with large outdoor balcony overlooking pocket park.
 19. Medium Commercial Area with large outdoor balcony overlooking park.

3.

Third Floor

Summary

Apartments x25

Commercial Spaces x 2

1. Roof Top Garden with grasses - not accessible.
2. One bedroom Apartment with dual aspect living area and large L shape corner balcony. (55m²+21m² Terrace
3. One-bedroom dual aspect apartment. (42m² +8m² Terrace)
4. Three bedroom family apartment with large open plan living. Master bedroom has access to large semi-enclosed balcony. (87m² +15m² Terrace)
5. Three bedroom family apartment with larger living and smaller terrace than the last. Master bedroom has access to large semi-enclosed balcony. (95m²+8m² Terrace)
6. Two-bedroom apartment, with large L shape living / dining space. (74m²+12m² Terrace)
7. One-bedroom studio apartment. With generous living the bedroom nook could be sectioned of for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming of the living area (42m² + 10m² Terrace)

8. Three bedroom Apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (94m² +18m² Terrace)
9. Two-bedroom apartment, with very shallow depth it will gain lots of sunlight and due to its width has a very large outdoor space. The entryway is partially screened to allow transition between lobby and living. Bedrooms at opposite ends lend themselves toward flatting situation. (77m²+ 20 m² Terrace)
10. One-bedroom apartment with eastern balcony. (48m² +8m² Terrace)
11. Roof Top Garden with grasses - not accessible due to Mews houses privacy
12. Two bedroom dual-aspect apartment with bedrooms on the morning side and living on the afternoon side. Desk nook Separates bedrooms from main living. (62m² + 10m² terrace)
13. Two bedroom dual-aspect apartment with en-suite. Bedrooms again occupy morning side and living on the afternoon side (78m² + 13m² terrace)
14. Large open single aspect apartment with transitional foyer space. (50m² + 10m² terrace)
15. Compact dual aspect two bedroom apartment faces north east with a north facing balcony. (56m² + 10m² terrace)
16. Large dual aspect two bedroom apartment faces north west with a north facing balcony. (70m² + 10m² terrace)
17. Internal Atrium Space.
18. Large Commercial Area with large outdoor balcony overlooking pocket park.
19. Medium Commercial Area with large outdoor balcony overlooking park.

4.

Fourth Floor

Summary

Apartments x19
Commercial Spaces x 2

1. Roof Top Garden shared with terrace of O2 Apartment
2. Three bedroom family apartment. Master bedroom has access to large semi-enclosed balcony. (85m²+30m² Terrace)
3. Three bedroom family apartment with larger living and smaller terrace than the last. Master bedroom has access to large semi-enclosed balcony. (95m²+12m² Terrace)
4. Two-bedroom apartment, with large L shape living / dining space. (69m²+12m² Terrace)
5. Large family three bedroom apartment with master suite. Kids rooms come off living while master takes advantage of northern aspect. Northern balcony opens off master and living. (90m²+26m² Terrace)
6. One-bedroom apartment. Covered and sheltered outdoor space coming of the living area (42m² + 10m² Terrace)
7. Two-bedroom apartment, with very shallow depth it will gain lots of sunlight and due to its width has a very large outdoor space. The entryway is partially screened to allow transition between lobby and living. Bedrooms at opposite

- ends lend themselves toward couples. (77m²+ 20 m² Terrace)
8. Same apartment layout as above but with large roof top deck.
 9. Roof Top Garden with grasses - not accessible due to Mews houses privacy
 10. Two bedroom dual-aspect apartment with bedrooms on the morning side and living on the afternoon side. Desk nook Separates bedrooms from main living. (62m² + 10m² terrace)
 11. Two bedroom dual-aspect apartment with en-suite. Bedrooms again occupy morning side and living on the afternoon side (78m² + 13m² terrace)
 12. Large open single aspect apartment with transitional foyer space. (50m² + 10m² terrace)
 13. Compact dual aspect two bedroom apartment faces north east with a north facing balcony. (56m² + 10m² terrace)
 14. Large dual aspect two bedroom apartment faces north west with a north facing balcony. (70m² + 10m² terrace)
 15. Three bedroom east facing apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (94m²+18m² Terrace)
 16. Three bedroom west Facing Apartment. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (94m²+18m² Terrace)
 17. Internal Atrium Space.

5.

Fifth Floor

Summary

Apartments x19
Commercial Spaces x 2

1. Triple- aspect apartment with large double suit bedrooms and a gallery like entrance way. (100m² + 30²)
2. One-bedroom apartment, with en-suite + guest powder room on entry (59m²+25m² Terrace)
3. One-bedroom apartment, with en-suite accessible at entryway for guest use (55m²+30m² Terrace)
4. Internal Atrium Space
5. One-bedroom studio apartment. Bedroom nook an be sectioned of for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming of the living area (42m² + 10m² Terrace)
6. Three bedroom west Facing Apartment. Large open plan living with island bench. Master bedroom has access to large semi-enclosed balcony. (94m²+18m² Terrace)
7. Two-bedroom apartment, with very shallow depth it will gain lots of sunlight and due to its width has a very large outdoor space. The entryway is partially screened to allow transition between lobby and living. Bedrooms at opposite ends lend themselves toward couples. (77m²+ 20 m² Terrace)
8. Large Shared Roof Top Space to be built out as vegetable gardens/ entertainment area.
9. Internal Atrium Space
10. Two bedroom dual-aspect apartment with bedrooms on the morning side and living on the afternoon side. Desk nook Separates bedrooms from main living. (62m² + 10m² terrace)

6.

Sixth Floor

Summary

Apartments x3

-
1. Two bedroom Apartment with dual aspect living area and partially enclosed balcony. (78m²+11m² Terrace)
 2. One-bedroom studio apartment. With generous living the bedroom nook could be sectioned off for couples who wish to stay up and work late etc. Covered and sheltered outdoor space coming off the living area. (42m²+10m² Terrace)
 3. Three bedroom Apartment with entryway and desk/storage nook at entry for families. Large open plan living with island bench. Two Bedrooms have large windows opening into internal atrium. (98m²+12m² Terrace)

Figure 144 - Interior view of Mews House Second Floor Bedroom

visual collective

Ebor Mews House

Large bedroom on the second floor of the Mews Houses. Out-looking the eastern Ebor Street side morning sun streams through front balcony partially screened by vegetation the space offers high levels of privacy despite being so close to the laneway. The image overleaf shows the ground floor looking toward the back courtyard. The Living Room nook sits at the front of the house protected by a mid-floor height increase aided again by vegetation as a privacy screen. Open plan living only separated by small dividing wall between entrance and living nook. Open tread floating timber staircases suspends itself from concrete ceiling on entry.

Mews House

Figure 145 - Interior View of Mews House Ground Floor Living Area Opening out into Back Courtyard

Studio Apartment

Figure 146 - Interior View of Studio Apartment
Typology Looking from Bedroom Nook

Studio Apartment

Entering slightly right of the centre of the apartment the apartment makes use of door swing direction and deep proportions to provide sufficient variation in intimacy gradient; both from entry and from peering eyes externally. Inbuilt kitchen and entertainment joinery make use of a small space and could be adapted into bench seat for dining. Bedroom nook sits tucked behind main door and could easily be partitioned off depending on tenants' desires.

Figure 147 - Interior Cutaway view of Studio Apartment

Taranaki Two Bedroom Apartment

Figure 148 - (Above) Floor Plan for Taranaki Two Bedroom Apartment

Figure 149 - (Left) Interior Living Room Space of Taranaki Two Bedroom Apartment

Taranaki Two Bedroom Apartment

Taranaki two-bedroom apartment as seen here and on the previous page has similar design aesthetic to the last but as seen in the plans the door directly off the living space leads into small transitional space, offering layers of spatial privacy. Outlook faces east from the Taranaki Street building looking over toward Mt Victoria.

*Figure 150 - (Right Over Page) Interior Living Room
Space of Taranaki Two Bedroom Apartment*

Jessie 2 Bedroom Apartment

A common feature of the Jessie St Apartments is that many of them use a terrace glazing setup with simultaneously connects and separates users. Being able to see the living from the bedroom through layers of space and glazing adds mystery and a greater sense of where you are within the urban landscape.

*Figure 151 - Interior View of Jessie Street Bedroom
looking through terrace space.*

Central 2 Bedroom Apartment

Situated above the central restaurant and function spaces are dual aspect apartments which offer views to the outside from every room, even the bathroom. With the shower and WC tucked away from view from the window spatial privacy is improved without the need to limit the height of the window to half height. Glass frosting slowly tapering off toward the ceiling allows for dramatic play of light throughout the space. Connecting you to the outside from within the most private part of the home was driven largely by the prospect refuge theory and windows were placed in as many bathrooms as feasible.

Figure 152 - (Right) Interior View of Central Dual Aspect Apartment Looking East toward Mt Victoria

Aerial Perspective

Looking north east the aerial perspective exemplifies the attention to detail around contextual design. Material palette and form manipulation allows the precinct to sit within the site harmoniously. Mimicking the large diversity of character seen within Te Aro the scale of the Taranaki street elevation blends the opposing scales at either end of the site together whilst creating important thoroughfares.

Figure 153 - (Right) Aerial Perspective view looking Northeast toward the Harbour

Plaza Looking West

Figure 154 - Plaza and Lawn perspective looking West toward Kelburn.

Pocket Park

Figure 155 - Plaza and Lawn aerial perspective looking East toward Mt Victoria.

Taranaki Northern End

The Taranaki pocket part opens itself up to the street via a wide entry point drawing you into the space before a moment of compression and release occurs as you move past the larger Taranaki Street building and into the large plaza space. External colonnades on the ground floor of both the Taranaki street and small left-hand building enables transition between domain and sanctuary while increasing commercial opportunity during poor weather.

Figure 156 - (Left) Over the street perspective of pocket park leading through thoroughfare down Ebor Street.

Taranaki Southern End

Moving slightly south down Taranaki street the full façade is revealed. Designed to transition between urban scales a fine urban grain is maintained through form manipulation of the upper levels. Staggered wooden screens and steel cable provide ample space for vegetation filtering light during the evening and increasing transition between domain and sanctuary visually. Light rail shown here was not explored but has been imposed on the site to show potential future context.

Figure 157- (Right) Exterior Night Perspective showing Taranaki Street Facade and Future Light Rail.

Jessie Street Entrance

The Jessie Street entrance provides a similar experience to the pocket part but on a smaller scale. Limiting the height to three or four stories at the street side means that the site doesn't overly impose. The angled wall leads you through a northern thoroughfare which forks underneath the Taranaki St Building to the left and reveals the large expansive plaza to the right. Ground floor retail activation key here in maintaining an active urban realm throughout entire the day.

Figure 158 - (Right) Activated Exterior Perspective of Jessie Street Entrance

Ebor Street Mews

Ebor Street Mews plays down the scale of the development behind it as it acts as transitional element in the design. There is more to their design than just that though. As mentioned previously mid height ground aids in increasing privacy whilst distance to curb side is at a minimum. Identical in floor plan the Mews uses vegetation and a reversed roof line to break up the repetition. The roof design also tipping its hat to the historical factory presence of the site.

Figure 159 - (Left) Exterior Elevation of Mews houses along Ebor Street

Shared Roof Top Terrace

Atop the central building nestled behind the Mews Houses and set back from the bustling Taranaki Street sits a large shared roof terrace which has the potential for multiple uses and users. Be it future vegetable gardens or simply as safer space for kids to play the space is basked in sun and is only limited by the tenant's cooperative imagination.

Figure 160 - (Right) Exterior Terrace Views from Central Shared Roof Top Space.

conclusion.

Thesis Summary

Self reflection and Final Notes

Chapter Six

- 6.1 Conclusion Overview
- 6.2 Chapter Reflections
- 6.3 Final Reflection
- 6.4 Bibliography
- 6.5 Figure List

milieu

“The context or environment in which
one lives and is influenced by”

Micheal McCormack of Milie Property Ltd.

Conclusion Overview

So, how can urban architecture respond and contribute more effectively to context?

This thesis explores the spatial and visual opportunities within contextually driven urban architecture. In doing so, the research directly critiques the urban housing trajectory within New Zealand. There is a growing demand for housing within New Zealand's urban centres, so it is, therefore, necessary to investigate and compare the present housing solutions against countries that have experienced similar housing demand.

This is achieved from the perspective of human orientated design. The quality of architecture will need to be higher in response to more people living closer together. The research explores how people perceive space, explicitly exploring how spaces can be designed to accommodate the inherent diversities and idiosyncrasies of life. Initially driven through the theories by Jan Gehl, Christopher Alexander, and Edward T Hall, the design-led methodology opens up a broader discussion regarding the considerations around urban design. The concurrent physical and theoretical development of the site enables a fruitful discussion regarding the response of the impending housing crisis in New Zealand. The following chapter outlines each step taken in answering the research question.

Chapter Reflections

01.

The opening chapter establishes a background of literature centred around contextual design. Recognising existing theories allowed design drivers to be tested and implemented with reference to notable authors, thus giving the research reference to context within the body of architecture. This formed the base of the primary research proposition; that urban architecture can have a positive response and contribution to context via Jan Gehl's framework and application of Aleatoric Milieu and prospect-refuge principles.

02.

Chapter Two: introduces the Te Aro site. Through various scales of contextual analysis, a base was established in terms of both past and present site conditions. Spatial analysis such as shadow mapping, urban grain studies and city-wide analysis in conjunction with visual analysis allowed for some preliminary design concepts to emerge.

03.

Chapter Three: Domain introduces the preliminary design hunch alongside the planned Paddington development. This established the design direction whilst the Paddington case study further reinforced my initial concerns regarding the trajectory of urban housing. From the background research a series of research elements were outlined in the form of pictograms to be referenced in the case studies which followed. The study expanded to 7 case studies all of which were selected based on having a similar context or scale to the Te Aro site. Here, the arrangement of urban form was analysed against the research principles of which key strategies were then identified. Priority was placed on relationship between public and private and how each responded and contributed to their respective context. From these studies a series of sketch concepts were explored before several levels of form articulation established a base massing model of which connections and building typologies were delineated.

04.

Chapter Four: Sanctuary studied the spatial relationship within the dwellings. Here, the interior quality of space was analysed from the point of entry against an intimacy gradient. By comparing notable historical case studies alongside both unsuccessful and successful contemporary examples a broader picture was established in terms of successful design techniques within the dwelling. Intimacy gradient allowed for a visual representation of the strategies as transitional spaces were represented as a shift in colour tone. As opposed to domain this research was more focussed on the response to context rather than its contribution. From the domain development a base module scale emerged. Successful sanctuary scale design techniques were then applied within these parameters resulting in a series of a well-defined apartment and terrace typologies. Semi enclosed terraces, interior thresholds, increased light, line of sight to the outdoors and small community size with shared amenities meant that the quality of the individual dwellings resulting was superior than typical Wellington apartments such as DXN case study.

05

The final design intervention exemplifies the spatial and visual benefits of contextually based design. It brings together the most successful strategies of domain and sanctuary into a fully resolved mixed-use housing precinct.

Consisting of 114 units capable of housing 335 plus residents the population density of 392 p/Ha surpasses Paddingtons 373 p/Ha while also providing over 6,000 m² of commercial space. Additionally strong linkages between Ebor, Taranaki and Jessie Streets draw the public in by applying wayfinding design principles. Contextually aware form manipulation along with diverse material choices result in a public realm which is far superior to both what is being proposed by The Paddington.

Possible Further Research

The research was limited to the creation of a people-orientated housing precinct within a single site in Wellingtons urban plateau. Although universal research conclusions have been made, the extent of their benefits would largely depend on the particulars of the intended site.

Although the focus was shifted away from financial gain, the feasibility of the design would ultimately rely on the realities of construction time, structural requirements. All three factors would be the determining factor in whether the solution is economically plausible for future residents.

In the vision concepts chapter the suggestion was made regarding expanded urban intervention. Manipulation of further along Taranaki street was not fully developed as it was out of the scope of the thesis.

Final Reflection

This thesis sought to create architecture with deep roots. Architecture which opened a fruitful discourse between buildings, spaces and life. The intention was never to reinvent the wheel, but rather investigate how architecture can contribute to its context as much as it responds to it. True to its namesake, Milieu creates the foundation for generations of social prosperity. Much like many of the cities studied within this thesis it is recognised that current housing shortage will not last forever. Housing stocks will replenish and those developments who failed to put quality design and people first will fall as fast as they were put up. Consequently, Milieu emphasises housing as a place where people live, not a numerical figure. In response to this the traditional borders of interior and exterior were replaced with Domain and Sanctuary and gave a more realistic representation of one's experience within the built environment. By reimagining the traditional development model focus was placed around the idiosyncrasies of people within design.

Learning from a building is the conscious act of combining it with your personal experiences. There is as subjectivity in this process which when understood allows for an intersubjectivity, an understanding to develop between the architect and the architecture. This opens up two reflections, firstly on one hand there is the users subjective experience and the other is the building in its contextual setting. It is the interpretations and various readings that come as a result of experience that we refer to as narrative. It is the job of the architect to understand these influences and interpretations in order to design for the wider public as well as the individual

As a result of the research and design experience various findings have surfaced which have universal relevance to people orientated design. Although every location is determined by the particulars of its given site the following should be consistent within every housing complex 'milieu'.

- Contribute back to the local urban environment through activation of street frontages, place-making and a balance of programs.
- Manipulation of forms and material palette in relation to the scale and character of the existing visual grain.
- Connect resident communities through shared amenity and limited corridors.
- Lay out space thresholds efficiently so that they create transitional sequence from public to private and that the edge of this is able to be occupied comfortably.
- Create spaces of concurrent prospect and retreat via extended sight lines and areas where you can see without being seen.
- Partially enclose and integrate all balconies so that they are an extension of the indoors rather than an exposed observation deck.
- Create buildings which foster positive usable, activated outdoor space rather than negative leftover space.
- Glazing and reflective material can increase the size of perceived proxemics so are especially effective at ground level

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