“architecture is the art of how to waste space.”

Philip Johnson
LIVING IN GENEROSITY

Designing and modelling a new refugee resettlement center in Porirua, Wellington as a study of an architectural typology.

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Abstract.

Generosity naturally reflects the idea of abundance, larger or plentiful. However, generosity as a language in architecture is vaguely understood, as it has neither a particular scheme nor definite form. This thesis focuses on the idea of generosity in architecture by exploring the language of generosity in providing a generous living for refugees resettling in New Zealand. It concerns the condition of living within a refugee resettlement centre when refugees spend their first six-week orientation program to prepare them for a new life in New Zealand.

Through design led research process, the project takes the concept of elementary geometry from children's drawing of a house and evolves by extracting the language of generosity to form an architecture. Anything that could be simple to us could mean more to others. Hence, the act of provocation in the simplicity of form, scale, scheme and colour could transform our perception on “generosity”, and thus it gives the potential for architecture to create an ideal condition of living for future refugees resettling in New Zealand.
to my beloved Grandmother.
Acknowledgements.

I would like to extend my gratitude to,

Sam Kebbell, for being such an amazing supervisor. 
Your kindness, patience, enthusiasm and your guidance;

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Friends, for keeping me sane;

Mom and dad, all the prayers and encouragement;

Jabatan Perkhidmatan Awam (JPA) Malaysia, my sponsor for giving me the opportunity of a lifetime;

May peace be upon you.
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Fig 0.01. Evacuees from Saigon, Vietnam, arriving at Whenuapai Aerodrome, Auckland, 23 April 1975
haere mai,
welcome
to aotearoa.
Fig 0.02. The site of the second largest refugee camp before the first shelter was erected. The photo was taken in August 2011, 32°17'N 36°19'E.
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CH.

01

INTRODUCTION.
01.01 Resettlement in New Zealand.
01.02 Refugee Resettlement Centre.
01.03 Problem Statement.
01.04 Design Intentions.
01.05 Methodology.
01.06 Design Scope.
01.07 Thesis Structure.
Resettlement in New Zealand.

New Zealand is one of 26 destinations for refugee resettlement. History recorded the first formal arrival of refugees in New Zealand dated November 1944; 733 Polish orphans and 102 guardians came to Wellington and resettled at Polish Children’s Camp at Pahiatua (Polish Children’s Reunion Committee). Since then and after WWII, over 33,000 refugees from all over the world have resettled in New Zealand (Immigration New Zealand).

In 1987, New Zealand Government established a formal annual quota of 750 refugees for resettlement program as a humanitarian relief support under the Office of United Nation High Commissioner for Refugees, UNHCR (Immigration New Zealand). Refugee arriving in New Zealand are given permanent residency and spend their first six-week at Mangere Refugee Resettlement Centre for orientation. The reception programme offers refugees the knowledge and necessary skills that are essential for them to build a new life in New Zealand.

In the last 5 years, the number of forced displacement experienced a dramatic increase. The United Nation High Commissioner for Refugees, UNHCR Global Trends: Forced Displacement 2015 recorded refugee crisis at its highest and unprecedented level; 1 out of 113 people from the world’s population of 7.4 billion people is now either an asylum seeker, internally displaced or a refugee. At the end of 2015, a total of 65.3 million individuals are displaced – about a population of Canada, Australia and New Zealand combined; and 21.3 million are refugees. The dramatic increase is largely due to the rising conflict in Syrian Arab Republic, causing 11.7 million of Syrians too be displaced. By the end of 2015, there were 4.9 million Syrian refugees worldwide (UNHCR).

As a response to this global emergency, New Zealand will be resettling more refugees on top of the national formal quota. The government has made a decision to raise the formal New Zealand’s refugee quota to 1000 as of 2018 (Radio New Zealand). In order to accommodate the new number of refugees resettling in New Zealand, an additional refugee resettlement centre is essential. Previously there were no purpose built refugee resettlement centre in New Zealand and the current Māngere Refugee Resettlement Centre, formerly an army barrack and recently underwent a major transformation. As a result it created a new niche or typology for study within the architectural discourse in the context of New Zealand.
Resettlement involves the selection and transfer of refugees from a State of asylum to a third State for permanent residency and long-term settlement. The United Nation High Commissioner for Refugee, UNHCR introduced resettlement strategy as one of three durable solutions to help resolve world’s refugee crisis, and it has been a viable solution for international protection addressing the world refugee population. Resettlement is vital in providing international protection for every refugee that meets their particular need and ensures a better prospect of living (UNHCR).

Māngere Refugee Resettlement Centre, (MRRC) is the central processing and assessment location for all refugees arriving in New Zealand. New Zealand Government owns the facility, and it functions as the national refugee resettlement operation centre for New Zealand. Immigration New Zealand runs the resettlement services and activities in collaboration with several other agencies that include Refugees as Survivor New Zealand, Auckland University of Technology and the Red Cross New Zealand. Refugees arriving in New Zealand obtain basic health treatment and mental health assessment, settlement planning, early education for young refugees, language education, and general support to help them adapt and integrate prior to resettlement into the receiving community – Auckland, Waikato, Manawatu, Wellington, Nelson and Dunedin (Immigration New Zealand).

The intention of this thesis is to explore the new architecture typology of refugee resettlement centre, in relation to the language of generosity within the context of New Zealand. A movement to provoke a secondary view on the concept of ‘generous’ living is the key exploration of this project to transform people’s perception especially the receiving community on refugees.
Forced displacement can have multiple effects on refugees, both physical and mental. Often at the state of emergency with multiple transitions and disorientation, refugees settled in the meanest form of architecture and condition of living. Resettlement can be a challenging journey for them however it gives an opportunity for them to ground themselves and move on with a new chapter, new hope and new destiny. A refugee resettlement centre is one of a primary mean of contact between refugees and the new society. Thus it plays a great role in the process of refugee resettlement. The current Māngere Refugee Resettlement Centre (MRRC) offers refugees with sufficient on-arrival orientation programme that can help prepares them to build a new life in New Zealand. However, the design of the old Māngere army barrack does not fit the ideal of a better living condition to create a new life and compromising the success of future integration.

Before the rebuilding of Māngere Refugee Settlement Centre, the facility embodies a form of architecture of authority and security. It is almost similar to the life at refugee camp but on a different ground; the centre is like a camp in disguise. The visual quality of a refugee resettlement centre is the focus of this design as research thesis. Sir John Phillip Key, the former Prime Minister of New Zealand, states: “My view is that New Zealand is generous when it comes to refugees.” (Vance). How can ‘generous’ be applied to architecture and carve the way of living for refugees resettling in New Zealand? This project addresses the orientation phase of refugee resettlement in New Zealand where they are accommodated for six weeks at the new Titahi Bay Refugee Resettlement Centre.

**Problem Statement.**

How can architecture create a ‘generous’ living condition for refugees living in refugee resettlement centre for six-week orientation program for better initial transition and long-term integration in New Zealand?
The purpose of this design as research thesis is to design a generous living for refugees, in the period of six-week orientation at refugee resettlement centre.

to explore the potential of architecture in generating and understanding the language of generosity through a visual quality of architectural form and space:

to investigate the role of architecture in the refugee resettlement centre as an architecture typology;

to explore the potential of architecture to unfold institutional typology into friendly living space;

to construct the ideal condition of living through the structure of a resettlement centre in relation to public and private spaces;
As a design-led research thesis, the research focuses on the design exploration. A studio-based research methods are the typical tools used throughout the project for design development process, analysis, observations, and assessing the outcomes against both works of literature and existing projects. The ratio of design to writing is 75% to 25%; hence design processes are predominantly the core of this thesis and writings are the supportive elements to the design outcome. Throughout the research, I have utilised the 3D printing technology as the primary research methodology. Its capacity to ‘mass-produce’ models allows for quick study on scale, form, and structure. Literature and project reviews on the other hand help outline the direction of the research and guide the progress of the design ideas.
The world’s refugee crisis is far more complex to be dealt with as there are so many aspects and matters that require individual attention. “Living in Generosity” covers the six-week reception phase of transition and integration for refugees upon resettlement in the context of existing resettlement programme in New Zealand. As a non-refugee, I am unable to measure the degree of integration in the perspective of a refugee. Hence the project is positioned as an attempt to welcome refugees with the most generous and hospitable condition, rather being a subject of the study.

This research project is limited to, and relies on, existing literature research on refugees and documents relating to Māngere Refugee Resettlement Centre. The outcome of this project is only comparable to current literature, and there were no refugees involved and interview conducted throughout the research process. Events happening before or after the reception period for resettlement is beyond the scope of this project, albeit selected factors have been taken into consideration and may influence the outcome of the design. I hope this research project will encourage more research on architecture for reception centre for refugees in the future.
Thesis Structure.

Chapter 1  
**INTRODUCTION**  
The world's refugee crisis demands global emergency aid. This chapter discusses the topic and the design-led thesis to address this issue.

Chapter 2  
**SITE ANALYSIS**  
This chapter presents a brief analysis and overview on the site for the new Titahi Bay Refugee Resettlement Centre.

Chapter 3  
**REFUGEE RESETTLEMENT CENTRE**  
This chapter investigates the history, condition and potentials of the existing reception centre in New Zealand. Besides that, reviewing the structure of the programmes in relation to the built environment to shape define the archetype for refugee resettlement centre.

Chapter 4  
**PROGRAMME ANALYSIS**  
Programme analysis provides information on the relationship between built form and the structure of the reception centre. Comparison between existing programme of similar nature to a reception programme helps highlight the design strategy for the project.

Chapter 5  
**LITERATURE REVIEW**  
This chapter introduces the general theoretical aspect of the project. The research revolves around the idea of uncanny, in-between fiction and reality and the colour pink. Focus is placed on a design strategy emphasising the spatial experience and writings on the qualitative aspect of living.

Chapter 6  
**PROJECT REVIEW**  
Example of works relating to literature reviews.

Chapter 7  
**DESIGN DEVELOPMENT**  
Investigation on ‘generosity’ as a design language and the design development is presented in three stages.

Chapter 8  
**DEVELOPED DESIGN**  
Design outcome.

Chapter 9  
**CONCLUSION**  
This chapter includes a concluding discussion on this design-led research thesis.
SITE ANALYSIS.
02.01 Introduction.

02.02 Porirua, Wellington.

02.03 Site Selection.

02.04 Urban Context between Porirua CBD & Titahi Bay.
LIVING IN GENEROSITY

Dunedin

Nelson

Wellington

Manawatu

Hamilton

Auckland

SOUTH PACIFIC OCEAN

TASMAN SEA
02.01

**Introduction.**

The expansion of the refugee resettlement centre and services will take place in the Greater Wellington region located south of the North Island. It is the third most populous region out of sixteen regions in New Zealand (Statistic New Zealand). Out of 496,000 people living in the Wellington region 25% are born overseas and offers a great population diversity with over eighty ethnic groups (Wellington City Council).

The Wellington region is divided into smaller districts – Wellington City, Hutt, Upper Hutt, Porirua and the Kapiti Coast. Each district is unique from physical topography, the diversity of the population and the city structure. The population spreads across the region creating satellite cities and creating more infrastructures and facilities throughout the suburban areas. Thus this offers each a great livelihood for settlement.

---

01. Wellington City
02. Porirua
03. Hutt
04. Upper Hutt
05. Kapiti Coast

Fig 2.01 (opposite) Destination for resettlement.
Fig 2.02 The Greater Wellington district divisions.
Porirua is located north of Wellington City. It was the only planned satellite city, a response to suburban sprawl and to decentralise urban growth (Schrader). The city was designed for 70,000, new populations, structured to the garden city principles with new suburbs, a town centre, an industrial zone and parks. In the 2013 Porirua City census, there are about 50,000 people currently living in Porirua City, ranging from a variety population group. There is a great trend for settlement in the city by the Pacific Island group (Statistic New Zealand), migrating or resettling for better prospect of living in New Zealand. Thus, it makes Porirua City a place that is rich in culture and opportunity for people alike.
Porirua district distribution:

01. Mana Island
02. Colonial Knob
03. Titahi Bay
04. Takapūwāhia
05. Elsdon
06. Kenepuru
07. Porirua City Centre
08. Aotea
09. Rānui
10. Papakōwhai
11. Paremata
12. Ascot Park
13. Cannons Creek
14. Waitangirua
15. Whitby
16. Pāuatahanui
17. Judgeford
18. Pāekakariki Hill
19. Plimmerton
20. Hongoeka
21. Pukerua Bay
22. Camborne
Site Selection.

41° 06’ S, 174° 50’ E

The site chosen for the new refugee resettlement centre is located in the Titahi Bay district, the Onepoto Park waterfront. It is located approximately two kilometres from Porirua CBD and about twenty minutes drives away from Wellington CBD. Titahi Bay is full of life and movement – seas, sands, open spaces, lush green paths up the hills, friendly community – offers a variety of recreational activities within the growing community. The site is prominently occupied by European and Māori, with 16.2 percent born overseas (Statistic New Zealand). History recorded Titahi Bay as Ngāti Toa Rangatira a Māori iwi fishing villages and then whaling stations set up by European settlers (Porirua City Council). The diversity of community on the site gives an opportunity for better refugee transition and integration in New Zealand.
Onepoto Park Waterfront.
Site Area: 6,602 m²
Fig 2.07 (opposite) Site selected - Onepoto Park waterfront.
Fig 2.08 Images on site
Onepoto Park Waterfront.
Site Area: 6,602 m²

Fig 2.09 Site selected - Onepoto Park waterfront.
02.04

Urban Context between Porirua CBD & Titahi Bay.

(see next page)
LIVING IN GENEROSITY

Health

Spiritual

Recreation
MANGERE REFUGEE RESETTLEMENT CENTRE.
03.01 Brief History.
03.02 Location.
03.03 Programmes.
03.04 Sleeping Block.
03.05 Conclusion.
Brief History.

Māngere Refugee Resettlement Centre (MRRC) is the central processing and assessment location for all refugees arriving in New Zealand. Prior to resettlement within local communities, refugees spend the first six-week at the centre for orientation programme. The programme help prepares refugees for life in New Zealand that includes, English language classes, health screening and mental health support (Immigration New Zealand). The formal reception centre has been in service for over 30 years, since the establishment of the formal annual quota for refugee resettlement. The centre was originally an army base barrack for American servicemen back in 1942 – 1944 (Ministry for Culture and Heritage). In mid-June 2016, the rebuilding of Māngere Refugee Resettlement Centre (MRRC) was completed and the new facility has been designed to accommodate more refugees, with a provision of up to 300 refugees to accommodate the new quota (Immigration New Zealand). A modern and contemporary design was introduced into the centre to create a sense of place, demonstrating the character of a new place and a sense of arrival and ‘home’ (Crosson Architects). The however, the rebuilding of the centre is outside the scope of this thesis research.
Location.
03.03

Programmes.

Māngere Refugee Resettlement Centre.
Site Area: 34,685 m²

Fig 3.02 Aerial view of Māngere Refugee Resettlement Centre (MāRC) during the rebuilding of the new centre.
Fig 3.03 (opposite) A model diagram of the centre.
Programmes:

**A01. Entry**  
A02. Assembly point  
A03. Caretaker’s House

**Administration**  
B01. New Zealand Immigration Service (NZIS)  
B02. RMS Refugee Resettlement Volunteers  
B03. Quota Residents Office  
B04. Interview office  
B05. Refugee As Survivor (RAS)

**Medical**  
C01. Medical Facilities

**Education**  
D01. Auckland University of Technology (AUT) Offices  
D02. Auckland University of Technology (AUT) Staffroom  
D03. Classrooms  
D04. Early Childhood Centre

**Residential**  
E01. Block J  
E02. Block K  
E03. Block G  
E04. Block H  
E05. Block I  
E06. Block F  
E07. Block E

**General Facilities**  
F01. Prayer Room  
F02. Laundry Room  
F03. Conference Room  
F04. Dining Room  
F05. Store Room  
F06. Recreation Room
Diagram above shows the typical layout of the accommodation block at Māngere Refugee Resettlement Centre. Small shared rooms are arranged along the long narrow corridor, limits movement and hasten any opportunity for interaction.

Fig 3.04 (top) The old building blocks at Māngere Refugee Resettlement Centre, before the rebuilding of the centre.
Fig 3.05 (bottom) Typical sleeping block.
03.05

**Conclusion.**

The condition of living at Māngere Refugee Resettlement Centre *(MRRC)* – before the rebuilding of the new Māngere Refugee Resettlement Centre – is essentially the factor to this thesis research. Refugees have been experiencing the meanest condition of living, having to follow strict rules, encountered multiple roadblocks and separation with family members. A modified army barrack is not an ideal place for refugees to start anew. Overall, the original form and layout of the centre generate authoritative attitudes towards the refugees. Daily activities are being carried out with the sense of fear, and feeling of being watched; there is no privacy and possibly affecting emotional quality while living in such space. Hence, how can architecture change this condition of living for refugees?
04

PROGRAMME

ANALYSIS.

LIVING IN GENEROSITY
04.01 Introduction.
04.02 Duality.
04.03 Programme Distribution.
The programme developed in this design research is a simplified form of the programme based on the existing programme identified at Māngere Refugee Resettlement Centre (MRRC). However, decisions are made with the assumption of a different institutional administrative running the centre as it is based in the Wellington Region. As there is no particular archetype for refugee resettlement or reception centre; the research aims to separate the residential programme and institutional programme as an architectural intervention on institutional architecture (fig 4.01). The reason is to promote a control-free environment for refugees in their private living space throughout the orientation phase – for six weeks – from the authoritative and institutional nature of a private centre. In addition to that, the separation of programmes aims to instill better cognitive response for both refugees and the receiving communities concerning the life at the centre. A focus on better opportunity for interactions and integration within the coexisting programme may elevate the quality of living for refugees in the orientation phase.
Fig 4.01 Typical layouts of institutional architecture, showing the relationship between two main programmes - institution administrative and residential.
Duality.

The United Nation High Commissioner for Refugees (UNHCR) outlined several key factors in the selection for refugee resettlement – to consider age, gender and diversity sensitive approach (UNHCR). The diversity of refugees coming into the resettlement centre requires an intricate approach in structuring the programmes throughout the centre. In the Refugee Resettlement: An International Handbook to Guide Reception and Integration, UNHCR identified four key group of refugees that requires attention throughout the orientation phase (UNHCR),

1.0 refugees with trauma – planning for optimal mental health;
2.0 women at risk – taking account on gender;
3.0 refugee children and young people – investing in the future;
4.0 refugee elders – to engage with all group of ages.

The formal institutional program will address this factors, to create a friendly and inviting space for refugees throughout the orientation phase. The duality approach separates residential program from the institutional program. However, there is a need for balance between the coexisting program to promote a better quality of living; to foster interactions between refugees and the receiving communities in both private and public spaces, and to achieve a long-term integration. An integrated ‘social’ landscape layer will be introduced in the research to tie the relationship between authority and residential; public and private; and, refugees and the receiving communities.
PROGRAMME ANALYSIS

Mental Health

Women at Risk

Refugee Children & Young People

Refugee Elders

INSTITUTIONAL

Residential

Mental Health

Women at Risk

Refugee Children

Refugee Elders

'Social' Landscape Layer
Programme Distribution.

Fig 4.03 Program distribution for medical facility in the refugee resettlement centre.
Fig 4.04 Program distribution for women centre in the refugee resettlement centre.

(refer health department)
Fig 4.05 Program distribution for children and young refugees in the refugee resettlement centre.
Fig 4.06 Program distribution for refugee elders in the refugee resettlement centre.
Fig 4.07 Program distribution for residential and administration in the refugee resettlement centre.
CH. 05 LITERATURE REVIEW.
Refugee Camp or Ideal Cities.

Refugee Architecture: Cities of Tomorrow.

The Architecture Uncanny: Homely & Unhomeliiness.

Real Fiction.

Why Pink?
Manuel Herz in his paper Refugee Camps or Ideal Cities in Dirt and Dust discusses the politics of refugee camps as an architecture typology. The planning of a refugee camp has become a political conundrum for planners to provide humanitarian aids. Strategic planning and the presumption of a temporary settlement are promptly overridden by growing consensus of a new urban development without the emphasis on better living condition. Despite the refugee camp model described in the UNHCR Handbook for Emergencies, “characterised by neutrality” the impermanent nature of refugee camp is no place for a community to grow. Herz notes that the planning decisions typically ignored the political, social and collective consequences of this type of settlement. Overall, the treatment is almost similar to the western urban planning in the modernist era aiming for the image of an idealised city. Nonetheless, it does not change the condition of living for refugees.

There is a disconnection between planning for a condition of space of living to the planning for a placing of a space of living. Humanitarian aids are politically conflictual as it raised only the technical issue of the planning. By following the idealised city reminiscent of those early modernist urban planning in the 1920s, refugee camps take shape from planning in the form of order and hygiene. Issues that are more significant to the site, social and tribal structure are ignored in favour of control for safety and resource distribution within a camp, subsequently promoting a place of segregation.

This ‘naive model’ has proven its incompatibility on the idea of neutrality when applied in another humanitarian aid structure. Continue to mislead the opportunity for place-making; the model should incorporate a more holistic approach in planning refugee facilities. Layouts should not be limited to control and efficiency but taking influence from culture and tradition would create a better settlement structure for the refugees.

The politics of the planning keeps changing and in the instance of integration, temporary, intended emergency became a permanent solution. Unplanned programmes are underdeveloped with scarcity in resources. The result of a planned refugee camp can be seen as an afterthought of the preconceived regulations and urgency to remediate a settlement problem, a design neglect for a sanctuary for protection.
In an interview with Killian-Kleinschmidt one of the world’s leading authorities on humanitarian aid with Dezeen Magazine, Kleinschmidt argues for a more lasting approach to the world’s refugee crisis and the government should stop thinking about refugee camps as temporary places. “We were building camps, storage for the people and the refugees were building a city,” and “these are the cities of tomorrow,” he told Dezeen Magazine. The average stay in a refugee camp is 17 years and architecture for refugees has not changed since the past 70 years, in providing humanitarian aids. He added that as of today, humanitarian agencies are incapable of coping with the current world’s refugee crisis and failure to provide proper infrastructure is leading to unnecessarily poor conditions and leaving residents vulnerable to safety and health problems.

Our general views on refugee architecture are latched to the typical UN tents as depicted through media. We are exposed to the fact that the necessities to be given are plain for survival affair without considering the potentials that can be pursued if the problem is addressed strategically. Again political issues that are affiliated to humanitarian aids concerns only on the temporal term of a refugee camp, by mean to survive this short period and to return home as soon as the war ends. These politicised conditions are biased to the status of a refugee and put a limit on the opportunity for a changing refugee architecture. As stated by Kleinschmidt, “we have to get away from the concept that, because we have that status – migrant, refugees, martian, alien, whatever – you are not allowed to be like everybody else” (Dezeen)

There is a necessity for a redirection of the humanitarian aids, to repurpose the resources at hand to accommodate a better solution. Refugee camps are essential in term or addressing an immediate response of emergency for the refugee crisis; however, the changing nature of temporary into a permanent settlement has to be acknowledged. What changes can be made to accommodate further a significant shift in population besides a low-cost, easy built, stripped of identity and culture and unsustainable? Besides that, the condition of living in refugee camps prompt a question on a moral issue within the study of architecture – to allow refugees residing in the meanest condition of a “home” and be certain that it is only temporary.
Uncanny according to Oxford Dictionary is translated as strange or mysterious, especially in an unsettling way. The Architecture Uncanny written by Anthony Vidler is a discussion about uncanny in architecture, linking contemporary architectural works to social’s paradigm on the theme from the nineteenth-century fanatics. The essay interrogates the reasoning to the modern and contemporary movement that exhibits the quality of uncanny in the setting of a home as a site filled with endless terror, a labyrinth city construed by modern anxiety, and societal phobias and alienation (Vidler).

In the subtopic Unhomely Houses, Vidler wrote the fundamental interest of uncanny in architecture being a representation, a metaphor and a strange subconscious form of sublime. The setting of a house in homely and unhomely does not define uncanny of a home to a strict quality but a product of narrated dream, induced with corrupted spatial quality on familiar elements of a home. The majority of the early nineteenth-century idealist expressed uncanny as a terror, haunting, a home in a horror story setting.

Beyond that, uncannily exists within the conscious of the mind that replicates the beauty of a home and introducing terror within the instant moment or vice versa (Vidler). Vidler discussed this as the result of suppression of feeling towards familiarity and domesticity. Homely or “heimlich” is translated as an act to conceal – the quality of a home, something intimate, “friendily comfortable” – and homely is deliberately a sensation of secrecy, “heimlichkeit”. Unhomely or “unheimlich” on the other hand is the terror of revealing this secrecy, from an instant memory that reminded of terror or invasions. These qualities are the basis of uncanny.

On the contrary and as the quality developed further, Vidler also touched architectural work being presented as truly uncanny. The narrative placed a cosy home in the setting of unhomely as a security to reinforce ambiguity of the mind to protect the pure sensation of homely. Exposing the non-ideal quality of a home to remove anticipated fear, and presenting fear into the actual form. By displaying unhomely as a true form, it inverted the notion of uncanny and created a new language for exploration.
Architectural projects are a kind of fiction comparable to utopias" (Coleman). Refugee architecture is a sort of real fictions, "something we imagined, the making of imaginary happening" and it presents a plausible unreality. In Utopias and Architecture on Real Fictions, Nathaniel Coleman discussed the potential of buildings to be reused through constructive fictions, by imagining a plausible realm within the present world. The dual-position of architecture – conserving a reality, and proposing for an improvement, reinventing what is – reveals the potential of fictional realisation.

The process of creating architecture, from drawing a floor plan, sections and elevations, to the construction work, and initial inhabitations are the sequence of fictional representation (Coleman). The building is real, but the imagined story of the building remains unreal and continues to either confirms or denies the fictional desires. Through prolonged inhabitation, plausible fiction can still be reinvented and encouraging inhabitants to weave their accounts and desires through the architect’s fictional proposition. Coleman claimed this as the utopian prospectiveness in architecture.
According to Sigmund Freud, “our behaviour is ruled not by reason but by emotion,” and the colour pink is more closely associated with emotion than other colours. In Pink: The Exposed Color in Contemporary Art and Culture, Barbara Nemitz writes how the colour pink has an influence on our behaviour, it addresses us with such intensity that it poses a genuine challenge to our emotion. Qualities associated with pink is diverse — sensitive, tender, youthful, artificial, eccentric, sweet, vulnerable, pleasurable, beauty — evoking our senses in touch, closeness, taste and even smell. The colour can be associated with children, and sometimes represents the spiritual and emotional realm of love. Pink in nature, however, is short lived – like the pink sky at dawn or a blooming sakura – but a fleeting manifestation often expresses delight. In Japanese culture, pink is the colour of happiness (Fuse). It reminded them of the first bloom of sakura in spring. Nonetheless, the scale of social attitudes towards pink runs to extreme especially in gender response (Nemitz).

Nemitz argued that pink is assertive in nature without the need to disguise its appearance, it is both subversive and revealing. It has the attraction and charm that is suggesting "between the lines", indirectly exposing what is concealed (Schawelka). Thus creating the language of uncanny, a condition that is filled with expressive quality that undermines any barrier of reasoning. The colour can communicate uncanny in many unspoken things; it prompts a shift in perspective towards accepting the unreal and the ideal. Through art, the colour pink can embody practically anything, surface and interior, happiness and suffering, delight and injury, the naïve and the corrupt, sublime and ordinary, playful and the existential (Von Taschitzki). While in architecture, pink walls are explicit in displaying a “dream world”, and built form becomes less ponderous (Nemitz). Pink in this context exudes generosity, a well-suited colour for genuine expression.

"pink is a generous colour"
(Nemitz)
Fig 5.01 Dadaab refugee camp in north-east Kenya, housing hundreds of thousands of Somali refugees.
Fig 5.02 A refugee shelter in the city; IKEA’s Better Shelter for refugees, an installation in West London.
Fig 5.03 Neon House, an installation designed by Fashion Architecture Taste FAT proposing a house as information for a living. The technologies of neon signalling are made three-dimensional to describe archetype elements of a house.
Fig 5.04 Grayson Perry’s sketchbook on the House for Essex.
Fig 5.05 House for Essex, a collaboration work between Fashion Architecture Taste FAT with artist Grayson Perry to capture the essence of Essex through architecture.
Fig 5.06 Forming the idea of in-between fiction and reality in the layout and scale of form; a quality of duality presented as one.
Fig 5.07 1983 drawings by Christo and Jeanne-Claude on the Surrounded Island project.
Fig 5.08 Surrounded Island, artificial pink canvas installations in Miami, Florida in 1980-1983.
PROJECT REVIEW.
06.01 Didden Village.
06.02 Maria Grazia Cutuli Primary School.
06.03 Community in a Cube, CIAC.
Didden Village.

MVRDV
Rotterdam, the Netherland
2002-2007

Didden Village is the first project done by MVRDV within their hometown in Rotterdam, the Netherland. The project primarily was part of a series of projects that focused on the output addressing the expansion of urban densification and residential concentration within the city. Instead of moving into the hinterland, MVRDV designed a sort of prototype for densification by building vertically.

The rooftop extension resembles the idea of a mini village, literally few block of houses within a courtyard with sitting areas and pot plants. The expansion was made to create more space for the Didden family. Growing kids need personal and private spaces for themselves, and the programme was an extension of individual bedrooms from the existing two storey loft-apartment consisting of a grand house and atelier.

By just using elementary geometry and simple construction, the project emphasised on the visual aspect of the architecture. It is conceived as “the crown on top of a monument” provoking the eyes with the colour to distinguish the built form from its surrounding. The entire exterior appeared in blue while some interior spaces appeared in red.

MVRDV’s approach on this project is simple yet intriguing, playing with the idea of representation over structurally designed programme is successful in the context and scale of a private housing project. Nonetheless, the colour and form inarguably raised a question on outcome becoming more of sculpture and an abstract art form than architecture. Perhaps there is more opportunity that can be conceived with this kind of mixture and can be extended as part of this thesis research.
Fig 6.01. (previous page) A view of the ‘village’ from a neighbouring building. The bright blue colour makes the extension of the house pops out from the surrounding.

Fig 6.02. An exploded diagram of the extension.

Fig 6.03. Every element is painted blue, basically a simple disguise of appearance on conventional form and known objects, thus it provokes the idea of in-between fiction and reality.
Maria Grazia Cutuli Primary School

2A + P/A | laN+ | Ma0
Herat, Afghanistan
2011

Maria Grazia Cutuli Primary school was erected as a monument and a memorial to Maria Grazia Cutuli, Italian journalist known by locals in Herat who was killed by gunmen in Afghanistan. The project was commissioned by the Maria Grazia Cutuli Foundation 10 years later as "a sign of peace" and to raise awareness on the importance of education. Unlike typical school structure within the local context, the project became an alternative model to a post-war construction to create a more innovative educational space.

The concept of the school revolves around the idea to create an educational environment from within the built form and the exterior spaces. There are eight classrooms, a double-height library, a secretarial office, staff rooms, caretaker’s house and gardens. Using random arrangement modular forms – linked boxes that contains classes and connecting corridors allow immediate connection of programmes throughout the school. As well as in-between play spaces that surround the external landscape help build a character for a safe haven for children in the learning environment.

The school is enclosed by bordering walls, for safety reason. It looks like a small village within a village, with specific programme for particular inhabitants. Similar to the Didden Village project, the architect incorporated a bright blue colour to the architecture. The colour is symbolic to the locals which remind them to the blue mosaics at a nearby mosque. Besides that, it is a sort of provocation to stop military actions towards innocent people and children.

The element of colour in this project is significant to get public attention to learn why this school was made. The school is distinct, in contrast, to dry terrain and immediately attract one’s vision towards it. Perhaps a refugee resettlement needs a similar approach to raise more public awareness concerning the opportunity of resettlement.
Fig 6.04. (previous page) An aerial view of Maria Grazia Cutuli Primary School.
Fig 6.05. Axonometric model and plan of the school.
Fig 6.06. The bright colour buildings distinguish the school from any typical building within its surrounding, creating a character suitable for an educational programme. Despite the harsh condition of the ground and traditional materials, the colour also creates a sense of welcoming and inviting for users to use the space.
Community in a Cube, CIAC.


Community in a Cube (CIAC) is a project designed to be zero carbon mixed-use development comprising of 82-unit block apartments, retail and leisure space. It is the only project that was realised as part of Will Alsop’s 2004 masterplan for the regeneration of Middlehaven docks and the rest remained a dream when the economy crashed. Nonetheless, the eccentric building block stands out being an architecture housing typology and provoking a sober cityscape.

Fashion Architecture Taste (FAT) collective as architecture designers is known for their eccentric, playful and satirical design approach. The CIAC project is no exception. The nine storey building was designed with a narrative to provide a mix of unit types within a little urban village. Retail and leisure spaces are located on the ground floor, a shared courtyard, followed by residential block cubes consisting of studios, one bedroom and two bedroom apartments, and ‘skyhome apartments’ on the top floor.

Despite its unruly appearance, the building conforms to the highest environmental standards: zero carbon emission, sustainable materials, biomass boilers as well as electric car charging outlets. Its appearance is purely aesthetic, and in the word of Sean Griffith, FAT’s director, "our philosophy is to transform the idea of dull architecture into an expression that is memorable" (Frearson). This sort of provocation, however, creates a different language of this form of architecture. The aesthetic communicates an idea of fiction, narrated into an ideal living condition. This approach is plausible in generating the language of generosity and can be applied in the process of designing the refugee resettlement centre at a similar scale.
Fig 6.07. (previous page) The building apartment view from the street.
Fig 6.08. Diagram showing the spatial planning of the building complex.
Fig 6.09. Main entry into the complex, displaying satirical elements of designs like the clouds silhouette over the name sign, and honest elementary geometries.
Fig 6.10. An unsettling image of a house, stacked under a massive structure suggesting an uncanny image of a house which is a ‘pub’.
DESIGN DEVELOPMENT.
07.01 Stage A.
07.02 Stage B.
07.03 Stage C.
Fig 7.01 The Blue House by Fashion Architecture Taste, FAT.
Stage A.

Design Objectives

To explore the language of ‘generosity’ in architecture through architectural form;

To investigate the role of architecture in shaping the architecture typology for a refugee resettlement centre.

The architecture exploration in this research seeks to create a language of ‘generosity’ for architecture emphasising on the visual quality and over quantity. Typically when we talk about generosity, it immediately speaks of the size of space and other quantitative factors. This design aims to simplify the idea of ‘generosity’ and translate it into a simplified architectural form.

At this preliminary stage, the design took a stand on translating complex and intricate architectural geometries into a simplified architectural form. The research takes silhouettes from the known architectural form like gothic church, medieval castle, a factory and even a simple house, then transforming the two-dimensional into a three-dimensional form and putting them in a different context. The form communicates the idea of what it is known for, but the contrast of scale and colour changes the language of the form.

This process gives an opportunity to generate ‘generous’ architecture language. Built form can be read differently to its actual programme, and this quality essentially drives this design-led research further.
Fig. 7.02 Illustrating simple form of a house from children's drawing.
A series of silhouette study - simplifying a variety of architectural forms into a two-dimensional profile.

[Series 01]
[Series 02]
[Series 04]
[Series 05]
LIVING IN GENEROSITY
The process of transforming simplified silhouettes into a three-dimensional model was done digitally. Each silhouette is unique, and the iterations of context have strange effect on how the form is perceived to its usual function. At this stage, this method formally creates the language of ‘generosity’ in architecture for the refugee resettlement centre.
Fig 705 Series 01 - Model B
LIVING IN GENEROSITY
LIVING IN GENEROSITY
Fig 7.07 Series 01 - Model D.
Fig 7.10 Series 01 - Model G.
Fig 7.2 Series III - Model I
Fig 7.13 Series III - Model J
Fig 7.5 Series 01 - Model L.
Critique:

At this stage in, the language of ‘generosity’ is formally identified as an architectural language for the new resettlement centre; as a form of intervention on institutional or authoritative architecture. The result of the remodelled silhouette form with the added pink colour visually transform the nature of the architecture.

It is essential to create a friendly, inviting and positive atmosphere for a refugee centre, and this can be done through architecture. In developing the architecture typology for refugee resettlement centre, the research proceeds to Stage 2.
Fig 7.7 Stacked house - apartment by Sou Fujimoto Architects.
Design Objectives

To explore the language of ‘generosity’ in architecture through scale;

To investigate the role of architecture in shaping the architecture typology for a refugee resettlement centre.

In this stage, the design exploration seeks to expand the research on the language of ‘generosity’ further by introducing formal program. There is a sense of ambiguity in the unconventional form of contemporary mansion-like architecture communicating a house or a mansion. A mansion is typically a grand living space. Unlike a basic house, a mansion describes many aspects of ‘generosity’ in the context of a refugee resettlement centre, equipped with a big hall, private rooms, personal washroom and etcetera.

Critique:

Mimicking contemporary approach on stacking structure to create a mansion-like building explores the capacity of design to develop the language of ‘generosity’ and developing a spatial planning within the built form. It is, however, eccentric in nature and raises a question on the moral of refugee architecture. Nonetheless, this exploration helps guide the development of a more suitable typology for a refugee resettlement centre.
Fig 7: 3D printed model stacking collage.
Fig 7.20 Stacked house 3d printed model north elevation.

Fig 7.21 (opposite) An illustration of the imagined space from north elevation.
LIVING IN GENEROSITY
Fig 7.22 Stacked house 3d printed model east elevation.
Fig 7.23 (opposite) An illustration of the imagined space from east elevation.
Fig 7.24 Stacked house 3d printed model south elevation.
Fig 7.25 (opposite) An illustration of the imagined space from south elevation.
Fig 7.26 Stacked house 3d printed model west elevation.
Fig 7.27 (opposite) An illustration of the imagined space from west elevation.
Fig 7.28 A bridge of houses model by Steven Holl proposal for the High Line in 1982.
07.03

Stage C.

Design Objectives

to investigate the role of architecture in the refugee resettlement centre as an architecture typology;

to explore the potential of architecture to unfold institutional typology into friendly living space;

to construct the ideal condition of living through the structure of a resettlement centre in relation to public and private spaces;

This stage focuses on the duality aspect of the programme. The design aim to separate residential and institutional program within the centre, however it requires an element to bridge the two programme. Steven Holl’s proposal for the High Line outlines a design that connects several building blocks with emphasis on spatial requirement between public and private. A similar approach is used to explore the idea of duality and to make sense of the spatial requirement of the refugee resettlement centre.

Fig 7.29 A duality of programme diagram.
Fig 7.30 A duality concept of programme between residential and institutional.
institutional

residential
Fig 7.31 Juxtaposition effect to communicate the duality concept.
Fig 7.32 Juxtaposition effect also communicate scale on form in relationship to the use of the building and space.
Fig 7.33 Juxtaposition effect to communicate the duality concept on different silhouettes.
Critique:

The duality concept between residential and institution allows refugees to separate their living between the two programme. It removes the unnecessary sense of provision from the authoritative nature of a centre. Thus this will allow them to have more freedom and control on their private or personal space.
DEVELOPED DESIGN.
08.01 Overall Design

08.02 Design Reflection
08.01

Overall Design.
Fig 8.01 Proposed site for the new Titahi Bay refugee resettlement centre.
Fig 8.03 Ground floor plan.

Programmes:
A01. Entry (north)
A02. Entry (east)
A03. Entry (west)

Administration
B01. Main reception/greeting hall
B02. Services office space
B03. Multi-use hall (conference/performance)

Medical
C01. Medical facilities
C02. Psychiatry facilities

Education
D01. Learning centre
D02. Library
D03. Classrooms
D04. Early Childhood Centre

Residential
E04. Block D
E06. Block F

General Facilities
F01. Dining hall
F02. Kitchen facility
F03. Laundry room
F04. Store room
F05. Public Washroom
F06. Recreation Room
F07. Bike barn

Special Programme
G01. Youth Centre + Playhouse
G02. Women's Centre
Fig 8.04 Level 01 floor plan.

Programmes:

**Residential**
- E01. Block A
- E02. Block B
- E03. Block C
- E04. Block D
- E05. Block E
- E06. Block F
- E07. Block G
- E08. Block H
- E09. Block I

**General Facilities**
- F08. Prayer room
Programmes:

**Residential**
- E01. Block A
- E02. Block B
- E03. Block C
- E04. Block D
- E05. Block E
- E06. Block F
- E07. Block G
- E08. Block H
- E09. Block I
Programmes:

Residential
E01. Block A
E02. Block B
E03. Block C
E04. Block D
E05. Block E
E06. Block F
E07. Block G
E08. Block H
E09. Block I

Fig 8.06 Level 03 floor plan.
Sleeping Block types:

There are 4 types of sleeping unit,

- **AA**: Single unit
- **BB**: Tall single unit
- **CC**: Double units
- **CC**: Triple units

Sleeping units are clustered in blocks and connected at the ground level of the sleeping block with the “social” landscape area.
Fig 8.08 Illustration on the reception hall.
Fig 8.09 Illustration on the multi-use hall

multi-use hall
Fig 8.10 Illustration on the youth centre.
Fig 8.11 North elevation - Titahi Bay Refugee Resettlement Centre (not to scale).
Fig 8.12 South elevation - Titahi Bay Refugee Resettlement Centre (not to scale).
Fig 8.13 Final physical model on site at scale 1:500.
Design Reflection.

The developed design reflects the primary focus of the design research, visual quality of architecture. Utilising the idea of uncanny, in between fiction and reality and the colour pink, the design outcome led to the creation of a ‘pink’ architecture. It was necessary to be aware on the morale in designing for refugees, in particular with the abstract nature of this design investigation. Nonetheless, the outcome was kept as modest as it can be to fit the character of refugee resettlement centre as an architecture typology.

The spatial arrangement on site was made to maximise interaction between refugees and the existing users on the site. The site itself was considered “generous” at the initial stage of site selection. It offers a view of Porirua Harbour, a site for recreation, and has high potentials for public interactions. It makes a perfect place to prepare refugees for a new life in New Zealand.

The final design, however, focused more on the built form than the site as a whole. A missed opportunity for the development of the site for a wider audience – local community, existing site users, city council and etcetera. Even so, there is potential to develop this research further in the future.
CONCLUSION.
Fig 9.01 August, 2016 design review.
Conclusion & Reflection.

As a response to the global situation, the world’s refugee crisis, there are many ways to address the problem. There are many events where we can see a potential for architectural intervention. However, through political judgement and sometimes biased in making the decision are putting pressure on creating these interventions.

Architecture for refugees is quite sensitive in nature, and naturally, we tend to treat it with cautions and care, minding cost over chance; and especially with a ‘one-tone’ approach. This design-led research is interested in changing that vision for refugee architecture and aim to give an opportunity for the possible outcome of an architectural intervention – an act of ‘generosity’ in architectural design.

Throughout the research investigation, the focus was heavily weighted to generate the language of ‘generosity’ in architecture. It is an abstract quality that is rather difficult to be extracted. The quality of generosity is typically placed on the notion of giving and providing; essentially that is present in the current context of refugee resettlement. However, it is possible to give more and something that is beyond physical necessity?

The research was not undertaken to (or “intending to”) change the nature of refugee resettlement centre as a new architectural typology; rather, it was designed to provide thought-provoking ideas to make room for a second opinion in architectural design for future discussion and contemplation.

The scope of this research covers only a small portion of issues relating to refugee’s resettlement. In reality, there are psychological, financial, resources and other factors that could affect the decision on making a new refugee resettlement centre. In addition to that, the effect of an architectural intervention on existing community has to be considered as well. Hence, the research undertaken avoid any extremes on design response and processes.

Even so, further research can be carried out on the aspect of ‘generosity’ towards refugee architecture. The beauty of architecture is that there is no limitation to any design opportunity. Rising issue concerning world refugee population is a niche that is yet to be expanded within the architectural discourse. This design as research thesis - the making of a new refugee resettlement centre, draws attention not only to create a suitable home for refugees but also to architecture’s responsibility to include every concern to create a richer environment for everyone.
Bibliography


List of Figures

Figures not included in the list are author’s own. 2015 - 2017

Figure 0.01  Alexander Turnbull Library Wellington, New Zealand. n.d. Web. 13 December 2016. <http://natlib.govt.nz/records/23207598>

Figure 0.02  Daily Overview Tumblr. n.d. Web. 20 June 2017 <http://www.dailyoverview.com/juxtaposehost/>

Figure 0.03  Daily Overview Tumblr. 2017. Web. 20 June 2017 <http://dailyoverview.tumblr.com/post/156493948279/the-zaatari-refugee-camp-was-constructed-in>

Figure 2.05  Pataka Museum Collection, at Porirua Library. n.d. Web. 22 June 2017. <http://www.pcc.govt.nz/About-Porirua/Porirua-s-heritage/Poriruas-suburbs/Titahi-Bay/History-of-Titahi-Bay#The arrival of Ngati Toa>


Figure 3.05  Thammavongsa, Nikorn. 2009. Web. 12 April 2016. <http://unitec.researchbank.ac.nz/bitstream/handle/10652/1380/Nikorn%20Thammavongsa%20MArch.pdf?sequence=1>

Figure 5.01  Dezeen. 2016. Web. 15 June 2017 <https://www.dezeen.com/2016/12/09/refugee-cities-turn-camps-into-enterprise-zones/>

Figure 5.02  Dezeen. 2016. Web. 15 June 2017 <https://www.dezeen.com/2016/11/14/design-museum-ikea-better-shelter-refugees-installation-south-kensington-london-uk/?li_source=LI&li_medium=recommended_single_stories_block>


Figure 5.04  Perry, Grayson. n.d Print. 4 July 2016. Sketchbooks Grayson Perry.

Figure 5.05  Hobhouse, Jack. n.d. Web. 10 May 2017. Web. <http://www.jackhobhouse.com/>

Figure 5.07  Christo. 1983. Web. 22 June 2017 <http://christojeanneclaude.net/projects/surrounded-islands>
Figure 5.08  Volz, Wolfgang. 1983. Web. 22 June 2017 <http://christo-jeanneclaude.net/projects/surrounded-islands>

Figure 6.01  MVRDV. 2006. Web. 15 May 2017. <https://www.mvrdv.nl/projects/didden>

Figure 6.02  MVRDV. 2006. Web. 15 May 2017. <https://www.mvrdv.nl/projects/didden>

Figure 6.03  MVRDV. 2006. Web. 15 May 2017. <https://www.mvrdv.nl/projects/didden>


Figure 7.01  Fashion Architecture Taste, FAT. n.d. Web. 27 June 2017. <http://www.fashionarchitecturatetaste.com/2006/07/blue_house_1.html>

Figure 7.17  Wordpress User “Studioza Architects”. 2012. Web. 27 June 2017. <https://studiozaarchitects.wordpress.com/2012/06/18/sou-fujimoto-to-lecture/>

Figure 7.27  Steven Holl Architects. n.d. Web. 27 June 2017. <http://www.archdaily.com/773828/alternative-realities-7-of-the-most-radical-could-have-been-buildings/55f1ddf2e58ecef5f000081-alternative-realities-7-of-the-most-radical-could-have-been-buildings-photo>
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these models will be recycled at the end of this research.