THE BRIDE OF THE DESERT

THE BRIDE OF THE DESERT

a chapter in time

by

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To my family and friends whom I have neglected, for their support throughout this five year journey.

To Daniel for his endless enthusiasm and passion for what we do.

Each night at sunset, the “bride of the desert”, as she [the ancient city of Palmyra] has been known for centuries, gets dressed for her wedding. In those last moments of daylight, she dons a robe of stunning colours—the buttery yellow of her limestone columns mixing with the blue shadows of her temples and the soft pinks of the desert floor...

- “Temple of the Bride of the Desert” (Sahner)

PREFACE

The following design-led thesis investigation has been conceived and framed as a metaphorical narrative where I build upon an architectural investigation to give something important back to the people of war-ravaged Palmyra: architecture empowered to be seen as a heroine and a guardian - a symbol of hope for rebuilding and for the future.

As a speculative work, this project is intended to be experienced through drawing, and to become part of the public realm - similar to the way Libeskind and Woods communicate their unbuilt work - presented in an exhibition, visible and accessible to the community. The investigation is not meant to suggest something to be built; but to explore how architecture can be perceived as an architectural guardian watching over the rebuild as a metaphor; architecture to rebuild a community.

“Is architecture only an end-product that people can physically inhabit, or is it also the matrix of ideas, concepts, and designs that serve as inspirations for constructions that can be inhabited, but lack the financial support, or the technical capacity to be physically built?”

- Lebbeus Woods, *Open Questions*

“Drawings and models are architecture in their own right. If they are not, I ask, when does the architecture appear?”

- Lebbeus Woods, *Open Questions*

ABSTRACT

The Syrian civil war has caused the largest global migration in history, where more than 11 million refugees have been forced to leave their home country due to political conflict. In January 2016 Angela Merkel announced that Syrian war refugees in Europe would be repatriated once the Syrian war is over. But for many Syrians, their homes have been destroyed.

The problem for the returning Syrian people is more than simply providing housing - even more important is how to provide a renewed sense of community as well as cultural and place identity for the returning refugees.

This thesis reflects on how architecture can make a difference in helping to re-establish the cultural and place identity of a war-torn country. The investigation takes a speculative approach to this topic with the principal objective being to provoke discussion and awareness about the fragile future of war-torn historic cities like Palmyra in Syria.

The investigation explores how architectural narrative can be perceived metaphorically as a guardian or a hero sitting within or on the outskirts of a devastated city, watching over it, in a place where it can reflect upon the historic symbolic attributes of the city that once provided its place identity. The Syrian site of this investigation is in Palmyra, and for this site the most important attributes are: the historic Roman ruins to the south (past), the new city being rebuilt in the north (future), the community camel racing track in the west (recreation, freedom) and the Tadmor Prison in the east (imprisonment, restriction). These four sites can be understood as icons of the city's ongoing time line, and acting as catalysts for new development that ensure the continuity of the community's past and future.

The final design proposition is to establish a metaphorical sanctuary for returning Syrian refugees, a place that functions as: 1) a memorial to ensure remembrance of the devastating crisis, 2) an archive of broken cultural artefacts, and 3) a place where returning refugees can come to understand the war as but one chapter in an ongoing cultural heritage that has endured the past and will move forward proudly into the future. This metaphorical sanctuary acts as a 'guardian', meant to greet the refugees upon their return to their homeland. As a sanctuary, they 'inhabit' it while awaiting the rebuilding of their homes - and by inhabiting it, they become a community with others who have suffered devastating loss, others who are determined to remember, and to move forward. This speculative sanctuary design has been conceived to aid them in the essential process of recovery, as an architectural exhibition. Like similar work of Woods and Libeskind, it is buildable architecture, never intended to be built.

Through this memorial/sanctuary, the devastation of war and tragic loss can be reflected upon as one segment of an ongoing eternal time line linked back to their ancient civilization, so that the recent war is not perceived as an ending of their community, but instead as an important reminder of a greater narrative that everyone shares, a narrative that can help define their strength and resilience as they move into the future.

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01

INTRODUCTION

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Figure 1. Free Syrian Army (FSA) fighter poses on his horse in grove of olive trees.

The Syrian civil war has caused the largest global migration in history, where more than 11 million refugees have been forced to leave their home country due to political conflict. In January 2016 Angela Merkel announced that Syrian war refugees in Europe would be repatriated once the Syrian war is over (Dearden). But for many Syrians, their homes have been destroyed.

The problem for the returning Syrian people is more than simply providing housing - it is also about how to provide a renewed sense of community as well as cultural and place identity for the returning refugees.

This topic is becoming increasingly more important because this is a problem that will be happening soon, but has not happened yet, and architects need to prepare a solution before the crisis occurs.

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Figure 2. An
abandoned
home in
Aleppo, Syria.

The following design-led research investigation explores how architecture can help to re-establish returning refugees' awareness and celebration of cultural and place identity within the context of a war-torn country.

The investigation takes a speculative approach to this topic, conceiving architectural design not necessarily intended to be built (though possible to build and inhabit), with the principal objective being to provoke discussion and awareness about the fragile future of a historic city.

refugee

NOUN

“A person who has been forced to leave their country in order to escape war, persecution, or natural disaster.”

- Oxford Dictionary

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Figure 3.
Syrian Army
soldier rests
amongst
the rubble
of historic
Roman ruins
in Palmyra that
were destroyed
by occupying
forces.

RESEARCH QUESTION: WHAT ROLE CAN ARCHITECTURE PLAY IN HELPING TO RESTORE THE IDENTITY OF A COMMUNITY AFTER A TRAUMATIC DISASTER?

Once such an event has occurred, simply rebuilding the original architecture in its original form would create at best a contemporary 'mask' of sorts pretending to be historic, but in fact a false identity. Rebuilding the city anew, on the other hand, using contemporary architectural ideas might create a vibrant modern city, but the visible time line that establishes true place and cultural identity would be lost. This investigation understands this conflict as fundamental to the challenge of renewal after devastating loss of a built landscape. An appropriate solution to such a crisis requires sensitivity to how the old is retained or remembered, while at the same time the new is born and invited to flourish.

The proposition of this investigation is that the first step for destroyed cities like Palmyra must be to first establish awareness of these issues and their required sensitivities. It proposes that architecture can enhance awareness of these issues and help establish meaningful dialogues about them, before any new building is even built – by first providing a speculative response in the form of narrative drawings and models meant to be viewed in public forums prior to the start of any rebuild.

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This thesis presents such a speculative response for the crisis that has befallen Palmyra in Syria, where the war is only now ending – and the fundamental loss of place, cultural, and community identity is about to be felt by the population of returning refugees.

“Is architecture only an end-product that people can physically inhabit, or is it also the matrix of ideas, concepts, and designs that serve as inspirations for constructions that can be inhabited, but lack the financial support, or the technical capacity to be physically built?”

- Lebbeus Woods (Woods, Open Questions)

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Figure 4. Road
to Palmyra.

AIMS & OBJECTIVES

The Research Aims of this investigation (what it hopes to achieve) are to create an architectural intervention:

- that is explicitly conceived to invoke discourse about an important political, social, and environmental issue.
- that reflects on loss and aids in restoring the identity of a war-torn city.
- that generates a renewed sense of cultural ownership, identity and control in response to the destruction of an historic homeland.

The Research Objectives of this investigation (how it plans to achieve the aims) are:

1. Speculative Architecture: To engage 'speculative architecture' as an approach to invoke discourse and critical reflection about the research problem.
2. Anthropomorphic Architecture: To anthropomorphise an architectural intervention, such that the returning citizens of Palmyra recognise and interpret it as a 'guardian' or 'sentinel' or 'heroine', looking out over their community. Such an intervention can represent the guardian of a community's history and heritage, pointing inhabitants in the directions of important heritage points in the community's time line.
3. Narrative Architecture: To establish an architectural narrative through which the architectural intervention can provide hope to its inhabitants, as well as a renewed sense of the devastating loss being but one chapter in an ongoing time line that has a proud past and a vibrant future ahead.
4. Contextual Architecture: To invite the materiality of the context to become a major component of the architectural response, thus ensuring that the original context is understood as an essential component of place identity – a place identity component that has withstood the devastation despite the appearance of total loss.
5. Habitable 'Sculpture' as Architecture: To invite a speculative, anthropomorphised, narrative – 'sculptural' – intervention to be translated into habitable architecture, representing a 'sanctuary' for newly returning refugees, as well as a 'memorial' for the community once it has found its footing once more.

In the following chapters these objectives will be achieved through the analysis of theory and precedents:

1. To achieve the first Research Objective, to invoke discourse and critical reflection through speculative architecture, the work of Lebbeus Woods will be investigated.
2. To achieve the second Research Objective, to anthropomorphise an architectural Intervention, the work of Lynn Chadwick will be investigated.
3. To achieve the third Research Objective, to convey a meaningful narrative, the work of Daniel Libeskind will be investigated.
4. To achieve the fourth Research Objective, to integrate the materiality of the architecture and its context, the work of Mary Miss will be investigated.
5. To achieve the fifth Research Objective, to translate a speculative, anthropomorphised, narrative intervention into habitable architecture, the work of Walter Pichler will be investigated.

Figure 5.
Bullet-riddled
rooms in
Quneitra, Syria

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Figure 6. A
Bedouin's
donkey,
outside of
Palmyra.

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METHOD

The design methodology follows an iterative and experimental process that begins with the research of site, and then aligns its research aims and objectives with the theoretical work of Lebbeus Woods, Daniel Libeskind, Mary Miss, Lynn Chadwick and Walter Pichler. Through this alignment, a strategic set of design principles was produced to begin the design experiments. The design experiments are an iterative process, starting siteless and in the end becoming deeply connected within the context. The method is very process driven, and is sculpted by critical analysis of each stage.

SCOPE

This thesis fundamentally deals with providing returning refugees with a safe place, a metaphorical sanctuary, when they return home to Palmyra after the war. The intention of this metaphorical, speculative approach is to create awareness about the serious problem of refugees returning to a destroyed home.

The scope for this investigation is limited to design investigations that are focused on combining elements required to live with the contextual elements of site so the building becomes a cohesive didactic experience for the user, restoring hope and enhancing strength and resilience in the community.

The intention of this project is speculative and to be experienced through drawing and modelling. The built intention would take away from the importance of the problem at hand and would introduce additional critical variables that would change the final design.

The structure of the following chapters begins with the analysis of site to establish a strategic set of design principles that can be incorporated into the design experiments. Theoretical approaches are then analysed to strengthen and build a cohesive argument for the design response. The design process is then presented through five phases that begin with early concept experiments and develop through to resolved preliminary designs that are critically reflected against the aims and objectives. Then follows the final design experiment which is expressed through drawing, sculpture and architecture to establish a metaphorical 'sanctuary' that a community 'metaphorically inhabit' whilst awaiting the construction of new housing after their return to a devastated community.

02

SITE ANALYSIS

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Figure 7.
Three-part
panorama
of Palmyra
taken from the
historic ruins
of Diocletian.

This chapter establishes a strategic set of contextual design parameters that can be incorporated into the design experiments. It will present an overall history of the site and culture of Palmyra, then further define specific site elements that will become the contextual design parameters that are used in the final design.

The inclusion of this analysis is integral to the investigation as it is the identification of historic, cultural and identity elements mentioned in the aims and objectives that will be used to create an appropriate design response.

Overall, the chapter provides the specific elements required to be able to arrive at a response that embodies the contextual cultural past. It will identify what the city once was, what it is today, and what it could be in the future.

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Figure 8.
Syrian Army
soldiers climb
on ruins of the
Temple of Bel.

The chosen site for this investigation is a historic town in the middle of the harsh Syrian Desert called Palmyra.

This site has an extremely rich cultural past with both a historic and torn urban landscape, and provides the opportunity to envisage a hopeful future.

The Syrian war has been devastating to Palmyra, and now there is the need for an architectural intervention to provide refugees with a new sense of cultural ownership, identity and control when the war is over and they return home to Palmyra in a broken and devastated state.

Figure 9.
Location of
Palmyra in
Syria.

In the middle of the Syrian Desert, Palmyra is a landlocked city situated on a flat desert plain surrounded by mountains and further flat expanses. It is very isolated, located 130 miles northeast of Damascus.

The first settlers were attracted to this location because of the underground water supply that feeds an oasis, which provides water for the people and agriculture, and allows rich orchards of date, olive and pomegranate crops to grow (Burns, 206).

Figure 10.
The palmery
located south
of the city.

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Figure 11. The ancient Roman ruins south of Palmyra,, looking down the main colonnaded street to the Temple of Bel.

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Figure 12. Modern city of Palmyra.

Before the Syrian war began Palmyra was home to more than 30,000 Palmyrenes, and over 100,000 tourists would visit the ancient city - a UNESCO World Heritage Site (Figure 11) - every year (Burns, Iain).

In 2015 when ISIS took control of the city, the extremist group destroyed many of the ancient buildings in the historic district, as well as major infrastructure, houses and public buildings in the modern city (figure 12) (Burns, Iain).

It is this damage and destruction caused by the war that has created the problem to which this design-led research investigation responds.

Figure 13.
Diagrammatic
map of
Palmyra
showing grids
and road
layout.

The city map (figure 13) shows a series of fluid lines (defined by roads and created by natural contours) in combination with two main orthogonal shifted grids (black lines), and how they intersect on a northern site, indicating the exact location of site selected for the final design intervention. As well as being located at the apex of these shifting geometries, this site is also located in the predicted direction of expansion and future urban growth (grey shaded area Figure 13) (Kain, 17).

The winding orange lines show main roads that carve through Palmyra. The modern city was built after the ancient city and this map shows the contrast between structured, grid-like roads that run through the modern city, versus the soft weaving of the roads that enter and leave the city from the north and the south, outlining the UNESCO World Heritage Site (shaded pink in figure 13). Another important fluid geometry is the dried river bed which the underground water source would flow down, underneath the modern city (thick pink line figure 13).

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Figure 14.
Etching of the
ancient city
of Palmyra
during the
Roman
occupation
by George
Malbeste.
Middle section
of Colonnade
Street, ca. 1799

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Figure 15.
Etching of the
ancient city
of Palmyra
during the
Roman
occupation by
Claude Niquet.
Funerary
Temple, ca.
1799

PALMYRA

The narrative

The first settlers to arrive in Palmyra in the third millennium BC were attracted to the oasis spring located in the south of the city where date, olive and pomegranate crops are still grown today (Stoneman, 94). It was rare for water to be found in the middle of the vast desert, and so this site became a perfect location to start a city and provide a place for travellers to stop on their journey through the desert (Burns, 206).

Palmyra gained the majority of its wealth in the Second Century when it became a major node on the Silk Road trade route which linked the Han Empire in the East with the Roman Empire in the West. It was the trading role of Palmyra that allowed the city to flourish, and brought the construction of the Temple of Bel in the late first century (Figure 27). The Temple of Bel was later used as a caravanserai - an important sanctuary which provided a safe place to stay for the travellers and their belongings. This notion of the caravanserai is explained further in this chapter (page 40) as it becomes very important element in the design investigation.

Palmyra has had many rulers throughout its history. The first, Hadrian in 129 BC, led the city at the beginning of its rise. The Second Century marked the peak of the city's success due to trade, which brought in money, leading to the construction of many civic buildings with Roman vernacular (Burns, 207).

In the Third Century, after the Parinthan wars in 160 BC, the Roman Emperor Caracalla declared Palmyra a part of the Roman Colony, which led to the rapid decline in travellers and trade due to decline in political stability. There were political uprisings, wars, death, violence, which greatly affected trade across land. The Roman Empire diminished and so did Palmyra. However, it was still fought over by various Roman rulers such as Odenathus in 250 AD to Aurelian and Zenobia in 270 and later Justinian in 520, leading to the destruction of the city and its grand early Roman architecture (Burns 208, 209).

To be able to create an appropriate design solution within the layers of this story it was important to understand the history and identity of this illustrious culture and place. This narrative enables the understanding and presents the lengthy time line of wars and violence that has caused the ancient city to crumble over time, while always finding ways to repair and flourish once more.

Figure 16.
Map showing
the location
of ancient
ruins south of
Palmyra.

Figure 17. 3D
view looking
southeast
over the
Ancient City,
palmyra in the
background.

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Figure 18.
Syrian Army
soldiers take
shade beneath
some of the huge
pillars in the
Temple of Bel
which survived
Islamic State
efforts to destroy
the ruin.

The ancient Roman Temple of Bel, situated at the south (far) of the city (Figure 17), is connected to the end of a dramatic colonnaded street that connects other elements of the ancient Roman town such as the amphitheatre and the marketplace and also leads to the temple tombs that sprawl into the valleys beyond. This long colonnaded street in the centre of the ancient city provided a very dramatic entrance for foreigners arriving in the city.

Figure 18 shows human scale at the base of the massive pillars in the colonnaded ancient Roman street. Upon regaining control of Palmyra in March 2017, Syrian Army soldiers were the first to re-enter the city and check for damage made by ISIS.

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Figure 19.
Syrian Army
soldiers take
shade
beneath some
of the huge
pillars in the
Temple of
Bel which
survived
Islamic State
efforts to
destroy the
ruin.

The pillars that lined the central street of the ancient city were dramatically tall, informing verticality in later design experiments; Figure 19 shows human scale.

Figure 20.
Syrian Army
soldiers
climb
through the
ruins of the
Temple of
Bel, reduced
to rubble
after being
bombed by
Islamic State
militants.

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The Temple of Bel was at the end of this colonnaded street, and was mainly destroyed under control of ISIS, with only the arch remaining. Figure 20 shows the destruction and remaining rubble that returning refugees will be faced with upon returning.

Figure 21.
Retreating
Islamic State
militants laid
mines under
the main
roads in
Palmyra at
50-metre
intervals, in
an attempt to
cause further
Army losses.

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Other destruction of the city includes one of the main roads into Palmyra, which has been torn to shreds by land mines and grenades (Figure 21). One role of the soldiers was to check the city for hidden mines so residents can safely return.

Figure 22.
Much of
modern
Palmyra lies
in ruins, from
fierce
fighting
between the
Syrian Army
and the
Islamic State,
which
controlled
the city for
ten months,
as well as
from the arial
bombardmen
ts carried out
by the
Russian Air
Force.

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31

Houses and public buildings were destroyed by the fighting. Figure 22 shows one example of a ruined house that Palmyrenes will return to.

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Figure 23.
The tarmac
of the road
leading into
Palmyra city
centre is torn
open by
mines laid at
50-metre
intervals by
retreating
Islamic State
militants, in
an attempt to
cause further
Army losses.

Another main road looking out from the modern town, and up to the Medieval castle (located on map in Figure 13) on a western hill, a witness to the devastation. The road has been torn up by land mines and grenades.

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Figure 24.
Syrian Army
generals and
soldiers gaze
over Palmyra
from the
medieval
citadel. Gaining
control of the
strategic citadel
was a decisive
moment in the
battle for
Palmyra.

Soldiers rest, looking east across the smoking
remains of the broken city.

Figure 25.
City map of Palmyra
showing
four
important
sites.

The following pages highlight three sites that contain important identity attributes of Palmyra. The three sites are later used as metaphors to inform design decisions for the preliminary experiments and final design. Figure 25 shows the location of each, and relation to the others and the city.

The fourth important site shown in this sequence is located in the north, and is the chosen site for the final design experiment. As this location was chosen because according to the Palmyra Regional Action Strategic Plan future development will occur in this northern location (Kain, 11). The second main reason for choosing this site location is because it is the apex of three urban grids as shown earlier (figure 13).

1. WEST CAMEL RACING TRACK

The camel track represents the opposite of Tadmor Prison: recreation and freedom, sport and community. The camel track is a place where everyone is equal; respect and fondness is shared nationally for the animals and the sport.

2. EAST TADMOR PRISON

The Tadmor Prison represents harsh conditions, extensive human rights abuse, torture and execution of political activists. It is one of the most notorious prisons in the world for the inhumane treatment of inmates, most of whom are political prisoners.

Figure 27.
Tadmor Prison

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3. SOUTH TEMPLE OF BEL

The third quadrant holds the Temple of Bel, the largest and most sacred structure in the ancient city. This quadrant represents the rich history of Palmyra as it holds the origins of identity, trade and wealth, violence and war. The Temple of Bel was once a Caravanserai and was the centre point for the ancient community (Burns).

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Figure 28.
Temple of Bel

4. NORTH CHOSEN SITE

The chosen site makes up the fourth quadrant, and represents the future of Palmyra. It is the catalyst for change in the urban plan and it sits at the intersection for three urban grids (Kain, 17).

Figure 29.
Chosen Site

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CARAVANSERAI

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Figure 30.
Exterior view
of caravanserai
in vast desert.

The caravanserai is an important cultural element in middle eastern culture that is referenced in the final design. Also known as “desert palaces” they are important because they acted as sanctuaries which were dotted along long trade routes throughout deserts in the Middle East to provide shelter for travellers, their belongings and their animals (Schutyser, Intro). They were a place where foreigners and locals were safe and protected along harsh isolated roads.

Figure 31.
Temple Of Bel
Floor Plan

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TEMPLE OF BEL

The Temple of Bel was constructed in Greco-Roman style on a north-south axis; it consisted of a paved court with a large columns that spanned 205 meters around the perimeter (Gates, 390). Although in the centre of this court was a Roman temple (later used as a mosque), the caravanserai element was created around the perimeter of the court where mud huts were built in the open for travellers to inhabit (Terpak). This presents an interesting contrast between different historic materials representing the permanent stone and temporality of the mud - a language that is used later in the design.

Figure 32.
Typical
floor plans
of various
caravanserai.

SPATIAL ARRANGEMENT

Figure 32 shows typical floor plans of four caravanserai. They were generally arranged with a communal uncovered courtyard in the centre, and various spaces around the outside which were used as sleeping chambers - this was also a dialogue that is used later in the design stage.

This chapter has established a strategic set of contextual design parameters that can be incorporated into the design experiments. These design parameters include: the converging of orthogonal, skewed, and fluid grids, fertility provided by the oasis spring, three historic identity sites of the prison, camel track and ancient city, and the notion of the caravanserai.

All of these elements represent place and cultural identity for the Palmyrene people, and as such have been incorporated into design experiments and then developed within the final design experiment. The following chapter will further build upon this argument by exploring relevant theoretical implications of this research through the investigation of 5 theorists and related precedents.

03

LITERATURE REVIEW & CASE STUDIES

This chapter explores selected theoretical approaches that relate to specific aims and objectives of this thesis and help to strengthen the design response to the research problem.

The precedent studies aim to represent design approaches to resolving the research problem, as well as interpreting the theoretical approaches from literature and addressing the Research Objectives

Specifically this chapter looks in detail at how theorists achieve the research objectives of this investigation; these research objectives are:

1. Speculative Architecture to invoke discourse and critical reflection about the research problem;

Lebbeus Woods

2. Anthropomorphic Architecture to enable the intervention to be interpreted as a 'guardian' or 'heroine' by the citizen;

Lynn Chadwick

3. Narrative Architecture to establish an architectural narrative that provides hope for the future;

Daniel Libeskind

4. Contextual Architecture to invite materiality of the context to become a major component of the response;

Mary Miss

5. Habitable 'Sculpture' as Architecture to invite a speculative, anthropomorphized, narrative 'sculptural' intervention to be translated into habitable architecture;

Walter Pichler

LEBBEUS WOODS

1940 - 2012

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Figure 33.
Lebbeus
Woods
1940-2012

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Figure 34.
Photon Kite,
from the series
“Centricity,”
1988. Graphite
on paper.

Lebbeus Woods was the most influential theorist at the beginning of this investigation, when the research was strongly situated around post-war architecture and making an important statement about the research problem through an unbuilt scheme.

“What if we lived by a different set of rules, ones that didn’t have, for example, governing agencies that dictate how buildings could stand up or not, or even gravity and physical limitations that dictate the specific kind of architecture we must live with?”

- Woods (Anderson)

THE ZAGREB FREEZONE

1990

Figure 35.
Case Study:
Zagreb Free
Zone

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THE BERLIN FREEZONE

1991

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Figure 36.
Case Study:
Berlin Free
Zone

The 'Zagreb Freezone' and the 'Berlin Freezone' are both case studies by Lebbeus Woods and are examples of the radical nature of his theory in design, and were obviously never intended to be built. They are incredibly powerful through the message they send; to shun political, cultural and social norms through the rejection of traditional form that surrounds them and translate the vernacular into a new form that is "heterarchial" (Woods, Anarchitecture, Intro).

He is making a fundamental statement about war through these projects, about a problem, about the crisis people face in a dense urban context and how architecture designed in a certain way can make people conscious of a certain issue.

For this investigation the intervention is located on the edge of the desert, unlike Woods whose is in a urban city centre. His interventions are active participants where the final intervention for this investigation is to be an 'observer'.

The overall goal for these projects is for them to be visualised in a public setting, a website, gallery or journal, to make a statement that architecture can transcend important issues and enable people to generate a greater sense of community, cultural and place identity within the context of a devastation where place has been lost.

There is no way one building could solve the refugee crisis in Syria. For a thesis to attempt to do so with a real building makes no sense. Whereas a thesis looking at the speculative opportunities after a disaster, like Lebbeus Woods did, would enable the investigation to make a statement that might affect people and help to raise awareness of issues that are important. This is what I want my architecture to do.

LYNN CHADWICK
1914 - 2003

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55

Figure 37.
Lynn
Chadwick in
his studio,
1950.

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Figure 38.
Drawings for
sculpture.

Chadwick was one of the most notable British sculptors of his generation, known mostly for his bronze and steel creations that were forms of abstract and expressive anthropomorphic figures (Bird).

He was used as a theorist and his work as a case study for this investigation because he tries to establish abstract forms that are not simply mute, but rather he gives them a sense of presence. He anthropomorphises them and by doing so he makes them confront us. He puts them into a dialogue with us and makes them feel as though they are understood by us by creating a discourse and familiarity.

CONJUNCTION

1953

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Figure 39.
Conjunction,
1953

Conjunction (Figure 39) and Conjunction V (Figure 40) both by Chadwick evidence his theories as the forms depict anthropomorphised elements and abstractions that an architect can look at and start to realise translation opportunities. These case studies both show clear sense of a entry, a gateway, a portal. A clear sense of shelter with a roofed opening, a clear sense of habitable volume up above. Whilst they are definitely not architectural, they begin to allow themselves to be translated into architecture.

CONJUNCTION V

1958

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59

Figure 40.
Conjunction V,
1958.

His theories and works were the most influential in the final stages of my investigation where physical and formal elements were required to translate my own ideas from abstract sculpture to an architectural solution to create a similar language that lies on the edge of architecture and sculpture.

DANIEL LIBESKIND

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Figure 42.
Case Study:
Berlin
“City Edge”
Competition
1987

Daniel Libeskind, similar to Lebbeus Woods, places his intervention against a context against an urban site. He also works with issues and metaphors about time, balance, scale and symbolism which is how he conveys a narrative, a story, a dialogue.

His designs make a statement both architecturally and socially in order to prolong the memory of a historic event for future generations to look back upon and learn from.

THE BERLIN “CITY EDGE” COMPETITION 1987

Figure 43.
Berlin “City
Edge” Model.

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Figure 44.
Berlin “City
Edge” urban
conception.

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An example of this is the Berlin City Edge competition entry by Libeskind in 1987. He tells the story using a symbolic narrative of a balance beam that balances on the fulcrum of the Berlin Wall. One half of the beam secured and grounded and accessible in the West, and in the East the other end of the beam hovers above, looking down, never able to enter which creates a very clear simple story told through the symbolism of architectural form resting on its context.

65

The way Libeskind has responded to context through symbols and forms in this project shows that a story does not come from a single static line. It has to be about a balance, about a duality and a responsiveness. For this design led investigation the three historic sites identified in Palmyra can use this notion of narrative to create an intervention that responds to a trilogy of symbols to depict the story through three sentinels that tell the narrative of Palmyra.

MARY MISS

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67

Figure 45.
Mary Miss

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Figure 46. Case
Study: Veiled
Landscape,
1979

Mary Miss is an installation artist who employs architectural vocabulary in her work. She deals with connections between built form and the natural environment, and most importantly the blending between the two.

One of the biggest obstacles I found in my experimentations was that with the desire to achieve what Woods had achieved, he had used non-traditional architectural forms and there needs to be a fine line between something looking completely alien in a landscape versus something feeling like it is abstracted. Something that is non-traditional, but still arises directly from the landscape. Mary Miss is an example of an architect and a sculptor whom begins to challenge the boundary between the two.

The Veiled Landscape (figure 46) is an installation in the dense forest and expresses the notion of the trees as columns and as the vertical constructs of an architecture. Then the wooden trellis begins to merge with the trees so you become unsure of which one is the architecture and which one is the context, because ultimately when you look through this piece you realise that the context is visually the inhabitant of the architecture.

PERIMETERS/PAVILIONS/DECOYS

1977-78

Figure 47.
Case Study:
Perimeters/
Pavilions/
Decoys
1977-1978

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A second case study Perimeters/Pavilions/Decoys by Miss was completed in 1978. The site on which these interventions sit becomes one of the most fundamental elements of the architecture. The architecture would not exist without the site, the landscape becomes the walls, which are the most critical elements.

In the final design for this thesis, the context is invited to inhabit the architecture, you are invited to see through the architecture to the context and vice versa. The boundaries will begin to be merged between built and unbuilt, and show how the two need one another in order to have a definition, and to express the narrative that they are describing.

Figure 48.
Case Study:
Perimeters/
Pavilions/
Decoys
1977-1978

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Figure 49.
Authors
work. Plaster
and card
experiment.

My response to the theories by Mary Miss has been demonstrated with experiments with plaster and card, the plaster forms to represent the rough untamed and vast landscape and the card to act as an intervention, a simple clean cut through the unruly expanse. This experiment was very useful and was used in the final design and preliminary stages where the architecture and landscape have a strong relationship.

WALTER PICHLER
1936-2012

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75

Figure 50.
Walter Pichler.

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Figure 51.
Old Figure in
studio.

Walter Pichler was once a part of Austria's post-war avant-garde movement which consisted of a group of Austrian architects who produced art that "defied the status quo." (Grady).

Similar to Chadwick, his theories and case studies are relevant to the objectives for this investigation through his exploration of sculptural form and the way each suggests inhabitation.

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"He does not project bliss or innocence into this world; it offers him neither shelter nor protection, it is neither Arcadian nor idyllic.

Most of his work involved, quite simply adjusting to the local circumstances, accepting the given realities, even taking advantage of them."

- Friedrich Achleintner (Pichler, 9)

HOUSE FOR THE WOMAN

1984

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Figure 52.
House for the
Woman, 1984.

House for the Woman by Pichler (figure 52), shows a plan at the bottoms of the drawing that appears very similar to the objectives that Mary Miss was trying to achieve. What he does that is different to Miss, is that he begins to build an architecture upon this grid-like base so that it becomes a landscape element that inhabits the architectural shell.

The second thing he does is that he brings a carved column and rests it within, not dissimilar from the figures of Chadwick, but this time the figure is the inhabitant inside – architecture inside architecture, landscape inside landscape.

WOMAN IN METAL

1990

Figure 53.
Woman in
Metal, 1990.

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Woman in Metal (figure 53), where he is moving beyond sculpture and inhabitable spaces can begin be recognised. This provides opportunity for how housing could infiltrate the veil of the Woman in Metal, as a place to inhabit these spaces could offer all different elements of privacy and enclosure seen on the right of the figure versus exposure to the outdoors and engagement with the elements on the left of the figure.

These ideas of inhabiting the abstract have been incorporated in the final design, of each vertical figure providing different inhabitable spaces with varying levels of privacy and exposure.

The overall problem that this investigation is responding to is refugees returning to a devastated homeland. I have confirmed through these preceding theorists and case studies several specific approaches to how one might integrate speculative architecture with anthropomorphism, with narrative, with the importance of context, and ultimately inhabitation. From transforming the abstract into the architecture.

In daily life one of the biggest issues is that when people walk past buildings they never see them. We are so used to windows, doors, cornices - that we become blind to them. How can the awareness of architecture be reinvigorated? How can architecture capture our attention as we walk by?

The following chapter will present the concept and preliminary design phases which are critiqued on their successfulness of achieving the aims and objectives required for this investigation.

04

CONCEPT & SKETCH DESIGN

The following chapter documents the iterative design process of this design-led research investigation. There are five phases that begin with early concept experiments and continue through to two resolved preliminary designs.

Each phase within this chapter has been critiqued against the objectives of this thesis to gauge the successfulness of each in order to develop ideas and arrive at a well resolved design solution.

The first stages of the design process were conceptual designs responding to contextual elements of the site in Palmyra, and were carried out whilst the research phase was occurring. The experiments in this phase were about understanding the site, and are laying the foundations for future experiments to be built upon.

They provided important insights, in particular relating to Research Objective 3: to integrate the materiality of the architecture and its context.

Figure 54.
Exploration
of contextual
elements to
understand
vertical
patterns on
site. Paint,
modelling
paste, charcoal
pressed
between
acrylic and
card.

These paintings were one of the earliest design experiments when simultaneously beginning site analysis. They were produced by placing various media: blobs of paint, modelling paste, charcoal, between a card base and an acrylic lid and different movement techniques were applied to each. The outcome was successful in depicting natural elements of site - sand, peaks, mountains, blurring of edges between two medium and allowed a starting point to answering Research Objective 4, dealing with context and relationship with place.

Figure 55.
Site
exploration.
Concrete
squares
containing
rubble.

This experiment was useful for understanding the composition of site, the broken elements, the rubble buried and exposed within the landscape. The conceptual models explore different impressions and fragments of the post-war landscape. These eventually became the precursors of the final response to materiality, and the incorporation of broken fragments into the new building materials as a 'memorial'.

Figure 56. Site exploration. Textured tissue paper formed on card.

This was an experiment with a material made from layers of glue and tissue paper. One side was matte and the other side had a rubbery-adhesiveness, and when pressed onto a card base it formed stiff peaks.

One element of site which was fascinating was the vastness of the desert plains in contrast to the mountains and peaks that rise out and frame the plains. This contrasting notion is what these experiments are interpreting.

These eventually became the precursors of the final response to the design site, and the creation of a 'broken' foundation from which the final design intervention arose.

Figure 57.
Concept
sketch. Initial
ideas.

The second phase in concept sketch design begins to experiment with siteless built forms within the context of Palmyra. The experiments remain siteless, but are the beginnings of key concepts that are used throughout the design process.

They provided important insights, in particular relating to Research Objective 4: to anthropomorphise an architectural intervention, such that the returning citizens of Palmyra recognise and interpret it as a 'guardian' or 'sentinel' or 'heroine', looking out over their community.

Figure 58.
Initial concept
sketches of
tower-like
forms.

This phase began with vertical forms that could act as observatories, holding a museum or inhabitable area high above the ground with a journey to get there. These sketches show quick fire concepts, with a selection developed later through modelling.

The element of verticality discovered in the grand entrance columns to the ancient city (figure 18) was used throughout the design process as a symbol of hope; the building becomes a monument in the landscape, standing tall and keeping guard over the city.

95

These concepts respond to Research Objective 1 of the investigation as they are of speculative nature and experiment with non-traditional form. The majority are simple, bold geometric forms that offer potential to generate strong patterns of light and shadow. They are also responding to the ancient city, as they all use the same footprint and form as one of the temple tombs.

In this way, they begin to address Research Objective 4, to represent the guardian of a community's history and heritage, pointing inhabitants in the directions of important heritage points in the community's time line.

Figure 59.
Model
experiment.
Tower 1. Front.

96

Figure 60.
Model
experiment.
Tower 1. Side.

This model is a development of the previous sketches, and has become an observatory. There is an enclosed journey leading you up through the legs, and to a platform with an inhabitable volume - a museum, or viewing platform looking out over the city.

Elements of the tower, elements which look out over the city are present here. This experiment was successful in answering objectives of nontraditional forms, simple form, strong light and shadow, narrative through journey and guardian.

Figure 61.
Model
experiment.
Tower 2. Front

98

Figure 62.
Model
experiment.
Tower 2.

A second development through modelling of previous sketches. A vertical tower with the museum element occurring as you journey up and across allowing the user to view the city from different perspectives facing different views.

The idea of framing views and facing different parts of the city was later incorporated into my preliminary and final design. This model responds to objectives of narrative and simple form.

In this way, these experiments begin to address Research Objective 2: to establish an architectural narrative through which the architectural intervention can provide hope to its inhabitants, as well as a renewed sense of the devastating loss being but one chapter in an ongoing time line that has a proud past and a vibrant future ahead.

Figure 63.
Concept sketch.
Inhabiting forms. Section (left) and plan (right).

100

Figure 64.
Sketch experiment.
Towers, Section (left) and plan (right).

The next phase develops the previous ideas further and presents design experiments that explore how architecture can be perceived metaphorically as a guardian or a hero sitting within or on the outskirts of a devastated city, watching over it, in a place where it can reflect upon the historic attributes of the city that once provided its place identity.

Figure 65.
Model
experiment.
Guardians.
Multiple
interventions
across the
landscape.

Figure 66.
Model
experiment.
Guardians.

The main idea for this set of experiments was to test an idea for four interventions placed around the city at important historic locations. The locations identified in the site analysis chapter had not been formalised at this stage.

From this stage, it was evident that a strong connection to the site would make this concept very successful. Therefore the next step was to revisit site analysis to pinpoint the important identity elements of Palmyra, which are the three sites mentioned in the site analysis chapter.

Upon reflection, the forms were also too bold and geometric and ended up appearing as intimidating rather than “sanctuary-like” which was not what the architecture needed to convey in order to meet the research aims.

These experiments provided important insights into how architectural narrative can make connections across the city and the use of bold and simple forms that would rise out of their context.

Figure 67.
Flat
axonometric
sketches of
monument
series.
Inhabitation.

These experiments provided insights into Research Objective 5: to translate a speculative, anthropomorphised, narrative intervention into habitable architecture.

05

PRELIMINARY DESIGN

Figure 68.
Prelim
sketches.
Inhabiting
forms.

Figure 69.
Prelim
sketches.
Inhabiting
forms.

This chapter presents two resolved preliminary designs that have built upon previous experiments and literary research.

The challenge that this phase presented was the combining of puzzle pieces from previous experiments and research that I wanted to bring together to become a whole.

Figure 70.
Concept sketches.

Experiments in this chapter are around the combination of speculative concept and historic site identity elements, as well as considering formal composition and metaphoric programmatic elements needed for people to inhabit – places to learn, repair and find shelter. These designs were the first attempts to respond to all five research objectives.

111

The following designs were presented in the July mid-year review, where advice from the critics was to look into more realistic precedents, and how it could actually be functionally used, as well as to make sure the project was true to what I was passionate about.

Figure 71.
Prelim design
1. Section

Figure 72.
Concept
sketch.

1.0

The first preliminary design uses elements of the caravanserai, as an entrance buffer for short term guests or travellers.

Also reminiscent of the caravanserai, in the centre of the inhabitable edge there is a towering form containing public spaces that embrace the private spaces in the centre.

The arm that extends upward functions as places for food growth and observation, as well as a nesting ground for a native bird population whose breeding ground had been destroyed.

Figure 73. Plan

Figure 74.
Exterior views.

Figure 75.
Zoom-in
sections.

Successful attributes of this first preliminary design are the use of nontraditional forms, the inclusion of narrative through caravansera elements, and connecting views to historic sites in the city, and suggestion of how the spaces would be inhabited.

Opportunities for the next design phase:
The base of this design is embedded within the landscape, but does not blend well and the towering form extends unsympathetic to the landscape. Whilst being aligned on one important axis point in the urban grid, there were still many important site elements that needed to be incorporated in the final design phase.

Figure 76.
Prelim 2.
Section

2.0

As a development of the first preliminary design, this second attempt incorporates elements that were omitted or unresolved in the first.

This preliminary design solution incorporates three bodies that twist to face historic elements in the city - one body contains housing and private shelter, the second contains space to repair and health spaces, and the third contains spaces to learn. Community gathering spaces and service spaces are spread vertically throughout the building, and intersect the three main bodies horizontally. The objective was to provide a sense of community to the returning refugees who now share an important common history and can act as a community to move forward.

The base is embedded within the landscape and has services below ground such as recycling, waste and water plants.

Figure 77. Plan of preliminary design 2.0.

In plan, there is a large area on the ground level for entry purposes and community gathering. The entrances are determined by alignments found in the immediate landscape, recognising the intersection of the shifting orthogonal and fluid urban grids from the modern city, and projecting access to future development in the north.

Successful elements of this design include the facing of volumes towards historic sites in the city, setting up a narrative that tells a story of the broken site. The other strong success is the way in which the base sits within the landscape, responding to the work of Mary Miss and the objective of blending between landscape and architecture. Architecture, which is refined further as later developments through modelling.

Figure 78.
Model of
preliminary
design 2.0.

Opportunities for the next design phase:
Upon reflection, the two preliminary designs were successful in some ways, but also unsuccessful in others. Neither of these completely answered the research objectives.

For the final design, each of these experiments was de-constructed and the most successful elements were reassembled to fulfil the objectives of this investigation.

After this phase, I revisited site analysis again, revisited the theorists who initially inspired the design process, and dove deeper into what each historic site had to offer, what each meant to the city - and how their ideas could be expressed.

Figure 79.
Concept
sketch.

Figure 80.
Concept
sketch.

Figure 81.
Concept
sketch.

Figure 82.
Concept
sketch.

After revisiting site analysis and literature by theorists, the next phase of experiments focus on the important historic sites in Palmyra that were mentioned in the site analysis chapter.

Each site is expressed through drawing and modelling with the aim of associating a deeper identity and meaning to each to strengthen the objective of narrative for a final design solution. The abstract sketches are the beginnings of this and are then further developed into models.

Other objectives that are addressed in this phase include the creation of abstract, nontraditional forms, a speculative scheme and the notion of narrative is explored.

Figure 83.
Observatory
concept
sketches.

These sketches were the beginnings of the final Preliminary Design Phase. Unusual forms were attempting to be the opposite of traditional, and relate to theories from Woods, where letting go of traditional vernacular and becoming something new releases architectural baggage and preconceived ideas of a typology.

Program and site were not initially applied to these sketches as they were the first design wash and first attempt for what they were intending to achieve. However they resulted in a successful experiment as they led on to be developed as models with deeper meaning.

Figure 84.
Observatory
models.

These are the resulting observatories. They are envisaged as being scattered across the city within or around the historic site to which they relate. They witness each other across the city from their individual sites, and respond to their site with their different symbolic persona.

Each design is very unique, but together they respond to the first objective of this thesis of being of speculative nature; the second as they tell the narrative of the particular site; the third as tell a narrative about the broken city of Palmyra; the fourth as they respond to contextual elements of place; and the fifth as they suggest inhabitation within their abstract, sculptural volumes.

The following pages detail each figure relative to their specific site and personality.

Figure 85.
Observatory
models.

Figure 86.
Observatory
models.

Figure 87.
Prison 1.
Model.

128

Figure 88.
Prison 1.
Model.

PRISON 1

Symbolic of the Tadmor Prison, showing elements of repetition of bars, rigidity, anonymity, separation. Positive and negative volumes with the main volumes being separated above ground and by hostile walls.

Figure 89.
Prison 2.
Model

130

Figure 90.
Prison 2.
Model

PRISON 2

Symbolic of the Tadmor Prison, showing elements of repetition, rigidity, anonymity, separation. Rigid structures with main volumes being stuck and restricted from movement.

Figure 91.
Camel racing
track 1. Model.

132

Figure 92.
Camel racing
track 1. Model.

CAMEL TRACK 1

Symbolic of the community camel racing track, showing elements of playfulness, recreation and freedom as it is leaning forward, it has torsion and wants to be moving.

Figure 93.
Ancient city 1.
Model.

134

Figure 94.
Ancient city 1.
Model.

ANCIENT CITY 1

Symbolic of the ancient city and its rich history.
A series of excavated layers extruding up and
out of the ground plane supported by vertical
members that encapsulate and hold the layers.

Figure 95.
Ancient city 2.
Model.

136

Figure 96.
Ancient city 2.
Model.

ANCIENT CITY 2

Symbolic of the ancient city and its rich history.
A series of excavated layers extruding up and out
of the ground plane with volumes and vertical
elements intersecting and balancing the historic
contents.

This chapter presented the iterative design approach for this design-led research investigation, which was essential to enabling the following final design to be realized.

Each phase of this process was critiqued in relation to the aims and objectives of this thesis, and to the findings in the preceding chapters. For example, even though a great deal of process work had occurred to arrive at the concept designs, there were still elements from site analysis and the literature review that needed to be included to create a strong argument and design, so I had to regularly revisit these chapters in order to move forward.

The findings from the preceding chapters have provided a tool box to forge a final design solution for this design-led research experiment.

06

DEVELOPED DESIGN

Figure 97.
Planning
of main
fragments.

The image above shows the raw process that was involved in the beginning of this phase. The grouping of important elements from preceding chapters with design experiments to be able piece together a final design solution.

This chapter presents and critically discusses the final design outcome for this design-led research experiment. The aim of this concluding design experiment is to establish not a refugee centre, but a kind of metaphorical ‘sanctuary’ – temporary shelter that a community can live in whilst awaiting the construction of new housing. A sanctuary where the returning community can feel safe once they return home to their ravaged city after the war.

The research question that the final design experiment is addressing is “What role can architecture play in restoring the identity of a historic town after a traumatic disaster?”

The objectives that this final solution will be achieving are; the proposition of a speculative scheme that will not be built, but act as a catalyst for the future of Palmyra; the use of architectural narrative to tell a story about the broken, historic city; the blending of realms between landscape and architecture, with bold forms with strong light and shadow; the creation of nontraditional forms; and expression of form and concept through drawing, sculpture and architecture.

The following pages present each fragment of the final design, and describe the contents of each and how they achieve the aims and objectives of this investigation.

Figure 98.
Initial sketch
of developed
design.

The design responds initially to the immediate needs of the town today, and then later when not used it will become an archive/museum/memorial that invites the people to remember, educating the next generations to come.

The building itself becomes the museum, through fragments and pieces of the old town that have been included in the construction, embedded in the walls and floors – so history is all around them, and when everyone has moved out, other artefacts can be brought in. As well as provide views to reflect on the identity and history of their home.

Figure 98 shows the first sketch and first attempt at constructing the final design. The first attempt at putting fragments of the puzzle together. The general arrangement of volumes was successful and set the scene for the following design.

25km 50km 100km

Figure 99.
City Map
locating
significant
historic sites
referenced in
design.

LOCATION

The three important historic sites that were identified in the site analysis chapter are referenced by three fragments that face each site, providing important vistas and views of each for the inhabitants.

Figure 99 shows the three sites in the city and the angle that each fragment must be on.

Figure 100. Site plan. Ground floor (entry).

ROOTS

The roots of the building provide four entrance points for the visitors and inhabitants, with each arm informed by an axis found within the immediate landscape. These three main axis are based upon the existing urban grids identified in the site analysis chapter, as the building is located at the apex of the three. This design decision provides a grounding within the immediate context, and as you travel vertically through the building, the spaces begin to reference the three historic sites.

The design decisions for the base of the building respond to the theories and work of Mary Miss where bold forms cut through the natural landscape, these short walls that slice through the earth result in a subtle blending between the landscape and architecture. The contrast between the straight clean forms against the shallow ravines and road forms is also evidenced in this plan.

Figure 101.
Exploded
Axonometric
Section of final
design.

A FRAMEWORK OF TIME

Figure 101 shows an exploded axonometric of all three fragments on their site. The design consists of three main fragments that hold the elements needed for life when the refugees return, there are: spaces for nourishment, shelter, gather, repair, learn and reflect which are shown in detail later.

Within each of the three fragments there are one or two of these elements based upon the direction and historic site that fragment is facing. For example: one holds shelter and gathering spaces, one holds nourishment and reflection spaces, one holds learning and repair spaces.

The building as a whole tells a story about the broken city of Palmyra, as each tells the story of the important site it faces, responding to the second objective of this research investigation.

The following pages describe each of the three fragments and explain why design decisions were made, as well as critically reflect upon their success in relation to the aims and objectives of the research investigation.

Figure 102.
Fragment
1. Learning
and Repair.
Elevation.

FRAGMENT 1
LEARNING AND REPAIR

Figure 103.
Fragment 1.
Learning and
Repair. Section
AA.

SECTION

This fragment offers spaces to learn and to repair through health care services and education services. All fragments have a similar construction with a central core structure (shear walls) that provides people with the basic services of a toilet and kitchenette. On the inner side (right) it meets outdoor community levels in three places, where the stairs and lift is also located.

The spaces within this fragment both face the ancient city, allowing the inhabitants to look back and learn about or reflect upon the past, and to repair through this reflection.

This fragment successfully achieves the aims and objectives of this investigation as the design decisions for this fragment embody the cultural past, and offer the opportunity to learn about the rich history and identity of place through the architectural narrative. The form is also not traditional

Figure 104.
Fragment
1. Learning.
Plan 1.

Figure 105.
Fragment 1.
Repair. Plan 2.

PLANS

The interior floor plans are very open, with services that are held within a core (shear walls) that permeate the entire building. There are communal spaces in the centre of the fragment and around the edge are private spaces of varying sizes to reference the plan of the caravanserai analysed in the site analysis chapter.

The plan shows a contrast between thicker permanent exterior walls with thin internal moveable walls to reference the plan of a caravanserai, and the contrasting materials used in the Temple of Bel.

Figure 106.
Fragment 2.
Shelter and
Community.
Elevation.

FRAGMENT 2

SHELTER AND COMMUNITY

Figure 107.
Fragment 2.
Shelter and
Community.
Section AA.

SECTION

The second fragment provides spaces for shelter and community gathering. In this fragment the space for shelter faces future development to remind the inhabitants of hope and the future chapters of Palmyra that are to come. The community gathering spaces face the camel track to remind them of recreation and freedom. Because there are two types of space in this fragment and they each face different sites, there are two twists in the body. This design decision results in non-traditional form informed by the site.

This fragment also has a central core (shear walls) structure that provide basic services of toilet and kitchenette on every floor. On the inner face (left) the body meets the outdoor community levels in two places - allowing the indoor community spaces to flow and join these. The the stair and lift are also located on this inside face.

The fragment is successful in answering the aims and objectives of the research investigation as the design decisions described above tell a narrative through the architecture by looking to important cultural sites throughout the city - specifically the camel racing track and the future development, embodying the cultural future.

Figure 108.
Fragment 2.
Private Shelter.
Plan 1.

162

Figure 109.
Fragment 2.
Private Shelter.
Plan 1.

PLAN

The interior floor plans of this fragment are also very open, with services that are held within a core (shear walls) that permeate the entire building. There are communal spaces in the centre of the fragment and around the edge are private spaces of varying sizes to reference the plan of the caravanserai analysed in the site analysis chapter.

The plan shows a contrast between thicker permanent exterior walls with thin internal moveable walls to reference the plan of a caravanserai, and the contrasting materials used in the Temple of Bel. This design decision relates to the aims and objectives by referencing the cultural past, and also a blending of the architecture.

Figure 110.
Fragment 3.
Nourishment
and Reflection.
Elevation.

FRAGMENT 3

NOURISHMENT AND REFLECTION

Figure 111.
Fragment 3.
Nourishment
and Reflection.
Section AA.

SECTION

The third fragment provides spaces for nourishment, sanitation and reflection. The abdomen has three volumes to provide food preparation and consumption, sanitation of clothing, and personal sanitation and waste. The abdomen faces the palmery/the oasis, as this block is the main source of water and fertility for the people in the building, as the palmery is for the city. The highest volume is the space for reflection, remote and separated offering views across the entire city, and faces toward Mecca in Saudi Arabia - the direction one faces to preform Islamic prayer (Islam being the most common religion in Palmyra).

This fragment also has a central core structure that provides basic services of toilet and kitchenette on every floor. On the inner face (left) the body meets the outdoor community levels in three places, this is where the stair and lift is also located.

The fragment is successful in answering the aims and objectives of the research investigation as the design decisions described above tell a narrative through the architecture by looking to important cultural sites throughout the city - specifically the palmery, the oasis and also Mecca, embodying the cultural future.

Figure 112.
Fragment
3. Laundry.
Plan 1.

Figure 113.
Fragment
3. Food
Preparation.
Plan 2.

Figure 114.
Fragment 3.
Sanitation.
Plan 3.

PLANS

The interior floor plans are very open, with services that are held within a core (shear walls) that permeate the entire building. There are communal spaces in the centre of the fragment and around the edge are private spaces on personal sanitation floors of varying sizes to reference the plan of the caravanserai analysed in the site analysis chapter.

The plan shows a contrast between thicker permanent exterior walls with thin internal moveable walls to reference the plan of a caravanserai, and the contrasting materials used in the Temple of Bel. This design decision relates to the aims and objectives by referencing the cultural past, and also a blending of the architecture.

Figure 115.
Fragment
2. Flat
axonometric
showing
flexible interior
elements.

The thin internal walls that were described in the plan of each fragment previously are flexible elements made from canvas fabric and posts. These elements define interior spaces to allow for anywhere from an 8 person family unit to a 2 person family unit to coexist on one floor without harsh barriers, but divisions of space. The separation through canvas elements brings in the notion of the desert tent, as identified in the site analysis chapter. The interior plans are intended to be read as a blending of the caravanserai and the desert tent.

The advantage of the flexibility is that the building can hold as many people as is needed or as few. Each floor becomes a community, and a community needs spaces to be together.

This blending provides a togetherness within the community and poses the ability to connect strangers who have shared a similar trauma. It will aid the transition of newcomers, for example when one family arrives for the first time and moves onto a floor with a family that has been there for 2 months, they can help and support each other.

Figure 116.
Journey to
Palmyra.

Figure 117.
Arrival in
Palmyra.

Figure 118. Entry.

Figure 119.
Shelter.

Figure 120.
Learning.

Figure 121.
View out over
modern city.

Figure 122.
Outdoor
community
space. Pockets
for reflection.

Figure 123.
The Bride

Figure 124.
The Bride

Figure 125.
The Bride
standing
tall. Front of
fragment 2.

Figure 126.
Side of
fragment
1 showing
central
outdoor
gathering
spaces

Figure 127.
Fragment 1
and 3 showing
central
gathering
levels.

Figure 128.
Entry through
the legs of
fragment 3

Overall, this design enables the returning refugees to reflect upon the devastation as one segment of an ongoing eternal time line that is linked back to their ancient civilization. This is so the recent war is not perceived as an ending of their community, but instead as an important reminder of a greater narrative that everyone shares, a narrative that can help define their strength and resilience.

The design presented in this chapter has successfully achieved the aims, objectives and the answers the research question that this thesis poses.

The design achieves the aims as it embodies the cultural past, looks to the cultural future and responds to both the past, the torn, and the future urban landscape; allows the inhabitants to reflect on loss and aids in restoring the identity of Palmyra and ultimately creates a place of sanctuary that the Palmyrenes can return to after the war; provides a place that enables the people to generate a new sense of cultural ownership, identity and control in response to the destruction of their historic homeland.

The design achieves the research objectives by proposing a speculative scheme; the second objective to have an anthropomorphic presence on the site; the third as tell a narrative about the broken city of Palmyra; the fourth as they respond to contextual elements of place; and the fifth as they suggest inhabitation within their abstract, sculptural volumes.

The various design experiments highlighted the importance of connection with site for this scheme. A lot of initial experiments were siteless to begin with, which led to failure when placed within the site, as the contextual connection was lacking. It was not until revisiting site analysis and the works by theorists that this connection was able to be made in later preliminary design stages.

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CONCLUSION

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The problem that this design led research investigation is responding to is the largest global migration in history which has been caused by the Syrian War. More than 11 million refugees have been forced to leave their home country due to political conflict. The city of Palmyra is one of the many cities that has been destroyed by war, and many Palmyrenes who have fled will be returning to a destroyed community.

The problem becomes more than simply providing housing - it is also about how to provide a renewed sense of community as well as cultural and place identity for the returning refugees.

This topic is becoming increasingly more important because this is a problem that will be happening soon, but has not happened yet, and architects need to prepare a solution before the crisis occurs.

The reviews throughout the year taught me that a clear decision as to whether a design is to be built or remain purely speculative needs to be made. As this will then affect the type of detail that the design is resolved to, as well as the steps preceding the design stage that need to be taken (cost, materials, labour) and also defining the scope of the project.

A second important thing that was discovered through researching theorists and case studies is that architecture can draw variably from outside its own discipline, and that symbolism, narrative, anthropomorphism and abstract sculpture can introduce valuable design opportunities for looking at important issues in new ways.

Through this process I learnt that architecture can be both built and unbuilt, and could be more expressive if unbuilt. The final design proposition for this investigation has been designed so that it could be built but has limitations of realistic parameters such as cost, materials, and time which have not been considered. It is ultimately to be experienced through drawing. This way of working was inspired by Lebbeus Woods, who believed that as well as the architecture we inhabit every day, architecture is also the ideas and concepts and visions that are drawn. They can be inhabited but lack money, materials and time to be built to effectively solve the problem at hand.

If this project were to be further developed and extended beyond its original scope a version of this design could be built where realistic parameters of time, money and materials could be considered as these were limitations for the scope. The result would be a sanctuary for returning refugees that enables a new sense of cultural ownership and identity. Narrative elements would be included to tell the story of Palmyra; materiality would be deeply connected to its context; it would stand tall as a heroine keeping guard of the people, and ultimately provide a inhabitable sanctuary for returning families.

I have known since the beginning it would be an impossible task to solve the refugee crisis in Syria. To build a building like this would only create its own problems as the creation of housing and infrastructure would become an endless cycle. I am working in the discipline of architecture, and I have designed this project so it can be built, but the goal is for it to be a speculative design and for it to be experienced through drawing. I have taken the challenge to envisage my own chapter in the extensive history of Palmyra.

fin

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