EAST MEETS WEST

DESIGNING AN INSTITUTE OF WORLD RELIGIONS IN ISTANBUL

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

by Rosemary Browne

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I would like to acknowledge all those who helped me over my five years of study.

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Figure I.01    /    An aerial view of Zaatri refugee camp, an architecture of temporality and vulnerability. This is today’s failed architecture of displacement.
ABSTRACT

Globally, over 65 million people have become involuntary displaced from their homes, their families and their livelihoods, victims of socio-political and cultural conflicts, manmade and environmental disasters. A global crisis is unfolding on an unprecedented scale.

Refugee camps are today’s architecture of displacement, named as ‘monuments of human suffering’ (Anderson, 2016). The architectural language of the refugee crisis is one of grids of tents, tarpaulins and containers; a language of lightness and vulnerability. This failed architecture of displacement may be seen as an opportunity to re-evaluate how architecture may respond global crises.

This thesis therefore aims to construct an innovative, adaptable infrastructure that responds to the global migration crisis. Slavoj Žižek’s idiosyncratic text ‘Against the Double Blackmail’ is taken as an intellectual provocateur for the research process.

Žižek offers a highly speculative and radical response to global mass migration, affirming a utopian reconstruction of society as our only option to resolve this global crisis. Therefore, the architectural construction of ‘utopia’ as a highly poetic and symbolic response to the global migration crisis is examined and developed.

The research is set in Istanbul, a geographical and cultural meeting point between Eastern and Western civilisations, and an international hub for refugees. The site itself is located in the ruins of St. Polyeuktos, an ancient, abandoned and dilapidated church in the centre of the city.

Both analogue and digital drawing are embraced as design methodologies to examine the architectural representation of Žižek’s utopia. The thesis culminates with a dynamic, sculptural formal expression of Žižek’s utopia, through the construct of an Institute of World Religions.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 The Problem</td>
<td>01</td>
</tr>
<tr>
<td>2 The Double Blackmail</td>
<td>08</td>
</tr>
<tr>
<td>3 The Site</td>
<td>20</td>
</tr>
<tr>
<td>4 Architecture and Utopia</td>
<td>40</td>
</tr>
<tr>
<td>5 The Programme</td>
<td>70</td>
</tr>
<tr>
<td>6 The Drawings</td>
<td>78</td>
</tr>
</tbody>
</table>
Figure 1.02 / Syrian refugees wait at the border of Turkey

Image removed for copyright reasons
We are currently witnessing the greatest transnational movement of people the world has ever seen. Images of exhausted refugees clinging to overcrowded, inflatable rafts, of families anxiously climbing through barbed wire border fences and of cities being inundated with floods of migrants, have become iconic in today’s global society.

Globally, over 65 million people have become involuntary displaced from their homes, their families and their livelihoods, victims of socio-political and cultural conflicts, manmade and environmental disasters (Edwards, 2016). A global crisis is unfolding on an unprecedented scale.

Of these, Syrians form the largest displaced population internationally (Mercy Corps, 2017). Syria has been flooded with violence for the past six years through the course of violent civil war. Marked by excessive civilian casualties through widespread use of torture, toxic chemical weapons, barrel bombs and lack of humanitarian assistance, conflict in Syria has destroyed cities, killing hundreds of thousands of people, and causing millions to flee the country, in search for a safer life (Sovcik, 2016).

The devastating effects of the Syrian crisis are compounded by the fact that refugees from Syrian represent less than one fifth of the overall refugee population (Sovcik, 2016). Millions are escaping conflict in Afghanistan, a country torn apart by war, political uncertainty and staggering unemployment (Zirack, 2016). Eritrean families and children continue to escape a totalitarian regime in which human rights violations, torture and compulsory indefinite military conscription are commonplace (Sovcik, 2016). Central America’s rampant drug and gang related violence combined with the ineptness of governments has caused mass exodus of entire families, fleeing for their lives (Lakhani, 2016). Somali refugees are in the world’s most prolonged period of displacement. Generations of Somali refugees are being born into exile, an effect of decades of armed conflict compounded with severe, recurring natural crises (Rawlence, 2015).
Carried by courage and hope of the unknown, individuals and families continue to traverse across dangerous landscapes and oceans, haunted by a dream of permanence, of shelter and security, stability and peace (Sovcik, 2016). Eventually, many refugees make their way into makeshift refugee camps and processing centres. Refugee camps are settlements built as short-term solutions to migration crises, places of asylum where refugees can wait out their displacement, before either returning to their home countries, becoming integrated into the country of asylum, or being resettled in a ‘third’ country (IRC, n.d.).

Often this process is delayed or impossible. Although camps are constructed as temporary, some end up existing for decades, trapping refugees in a state of permanent transition. A refugee spends an average of 12 years living in a refugee camp (Anderson, 2016).

Refugee camps trap people in a constant state of uncertainty and fear. Conditions are often cold, wet and muddy, and violence is widespread. Shelter, food, water and medical supplies are limited, and disease is often rampant. In refugee camps, refugees are often deprived of employment, land access and freedom of movement (Egerstrom, 2016). Refugees face the impossibility of returning to a semblance of home, while living in sites in which their humanity is questioned (Anderson, 2016).

Refugee camps are today’s architecture of displacement, named as ‘monuments of human suffering’ (Anderson, 2016). The architectural language of the refugee crisis is one of grids of tents, tarpaulins and containers; a language of lightness and vulnerability. Impermanence permeated refugee camps, in which refugee’s most intimate spaces are ‘constructed with destruction in mind.’ (Dunn, 2015). Architecture has failed to meet the very core needs of refugees, lacking security and permanence, the very things that inspire refugees to leave their homes.

This failed architecture of displacement may be seen as an opportunity to re-evaluate how architecture may respond to the global refugee crisis. As stated by renown architecture curator Sean Anderson in his MOMA exhibition Insecurities: Tracing Displacement and Shelter, ‘new modes of innovative infrastructure at all scales are needed to establish foundations for persons that desire integration into the same societies that consider them foreign’ (Anderson, 2016).

The successful establishment of infrastructure as a response to mass migration is a challenge faced by governments, nonprofit organizations and architects (Castillo, 2016). The role of the architect in regards to these issues is to facilitate an infrastructure that enables refugees safety and security in their host countries, encouraging social, cultural and economic integration and acceptance with local and national communities (Castillo, 2016). In doing so, an environment of peace will be strengthened.
It is essential this infrastructure is adaptable, flexible and versatile, encompassing a range of services and programmes (Castillo, 2016). This will ensure the structure stays relevant in reflection of the constantly evolving, rapidly changing nature of mass migration.

This thesis aims to construct an innovative, adaptable infrastructure that responds to the global migration crisis. It will be grounded in the poetic and symbolic rather than pragmatic and practical, as to maximise creativity in formal architectural expression.

“REFUGEE CAMPS ARE MONUMENTS OF HUMAN SUFFERING”

Sean Anderson
This design research aims to create a poetic architectural response to the issue of mass migration through the construction of an innovative and adaptable mode of infrastructure.

To construct such a response, this thesis embraces a design-led approach to research, driven by written theory. Although the research process is presented in a linear manner, it was the continuous interweaving and integration of written and visual research that constantly progressed, questioned and developed an innovative architectural response to global mass migration.

This thesis is assembled through eight key chapters, chronicling a rich narrative of discovery, engagement and delight.
A DOUBLE BLACKMAIL

Slavoj Žižek’s idiosyncratic text ‘Against the Double Blackmail’ is identified as an intellectual provocateur for the research process. Žižek offers a highly speculative and radical response to global mass migration, affirming a utopian reconstruction of society as our only option to resolve this global crisis. This chapter examines and develops Žižek’s notion of utopia in a theoretical context, concluding that an architectural construction of Žižek’s utopia is an appropriate and poetic architectural response to global migration crisis.

THE SITE

The thesis is set in Istanbul, a geographical and cultural meeting point between Eastern and Western civilisations, and an international hub for refugees. The site itself is located in the ruins of St. Polyeuktos, an ancient, abandoned and dilapidated church in the centre of the city. This chapter examines the rich historic, cultural and social narrative of the site, establishing its significance in relation to global migration and the construct of Žižek’s utopia.

ARCHITECTURE AND UTOPIA

This chapter examines and questions the architectural representation of utopia. Through this process, parallels between sacred architecture and the architecture of utopia are discovered. A. T. Mann’s three principles of sacred architecture provide a theoretical framework to analyse and critique a range of relevant case studies. As the thesis is grounded in the poetic rather than the practical, this focus is reflected in the nature of the case studies.

THE PROGRAMME

This chapter refines the focus of the research, establishing a relevant architectural programme to develop the construction of Žižek’s utopia. The programme is decided as an Institute of World Religions, with five independent but interrelated sections - an Academy, an Asylum, an Eatery, a Garden and a Museum.
THE DRAWINGS
This chapter explores a methodology of drawing to systematically and visually chronicle, investigate and develop initial stages of research. Two drawings are produced; acquiring, isolating and methodologically assembling a diverse range of visual, written and oral sources through techniques of tracing and bricolage. These drawings do not offer any research conclusions, but encourage open discourse, inspiring the development of ideas and formal representations.

THE TRACE
This chapter investigates and develops a framework to de-construct, extract, apply and develop information from the drawings produced in the previous chapter, to an architectural context. Various methodologies of data extraction are examined, through processes of tracing and bricolage, fluctuating between analogue and digital modes of representation.

THE SACRED
This chapter reintegrates the language of the sacred into the design process, through the visual exploration of Mann’s principles of sacred architecture. An architectural relationship over a variety of scales is subsequently developed between the sacred language of utopia, and the data methodologically extracted from the drawings.

THE DESIGN
This chapter presents and narrates a final design conclusion of the research process. This design succiently combines all stages of the research process, constructing a poetic and dynamic architectural expression of Žižek’s utopia, an Institute of World Religions.
Philosopher and political activist Slavoj Žižek has repeatedly affirmed himself as a prolific academic voice to key contemporary issues. In ‘Against the Double Blackmail’ Žižek provides an idiosyncratic perspective on global mass migration and the refugee crisis.

The Western world’s response to mass migration and the refugee crisis presents two opposing versions of ideological blackmail. Leftist liberals encourage international solidarity, permeating notions of open borders, freely and widely offering asylum to all in need (Žižek 10, 2016). Counteractively, conservative populist governments incite the prioritisation of national needs above all else, leaving refugees ‘to solve their own problems.’

Many of the world’s wealthiest nations host the world’s fewest refugees and financially contribute the least to international efforts to address the crisis (Amnesty International 5, 2016).

More than half of the global refugee population is living in 10 of the 193 nations of the world (Amnesty International 6, 2016).

Both opposing and polarising reactions to the refugee crisis are equally terrible, as neither address the fundamental underlying causes and effects of contemporary mass migration. There must be an alternative response.

In ‘Against the Double Blackmail’ Žižek radically rethinks current crises management norms. He argues that a utopian reconstruction of society is our only option to resolve this global crisis. His utopia imagines a world in which there would no longer be desperate refugees forced to wander around. Global solidarity with the oppressed and the exploited will enable this idealist society to function. Žižek concludes his text by stating that if we don’t ‘engage with this utopia, then we will deserve to be lost.’ (Žižek 109, 2016)
I An ideally perfect place, especially in its social, political, and moral aspects.

II An impractical, idealistic scheme for social and political reform.
It is becoming apparent that mass migrations are most likely a permanent phenomenon rather than a momentary crisis, an ongoing, accumulative result of natural disasters, climate change, economic crises and failed states. As the effects of global warming increase, and the global population continues to grow, these events will become increasingly common. There needs to be a drastic response to this continuously expanding problem.

As iterated by Žižek, the construction of a utopia as a response to the global refugee crisis is highly radical and revolutionary. However, such a large-scale response may be what is required to confront these critical global issues.

‘Utopia’ is an ambiguous term. For the purpose of this research, it has been defined as a visionary society of idealised perfection. This notion is exemplified through Žižek’s utopia, in which he wishes to eliminate causes and effects of mass migration, imagining a global society of solidarity, tolerance and peace.

The construct of ‘utopia’ was first documented by Sir Thomas More in 1516 (Ollman 78, 2005). More’s ‘Utopia’ was a work of fiction, radical and revolutionary. Throughout the text, More depicted the cultural, religious and political customs of an imaginary island society in the centre of the Atlantic Ocean (Ollman 78, 2005). Deemed ‘the most civilised nation in the world,’ More’s ‘Utopia’ promoted an egalitarian lifestyle through communism, encouraging absolute cultural and religious tolerance (Eagleton, 2015). In constructing this fiction, More formed a narrative critique of the undesirable foundations of British society at the time, eradicating them completely, ensuring social, political and religious perfection in his new nation.

Since the publication of ‘Utopia,’ the word has come to define the construct of visionary, idealised environments (Ollman 78, 2005). Utopias analyse and critique negative aspects of the present condition, posing visionary solutions. This subsequently brings public awareness to social, cultural, political and environmental issues faced on a local, national and international scale, facilitating change.

As stated by Ollman in The Utopian Vision of the Future, ‘utopia always has been both intellectually and practically present in the aesthetic act of design’ (Ollman 80, 2005). Architecture, as a discipline, provides a means of exploring, developing and communicating a construct of utopia. From Le Corbusier’s Plan Voisin to Frank Lloyd Wright’s Broadacre City, architects have long expressed visions of highly visionary and futuristic utopian societies (Bartolacci, 2013).

Using architecture as a medium of utopian imaging is highly topical in today’s contemporary society (Dunham 26, 1996). More’s ‘Utopia’ was written in Latin, accessible to only the privileged at the time, those who could read and comprehend the language. But in today’s image saturated atmosphere, the highly visual qualities of architecture make it accessible to all. For this reason, architecture will provide an ideal methodology of exploring a construction of Žižek’s utopia.

To speculate how architecture may respond to the construction of Žižek’s utopian society, a fundamental cause and effect of global mass migration will be examined. By looking at the ultimate causes and effects of current mass migration a greater understanding of this complex problem will be developed to ensure an appropriate architectural response.
Figure 2.03  /  An illustration of Broadacre City by Frank Lloyd Wright. This utopian city idealizes suburban, decentralized landscapes, prioritising open space and the development of innovative transportation networks (Bartolacci, 2013).

Figure 2.04  /  An illustration of Plan Voisin by Le Corbusier. This utopia reimagined central Paris as a high density landscape, surrounded by thriving green spaces. This utopia was a reaction to the pollution and traffic congestion in Paris at the time (Barolacci, 2013).
Contemporary global mass migration has complex causes. One fundamental influence lies in the dynamics of food and the globalisation of agriculture (Žižek 48, 2016).

The Middle East and North Africa region is one of the largest global agriculture importers, an accumulative result of little cultivable land, scarce water supply and excessive population growth (Nigatu 1, 2015). As a result, many countries within this region have become highly dependent on imported food. Consequently, their food supply is subjected to fluctuating prices on the global food market, causing economic and political shifts that severely disrupt national stability. This is becoming increasingly common as the effects of climate change cause severe weather events, compromising global food supplies. (A. Jones, n.d.)

Food is rarely the only cause of national instability. Although elements such as corruption, lack of democracy and ethnic tension may cause conflict, food is often the difference between a despondent but inactive populace and one in public protest.

One step to solving these food crises is through the implementation of programmes aimed at increasing food literacy, educating on agriculture, food safety and sustainability (Fraser, 2014). Increased education also allows for a more informed implementation of environmental and agricultural policies and regulations aimed at reducing agricultural conflict. This may include supporting locally produced food, encouraging food production methods that preserve water quality and taxing pollution (Fraser, 2014). The construction of Žižek’s utopia may therefore address these identified issues associated with the globalisation of agriculture by providing a place of education, increasing knowledge and understanding.

Figure 2.05 / An agricultural landscape affected by drought
Image removed for copyright reasons
SEND IN ARMY TO HALT MIGRANT INVASION
Headline - Daily Express / July 2015

THE SWARM ON OUR STREETS
Headline - Daily Mail / July 2015

EUROPE DIVIDED
Headline - The Times / September 2015

ILLEGAL IMMIGRANTS FLOOD EU
- Headline - Daily Express / November 2015

HALT THE ASYLUM TIDE NOW
Headline - The Sun / September 2015

THEY’VE STOLEN ALL OUR JOBS
Headline - The Star / February 2016
Throughout ‘Against the Double Blackmail’ Žižek repeatedly affirms the need for global solidarity for his idealised utopia. Intolerance, a key effect of Europe’s migration crisis, is in opposition with solidarity. To abolish conflict on a global scale, we must replace intolerance with tolerance, empathy and solidarity among people and cultures. To understand how this may be achieved, we first must understand the roots of intolerance in view of today’s global migration crisis.

Initially, the Western world acted with outrage and empathy at the brutality of the migration crisis. This reaction was further ignited by images of Aylan Kurdi, a three-year-old child from Syria whose body washed ashore in Turkey, after he drowned crossing the Mediterranean Sea (Smith, 2015). These images visually exposed the shocking reality of the global migrant crisis, sparking controversy and protest.

However, when the unprecedented scale of the crisis became clearer, and the West encountered a constantly escalating influx of refugees, public opinion grew much more divided. Many people share similarly grave concerns regarding the fragility of their economic resources and social structures, in response to the increasing pressure of the migration crisis (Icduygu 1, 2015).

This fear is exacerbated by the perceived cultural, political, religious and economic differences between residents and refugees, and the resulting anxiety that the influx of refugees will drastically alter Europe’s cultural landscape. Contributing to this intolerance is the rise of ISIS motivated terror attacks, and racial profiling in accordance with the ‘Islamic terrorist’ stereotype permeated by mass media. Resultantly, hostility and intolerance towards refugees is constantly rising, rooted in fear and ignorance.

Widespread intolerance prohibits the prospect of cultural and religious co-existence. Successful refugee resettlement necessitates complete elimination of xenophobic and racist attitudes.
The global village is a reality, as societies are becoming increasingly interdependent. We are living in a time of globalised trading and mass migration, so it is essential we are able to understand each other (Icduygu 1, 2015). Finding ways to live and work together is essential for the common good of shared local, national, and global communities, ensuring survival of our planet (Graham, 2012).

In 1995, the 185 member states of UNESCO adopted a Declaration of Principles on Tolerance, aimed at reducing intolerance on a global scale. Article four of this declaration states education ‘is the most effective way of reducing intolerance’ and that ‘education for tolerance should be considered an urgent imperative’ (UNESCO 4, 1995). Therefore, to reduce widespread intolerance, a focus on education will be imperative to the construction of Žižek’s utopia.
“Laws alone can not secure freedom of expression; in order that every man present his views without penalty there must be spirit of tolerance in the entire population.”

Albert Einstein
Image removed for copyright reasons
A mesmerizing city filled with bustling bazaars, ancient architecture, colourful cuisine and sights of undiluted glitz, Turkey’s Istanbul embodies a rich cultural history. For centuries, Istanbul has been a geographical and social crossroads of Eastern and Western civilisations, a transcontinental city bridging Europe and Asia.

Consecutively crown capital of two of the worlds greatest Empires, Istanbul is one of the most significant cities in global history. Istanbul has stood for over 2,500 years, amongst conflict between religions, cultures and civilisations. (Clark 5, 2010)

Istanbul is home to an uprising volatility and deteriorating human rights situation, recently accentuated by increasing public insecurity, media censorship, economic downturn and terrorist brutalities (Human Rights Watch, 2017). This was punctuated by a violent military coup attempt in July 2016, claiming the lives of over 265 people and resulting in the unlawful detaining or dismissal of over 100,000 civil servants, including judges, prosecutors and teachers (Said-Moorhouse, 2016). This struggle is exacerbated by recent escalations of conflict in neighbouring countries. Turkey has maintained an open door policy to refugees throughout recent years. As a result, it now hosts the largest worldwide community of refugees displaced due to conflict (Icduygu 1, 2015). Syrians form the majority of this refugee population, however there are significant numbers of Iraqis, Afghans, Iranians, Somalis and Palestinians (Amnesty International 5, 2016). Today, Istanbul itself is home to over 540,000 refugees, 4% of the cities population (Hurriyet Daily News, 2017).
Istanbul’s Fatih District is located within the historic walls of ancient Byzantium. The district is of high cultural significance, home to artefacts of bygone Classical, Roman, Byzantine, and Ottoman eras. (Frommer’s, n.d.)

A microcosm of modern Turkey, Fatih is densely populated and culturally diverse. In recent months, the district has become home to thousands of refugees, a well-recognized immigrant district to residents of the city. The majority of Istanbul’s refugee population reside, work, study, and socialize in this district (Gilbert, 2016).
Image removed for copyright reasons

Figure 3.04 / Istanbul’s blue mosque ornamentation
Figure 3.05 / Colours in Istanbul’s spice market
Figure 3.06 / A neighbourhood in the Fatih district
Figure 3.07 / Mosaic detailing in Topkapı Palace, Istanbul

Figure 3.08 / Homeless Syrian refugees in Istanbul
Image removed for copyright reasons
Centrally located in Istanbul's historic Fatih district, Saraçhane Archaeological Park is representative of the political, religious, cultural and social transitions that have taken place in the city over the past 1500 years, providing a narrative of Istanbul's rich history. Although historically significant, the site is currently abandoned and dilapidated, thus providing an ideal opportunity for design exploration.

In 1960, whilst excavating for construction of a motorway, archaeological ruins at the park were accidentally discovered. Among the finds were fragments of the poem on two richly carved marble blocks. Historian Ihor Sevcenko recognised this poem from the Greek Anthology as one that was historically inscribed on the lost Church of St. Polyeuktos, once the largest and most extravagant churches in Istanbul. (Harrison, Temple of Solomon 276, 1983).

Anicia Juliana was an aristocratic Byzantine patron, the last regal figure of the Theodosian dynasty. Juliana was confident her imperial lineage would eventually ascend the Constantinople throne of the Eastern Roman Empire. However, following Anastasius I's death in 519 AD, the army elected Justin, an illiterate former peasant turned commander, to the throne (James, n.d.). As means of retaliation to Justin, Anicia commissioned a church to showcase the wealth, virtuous devotion and artistic sensibility of traditional Roman aristocracy. The church was intended to house the remains of ancient Roman martyr Polyeuktos, in remembrance of his noble and poignant actions during the Armenian persecution of Christians in 259 AD. (Yerasimos 42, 2000)
Anicia Juliana’s significant influence on the Church of St. Polyeuktos is recorded in the Palatine Anthology, a compilation of 3765 Greek poems and epigrams. A 76-line epigram described Juliana’s construction of the church of St. Polyeuktos, in honour of her dynastic family ancestry (James, n.d.).

The epigram asserted Juliana’s intention to replicate the ancient biblical Temple of Solomon through physical and allegorical architectural representation, manifesting her societal importance. (Harrison, Temple of Solomon 278, 1983).

This relationship is represented through the proportions of St. Polyeuktos. The church was built on a large square base, with dimensions approximating 51.45m x 51.90m. It is apparent the church was laid out as a 100-cubit square grid, the same as the Temple of Solomon (Harrison, Temple of Solomon 277, 1983). The construction of St. Polyeuktos combined two traditionally different forms of church architecture, uniting a traditional basilica layout with a dome structure, pioneering the development of this form.

The excavations of the site uncovered many sculptures and decorative fragments of extraordinarily high quality. These findings visually corroborate the incredibly rich and lavish ornamentation of St. Polyeuktos. There are noticeable resemblance between St. Polyeuktos and the Temple of Solomon in regards to ornamentation, as both contain the lavish use of reoccurring ornamental motifs, including palm-trees, open flowers and pomegranates. (Harrison, Temple of Solomon 278, 1983).
Figure 3.11 / Fragment of a statue from St. Polyeuktos
Figure 3.12 / Fragment of ornamentation from St. Polyeuktos

Figure 3.13 - 3.14 / Reconstruction of St. Polyeuktos in plan and section

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For several years, until Justinian's construction of Hagia Sophia from 532 AD - 537 AD, St Polyeuktos was the largest and most magnificent church in Constantinople. It is believed the construction of Hagia Sophia was Justinian's deliberate reaction to this extraordinary achievement of his rival, Juliana (Yerosimos 43, 2000).

St. Polyeuktos was abandoned by the 11th century, falling into a dilapidated condition. Thoroughly looted during the Latin occupation of Constantinople by Byzantines and Crusaders, many valuable architectural elements were dispersed as far as Barcelona and Vienna (Yerasimos 42, 2000).

Following the 1453 Fall of Constantinople, the decrepit site of St. Polyeuktos was occupied with both a mosque and housing. In 1940, the mosque was demolished and the site levelled. Excavations of the site began in 1960, to enable the construction of a new highway, leading to discovery of the church ruins. Further intensive excavations of the site were carried out from 1964 – 1969 (Yerosimos 44, 2000).

Figure 3.15 / A simplified plan of the excavated church in 1968

Figure 3.16 / View across the western foundations of St. Polyeuktos, 1964
Image removed for copyright reasons
Figure 3.17 / View of St. Polyeuktos from the north-east

Figure 3.18 / The northern part of the atrium of St. Polyeuktos

Figure 3.19 / Cleaning masonry during the excavation

Figure 3.20 / Foundations that supported the north aisle
Today, Sarayhane Park is a partially preserved archaeological site. All that remains is sub-structural ruins of the church, inaccessible to the public. Although fencing was initiated to protect the ruins from the previous issues of homeless people and vandalism, it has consequently isolated the ruins from the surrounding urban environment and the public. (Bayraktar 6, 2010)
Figure 3.24 / Saraçehane Park in relation to Istanbul

Image removed for copyright reasons
Figure 3.25 / Location of Saraçhane Park in the Fatih District. The existing ruins of St. Polyeuktos are shown on site.

Figure 3.26 / Location of Saraçhane Park on a map of the Fatih District.
Saraçhane Park is situated in a bustling metropolitan area, bordered by Fatih Hospital, Istanbul University and four public parks. Interesting parallels can be drawn between the triangulated placement of the hospital, the university and the site, with a spiritual relationship between the mind, the body and the spirit. The hospital heals the body and the university enlightens the mind. The prior site programmes of church and mosque developed spiritual awareness.
Istanbul’s transcontinental location, combined with its strong connection with mass migration and the refugee crisis, make it an ideal city for the construction of Žižek’s utopia. Saraçhane Park is a reservoir of cultural wealth, representative of the political, religious, cultural and social transitions that have taken place in the city over the past 1500 years. The site and its surroundings remain integral and highly important to the Fatih District of Istanbul. For these reasons, Saraçhane Archaeological Park is an ideal location to ground the research, and will provide the third motivator of this thesis.

Figure 3.29 / Excavations of St. Polyeuktos, 1960
An ingrained connection between utopia and religion is manifested through sacred architecture. The architecture of utopia is ingrained in the architecture of the sacred. Often reflecting the subliminal beauty and perfection of the Divine, sacred architecture is humanity's way of representing heaven on earth. For this reason, sacred architecture will provide an ideal study for the architectural construction of Žižek's utopia.

Sacred architecture is universal to humanity, existing in virtually all cultures and civilisations. From the sands of ancient Egypt, to the mountains of Nepal, to the bustling cosmopolitan streets of Wellington, sacred architecture is ingrained in our societies, spanning space and time.

Sacred architecture has been defined by architectural philosopher A.T. Mann as 'architecture which has a common root in the life of the soul and spiritual vision, extending beyond formal aesthetics.' Mann emphasises that sacred architecture taps into the subconscious psyche, activating higher spiritual qualities.

Sacred architecture validates the religions it was built to serve, embodying a sacred relationship between humanity, earth, and respective deity/deities. Universally, sacred architecture transcends function, expressing perceptions of the human existence at its deepest and most fundamental level (Berkin 141, 2015). Sacred architecture is often believed to form the physical and symbolic meeting point between earth, and the utopia of heaven (Mann 3, 1993). Due to these intrinsic sacred qualities, the architecture of the sacred often allegorically reflects the subliminal perfection of the Divine, creating a crossroad between heaven and earth.

To fully understand how sacred architecture evokes 'utopia,' it is crucial to understand the underlying architectural design principles, universal to the sacred architecture of all religions and faiths. In Sacred Architecture, Mann outlines architecture principles of sacred architecture (Mann 15, 1993).
I Sacred architecture reflects cosmology

II Sacred architecture is derived from the four classical elements

III Sacred architecture is organised using principles of numeracy and geometry

These three principles provide a design framework to an architecture of utopia. The following sections will examine how each principle may be utilized to construct Žižek’s utopia.
In primeval time, humanity worshipped the sun, the moon, planets and constellations. Since these galactic phenomena were believed gods and goddesses governing humanity, their power and influence was paramount (Mann 31, 1993). The celestial deity worshipped heavily influenced early sacred architecture, determining location, scale and orientation of such monuments (Mann 15, 1993). Although civilisation has significantly progressed, this early amalgamation of cosmology and religion remains at the core of sacred architecture. This is exemplified by the incessant relationship between the sacred and cosmic light. Throughout many scriptures and mythologies, light is a metaphor for divinity. The Egyptians worshipped their sun god ‘Ra,’ regarding him as creator of the universe and source of all life (Moffett 20, 2008). In the Bible, sunlight was introduced at the beginning of creation. In Hinduism, light symbolises the gods of heaven (Antonakaki 57, 2007). The light produced by the cosmos is fundamental to religious practice, conveying ephemeral and intangible qualities of the Divine. Universally, works of sacred architecture have used light to convey intangible and ephemeral qualities of the Divine. The interplay of light and shadow gives architecture its character by expressing qualities of the surrounding environments, such as form, colour, materiality, temperature and texture. In doing so, light determines the atmosphere of a building, evoking strong emotive responses (Ramzy 219, 2013). A ray of sunlight highlights aspects of interest, extreme glare is overpowering and overwhelming and complete darkness arouses fear (Schielke, 2014). By creating powerful connections with our emotions, light dictates our experience of place.

Successful sacred architecture embodies the cosmic rhythms of day and night, sunrise and sunset, summer and winter, using the varying light qualities produced by such shifts to create powerful, ephemeral atmospheres. The successful integration of architecture and cosmic light allows for the manipulation of emotions, allowing patrons to transcend reality, evoking a higher level of spiritual engagement.

COSMOLOGY AND ARCHITECTURE

4.1
Located in Ibaraki, 25km outside of Osaka, Japan stands the ‘Church of the Light,’ constructed in 1989 (Kroll, 2011). The cross cut-out on the far wall defines the interior atmosphere of the building, starkly contrasting the dualities of light and darkness through the thoughtful manipulation of solid and void. In doing so, the ephemeral qualities of light become the focus of the space, evoking an environment of spirituality. This manipulation of atmosphere through the conscious juxtaposition of dualities may be incorporated throughout the design to evoke a highly spiritual environment.
“Through sheer manipulation of light, Saarinen created a place of mystic quiet.”

Leland M. Roth

Figure 4.06 / Eero Saarinen, MIT Chapel, 1955
The MIT Chapel is a non-denominational chapel, a cylindrical volume with a windowless facade. Light penetrates the space by filtering through a circular hole in the ceiling, creating a dynamic spatial environment, amplifying the raw qualities of the brick and marble interior materialities (Souza, 2011). Sunlight is successfully utilized as a tool to enhance and embrace the materialities of the space through the interplay of light and shadow.
Located in Barcelona, Sagrada Familia is an iconic Catholic cathedral, still under construction (R. Jones, 2013). Large windows draw the eye upwards, towards the Divine. The stained glass captures and channels light, illuminating the interior with a dazzling array of colour. A vibrant, lively spatial atmosphere is created. This interior emphasises how a well-considered integration of colour and light can transform and dictate our experience of space and place.
Located in Istanbul, Sancakler Mosque is an ‘awe-inspiring and dramatic place to pray (ArchDaily, 2014). The cave-like characteristics of the interior is enhanced by narrow slits along the Qiblah wall. The ephemeral qualities of light are used as a tool to orient inhabitants of the space, channeling their attention in one defined direction. Light is utilised to construct a spatial hierarchy.
The second condition of the sacred is an architecture derived from the four ancient elements of earth, air, fire and water. Sacred architecture may evoke one or multiple characteristics of these elements.

Before modern science consigned them to the archaism of mythology, fantasy and the imagination, the four elements of earth, air, fire and water were believed to constitute the basis of life. This theory was followed by many cultures and religions of the world, anchoring Hinduism, Buddhism, Chinese and Japanese religions, and forming the foundation of philosophy, science, astrology and medicine. (Ferrey 259, 2012)

Traditionally, the four elements were widely considered sacred entities, forming the very foundation of our existence. The collective notion of all elements was representative of unity, responsible for the formation of each and every entity in the universe. The unity expressed by the immutable elements was reflective of the Divine.

The inclusion of one or several of these elements in sacred architecture intersects the literal and figurative gap between the world of human technologies and the natural realm. Architecture can be used as a tool to embrace the raw characteristics of these elements, generating a deeper connection with the very foundation of our existence.

Figure 4.10 / Matrix of the four elements
The ground that constructs the planet we live on, Earth supports the weight of the world. This element is experienced and encountered on a variety of scales, from particles of sand and dust, to valley basins and alpine ranges (Macauley 15). Through this, Earth is central to our perceptions of space and form.

Earth is altered more visibly than other elemental realms by human activity, mapped with an interconnected network of lines: complex transportation corridors, urban grids, and twisting borders (Macauley 19, 2011). Earth can be excavated, moulded and sculpted to form not only a foundation for our structures, but the construction materials themselves.

An invisible, unpredictable force in constant dynamic movement, air is the breath of all forms of life. Air is articulated as wind, and is seen through clusters of clouds and storms (Macauley 32, 2011). By causing such ever-changing weather, air possesses a strong emotional influence over us, dictating our daily feelings and moods (Macauley 26, 2011). From prehistoric times, civilisations have worshipped celestial bodies, contained by air. In doing so, we merged our imaginative vision of the heavens with our optical experience of the sky. These perceptions of air and the heavens can be metaphorically expressed through architecture. Within buildings, elevated ceilings evoke feelings of wonder and facilitate speculation and elevated thoughts. (Macauley 28, 2011).
The discovery and domestication of fire transformed the capacities of humanity, providing light for darkness and heat for cooking and comfort. Following its domestication to a central hearth, fire has long provided the physical and social centre and focal point the human home, encouraging people to gather and socialise. (Macauley 36, 2011)

Containing a mystical ability to manipulate our environment, fire can be generated from next to nothing, in a vast range of geographical locations and climates. Fire is an extremely powerful force, giving us immense power to shape our surroundings in the form of soldering, melting and burning.

Water is a pervasively powerful force, sustaining all living organisms on earth. It can be experienced in a variety of differing colours, strengths, courses, and purities. From deep pools to surface liquids, clear to contaminated, stagnant to running, winding to linear, water as an element can be encountered and perceived in many ways. Water continually shapes and sculpts our environment in an organic and unpredictable fashion, providing shape, contour and texture (Macauley 44, 2011).
Image removed for copyright reasons
The Salk Institute is an iconic architectural masterpiece, timeless and enduring. The success of this work of architecture can be partly attributed to its engagement with water, one of the classical elements.

Designed by Louis Kahn from 1959-1965, the Salk Institute for Biological Studies is a functional scientific research institution, located in La Jolla, California. Situated on a coastal bluff overlooking the Pacific Ocean, Kahn capitalised the prime location of the site, to create a tranquil, serene and beautiful work of architecture (Fiederer, 2017).

Kahn was one of the most influential and innovative American architects of the twentieth century. He created a distinctive style that was monumental and monolithic; fusing modernism and spirituality. This style is expressed through the Salk Institute. Although the Institute has a secular programme, the architecture expresses an underlying sense of the sacred, embodying highly spiritual spatial characteristics (Fiederer, 2017).

The Salk Institute consists of two symmetrical vistas, each with five laboratory wings of six floors, mirrored over an open courtyard. A narrow vein of water runs the central axis of this courtyard.
This vein of water ornaments the otherwise monolithic plaza, intersecting built forms with a natural element. The central, linear placement of this water channel emphasises the geometric symmetry of the monolithic structures surrounding the central courtyard, acting as an axis of reflection. In doing so, a sense of balance is created, generating an atmosphere of tranquillity.

By incorporating the element of water throughout the Salk Institute, Kahn also creates a place of spirituality. The vein of water directs the eye from the courtyard to the vast expanse of ocean and sky. In leading our eye to the horizon, our sense of scale and perspective is immediately shifted (Steele 53, 1993). We are reminded how small we are in regards to the vastness of the universe.

In the Salk Institute, the incorporation and elemental manipulation of water evokes an atmosphere of tranquillity, serenity and spirituality. Throughout the research process, it will therefore be important to consider how the characteristics of each classical element may be embraced, to contribute to an architecture of utopia.

“Architecture is the thoughtful making of space.”
Louis Kahn
Image removed for copyright reasons
Sacred architecture uses numeracy and geometry as a formal language to represent the perfection of the Divine, creating order and harmony on a physical and symbolic level.

Numbers are the most primitive manifestation of order and structure. A probable explanation for this phenomenon lies in the dynamics of cosmology. When early civilisations measured and consecrated celestial cycles to create their calendars, it was natural to integrate the same numbers, geometric shapes and proportions into their sacred architecture, providing temples in which to worship those same celestial deities (Mann 18, 1993). The numerology of cosmic cycles infiltrated early works of sacred architecture, becoming increasingly integrated with the sacred. As stated by Mann, ‘the number and God became one’ (Mann 19, 1993).

The square, circle, triangle and other primary plane shapes and their equivalent solids (cube, sphere, pyramid) are found in virtually all works of sacred architecture, stipulating a geometric vocabulary (Mann 19, 1993). Throughout many religions, these geometries are ascribed symbolic and spiritual meanings.

Perhaps the most common geometric form universally evident throughout sacred architecture is the reconciliation of square and circle. The square is representative of the human mind, whilst the ever-lasting geometry of the circle represents the primordial Divine. The symbolic relationship between these forms represents a metaphor between human and divine, and physical and spiritual qualities. This formal integration of square and circle represents the relationship between heaven and earth. (Mann 34, 1993)

This creation of order through geometry creates an atmosphere of calmness and tranquillity, emanating a place of sanctuary. In doing this, we are brought closer to utopia.
Figure 4.16 / Initial tessellation experimentation of sacred square and circle geometries
The architecture of asylum provides a framework to analyse the architectural relationship between geometry and utopia. Asylums were traditionally constructed as places of refuge, spaces to protect, support and heal the most vulnerable in society. Although the architecture of asylum generally lies in the secular rather than the sacred, underlying principles of these structures have highly spiritual connotations. Much like sacred architecture, the geometric language of the asylum aimed to create an atmosphere of tranquillity and calmness, evoking security and shelter. As stated by W. Browne in his text *The Asylum as Utopia*, “a perfect asylum may appear to be a Utopia” (Browne 1, 1837).

It was decided to critically examine the architecture of both the Eastern and the Western asylum. Each utilize geometry in different way to create ‘utopia,’ by constructing an architecture of tranquillity and peace.

Bethlem Royal Hospital, colloquially known as ‘Bedlam’ is the oldest psychiatric hospital in the Western world, an infamous symbol of asylum. Established in 1247, Bethlem has evolved over four different institutions across four distinct sites. This section will analyze the third development of Bethlem Royal Hospital, at Southwark, England.

In 1815, Architect and surveyor James Lewis was selected to design a new Bethlem in rural Southwark, after its previous structure at Moorfields was increasingly overcrowded and dilapidated (Yanni 19, 2007). Bethlem at Southwark was constructed in a period of psychiatric reform, transforming professional and public opinions of the role of asylum in society. Referred to as ‘moral treatment’, new psychiatric treatment regimens shifted the emphasis on healing therapies instead of physical punishments (Science Museum, n.d.). The role of architecture was paramount to facilitate an environment of healing.
Figure 4.17 / Bethlem Hospital at Moorfields, 1676

Figure 4.18 / Patients at Bethlem, 1763
Figure 4.19 / A mens ward at Bethlem, 1878
Figure 4.20 / A workroom at Bethlem, 1860
Monumental in scale and grandeur in style, Bethlem at Southwark was a large and imposing institution, spanned over 180m, and reaching a height of 12m. The building consisted of a central, square administration block, flanked by two symmetrical, tiered wings arranged in an ‘en echelon’ style (Scull 407, 2015). Cells and chambers were spaced on the south side of the building, and a large gallery spanned the length of the north side (Yanni 19, 2007). Careful attention was given to every detail of the design in order to facilitate an atmosphere of healing (Kirkbride Buildings, n.d.).

The rigid structure and symmetry of the plan evoked an environment of order. It ensured patients were placed in a balanced environment, segregated from the chaos and complexities of the outside world. By creating a geometric, proportioned, and symmetrical structure, an atmosphere of tranquillity and serenity was evoked.

The tiered, symmetrical layout of each wing maximised levels of sunlight and fresh air flow throughout the building, ensuring a comfortable internal environment (Yanni 18, 2007). By using geometry as a tool to engage with the external site conditions, the architecture of the institution facilitated a therapeutic treatment, creating healthy and healing atmospheres for patients.

Through the careful application of geometric principles in plan and section, Bethlem at Southwark was conceived as an idealised sanctuary. In regards to the construction of Žižek’s utopia, it is therefore evident that geometry can be utilized as a tool to manifest order and harmony throughout the built environment, bringing us closer to utopia.
Figure 4.24 / Exploring the underlying geometries of Bethlem Hospital. Lines of hierarchy intersect to manifest geometric points of interest.

Figure 4.25 / A geometric detail taken from figure 4.24. Lines of hierarchy converge at a central axis of symmetry.
The Islamic asylum of Nuri al-Din is one of the oldest and largest asylums in the Middle East.

Nur al-Din al-Zangi was the first Islamic sultan to defeat the Christian Crusaders, expelling them from Syria, Palestine and Egypt from 1149 AD – 1171 AD (ArchNet, n.d.). He used part of the financial rewards gained from his conquests to commission the construction of Nuri al-Din ‘bimaristan,’ a large Islamic hospital and asylum located in Damascus, Syria (Moaz, n.d.). This hospital served several purposes: it was a centre of medical treatment, a psychiatric asylum and a place of refuge to societies most vulnerable people (U.S. National Library of Medicine, n.d.). Nuri al-Din was also a place of education, functioning as a medical school for aspiring physicians and practitioners (Moaz, n.d.). For centuries, Nuri al-Din fused programmes of asylum and education, remaining functional until the mid 20th century. Today it has been restored as Syria’s Museum of Arabic Medicine and Science (Moaz, n.d.).

Much like many Medieval Islamic hospitals, Nuri al-Din was constructed on a cruciform plan. Four central iwans surrounded a central, square courtyard. A rectangular pool of water sat in the centre of the courtyard. By using the primary geometry of the square as a foundation to dictate the spatial layout of the asylum, a strong aesthetic of order and balance is evoked. In doing so, an atmosphere of tranquillity and serenity is created, evoking harmony.

High levels of intricate and lavish ornamentation are evident throughout the interior of Nuri al-Din, decorating the walls, ceiling and floors. Many of these elements of ornamentation are built on the sacred forms of square and circle.
Figure 4.27 / Nuri al-Din entrance elevation
Figure 4.28 / Elevation and section of entrance dome
Figure 4.29 / Nuri al-Din geometric ornamentation
This square / circle motif is repeated, overlapped, interlaced and tessellated to form elaborate and elegant patterns. Throughout Islamic architecture, the order, precision and systematic beauty of such geometric patterns is symbolic of the beauty and perfection of the Divine, even throughout secular programmes.

It is therefore evident that by incorporating tessellated patterns into the creation of Žižek’s utopia, an environment of beauty and balance will be created. In doing so, we are brought closer to the Divine and to utopia.
Prime numbers have long been considered the building blocks of numeracy, a principle of sacred architecture. Their fundamental importance is articulated throughout Marcus du Sauvoy’s acclaimed text ‘The Music of the Primes.’

A prime number is defined as a natural number greater than one, that as no positive divisors apart from one and itself. Prime numbers are crucially important to the theory of numeracy. Mathematics stems from the ‘fundamental theorem of arithmetic,’ which states that ‘every integer larger than one can be written as a product of one or more primes’ (Britannica Academic, n.d.). Prime numbers are therefore outliers in an infinite numerical sequence, providing a foundation for mathematics. In doing so, prime numbers are archetypal of unity, as unified primes form the basis of all numbers. (du Sauvoy 11, 2004).

Poetic and symbolic connections can be drawn between the prime number and the refugee crisis. We are presented with an overwhelmingly inconceivable number of refugees, much like there is an inconceivably infinite sequence of numbers. The prime number accentuates individuality in sequence, providing us a methodology of interpreting, analysing and applying the very foundation of this numerical infinity. By integrating the prime number into the research methodology, we poetically integrate a methodological approach to interpreting the seemingly infinite scale of the refugee crisis in parallel with mathematics.

Prime numbers have been ascribed characteristics of unity and individuality in sequence, much like how sacred architecture may ascribe specific meanings to different numbers. Therefore, by consciously integrating the symbolic numerical framework of the prime throughout the research, we are brought closer to a sacred utopia.
“Primes are the jewels studded throughout the vast expanse of the infinite universe, numbers that mathematicians instil a sense of wonder.”

Marcus du Sauvoy
A relevant programme is essential to the successful architectural construction of Žižek's utopia.

As analysed in ‘Against the Double Blackmail,’ the implementation of educational programmes confront the very causes and effects of the global refugee crisis – the globalisation of agriculture and the intolerance of ‘the other.’ It is therefore evident that the architectural creation of Žižek’s utopia needs a programme of education.

It was also crucial that the programme reflects the sacred. As realised in the previous chapter, the architectural language of the sacred can be directly correlated with the architectural language of utopia. By incorporating aspects of spirituality and the sacred into the programme, architecture may bring us closer to utopia.

Incorporating the sacred also acknowledges the rich architectural history of the site. The site has almost always been of high spiritual significance, having provided the foundations for both a church and a mosque. By maintaining a programme of the sacred, we maintain a connection between past and present. For these reasons, it was decided to also integrate a programme of religious education into the creation of Žižek’s utopia.

Religion is integral to humanity, a powerful force defining civilisations, connecting history, politics, economics, art, and literature (University of Pennsylvania, n.d.). Over centuries, religious doctrines, ethics, myths, rituals, and institutions have continuously shaped the development of our society (UC Davis, n.d.). Studying religion allows us to develop a greater knowledge, understanding and appreciation of other cultures and religions. Through personal engagement, people of different backgrounds discover common interests and concerns, realising shared values, ideas, intelligence and morality. Focusing on similarities, rather than differences, a shared humanity is discovered,
“Why study religion in the twenty-first century? Because it matters.”

William Graham

reducing levels of intolerance. By deepening our understanding of others, we gain a more informed perspective on the world and its issues (University of Pennsylvania, n.d.).

However, it must also be considered that religious education is a life-long experience, not exclusively limited to formal institutions of schools and universities. Although the programme will focus on religious education, it will be important to include a range of sections, that will appeal to a diverse range of people.

Therefore, the programme was decided as an Institute of World Religions. The programme will be separated into five independent but correlated sections, to appeal to as many people as possible.

As five is a prime number, the establishment of five sections reflects the intrinsic unity of the prime, metaphorically representing solidarity.

The design process of the Institute of World Religions will follow that of Kahn's Salk Institute, a key research precedent. Louis Kahn approached the design of the Salk Institute without ‘restrictions of dictatorial programme, instead projecting an evolving programme of spaces without precedence’ (Coleman 182, 2005). As the research is grounded in the poetic rather than the practical, the spatial requirements for each section of the School of World Religions were deliberately kept ambiguous, to maximise architectural expression.

The four classical elements of earth, air, fire and water are also introduced to the programme. By doing this, an underlying, poetic connection between the programme and the qualities of sacred architecture are established.
The Academy will be the only formal learning institution of the programme. Driven by the exchange of knowledge, information and ideas, the academy will facilitate an intellectual place of assembly through the academic study of religion.

The academic component will be integrated with the element of air. Much like academic education, air is an intangible asset. Although unseen, the movement of air can generate large amounts of change. Parallels can immediately be drawn between these characteristics of air, with the ability of the intangible knowledge gained at the Academy to generate change.
Museums are places of knowledge, spaces where historical, scientific, cultural and artistic treasures are stored, preserved, interpreted and exhibited. The museum as an institution tells the story of how society has survived, evolved and developed, expressing a physical record of past and present. Museums essentially hold the cultural soul of a nation, and the heart of communities, preserving local and national stories (Harward, 2014). By providing and preserving physically tangible links to our past, the museum teaches us the mistakes and achievements of our predecessors; allowing us to make more informed future decisions (Harward, 2014).

The primary role of the museum is to engage, educate and inspire the public (Harward, 2014). In doing so, the museum will foster a greater understanding of our collective heritage, constructing a dialogue between past and present. Through discovering a shared history, tolerance will be increased through education.

The Museum will evoke the element of earth. Museums physically and psychologically ground us in the past, enabling us to explore our history. Creating a tangible connection between earth and a museum poetically expresses this notion of grounding.
Food is essential for the survival of humanity, physically and psychologically providing nourishment and sustenance. The intrinsic relationship between food and social interaction is deeply entwined in the human psyche and the universal enjoyment of eating and sharing a meal is something we all have in common, regardless of age, gender or nationality. When we eat together, we bond with each other, forging friendships and strengthening family and community relationships (Oaklander, 2014).

The universal nature of eating and sharing food connects people across space and through time. Sharing a meal encourages communication, allowing us to build inter-personal relationships. In doing so, we increase our understanding of others. Therefore, the incorporation of an eatery into the Institute of World Religions will contribute to Žižek’s utopia by increasing tolerance through social interaction and communication.

The eatery component will be integrated with the element of fire. Fire is an essential element of the food preparation process, providing heat for cooking and warmth for comfort. The raw qualities of fire will therefore be embraced throughout the design of the eatery, to provide a place to cook food and facilitating a space for people to gather.
A public garden is a space that displays, cultivates and maintains plants and other natural forms for the enjoyment of all. For centuries, gardens have been integrated into our urban landscapes, creating contemplative environments of beauty and peace. Public gardens provide informal social spaces where people can interact with each other, facilitating communication across a diverse range of people.

As realised in previous sections, significant global issues stem from food and globalization of agriculture. The successful integration of thriving urban ‘greenery’ in our urban centres is paramount to increase public consciousness surrounding environmental ecology (European Commision 19, 2010). By doing so, a greater awareness of the natural environment is generated. Environmental awareness is critical to address such environmental issues universal to all.

The incorporation of a garden will reflect the religious focus of the programme. Throughout many religions, a garden is constructed as a sacred utopia. This construct is exemplified by the Garden of Eden in Christianity and Jannat ‘Adni in Islam. By integrating a garden into the programme of the Institute of World Religions, an allegorical utopia will be constructed.

The garden will poetically incorporate the element of water. Water is essential to sustain and nourish all living organisms on earth. By sustaining and nourishing all plants of the garden, the successful integration of water will allow the garden to thrive.
The asylum has historically provided a place of refuge, protection and safety. It is therefore essential that an architecture of asylum is incorporated into the Institute of World Religions, a direct response to the issues of insecurity suffered by refugees and asylum seekers worldwide today.

This asylum will provide a place of sanctuary, a physical, intellectual and spiritual retreat from the world. In doing so, the asylum will be a welcoming place for all religions, faiths and cultures, providing a spiritual space where all can seek peace and refuge through meditation and self-reflection. Although the asylum is a place of spirituality, it is essential the architecture is devoid of iconography that can be correlated with any specific religion. This is to ensure that all will feel welcomed within the space.

The asylum is intended to be a focal point for the Institute of World Religions, conveying the very essence of Žižek’s utopia.

To create a relationship between the architecture of asylum and the spirituality of the space, it is essential that the asylum conveys an interior essence of mystery and awe. This may be achieved through the incorporation of Mann’s principles of sacred space into the architecture of asylum.

It was therefore decided that the architecture of the asylum will manifest every element - earth, air, fire and water. In doing so, the asylum will poetically and physically unite all sections of the Institute of World Religions.
All five sections will combine to form Anicia Juliana’s Institute of World Religion. This programme embraces Žižek’s idealised utopia. By encouraging dialogue between a diverse range of people, this structure will minimalise intolerance, opening lines of communication to discuss global issues such as the globalisation of food and agriculture.

This programme of religion also embraced the surrounding context of the site. Fatih Hospital serves the body, Istanbul University serves the mind, and the Institute of World Religion will serve the soul.

As this programme is reflective of the site, the prime and Slavoj Žižek, all three instigators of this research, it is ideal for an architectural creation of Žižek’s utopia.
Throughout the initial stages of the research process, all relevant information acquired was inputted into two large drawings. These drawings provided an illustrative narrative of the research process, visually chronicling ideas and thoughts, constantly unfolding, developing and evolving. A bricolage overlay technique formed the foundation of both drawings; acquiring, isolating, organizing and methodologically assembling a diverse range of visual, written and oral information. This allowed for the convergence of complex and sometimes opposing ideas into unanimous, unified forms. In doing this, the unique identities of the sometimes previously unrelated sources started to merge, manifesting relationships between seemingly disparate components.
FLOWER OF LIFE
A mandala and represents the Five Elements with the human. The point of Life is a sacred symbol of creation.

DIVINE PRESENCE
IХОΣ
The sign of Life was used by Jesus and represented the presence of God.

LIGHT SUSTENANCE COMMUNION
The light of life is represented in various forms and symbols throughout history.

INNER COURTYARD
ISLAM
ARK
INCENSE ALTAR LAMP
BREAD TABLE
HOLY OF HOLIES
HOLY PLACE
SACRED TABERNACLE

PATTERN
GEOMETRY

THE BEGINNING: A POINT.
A point is the center of all forms.

THE LINE: A DEPARTURE
FROM THE POINT.
A line represents the relationship between two points.

THE CURVE: THE CREATION
OF A BOUNDARY.
A curve represents the origin of a hexagon and trigon.

Symbols representational of the universe created by the use of universal shapes.

50

100
**DRAWING I**

This drawing provides a narrative based exploration of the research site: the ruins of the St Polyeuktos (Harrison 36, 1989). The original archaeological excavation grid of the church provided the basis for the drawing, initiating a regimented and structured scale. Lavish fragments of ornamentation were uncovered, assembled and overlaid in accordance to their location on the plan. Scale and directionality remained fluid through the layering of ornamentation, allowing for maximum assemblage flexibility and ease of manipulation.

**DRAWING II**

In reference to the fundamental themes of I, II further analyses the language of the sacred domain, focusing on the exploration of an allegorical, visual relationship between Islam, Christianity and Judaism. The drawing originated with a grid-based, geometric exploration of the square and circle, both sacred geometric forms. As it progressed from left to right, the exploration of polygon geometries developed to the linear analysis of overlaid sacred architectural icons, such as the Islamic Ka’aba and the Jewish Tabernacle. These works were represented through overlaid plans and sections. The descriptive text surrounding the border juxtaposed sacred and secular texts, blurring the boundaries between written and graphical representation. This drawing questions if architecture similarities between disparate religions can be used as means of reconciliation amongst conflict.
“A bricolage overlay technique formed the foundation of both drawings; acquiring, isolating, organizing and methodologically assembling a diverse range of visual, written and oral information.”
As the drawings were entirely composed by hand, every smudge, miscalculation and error had an aura of permanence, more so than with comparable digital means of image production. Therefore, a perpetual fear of making mistakes underlay the drawing process, as a significant mistake could mean days, even weeks of wasted time. Consequently, an extremely rigorous and systematic drawing approach was generated and developed, as to minimalise risk of error. This added value to the research process, as the scale, placement, and weight of each piece of information was logically justified.

The pencil techniques used throughout the drawings also contributed to a narrative approach, visually manifesting the successes and challenges of the work. Every line represents an intentional, controlled gesture of graphic representation. These varied techniques combine to form a hierarchical narrative of the drawing process.

As exemplified by the drawing, the bricolage technique was accentuated by an extensive use of hatching, creating a rich dialogue of opacity and transparency. The use of parallel hatching and cross-hatching throughout the drawings allowed a controlled and systematic build up of images through variation of densities. This ensured clear distinctions between the layers of bricolage information, generating aesthetically unique, richly contrasting moiré patterns. The bricolage technique provided a visual filtration system through tactile means, isolating relevant, useful and eye-catching research information to input into the drawings. The decision to include or exclude a piece of information narrated its perceived significance, even if unrealised at the time.

Each drawing articulates a different section of the research narrative. The value of the drawings is the methodological assemblage of many ideas into one. My drawings provide self-reflective speculation of future possibilities and opportunities for my thesis, as part of a constantly advancing process of discovery. These drawings do not offer any research conclusions, but encourage open discourse, inspiring the formation of new ideas and ideologies.
In the first drawing development experiment, random areas of the drawing are extracted, combined and overlaid. By combining sometimes disparate bricolage elements across both drawings, a collage of unity is created. The methodological overlaying of these areas creates images that could be interpreted as three dimensional forms.

The following chapter investigates how my drawings may be interpreted and developed. A process of bricolage and tracing successfully constructed the initial drawings. Therefore, to decipher the information engrained in each drawing, it was important to maintain this process of tracing and bricolage, de-constructing the masses of information present.

Methods of extracting information from the drawings are therefore explored through a process of tracing and bricolage, both analogue and digital. This methodology provides a framework to extract, apply and develop a range of information from the drawings to an architectural context.
Figures 7.02 - 7.03 / Two further iterations, extracting, reassembling and overlaying bricolage drawing fragments, to speculate randomized 3D forms.
II | The second trace experiment begins with the tracing of dominant lines from each drawing using a lighting table and tracing paper. The areas on each drawing selected for tracing are the areas with the densest hatching, and therefore the highest concentration of information. Many small traces are taken, overlaid and combined, speculating innovative forms. In doing so, a range of information from the drawing is reassembled and reinterpreted in new ways.

Figure 7.04 / 12 organic fragments are traced and extracted from the 'Drawing I - The Site.' These forms are systematically rotated and reflected, to experiment with the formal manipulation of traced drawing fragments.
Figure 7.05 / A further 32 fragments are traced and extracted from both drawings. These forms are taken from areas of greatest densities; the densest concentration of information and knowledge.
Figures 7.06 - 7.07 / Traced fragments of both drawings are reassembled in sectional view through a process of randomization. These experiments speculate how traced fragments of both drawings may be combined to create innovative spatial forms.
Figures 7.08—7.09 / Traced fragments from both drawings are randomly combined and overlaid to speculate 3D design possibilities.
III | Iteration three speculates a different methodology of tracing. Instead of overlaying a range of randomized drawing fragments to produce form like previous iterations, specific sections of each drawing are methodologically isolated and traced. Forms are extracted through a layered tracing approach.

Figures 7.10 - 7.13 | Tracing of a drawing fragment from ‘Drawing II’ speculates possible architectural form. This drawing fragment is heavily influenced by the floor plan of Nuri al-Din, an Islamic asylum case study. The traced form therefore reinterprets an architecture of asylum through the constraints of ‘Drawing II.’
Figure 7.14 - 7.15 / The tracing of another drawing fragment from ‘Drawing II’ speculates possible architectural form. This drawing fragment is dictated by the floor plan of Bethlem Hospital, an English asylum case study. The traced form provides another interpretation of an architecture of asylum through the constraints of ‘Drawing II.’

Figure 7.16 / A traced fragment is layered, overlaid and extruded to speculate 3D form, manipulating the drawing trace into a mode of architectural representation.
Iteration four reassesses A. T. Mann’s three principles of sacred architecture in accordance with the tracing and bricolage process. These three principles were somewhat lost in the previous iterations. Although the randomization of several trace iterations combined seemingly disparate elements to unified forms, these forms lacked the simple, symmetrical and ordered geometries essential to the construction of an architecture of utopia.

Throughout iteration four, hatching fragments of both drawings have therefore been systematically traced and tessellated to produce vivid patterns. These iterations incorporate a sacred architecture principle of geometry, generating order and balance from a disparate combination of information.
Figure 7.19 / A hatching fragment from ‘Drawing I’ is traced and tessellated to produce an ornamental pattern. This process manipulates the drawing through the application of Mann’s sacred architecture principle of geometry.

Figure 7.20 / A hatching fragment from ‘Drawing II’ is traced overlaid and tessellated to produce a decorative pattern. This process manipulates the drawing through the application of Mann’s sacred architecture principle of geometry.
To further develop the drawing experimentation, it was decided to integrate analogue methodologies of tracing and bricolage with digital iterations. The next ‘trace’ experiment converts the drawing from analogue to digital, through digital scanning. Using the ‘Live Trace’ function on Adobe Illustrator, a scanned copy of a drawing is digitally traced. This intends to digitally replicate the analogue tracing of information practiced throughout the drawing process. It was thought that the digital ‘tracing’ of the drawing would somehow provide a new way to interpret its data.

Density represents information. The digital traces manifested areas of greatest density; areas concentrated with data. These areas of higher density are isolated, then retraced at a larger scale, replicating techniques used during the drawing process. Each image represents digital experimentation with the settings of Adobe Illustrator’s ‘Live Trace’ function.

Figures 7.21 - 7.24 / A small fragment of a drawing is isolated. Using the ‘Live Trace’ function on Adobe Illustrator, a series of tracing iterations are produced, experimenting with different ‘Live Trace’ settings.

Figures 7.25 - 7.32 / As a means of digital tracing experimentation, all of ‘Drawing I’ is in-putted into Illustrator. As with figures 7.21 - 7.24, several trace iterations are produced, experimenting with different ‘Live Trace’ settings.
Images produced from the previous Illustrator trace experiments are imported into SketchUp, a 3D modelling software. Each region created by the trace is extruded, in relation to its density on the original drawing. Areas of greater densities are extruded physically higher than areas of lesser densities. These iterations experiment with the conversion of visual data from the drawings, from 2D to 3D form.

Figure 7.33 / A small drawing fragment is taken from a previous digital trace experimentation on Adobe Illustrator. This fragment is exported to SketchUp as a DWG file.

Figure 7.34 - 7.36 / Segments of the traced drawing fragment are extruded, in relation to their density. Areas of greatest density are extruded the highest. These images show multiple views of an extruded form from the digital trace shown in figure 7.33.
Figure 7.37 / A second fragment of a drawing is taken from a previous digital trace experimentation.

Figures 7.38 - 7.41 / Segments of the traced drawing fragment are extruded, in relation to their density. These images show multiple views of an extruded form of figure 7.37.
VI | To reduce the randomisation of data evident through all previous trace experiments, the site of St. Polyeuktos, a key protagonist of the research, is in-putted back into the digital extraction process. As discussed previously, the unearthing of fragments of the St. Polyeuktos epigram on the site was fundamental to the rediscovery of the church. In recognition of the epigram’s historical significance, it it re-integrated into a digital drawing experiment.

Parallels can immediately be drawn between the epigram structure and the digital JPEG hex code structure of the scanned file of the drawing.

A hex code is a way of digitally specifying colour using hexadecimal values. The code consists of a sequence of three two-digit numbers, representing red, green and blue. Ranging from 0 1 2 3 4 5 6 7 8 9 A B C D E F, 0 represents total colour absence, and F is maximum colour intensity. 00 is equal to zero hue. FF is equal to a pure colour.

The epigram of St. Polyeuktos has a hexameter structure. A hexameter is a line of verses consisting of six feet, each foot made of two long syllables or a long and two short syllables. Therefore, both the St. Polyeuktos epigram and the JPEG drawing code have fundamentally similar underlying structures.

The next digital experiment involves physically and systematically altering the digital drawings hex code. The programme Hex Editor allowed me to view the complete hex code of the drawings digital scan. This programme also allowed me to physically alter the digital code. For example, I can replace all ‘A6’ sequences with ‘13,’ or replace all ‘FA’ with ‘20.’

Initial hex code experiments question how the history of the site could be subtly, almost subconsciously integrated into the hex code structure. For example, since the church was constructed in 527 and rediscovered in 1960, all ‘05’ sequences in the hex code are replaced with ‘19,’ whilst all ‘27’ sequences are replaced with ‘60.’ By doing this, the history of the site is used as a methodology to interpret and digitally develop the data in the drawings.
Figures 7.42 - 7.56 / Iterations of the altered hex code structure of a drawing
Initial hex code experimentation processes were not systematic enough, and the relevance and applicability of these images to my design was unclear.

The prime number was therefore inputted into the process. All prime numbers are removed from the hex code, replaced with 00. This produced a very interesting output, creating an extremely corrupted pixelated file that completely transforms every rotation.

This constantly changing image is rotated 76 times, in accordance with the 76 lines of the epigram. Each rotation is consecutively allocated a line.

The English translation of the allocated Greek line alludes to the use of the image. For example:

κόλποι δ’ μφοτέρωθεν ἐπ’ ψίδεσσι χυθέντες
φέγγος ειδίνητον ἐμαιώσαντο σελήνης
“On both sides recess hollowed out in arches have given birth to the ever-revolving light of the moon” (58-59)

The two images associated with these lines may be used for the ceiling structure. This systematic image manipulation provides a strong framework for further drawing experimentations.
1 / The empress Eudocia, in her eagerness to honour God, was the first to build a temple, not from any thrift or lack of resources - for what can a queen lack?

5 / but because she had a divine premonition that she would leave a family which would know to provide a better embellishment. Juliana, bright light of blessed parents, sharing their royal blood in the fourth generation, did not cheat the hopes of that queen,

10 / but raised this building from its small original to its present size and form, increasing the glory of her many sceptred ancestors. For who has not heard of Juliana, that, heeding piety, she glorified even her parents by her finely laboured works?

16 / She alone by her righteous sweat has made a worthy house for the ever-living Polyeuktos. For indeed she always knew how to provide blameless gifts to all athletes of the heavenly King.
20 - 22
20 / The whole earth, every city, cries out that she has made her parents more glorious by these better works. For where is it not possible to see that Juliana has raised up a glorious temple to the saints?

23 - 24
23 / Where is it not possible to see signs of the pious hands of you alone?

25 - 29
25 / What place was there which did not learn that your purpose is full of piety? The inhabitants of the whole world sing your labours, which are always remembered. For the works of piety are not hidden; oblivion does not wipe out the contests of virtue.

30 - 34
30 / Even you do not know how many houses dedicated to God your hand has made; for you alone, I think, have built innumerable temples throughout the whole earth, always revering the servants of the heavenly God. Following on all the well-labouring footsteps of her ancestors,
35 - 39

35 / she fashioned her ever-living stock, always treading the whole path of piety. Wherefore may the servants of the heavenly King, to whom she gives gifts and for whom she built temples, protect her readily with her son and his daughters.

40 - 41

40 / And the unutterable glory of the family of excellent toils survive as the Sun drives his fiery chariot.

42 - 44

42 / What choir is sufficient to sing in the contests of Juliana who, after Constantine, embellisher of his Rome, after the holy all-golden light of Theodosius

45 - 50

45 / and after royal descent from so many forebears, accomplished a work worthy of her family and more than worthy in a few years? She alone has overpowered time and surpassed the wisdom of the celebrated Solomon, raising a temple to receive God, the richly wrought and gracious splendour
51 - 54

51 / How it stands forth on deep-rooted foundations, springing up from below and pursuing the stars of heaven, and how too it extends from the west, stretching to the east, glittering with the indescribable brightness of the sun.

55 - 56

55 / on this side and on that! On either side of the central nave, columns standing upon sturdy columns

57 - 59

57 / support the rays of the golden-roofed covering. On both sides recess hollowed out in arches have given birth to the ever-revolving light of the moon.

60 - 61

60 / The walls, opposite each other in measureless paths, have put on marvellous meadows of marble,
62 - 64

62 / which nature caused to flower in the very depths of the rock, concealing their brightness and guarding Juliana’s gift for the halls of God, so that she might accomplish divine works,

65 - 68

65 / labouring at these things in the immaculate promptings of her heart. What singer of wisdom, moving swiftly on the breath of the west wind, and trusting in a hundred eyes, will pinpoint on each side the manifold counsels of art, seeing the shining house, one ambulatory upon another?

69 - 76

70 / Thence, it is possible to see above the rim of the halls a great marvel of sacred depiction, the wise Constantine, how escaping the idols he overcame the God-fighting fury, and found the light of the Trinity by purifying his limbs in water. Such as the contest that Juliana, after a countless swarm of labours, accomplished for the souls of her ancestors, and for her own life, and for those who are to come and those that already are.
Following the correlations made between St. Poleuuktos epigram and the JPEG code, several images are produced that illustrated sections of the epigram. These start to examine how the translation of the St. Polyektos epigram might begin to speculate architectural form.
Further explorations of using a drawing and collage methodology to speculate form. This drawing is correlated with verse 60-61 of the St. Polyeuktos epigram - “The walls, opposite each other in measureless paths, have put on marvellous meadows of marble.” The JPEG files correlated with these verse are collaged over an abstraction of a reflected wall structure of St. Polyeuktos.
Figure 7.28 / Another exploration of using a drawing and collage methodology to speculate form. This drawing is correlated with verses 57-59, “support the rays of the golden-roofed covering. On both sides recess hollowed out in arches have given birth to the ever-revolving light of the moon.” The JPEG files correlated with this verse are overlaid with traces from ‘Drawing II’ to speculate a ceiling structure in the form of a rose window.
Figure 7.29 / A final exploration of utilising a drawing and collage methodology to explore form. This drawing is correlated with verses 62-64, “which nature caused to flower in the very depths of the rock, concealing their brightness and guarding Juliana’s gift for the halls of God, so that she might accomplish divine works.” The JPEG files correlated with this verse are collaged over an abstracted garden structure, taken as a trace of organic forms in the drawings.
‘The Trace’ experiments produced many interesting forms, through an iterative process of tracing, layering and bricolage. These processes successfully explored how the data ingrained in the initial drawings may be systematically manipulated to speculate architectural forms.

However, most iterative processes seems to lack a tangible connection with Mann’s three principles of sacred architecture, an architecture of utopia. This was especially evident through the geometries produced throughout the iterative process. Forms were organic and complex, generating atmospheres of chaos and unpredictability, rather than balance and tranquillity. It was therefore essential to integrate sacred geometries back into the iterative design process, providing a physical framework to architecturally generate Žižek’s utopia.

As previously identified, perhaps the most universally common sacred geometry is the balanced reconciliation of square and circle. The square is representative of the human mind, whilst the ever-lasting geometry of the circle represents the primordial Divine. The symbolic relationship between these forms represents a metaphor between human and divine, heaven and earth. (Mann 34, 1993)

This section therefore explores the possible architectural languages of this geometric reconciliation. By combining these ‘sacred’ forms with the organic drawing experiments, it is thought to create an architecture of utopia, inclusive of data extracted from the drawings.

Figure 8.01 / Initial exploration of an architectural reconciliation of square and circle
Figure 8.02 / Sacred architecture iteration one: exploring simple 'sacred' geometries formed by the spatial manipulation of the square.

Figure 8.03 / Sacred architecture iteration two: exploring simple 'sacred' geometries formed by the reconciliation of square and circle.
Figure 8.04    /   Experimenting with an architectural relationship between square and circle

Figure 8.05    /   Re-conciliating the square and circle through spatial speculation
Figure 8.06 / A further experiment with the sacred forms of circle and square

Figure 8.07 / Developing the relationship between the sacred forms of circle and square
Initial formal experimentation of the reconciliation between square and circle successfully evoked an aesthetic of balance and order, essential to the architectural construct of utopia. It was therefore vital to utilise these principles of sacred geometry throughout the master plan of the Institute of World Religions. This will construct an environment of balance, between each of the five sections and the site.

Figures 8.08 - 8.27 / An iterative lego modelling process exploring the spatial relationship between the five sections of the programme, constrained by the forms of sacred geometries. This process leads to the development of the master plan.
Developed master plan iterations integrate Mann’s principles of sacred architecture, exploring the relationship between site, cosmology and the sacred geometries of square and circle.

The planar dimensions are dictated by the symbolic numerical framework of the prime number.

Figures 8.28 - 8.33 / A developed iterative process, exploring a relationship between site and programme.

Figure 8.34 / The final master plan iteration. All dimensions are dictated by the prime number, constructing an underlying allegorical framework of unity.
The following design stage combines aspects of all previous design iterations - the trace, the sacred architecture experimentations and the master plan development. All previous iterations were integrated using a methodology of drawing and bricolage. This allowed for the convergence of complex and sometimes opposing ideas into unanimous, unified forms. In doing this, the unique identities of the sometimes previously unrelated sources started to merge, manifesting relationships between seemingly disparate components.

The five sections of the programme were re-integrated into this stage of design experimentation. Design therefore could become more specific, ensuring the diverse spatial and symbolic requirements of each section could be met.

Figure 8.35 / Snapshots of the combined design process, taken from a sketchbook
ACADEMY

The academy is representative of the element of air. Therefore, the construction of a tall, porous structure is essential to maximise tactile air flow and ventilation, channelling the intangible to the tangible. All Academy iterations therefore explore how a construct of permeable verticality may be extracted from previous design processes.
Figure 8.44 / Exploring design possibilities for the interior of the Academy, integrating a rigid geometric structure with porous facade ornamentation taken from trace iterations.

Figure 8.45 / Developing facade options for the academy, overlaying traced fragments from both drawings on a geometric grid. The porous aesthetic of the facade is juxtaposed with a solid, linear ceiling, constructing a formal duality.
Figure 8.46  / Tracing and overlaying the ‘sacred’ geometries of square and circle with an ornamental use of an altered hex code, as interpreted as a wall surface. The systematic, linear layering of sacred geometries constructs a rigid yet permeable structure.

Figure 8.47  / Exploring a possible section view of the Academy, combining a structure based on the sacred geometries of square and circle, with ornamentation taken from the drawing trace iterations.
Figure 8.48 / Exploring the ornamental use of an altered hex code image as a stained glass window. The implementation of a colourful multi-storey window constructs a bold statement of verticality.

Figure 8.49 / Exploring facade options, layering sacred geometries with forms traced from drawings to construct a permeable, vertical structure.
It is essential the ruins of St. Polyeuktos are incorporated into the Museum, as they narrate the history of the site, providing a tangible connection between past and present. As the Museum is representative of ‘earth,’ it was decided to construct the majority of the structure into the ground, generating a physical and poetic connection between programme and element. These iterations therefore explore a subterranean architectural relationship between museum and site.

 Figures 8.50 - 8.51 / Initial design sketches exploring how architecture may be integrated into the ruins, both above and below ground.

 △ Figure 8.52 / A bricolaged image, which develops a relationship between architecture and site.
Figures 8.53 - 8.55 / Exploring how architectural design might be integrated into the ruins of St. Polyeuktos.
GARDEN

It is essential that the design of the garden formally integrates the element of water, constructing an environment for all plants to thrive and flourish. These iterations therefore explore a duality between organic forms of the plants, and linear forms of water containment.

Figures 8.56 - 8.58 / Thee design iterations juxtapose organic forms of nature within the rigid constraints of the site in sectional view.
Figures 8.59 - 8.60 / Two iterations experiment with the layout of the garden. The linear form of the square constructs a foundation of the sacred. This is juxtaposed by the organic form of the plants, creating a tangible duality.

Figure 8.61 / A developed iteration speculating the form of the Garden. The JPEG code is integrated into the process, highlighting areas of significance and interest.
EATERY

The eatery embodies the element of fire, using its heat for cooking food, and its warmth and light to provide a place for people to gather. All Eatery iterations therefore explored the relationship between architecture and the construct of a hearth.

Figure 8.62 / Bricolaged image exploring the interior aesthetic of the Eatery, combining a geometric structure with ornamentation derived from trace iterations. A centrally located heath is speculated.

Figures 8.63 - 8.66 / Four iterations exploring a design of the eatery, merging sacred forms of square and circle with ornamentation taken from the trace experiments.
Figures 8.67 - 8.68 / Two bricolaged images explore the scale and placement of the hearth through the constraints of sacred geometries.
The iterative process for the architecture of asylum combines a diverse range of influences. Aspects of the trace were combined with sacred geometries to speculate form. As illustrated in the master plan, the asylum will be circular in planar form. This constraint be considered through an iterative design process.

Figures 8.69 - 8.70 / Exploring possible sections in accordance with the circular floor plan of the asylum section. Sacred architecture is combined with the altered JPEG code.

Figure 8.71 / Further exploring possible sections in accordance with the circular floor plan of the asylum section.
Figures 8.72 - 8.74 / Speculating possible sections in accordance with the circular floor plan of the asylum section. Sacred geometries of circle and square are unified with abstracted geometries from the drawing process.
The final design succinctly combines all stages of the research process, constructing a poetic and dynamic architectural expression of Žižek’s utopia, an Institute of World Religions. This chapter reiterates the programmatic significance of each section, generating a utopian society through the facilitation of modes of communication and education.

The relationship between each section of the programme, and Mann’s three principles of sacred architecture is noted. As realised through prior research, sacred architecture physically and spiritually evokes qualities of the Divine, bringing us closer to a construct of utopia. By ingraining Mann’s three principles of sacred architecture throughout the final design, a physical, architectural construct of utopia is manifested.

This section also explores the relationship between the drawing, the trace, and the final design. These processes of design exploration provided a methodological framework to interpret, develop and critique a diverse range of visual, written and oral sources of research. By uniting all iterative processes through the final design, an informative journey of innovative discovery is visually and symbolically narrated.
“If we don’t engage with this utopia, we will be lost. And we will deserve to be lost.”

Slavoj Žižek
Figure 9.01 / Approaching the Institute of World Religions from the north. A garden of utopia is immediately visible.
Figure 9.02 / Approaching the Institute of World Religions from the south
Figure 9.04 / The layout of the combined basement floor of the Institute of World Religions. The spatial configuration for each section is deliberately kept open and ambiguous, allowing for maximum flexibility and adaptability.

Figure 9.05 / The layout of the combined ground floor of the Institute of World Religions.

A  Academy
B  Asylum
C  Eatery
D  Garden
E  Museum
Figure 9.06 / Looking towards the central atrium of an Academy building. The double height learning spaces, combined with vertically spanning atria constructs a light, breezy atmosphere, reflective of the qualities of air.
As analysed in ‘Against the Double Blackmail,’ the implementation of educational programmes confront the identified causes and effects of the global refugee crisis – the globalisation of agriculture and social intolerance.’ The Academy physically constructs an environment of education, facilitating the exchange of knowledge, information and ideas through the creation of flexible, adaptable learning spaces. In doing so, the Academy aids the creation of Žižek’s utopia.
1. Flexible learning space
2. Library
3. Services and bathroom area
4. Library atrium
5. Academy atrium
6. Staircase leading to underground connection between Academy and the ruins of St. Polyeuktos

Figure 9.07 / Extruded floor plan of the Academy.
Figure 9.08 / Looking towards the ceiling of a central atrium in the Academy.

Figure 9.09 / The structural layout and ornamental design of the rose window is constructed through the systematic tracing and tesselation of figure 7.29.
Figure 9.10 / An informal space for study and small group instruction. The interior is dynamic, constantly transforming as the qualities of cosmic light change throughout the day. The shadows cast throughout the space are reflective of the linear nature of the hatching through the drawing process, constructing a optical duality between lightness and darkness.

Figure 9.11 / The library - a social study zone. The structure of the facade and the internal columns represent a reconciliation of square and circular forms, reflective of sacred architecture. The double height floors and atria spanning the verticality of the structure create a light and airy internal atmosphere.
Figure 9.12 / The construct of a formal duality between porous facade and solid ceiling is taken from this iterative sketch.
Figure 9.13 / The southern facade of the library. The angular form maximises sunlight penetration throughout the interior. The facade ornamentation consists of narrow timber slats arrayed in a linear manner. Traced from the hatching of the initial drawings, the facade is permeable and porous.

Figures 9.14 - 9.19 / The facade form was traced from areas of hatching throughout initial bricolage drawings.
Figure 9.20 / A large, adaptable learning space maximises the flexibility of the interior. The column structure is reflective of sacred geometries, whilst the railing structure is traced and extruded directly from the hatching patterns evident through both large drawings.

Figure 9.21 / A simplified profile of the column and beam structure. The square and the circle are formally reconciled.
The Garden creates an environment of tranquillity and beauty, a thriving green space in a urban landscape that displays, cultivates and maintains a variety of plants and other natural forms for public enjoyment. By providing an informal place for members of the public to meet, the Garden facilitates communication and interaction across a diverse range of people, increasing levels of social tolerance.

The diverse and colourful range of plants in the Garden accentuates the role of the natural environment in an urban context. In doing so, it passively and visually educates the public on the importance of environmental ecology.
The Garden is laid out on a square grid, emphasised by a linear arrangement of the plants. The square and circle are reconciled through the ornamental design of pools spaced throughout the complex. These pools collect and store rainwater, sustaining and nourishing all plants within the garden in times of drought. Resultantly, the Garden flourishes.
Figures 9.23 - 9.26 / A section of the Garden leading to the Library. Fragments of multi-coloured grass throughout the garden are taken as virtual extrusions of relevant rotated JPEG code images. Lines 62-64 of the St. Polyeuktos epigram translate to “which nature caused to flower in the very depths of the rock, concealing their brightness and guarding Juliana’s gift for the halls of God, so that she might accomplish divine works.” Parallels can be drawn between these verses and the programme of the Garden - a space causing nature to flower. Therefore, the corresponding JPEG images as seen on the right are visually and symbolically integrated into the Garden.
Figures 9.27 - 9.28 / A long, ornate pathway intersects the Garden, leading to the main Academy entrance. This path ornamentation is abstracted from Drawing II. This fragment of Drawing II develops geometries through a trace and bricolage methodology, ‘leading’ into a drawn journey of discovery. Therefore, this path ‘leads’ persons into the Academy, a place of intellectual discovery.
The Eatery facilitates a place of physical and psychological nourishment, a space were people can meet, interact and share a meal together.

The element of fire is embraced throughout the design of the Eatery. A large hearth is located in the centre of the structure, a focal point for the building. The light emitted from the hearth radiates through the Institute, encouraging people to gather for light and warmth.

In doing this, the architecture of the Eatery aids the construction of Zizeks utopia, increasing tolerance by facilitating and encouraging social interaction and communication.
Figure 9.29  /  A interior perspective of the Eatery. A central hearth creates light and warmth, drawing people into the space. The hearth structure is taken from a trace of a drawing, extruded in relation to hatching density.

Figures 9.30 - 9.32  /  The structure of the hearth as taken as an extruded trace from this fragment of the drawing. This methodology follows a process previously developed through the design method, as seen in the images to the right.
Figure 9.33 / Eatery interior perspective. The split ceiling structure maximises sunlight penetration through the space, accentuating the warmth of the hearth with qualities of natural light.

Figures 9.34 - 9.35 / The ceiling structure of the Eatery is heavily influenced by previous design iterations, as shown.
Figures 9.37 - 9.38 / Two façades of the Eatery are lined from floor to ceiling with highly ornamental glass and copper panels. The patterns on these panels were taken directly from traced fragments of the drawings. As the sun moves across the sky, the shadows generated by these panels transform the internal atmosphere of the Eatery, mapping a cosmic passage of time.

Figure 9.36 / Looking up towards the ceiling of the Eatery. The lower ceilings are formed of square grids, whilst the higher ceilings are formed by circular arch structures. This vertical directionality from square to circle is representative of a spiritual relationship between earth and the sacred.
Figure 9.39 / Eatery extruded floor plans. The architecture of the Eatery is constructed on geometric foundations. The building itself is symmetrical through both axes, and linear in formal composition.

Figure 9.40 / A staircase leads from the basement to the ground floor of the Eatery. Light filters through the interior from the ceiling, drawing the eye upwards, towards the heavens.

Figure 9.41 / The basement of the Eatery provides a place to dine. As light filters through the space, intricate shadows ‘hatch’ the floor, changing perspective as the sun moves across the sky. A traced JPEG code image ornaments the eastern wall, creating a colourful, vibrant internal atmosphere.

1. Entrance from the courtyard
2. A space for meeting
3. Entrance from the ruins
4. A space for dining
5. The kitchen
6. Services and bathroom
Figure 9.42 / A interior perspective of the Museum. The existing ruins of St. Polyeuktos are seen as the back wall.
The Museum creates a public place of knowledge, physically and spiritually holding the cultural wealth of Saraçhane Park. By integrating the Museum into the ruins of St. Polyeuktos, a tangible relationship between past and present is generated.

The Museum helps craft Žižek’s utopia, constructing an accessible space to educate and inspire all. By integrating an impartial, programme of religious education, the Museum reduces social intolerance thorough education, developing public perceptions and perspectives on such topical issues.
Figure 9.43  /  An exploded floor plan of the Museum. Internal spaces are deliberately kept large and open to maximise flexibility and adaptability. A central atrium spans the length of the building, allowing light from the skylights to penetrate all internal space. The architecture incorporates three distinct functions over four different levels. The ground floor chronicles a rich narrative of the religious history of the site and surroundings. The first and second floors contain exhibitions that provide a brief, impartial overview of all major religions and faiths of the world. The top floor houses travelling exhibitions, facilitating interaction with a range of different museums.

1  The entrance - from the ruins
2  Space for travelling exhibitions
3  Services areas
4  Bathrooms
5  An exhibition on world religions
6  An exhibition on the history of the site
Figure 9.44 / A fragment from Drawing I - the Site. This drawing fragment dictated the layout of the Museum.

Figure 9.45 / An explored view of the drawing fragment. Through the drawing process, this section of the drawing conducted a visual analysis of the existing ruins. It was essential this analysis was inputted back into the design. The location of the museum, and the linear layout of its floor plans was taken as a trace from the dotted region indicated.
Figure 9.46   / The ground floor of the Museum. This space visually chronicles a rich and dynamic historic narrative of the site. The element of Earth is evoked through the interior, a cave-like structure buried deep in the site, encased in rock, soil, dust and dirt. A raw, physical connection between the element and architecture is therefore manifested.

Figure 9.47   / A large spiral staircase connects the subterranean floors of the Museum with the ruins of St. Polyeuktos. This vertical connectivity between old and new is taken directly from the design process.
Figure 9.48 / Looking across the atrium of the Museum. Sunlight is filtered through the space by circular skylights spaced throughout the ceiling. As the angle and intensity of sunlight changes, the space evolves and transforms.

Figure 9.49 / The structural relationship between column and beams is based on the sacred reconciliation of square and circle. This formal reconciliation creates an atmosphere of balance and tranquility.
The asylum provides a place of refuge, an intellectual, physical and spiritual retreat from the outside world. This is a space for collective self-reflection, contemplation and meditation.

All four classical elements are evoked throughout the architecture of asylum. As indicated in the site plan, the Asylum is only accessible from the connected basement of the site, incorporating the element of earth. The front section of the roofing structure is open to the elements, allowing water to enter the space, gradually shaping and corroding the structure over time. This open structure also channels the flow of fresh air throughout the space, creating an airy atmosphere. The central floor structure abstractly represents a hearth, facilitating a place for people to meet and gather in mutual reflection.

By integrating all four classical elements, the Asylum constructs a highly spiritual focal point for the Institute of World Religions, a welcoming sanctuary for all.
Figure 9.50 / An interior view of the Asylum, facing towards the south. Architectural form is simple and minimal. Light accentuates the raw and natural qualities of the interior materiality, creating a beautiful and ephemeral atmosphere.
A space for meditation
A space for reflection
Entrance from the street
Entrance from the ruins

Ground Floor

Basement Floor

1
2
3
4

10m

Figure 9.51 / A circular staircase leads from the basement to the ground floor, guided by light streaming through the ceiling structure. Wide timber benches construct a place to relax and reflect.

Figure 9.52 / Sunlight streams into the Asylum through narrow slits in the facade.

The Asylum is the only section of the programme to have a circular plan, as opposed to a linear plan. Throughout many major religions, the ever-lasting geometry of the circle is representative of the primordial Divine. This conscious geometric planning therefore accentuates the spirituality of the space, establishing the architecture as a domain of the sacred.

Figures 9.53 - 9.54 / Floor plans of the Asylum. The development of the plans were taken as a trace from the Drawing II - The Sacred as indicated to the right. The Asylum is the only section of the programme to have a circular plan, as opposed to a linear plan.
Figures 9.55 - 9.56 / An interplay of light and shadow amplifies the raw qualities of the internal materiality. The timber flooring structure is produced from the repeated tessellation of a drawing fragment, taken from ‘Drawing I - The Sacred.’ This fragment is shown to the right.
Figures 9.57 - 9.58 / The central structure of the ceiling is formed through the geometric tessellation of a curvilinear form; a central form taken from ‘Drawing II - The Sacred.’ Light streams through the ceiling, casting delicate shadows throughout the interior.
“If we don’t engage with this utopia, we will be lost. And we will deserve to be lost.”

Slavoj Žižek
Figure 9.59 / An architectural construct of Žižek’s utopia.
Global mass migration will become increasingly more common, an on-going, accumulative result of recurring natural disasters, climate change, economic crises and failed states. There needs to be a drastic response to confront and mitigate this continuously expanding problem. As iterated by key provocateur Slavoj Žižek in ‘Against the Double Blackmail,’ the construction of a utopia as a response to the global refugee crisis is highly radical and revolutionary. However if we do not engage with this utopia ‘we will deserve to be lost.’

This thesis fully engages with the architectural construction of Žižek’s utopia through the development of an innovative architectural infrastructure of education. As identified through the analysis of ‘Against the Double Blackmail,’ the implementation of educational programmes directly addresses both a cause and an effect of mass migration, reducing intolerance and increasing awareness over critical, significant global issues. By constructing an architecture of education, the design successfully facilitates a space of knowledge, awareness and understanding. In doing so, a tangible counteraction to widespread xenophobic perceptions and attitudes is provided, initiating the development of a utopian society of social acceptance.

The integration of sacred architecture throughout the design process manifests a tangible architecture of utopia. Reflective of the subliminal beauty and perfection of the Divine, sacred architecture represents heaven on earth. By consciously evoking principles of sacred architecture, the architectural design of the Institute of World Religions physically and spiritually expresses an architecture of utopia.
The architectural response to global migration is highly poetic, symbolic and idealistic. The aesthetic directly confronts the failed architecture of displacement, an architectural of vulnerability, lightness and temporality. External structures appear as large solid forms, monuments of permanence and security. Highly flexible and adaptable interior spaces engage with the constantly developing, evolving and advancing movements of global mass migration, allowing for maximum spatial manipulation.

Using architecture as a medium of utopian imaging is highly topical in today’s contemporary society. The highly visual qualities of architectural representation make it accessible to all, breaking down typical communication barriers of language and culture. For this reason, a design-led research process presented an ideal methodology to construct Žižek’s utopia, bringing awareness to the highly topical social, political and environmental issues associated with mass migration through a highly visionary and poetic work.


FIGURE LIST

All figures otherwise attributed are authors own


3.21 Conlon, James. “Church of St. Polyeuktos; View of the Site.” Photograph. http://library.artstor.org/library/ExternalIV.jsp?objectId=8j1DbS0pITwtMj08cFN7R3MmX-HopcV0%3D&fs=true


3.23 Google Maps. “Saraçhane Park.” Photograph. https://www.google.co.nz/maps?q=google+map+saraçhane+park&um=1&ie=UTF-8&sa=X&ved=0ahUKEwilx_fYpIjTAhXILm5QKHf41A28Q_AUICCgB


Google Maps. “Istanbul University.” Photograph. https://www.google.co.nz/maps/@41.013713,28.952962,3a,75y,259.65h,99.11t/data=!3m6!1e1!3m4!1sGJewGLHhqY5ANBkWrljEhg!2e0!7i13312!8i6656!6m1!1e1


4.29 Herzfeld, Ernst. “Elevation and horizontal section of muqarnes dome over entrance hall” 1943, Metropolitan Museum of Art, New York. Drawing

