RITES OF REMEMBRANCE

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Master Thesis explanatory document
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Rites of Remembrance

An architectural research project exploring the funerary requirements of modern day secular New Zealand society
Abstract

Technological advancements have increasingly led to the alienation of human emotion from physical experience. A prime example of such can be demonstrated upon analysis of the business of death and dying, an experience which evokes raw emotion in its most extreme form, thus providing the perfect platform for highlighting the effects of the gradual institutionalisation of what were once beautiful forms of mourning and ceremonies surrounding death.

Land shortage and the resulting increase in land value has pushed cemeteries in Auckland out of the city, meaning they no longer have a place in the urban context. Cemeteries thus are losing their integrity and becoming vast green spaces representing everything but the reality of death.

The growing land shortage in big cities around the world together with the rise of secularism particularly in New Zealand has resulted in the increasing popularity of cremation over burial. As such, the crematory process has evolved accordingly and technological advancements have brought with them such issues as the loss of ritual in the funeral process as well as the lack of finality associated with cremation ceremonies.

Through historical and theory research, analysis and application of precedent studies and analytical drawing, this project aims to bring people closer to the acknowledgment of death and to provide a healing environment for people of all cultural diversities with the process of grief. The research proposes a crematorium together with chapels, communal spaces and other ancillary facilities located in the Waipapa Valley of Parnell, re-engaging the urban environment and those city-dwellers with the transition from life to death.

The diverse nature of New Zealand’s population meant it was paramount that this project provided for a number of facilities and spaces that would appeal to a multitude of diversities. Accordingly, establishing common threads of importance to the bereaved and analysis of the funerary process across a diverse range of cultures and religions have influenced and thus been incorporated into the design.

This project delves into the notion of silence, with death being the most extreme form of silence and the journey towards the concept of eternal silence within being an important attainment in the grieving process for the bereaved. Exploration into healing silence transcends the idea of the passage between earth and sky, the momentary and the eternal and form links to the design of the site and crematorium in the Waipapa Valley.

Throughout the design process, various issues and problems of the site and concepts are addressed and further concepts developed accordingly. It is noted that the final outcomes of this design process are indicative in nature only of the final design, with scope for further architectural development in the final design.
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Introduction

Research Question

What are the requirements of funerary facilities in modern day Auckland, New Zealand, specifically in relation to crematoria?

Aims and Objectives

New Zealand is a nation of immigrants, being relatively new in terms of history. Accordingly, New Zealand and in particular Auckland where the majority of new immigrants settle for work opportunities, is a melting pot of cultures, with the definition of a unique identity specific to Auckland hard to define. The business of death and dying thus is also hard to define in terms of a standardised funerary process and the specific requirements of such. The aim of this project is to design funerary facilities that cater to the diverse cultural and religious views of those that call Auckland home while also addressing such issues that have arisen with the use of modern day crematory practices as the lack of finality associated with death and the loss of ritual.

Project Outline

This project will firstly outline common threads in the funerary process; emotional reactions, close human contact between the bereaved and the deceased, the singing of hymns and a necessity to make tributes to the deceased, various rituals following the day of burial or cremation as well as the social aspect of the funerary process in which family and friends wish to show their support for each other.

A historical analysis will then be conducted highlighting the transition of Christian burial in a churchyard to mass graves on the outskirts of society, then the rise of individualism and individual interments. The resulting land shortage in response to such and the need therefore for graveyards to again be pushed to the outskirts of society in order to cater to such space issues brought with it a removal of the concept of death from the urban context.

The rise of cremation in response to land shortages and the rising cost of burial plots is then explored in relation to various large cities around the world. This is then applied specifically to Auckland city.

However, the rise of cremation brought with it its own issues. Namely, the rising popularity of cremation in the Western world developed with a distinct lack of religious sentiment. Accordingly, the issue of the lack of ritual associated with cremation is explored in depth. Further to this, as technology has developed, crematoria have developed to a point where human contact with the deceased during the crematory process is significantly reduced, deemed to be an important aspect of the grieving process allowing the bereaved to reach acceptance. The issue of the lack of finality of death in the process of cremation is therefore explored.

Specifically, the secular nature of New Zealand society is addressed, bringing the aforementioned issues of lack of ritual and lack of finality home to their application to Auckland city.

Precedent studies are then carried out of Crematorium Haarlem in the Netherlands, Ashwinikumar Crematorium in India, Igualada Cemetery in Spain and Montecatini Alto cemetery in Italy.

The site analysis then begins with an analysis of the site location and boundaries, specifically a thorough analysis of Parnell’s history including the Auckland Domain and the Waipapa Stream. Access to the site in the Waipapa Valley together with the views, site conditions, surrounding buildings and analysis of the existing business on site is then conducted. An exploration of the potential conflict of the site development with the future planned development of a Parnell train station is also made. Further to this, the proposed reinstatement of the Waipapa Stream is also proposed in order to further enhance the proposed design and the character and atmosphere of such.

The design process sets out the functional requirements of a crematorium, chapel and ancillary facilities in the Waipapa Valley. Understanding of the funerary process is made by way of reference to the Purewa Cemetery and Crematorium located in Meadowbank.

The notion of silence, in particular healing silence and its connection with earth and sky and the momentary versus the eternal is also conducted. Links are drawn to the development of the design, requiring the incorporation of design aspects which acknowledge and nurture the attainment of eternal silence within.

Design exploration occurs in two phases. Concept one is developed with ideals of accent and descent acknowledged as its primary focus. Issues associated with Concept one are then addressed in Concept two, in particular, further addressing the loss of ritual and lack of finality, access to the site, connection to the Auckland Domain, lack of connection to the railway line and Waipapa Stream and the need for further exploration of secularism.
Figure 1: Collage of raw emotion across a variety of cultures
In every culture there is some form of ceremony surrounding death, grieving for the dead, and disposal of the body. There are thousands of variations, but the point is always to give the community of friends left alive the chance to reconcile themselves to the facts of death: the emptiness, the loss, their own transience.1

Death evokes such emotional reactions as feelings of emptiness, loss, desire for reconciliation and forgiveness, the need to give and receive love, and the reminder of one's own briefness in the world.2 These feelings are often present in the grieving process either when losing or having lost someone, or when one approaches death themselves.3 However, assuming universal threads is difficult as each individual is unique in their grieving process, death having a particular meaning for each individual.4

This meaning is going to be interpreted differently, depending on such as culture, religion, spirituality, upbringing, philosophical outlook and education.5 Accordingly, this will determine how people deal with each aspect of the funerary process such as particular foods or remedies, prayers and rituals, the presence of wider family and treatment around the remains of the deceased.6 These factors should therefore be considered in order to understand some of the common needs of the bereaved and also those facing death.

For many cultures the close human contact between the person dying and the relatives that care for them is extremely important in the moments before someone passes as well as when the body is prepared for burial or cremation.7 To support this notion, in the book Last Words, of the people interviewed there was a general consensus that by being physically involved with the burial process—digging the grave, lowering the coffin and filling it in afterwards, an immense physical satisfaction was gained.8

When someone dies, the first stage of the funerary process is the washing and preparation of the deceased body. In some cultures this is an important duty bestowed upon close family members or individuals.9 Accompanying the body from the time of death to the funeral is also very important for certain cultures.10

For example, during a Maori Tangihanga the coffin containing the deceased is taken to the family home or Marae for a number of days for people to come and pay their respects.11


2 Margot Schwass, Last Words: Approaches to Death in New Zealand’s Cultures and Faiths (Wellington, New Zealand: Bridget Williams Books Limited, 2005), 16.
4 ibid.
5 ibid.
6 ibid.
7 ibid.
8 ibid.
9 Last Words: Approaches to Death in New Zealand’s Cultures and Faiths, 14.
10 “Funeral Customs and Beliefs”.
11 ibid.

Figure: Funeral of New Zealand poet James K Baxter (known at the time as Hemi, the Maori version of his name), 1972. In order to defy the destructive effects of urban capitalism, Baxter opted for Maori communal values and his final wishes were for the community to be involved throughout his funerary process.
The preparation stage also includes embalming, which is used in approximately 99.9 percent of cases in New Zealand to preserve the body for several days. However, due to certain health and safety reasons most funeral companies do not allow people to be part of this process.

Special clothing for the deceased is also a significant part of the preparation stage for many cultures, and the colour or traditional dress worn at the funeral can be of importance for some cultures. For example, if a married Hindu woman dies, they may be dressed as brides in beautiful bright saris.

During the funeral ceremony, many cultures and faiths consider some of the most important parts to be the hymns and tributes to the deceased, with many using this opportunity to reflect on the life of the deceased. Nigel Barley says that during funeral ceremonies, most cultures have particular songs that are of importance to them. For example, in the Alaskan Tlingit culture a 5 line song is performed at every funeral which encourages the bereaved to remember not only the immediately deceased but also those deceased close to each individual’s heart:

“Whenever I hear the sound of [the] thunder [bird]
I become hurt.
This sound reminds me of my lost uncle and brother.
I am surprised when I hear thunder.
It sounds like relatives I lost.”

Food and water are often used by many cultures and faiths for symbolic purposes. For example, bread is used to represent or symbolise the Body of Christ and wine to represent or likewise symbolise the Blood of Christ in the Christian faith. Traditionally, in the last moments of a Christian’s life, a final wafer would be placed in the mouth as a symbol of repentance. In the Hindu culture, rice balls may be offered to the spirit of the deceased person during the memorial service, after the ceremony ghee may be thrown into the casket before the deceased is

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14 Ibid.
15 Schwass, “Funeral Customs and Beliefs”.
16 Last Worlds: Approaches to Death in New Zealand’s Cultures and Faiths, 101.
17 “Funeral Customs and Beliefs”.
19 Schwass, “Funeral Customs and Beliefs”.

Figure 3: Days of the Dead ceremony, Mexico
The aim for this project is to enrich the funerary experience with a secular crematorium. In order to achieve a secular design, one of the common threads that will influence the design is the social aspect of death for many cultures and faiths. The design must allow for various spaces where groups can gather and interact before, during, or after the funerary process. Also, the human connection to the deceased seems to be particularly important. Whether it is nursing the dying, washing the deceased body, staying with the casket for several days or the attendance at the disposal of the body, it seems to be helpful to get used to the idea of death and is important for the grieving process. There should be plenty of room for personal, expressive and flexible death rituals that can give new meanings to a fundamental human transition. Death should be celebrated at the right time and place and a crematorium should cater to that. This design should provide a physical context to deal with practical needs that also allow emotional fulfillment. Enriching each stage in the funerary ceremony should make the funeral more memorable, and therefore meaningful.

Whether the body is buried or cremated, most people have certain rituals following the funeral. A common ritual in New Zealand is placing a flower or petal on the casket after you leave the chapel, however some carry the ritual on for a certain number of days after the ceremony. In Chinese culture, after the body is interred, friends or family must not visit the body for 100 days as a sign of respect. The hundredth day signifies the end of the grieving process.

As demonstrated above, various religions have different requirements for the funerary process. However, this design project attempts to take a secular approach to the design of crematoria. By analyzing the ritual ceremony it is clear there are common threads about the emotional impact of death and dying on the living and the importance of the funerary process. Culture, religion, faith, beliefs and upbringing are the tools and strategies used to deal with the facts of life and death.

Anthropologists have often stressed a certain “psychic unity of mankind,” so postulating that whatever different beliefs people have, whatever different types of societies or environments they inhabit, they nonetheless share the same emotional and cognitive qualities.

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24 Schwass, “Funeral Customs and Beliefs”.
25 Ibid.
27 Ibid.
28 Schwass, “Funeral Customs and Beliefs”.
29 Ibid.
31 Ibid.
32 Peter Metcalf and Richard Huntington, Celebrations of Death the Anthropology of Mortuary Ritual (United Kingdom: The Press Syndicate of the University of Cambridge, 1991).
Figure 4&5: Ghats at Varanasi, India
During The Middle Ages death was stitched into the fabric of European society, noticeably by the location of graveyards near, or inside, local churches. Taylor and Lammerts explain the shift society has experienced in the relationship with the dead, “During the Middle Ages, the line separating life from death was not as sharp as it is today. The living and the dead mingled and regularly influenced each other.”

Due to the increases in population and the outbreak of disease, graveyards were pushed to the outskirts of towns and considered unsanitary places. During the Middle Ages, those who died for their faith in the Christian religion were worshipped. A martyr, not only in the Christian religion, was idealised, and often became the centre around which a church was built. Early Christian churches were built on gravesites of martyrs, as it was believed their bodily presence would sanctify the space of the church for the living and altars were built on top of the martyrs’ tombs. A belief in sanctification by association, created a desire to be buried as close to the holy centre as possible. Those with the highest spiritual ranking (martyrs/saint and clergy) were buried closest to the tomb. While the clergy and socially established citizens were interred in or near the church, the poor were buried in common, mass graves located on the outskirts of town. As cities grew, the mass graves of twelve to fifteen hundred corpses encircled the living. The proximity of these graves posed serious threats to public health.

The early modern era saw a rise in individualism in the nineteenth century. A major influence in this era was Martin Luther King (1929-68) who declared, “Salvation did not depend on public participation in the church universal but was the result of the individual’s private and personal relationship to God.” The shift towards individualism eventually altered the understanding of death and transformed the architecture of cemeteries and the design of graves. The Decree of 23 Prairial, Year XII issued in Paris in 1804 declared that bodies could not be “superimposed but must always be juxtaposed,” which put an end to mass graves, and saw the beginning of individual interments. The results saw a rapid expansion of cemeteries in the nineteenth century, and ultimately, space problems. The architecture also began to change, and the traditional churchyard began to mirror the gridded metropolis. This shift in thinking is part of the complex set of factors that led to a society driven by materialism and capitalism.

In response to space issues, graveyards therefore started to move to the outskirts of cities, which in turn resulted in a new set of problems. In A Pattern Language, Christopher Alexander explains that moving cemeteries to the outskirts of town has pushed the notion of death out of the lives of the living. Cemeteries however are a necessary part of our urban fabric as they are a place for the contemplation of death.

Death seems to no longer be part of the urban fabrics of our cities; “The churchyards used to be at the heart of the settlement, but the cemetery is now usually on a ring-road or by-pass, accessible only by car. Death has been torn out of the heart of the city and a significant part of the city has died as a result.”

Nowadays, most people living in modern suburbs are not comfortable living in such close proximity to a cemetery, but that is only because people are no longer used to it. In order to properly process grief however, it is important to bring the notion of death into the lives of the living and to dwell on the memorials of past loved ones. Therefore, the placement of such funerary spaces where people can contemplate death should be of utmost importance in the planning of cities.

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Edwin Heathcote, Monument Builders (Great Britain: Academy Editions, 1999), 6.

Alexander et al., A Pattern Language, 354.

Heathcote, Monument Builders, 73.
Figure 7: St. Peter's Churchyard
Land Shortage and Cremation

Cremation gained popularity throughout parts of Europe as the preferred way of death in the twentieth century. Issues, such as urban sprawl have caused severe land shortages and overcrowding in larger cities around the world. These have been pressing issues for some time and one of the main reasons for the rise in cremation rates to more than 70 percent in parts of Europe, Asia and Japan. As cemeteries reach full capacity, countries have been forced to come up with new solutions to address the issues of land shortage. While the issue of land shortage in the US is not as pressing, parts of the US have resorted to high-density, above ground options in the form of mausoleums to make room for more burials.

In China, with a population of 1.3 billion people, cremation has gained popularity as the preferred way to treat bodies, approaching the same level of popularity as the rest of the world. Statistics reveal that nearly 46 percent of Chinese deaths result in cremation, up from 15 percent in the mid-twentieth century. Chinese officials, under communist rule in 1940, decided that burial in a cemetery was a waste of space, harmful to the environment and too expensive, so banned traditional burial and made it mandatory for the deceased to be cremated. Despite this, some rural areas of China still bury their dead.

While the US owns and operates around 50,000 cemeteries, China, on the other hand, only has about 3,000 approaching full capacity. According to Want China News, within just six years the country will run out of spaces for burying people. As a result of limited plot spaces, prices are rising, where the average plot price is usually $15,000. The Chinese government has started providing incentives for those who choose to get cremated instead of buried. They have come up with alternatives to burials such as tree burials that require the body to be placed in a biodegradable casket and interred next to a tree, a floating cemetery on the South China Sea, and launching ashes into space.

In Japan where space is so scarce that cremation of the deceased is becoming the only viable option, this option is further made popular due to the large number of Buddhists who believe that cremation of the body purifies the soul before departing to the next life. In fact, land is so limited that there is also a shortage of urn storage space. So much so, methods for urn storage are now mechanized underground facilities where families use a smart card to retrieve remains.

While China has the largest population on earth, cemeteries in England are also expected to reach full capacity in the next twenty years, according to BBC reports. In parts of the US, e.g. New York, cremation has become a popular option due to affordability and lack of room for burials near the city.

Japanese funerals are the most costly of anywhere in the world. Japan has a population of 127.3 million people, with approximately 900,000 deaths per year. The number of cremations each year, approximately 99.4 percent, has been steadily increasing since 2009.

Land shortage for burials is most pressing in Asia, however particularly in Japan where space is so scarce that cremation of the deceased is becoming the only viable option. This option is further made popular due to the large number of Buddhists who believe that cremation of the body purifies the soul before departing to the next life. In fact, land is so limited that there is also a shortage of urn storage space. So much so, methods for urn storage are now mechanized underground facilities where families use a smart card to retrieve remains.


Ibid. 70.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.


Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.

Ibid.
Figure 8: Kyoto Cemetery, Japan
Figure 9: Looking at Auckland City from the Waipapa Valley of Parnell
New Zealand is one of the leading Western countries when it comes to the number of people choosing cremation as the way of death, with 72 percent of bodies being cremated in 2010\textsuperscript{65} and a continuous increase in such figures according to Auckland City Council. The large price discrepancies between burial and cremation due to rising land values have led to more and more New Zealanders choosing to cremate.\textsuperscript{66}

In Auckland, as the number of deaths continue to rise with the increasingly aging population, space is becoming more of an issue. Auckland Council currently owns 52 cemeteries and are purchasing new cemetery sites and developing current sites to cope with the demand. The Council determines that all three of Auckland’s three main regional cemeteries including Manukau Memorial Gardens, North Shore Memorial Park and Waikumete Cemetery will have sufficient capacity through to beyond 2022 based on planned expansions.\textsuperscript{67}

However, despite plans for increased space to allow for burials, the cost of a burial has become a deterrent, resulting in most opting for cremation. On average, a funeral in New Zealand costs around $8,000.\textsuperscript{68} Bob Russell, Manager of Davis Funerals, the largest funeral company in Auckland, said they had a cremation rate of 70 to 75 percent, citing cost as a major factor for those choosing cremation. At the Purewa Cemetery for example, cremation costs $529 compared with $6,934 for a plot and burial.\textsuperscript{69} The cost then of a burial is particularly out of step when you compare this to the maximum Work and Income grant of $1,971.37.\textsuperscript{70} Accordingly, cremation is fast becoming the only viable option for the average Kiwi family.


\textsuperscript{66} Aldridge, “Behind the Scenes at the Crematorium.”


Cremation and Objections

The Loss of Ritual Associated with Cremation and the Post-Modern Reaction

In the nineteenth century the shift of the Western world towards secular impulses resulted in a shift away from the churchyard as a burial ground to large municipal burial grounds. As these large burial grounds became overcrowded and new more modern ideals of hygiene became popular, revulsion over the insanitary conditions of foul-smelling, overcrowded burial sites developed and thus this was also in part responsible for the adoption of cremation as an efficient and hygienic method of disposal for bodies. It was the invention of modern crematoria in the late 1800s which influenced post-modern views of death in which rituals tended to become more standardized.

During the time of the plague epidemic (1347-1750), cremating the deceased became the best way to deal with the masses and also prevent further infection into the environment. Aside from this, the move of the Western world towards cremation as the preferred option began in the 1870s when it was invented as the best solution to urban crowding. At the Vienna Exposition in 1873, professors Brunetti, Polli and Gorini, and even companies such as Siemens unveiled the first modern cremation furnaces for hygienically disposing bodies. These cremators operate similar to the equipment used in New Zealand today.

While cremation has been a method used for the disposal of bodies since the Stone Age, burial has historically been preferred in many cultures and religions. In fact, for centuries the Catholic Church outlawed cremation however in 1963 softened its stance. In fact, in some circumstances, the Bishop can now even permit a funeral mass with cremated remains present, although the Church still cites burial as the preferred option. “For dust thou art, and unto dust shalt thou return,” (Genesis 3:19), was recast in the 17th century as “ashes to ashes, dust to dust,” and this, when interpreted in the most literal sense, could be taken to mean that cremated remains are in fact the intended final output of one’s human presence on earth.

Hindu traditions in India have always viewed cremation as a way of freeing the soul, which is then reincarnated to another form of life. These views also inspired British colonialists to encourage cremation. The romantic poet Maurice Maeterlinck was an influential force, glorifying the notion of cremation as a decent, spiritual end to life, “Purified by fire, the memory lives in the heights as a beautiful idea; and death is naught but an immortal birth cradled in flames.” Religion breeds ritual, however, in the Western world, where society has not developed based on such large scale Hindu ideals and where cremation has not traditionally been seen to be a Christian practice, cremation has thus developed as a process with significantly watered down rituals. It is ceremonies and rituals surrounding death which bring people into contact with the experience of mortality, which bring us closer to the acknowledgment of life and thus the transition to death. Martin Heidegger was an important influence on this concept of dwelling, having said, “it is the awareness of impending death which makes us truly alive,”. Accordingly, “If I take death into my life, acknowledge it, and face it squarely, I will free myself from the anxiety of death and the pettiness of life – and only then will I be free to become myself.” Without such rituals which thus allow one to work through the acknowledgement of death, such other issues arise as an inability to accept the finality of death.

Figure 11: The cremation of Patroclus (companion of Achilles) was one of the most well-known and documented examples of cremation in ancient times.

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71 Heathcote, Monument Builders, 35.
72 Ibid., 12.
74 Ibid., 79.
75 Ibid., 79.
78 Heathcote, Monument Builders, 35.
79 Heathcote, Monument Builders, 36.
81 Heathcote, Monument Builders, 32.
Figure 12: Spiritual leaders perform a Maya ritual inside the “Naj Tunich” (“Stone House” in Mayan language) caves in the municipality of Poptun, Petén, north of Guatemala City. Mayan people are highly ritualistic and have many traditions to commemorate the recently deceased and worship their ancestors.

Figure 13: The Ghats at Varanasi, India
The Lack of Finality Associated with Cremations

Rapid advancements in science and technology have influenced core values in the modern era and have had significant effects on today's views on death and the rituals surrounding it. Technological advancements have increasingly led to the detachment of genuine human thoughts and feelings from actual physical experience, as technology has replaced many of the jobs that were once carried out by humans. This is apparent in the gradual institutionalisation of the business of death and dying.

Modern technology has brought with it a fear of losing everything deemed human: bodily being, material reality, face-to-face contact, personal relations, genuine community, and real presence. Today's post-modern society is obsessed with youth and the desire for immortality. The world has become so reliant on a rational, technologically proven base of understanding and the belief that technology can better or fix any experience or situation that the ability to accept the finality of death has become a major concern in today's post-modern society.

At Purewa Cemetery and Crematorium in Auckland they have two cremators located underneath the chapel. During the service, the casket sits on a catafalque. It is completely up to the families whether the casket is then lowered or not. When it comes to the time of the committal, the casket is lowered 600-800mm, which allows the family to come over and place a flower or petal on the casket and then leave the chapel. Due to health and safety reasons, the casket is not lowered right down to the crematorium until everyone has left and the casket and then leave the chapel. The body is consumed over a couple of hours, and afterwards, the cremation process usually involves pulverizing the remaining bones. The ashes are scooped into an urn, or other container, and then scattered, buried, or placed in a columbarium—a wall or similar structure lined with urn-size niches. Some people request to be present at the final committal, however the conditions are not suitable for big groups of people due to space and hygiene reasons. At North Shore Memorial Park there is a viewing room from upstairs looking down at the cremator. Similarly at Manukau Memorial Gardens there is a viewing room next to the cremator room.

While the lowering of a coffin into a grave finalises a burial, there is not the same finality associated with cremation ceremonies. The final committal is hardly ever witnessed, and instead what goes on behind the scenes is hidden from mourners; the coffin is either left behind after a service or taken away in a hearse. There is a law that crematoria in New Zealand must comply with stating that there must be no visible smoke emissions or smells. When the coffin is left and then lowered, this physical disconnection can often create an emotional disconnection between the mourners and the deceased. Sometimes it is only through experiencing each stage of the process that we can then accept the finality of death and gain acceptance, “but when circumstances or customs prevent us from making contact with the experience of mortality, and living with it, we are left depressed, diminished, less alive.” Hilary Grainger states that to witness the charging of the coffin into the furnace would be the ultimate statement of finality, surely this is equivalent to throwing soil into a grave at a burial. According to Grainger, “mourners who were subjected to a more ritualistic form of mourning seemed to be able to adapt themselves more readily to life afterwards.”

Further to this, the New Zealand Government is also seeking to impose further restrictions on what exists of already diminished cremation rituals. According to Auckland Council, there are problems associated with the scattering of ashes in public places in Auckland. Auckland Council have proposed a bylaw that could come into affect as early as November 2014 that states people will need consent to scatter their loved ones ashes in popular areas in Auckland, such as the Parnell Rose Gardens. The problems apparently associated with the scattering of ashes are the large volume of ash left behind that becomes a problem to maintenance workers, as well as various issues of health and safety. However, there is no evidence there are health issues, as cremations occur at over 800 degrees Celsius and nothing can survive such temperatures. The emotional impact on grieving families this bylaw will generate should be of grave concern. Scattering of ashes is an important part of the grieving process for many as without the burial process, it is their only way of saying goodbye.

The bereaved thus are steadily becoming more and more like passive observers to the funerary process rather than being actively involved, making it difficult for the grieving to come to terms with the reality of losing a loved one. Developing a project which would allow the bereaved to be actively involved in the final closing stages of the cremation would help them to understand the process and then move on to the next stage of grieving.

References:

83 Taylor and Lammers, Grave Matters, 21.
84 Heathcote, Monument Builders, 6.
85 Aldridge, “Behind the Scenes at the Crematorium,” 2.
87 Schwass, Last Words: Approaches to Death in New Zealand’s Cultures and Faiths, 14.
88 Alexander et al., A Pattern Language, 354.
Figure 14: A mother cries over the loss of her husband and son when her city Aleppo, Syria, was hit by Syrian Army missiles in the Feb. 23, 2013 tragedy.
Diversity in New Zealand

The Secular Approach

New Zealand is more or less known as an ‘immigrant nation,’ with the 2013 Census Statistics revealing that Europeans make up 74 percent of the population, Maori 14.9 percent, Asian 11.8 percent, Middle Eastern, Latin American and African 1.2 percent, and Other 1.7 percent. While the percentage of Maori in New Zealand has stayed consistent since 2001, the Asian ethnic percentage has almost doubled since then and this, coupled with the increase in other such ethnic groups who do not generally adhere to Christianity or Christian death rituals has resulted in a rise in other death practices, namely cremation as opposed to Christian burial in New Zealand.

According to Australian National University’s Professor Pat Jallard, the decline in religion and rise in secularism has been a trend throughout Australia since the start of the 20th century. This has also been the case in New Zealand, as the most recent 2013 Census Statistics reveal, 41.9 percent of New Zealanders define themselves as having ‘no religion’ (up from 29.6 percent in 2001), making it the country’s largest ‘religious affiliation.’ Of all the major ethnic groups, those of Maori and European origin were most likely to deny having a religion. Also, of those that were classified as belonging to at least one of the European ethnic groups, 46.9 percent indicated they had no religion.

The predominately secular views of New Zealanders have driven the development of crematoria as purpose-built facilities lacking any sort of attachment to Christian death rituals. Crematoria are non denominational, as they do not associate with any main religious group or culture. Accordingly a link can be drawn between this and over 70 percent of families in New Zealand choosing cremation as the most preferred way of death.

While crematoria are secular, they have institutionalized the business of death and dying, reducing the need for human interaction during the final stages of the funerary process. Science and technology drive the process of cremation. According to celebrant Mary Hancock from the Funeral Directors Association of New Zealand, one of the reasons people migrated to New Zealand was to create a new society, moving away from institutionalized religion and traditional language. However, a side effect of such has been a weakening of the bond between the bereaved and the deceased. The human connection between the bereaved and deceased is important regardless of culture and faith and accordingly, this is an issue the design process seeks to address.
Figure 15: The grieving process transcends all cultures
Precedent Studies

Ritual Process/Journey

Crematorium Haarlem, DOK Architecten
Haarlem, the Netherlands, 2002

Haarlem Crematorium is located in the Noorder Cemetery, west of Amsterdam. The building redefines the Dutch funerary process and embraces spiritual diversity by softening the approach to how the Dutch say goodbye to their loved ones. The main idea behind the design was to solve the problem in modern crematoria of the lack of space to gather, eulogize and share a meal. One of the main issues with existing crematoria is that the family cannot be present throughout the entire process of cremation; they must leave before the coffin is taken to the crematorium, usually by disappearing into the floor via hydraulics. “I say let's make a building where you can understand what happens when you're cremating someone,” says Herman Zeinstra, one of the main architects.

The design is focused around ritual and procession, but also individual freedom. The different stages of the cremation procession are located in different buildings, arranged around an inner courtyard. The route between each building is significant because it acts as a space of relief, allowing time and distance between each stage, which can be taken at any desired pace. The landscaped courtyard also provides positive spatial experiences as you are proceeding to each stage.

According to Zeinstra, a ceremony that shelters the bereaved from the external influences, like most existing Dutch crematoria where the farewell happens in the interior of the building, does not provide comfort for the bereaved, and does not give mourners anything to hold onto.

The lack of finality associated with the cremation ceremony is another issue Zeinstra wished to address in the Harlem Crematorium, in which the design would explicitly acknowledge the final committal, rather than implicitly. The act of cremation is hardly ever witnessed, and this physical separation causes an emotional separation from the finality of death. By witnessing the charging of the coffin, Zeinstra thought this would be the most certain way of confronting finality. Therefore, the design gives family and friends the option to accompany the casket to the crematorium after the ceremony. The journey throughout the design is not forced, and gives the feeling of a natural, logical journey, yet not restricted to one route.

103 Sokol, “Making an Exit,” 83.
104 Ibid.
105 Ibid.
The Ashwinikumar Ghat (crematorium) is located on the banks of the river Tapi in Surat. While respecting the strong religious beliefs, Ashwinikumar attempts to “eloquently navigate the changing role of religion in modern society.”

While the building follows the traditional Hindu rituals, it is a modern take on the cremation ceremony. Secular by nature, the building is open to all, regardless of religious beliefs.

The building integrates nature and uses natural elements, such as light and water, to remind you of the infinite and unknown. The courtyard that the building wraps itself around relieves the bereaved between the various stages of the cremation ceremony, allowing moments to take a break and be reminded of nature and the sublime. Around the periphery of the courtyard there are pockets of built in seating spaces, allowing mourners the solitude if they so desire, or social gatherings over shared meals, etc.

Entrance to the building is via a narrow slit opening, revealing nothing of its internal nature. A large tree stands near the entry, puncturing through the ceiling above, again using the presence of nature to symbolise life.

Hindus believe that once cremated, your soul is then liberated and reincarnated. The meditation plane plays on this suspension between the known and the unknown. In a traditional Hindu ceremony, the body would be taken to the funeral pyre via a wooden frame, specially made by the closest male relatives. Instead, the body is brought in by ambulance. Relatives then accompany the corpse to the body-washing platform, where the deceased is cleansed before cremation. From there, there are five gas furnace chambers partly shielded by curved walls for privacy, with only a slit of light that falls across the back of the wall—a reminder of the passing of time and continuation of life. The view from the furnace chambers looks out to the Tapi river, a reminder of life beyond the physical and the continuation of life. The deceased is then placed on a raised platform next to the furnace, where further rituals are performed if desired. The deceased is then placed on a trolley and enters into the furnace. Once the soul has left the ashes, they can be collected and taken down to the riverside via a ramp, just like the Ghats of Varanasi. Afterwards, friends and families bathe in the river—a cleansing ritual marking the end of the first stage of grief. It is also believed that the ashes make the river holy, so bathing in the river could bring you good luck.
Igualada Cemetery, Enric Miralles
Barcelona, Catalonia, Spain, 1994

Embedded between the Riera d’Odena valley in the industrial outskirts of Spain, Enric Miralles’ Igualada Cemetery contrasts its surroundings with qualities of serenity and tranquility.

The processional pathway through the site is less about axial planning and more about fluidity and freedom like that of the natural landscape. The responsiveness to landscape makes the project feel as though it is emerging from the site, which is largely due to the careful material articulation that combines the use of Cor-Ten steel, local stone, and weathered railroad sleepers, tying seamlessly into its rugged surroundings. The densely planted trees provide shade and enrich the design by reminding the bereaved of life and renewal.

The journey through the site encourages a slow progression through spaces, allowing mourners the freedom to move as they wish, at the pace they so desire. The gentle moments of ascent and descent encourage this slow progression, relating to ideas about time and memory.
Montecatini Alto cemetery, Leonardo Savioli
1967-1975

Embedded into its environment, the building only reveals its entirety as it unfolds down the rolling Italian countryside.

Street access to the site descends down a long driveway; the skewed street access only revealing pockets of the roof form. The winding driveway and low gradient create a slow journey towards the entrance to the building. The low roof entry to the site engages on a human level, then gradually opens up through the core of the building, creating varying heights of spaces. The continuous roofline and placement of skylights create a clean, swooping line to the edge of the roof, which then folds upward, disappearing to the sky.

The main building has no external walls, only internal partitions. This allows the external atmosphere i.e. the landscape, to penetrate the building, as well as vast amounts of natural light.

Circulation occurs on a multitude of levels, each ramping into the latter. The sloping ramps solve practical issues of wheelchair access, and also fuse the ground plane together, creating a smooth continuous surface, as if carved from the original landscape.

Concrete cast in-situ walls reveal soft details of its character as the natural light embraces the surface. The colour and natural state of the concrete is indicative of its age.

Careful attention has been given to the way in which different people use the various spaces. Areas have been designed to cater for different people visiting the cemetery, such as waiting, praying, and socializing spaces, which have been embedded into the form.

Relationship Between Earth and Sky

Figure: Sketch of processional route to the entrance
Site Analysis

Site Location and Boundaries

The site is located in the Waipapa Valley of Parnell, Auckland. To the East of the site is Parnell, Auckland Domain to the west, Carlton Gore and the Port of Auckland to the north, and Newmarket to the south. The main railway line defines the western boundary and runs adjacent to the site. Remnants of the Waipapa Stream can be seen at the southern end where the Ngahere Terrace steps terminate.
Early Parnell:

Parnell is Auckland’s oldest suburb, bound between the Waitemata Harbour and Auckland’s Domain. Parnell used to be confined by the original shoreline (which terminated at the bottom of Stanley Street), where a number of Maori Pa sites were located. The area of Parnell now stretches approximately 500 acres, originally purchased by Governor Hobson. Of those, 3-5 acres were sub-divided into 36 allotments, making up what is now Parnell Village.

Bishop Selwyn believed Parnell should be the focus of the Church of England, and so in 1842 he founded the Holy Trinity Cathedral. His vision was for the cathedral to become the centre for educational, social, charitable and missionary work. He also established other iconic places in the area such as a deanery, St Barnabas Church, St Stephen’s School, the Church Grammar School, St Stephen’s Chapel, the first St Mary’s church, the Cathedral library, Bell Tower and Bishopscourt in St Stephens Avenue.

The majority of early settlers to Parnell were mechanics and tradesmen that set up industry businesses in Mechanics bay, hence the name. Namely timber was milled, iron cast, and bricks and rope made. It was the industrial area for transport materials: forges, tram and carriage assembling, boat building, and the stabling of horses. Other notable facilities for Maori were established at Mechanics Bay such as commerce and trading links which were of key importance to the survival of early Auckland (1840s-50s). Supposedly there was no place for visiting Maori to stay or trade, and it was thought they were roughing it beneath waka sails and canvas. These facilities included a Maori hostelry (where Maori from out of town could stay when they came to visit) as well as a canoe reserve and markets that managed to survive up until the 1960s, which were then later demolished.

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112 Wild, “History: A Brief History of Parnell”.
115 Ibid
116 Wild, “History: A Brief History of Parnell”.
Transport History:

In the early 1850s a bridge crossed the inlet to Mechanics Bay (where Parnell Rise begins). This formed the main highway through Parnell and Newmarket to farming settlements in Epsom, Onehunga and the South. In the 1870s a railway system was put in place that saw the erection of the overhead bridge at the foot of Parnell Rise. This extended through the railway tunnel that was holed through Parnell Hill in 1872. This railway was the first public railway line in New Zealand, linking Britomart to Drury. The dual track tunnel was built approximately fifty years later. In the early 1900s, tram cars ran up Parnell Road.

Reclamation:

As people flocked to Auckland for work the demand for more land and housing rapidly increased. In 1879 Mechanics Bay and St Georges Bay disappeared and were reclaimed for industry, railway and port development for Auckland’s waterfront. The area from Customs Street to Queen Street was then formed, enabling the railway to continue through to Queen Street.

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117 Ibid.
119 Bonny and Irving, Early Parnell, 78.
120 Ibid., 78.
121 Wild, “History: A Brief History of Parnell.”
122 Bonny and Irving, Early Parnell, 78.
Auckland Domain:

Stretching 75 hectares, The Auckland Domain is the oldest park in Auckland. Approximately one hundred thousand years ago the Domain was the scene of volcanic activity. Puukekawa, meaning “hill of bitter memories” was the Maori name given to the Domain Volcano in memory to the lives lost in ancient tribal wars. The crater of the volcano was initially a lake, which filled with alluvium and plant remains over thousands of years, turning into swamp, which was later drained and filled in for playing fields. Before it was filled in however, the Crater Lake operated as a fresh water supply called The Domain Spring, which became Auckland’s main water supply in 1866.

The crater of the volcano was considered, by early Maori as one of the best locations for a Maori pa site, as the flat swampy crater provided eels and plenty of water, and the site orientation good for growing kumara.

In 1843 the Pukekawa land was bought from Ngati Whatua by Europeans and named a public reserve by Governor FitzRoy. Today, the Domain is home to many tourist attractions such as the Auckland War Memorial Museum, Winter Gardens, sports fields and music events.

Waipapa Stream:

In the early Maori period the Waipapa Stream served as a moat protecting those at the Pa site on the north to eastern sides of the Pukekawa during the Ngati Whatua invasion of the Ngati Paoa circa 1760. The stream was also a valuable source for food and water during the tribal wars. The stream used to flow into Mechanics Bay, the main arrival place for Maori entering Auckland. At the time, the surrounding area was largely wetland area and estuary that serviced fresh water to the immigrants that migrated there.

In 1840 the Waipapa Stream was selected by Governor Hobson and Ngati Whatua to define the boundaries between Parnell and the Domain. The Waipapa was valued for its pure water, hence many baptisms were performed. It also inspired the founding of the first brewery in Auckland in 1852, which later became Lion Nathan Breweries.

 fourmills were established on the Waipapa. The first ropewalk was established on the Waipapa, using the flow of the stream for the manufacture of cordage. At Mechanics Bay, the depth of the stream meant it was suitable for the launch over 80 ships. In 1865, however, these long established businesses had to relocate from the banks of the Waipapa to other notable areas in Auckland due to the reclamation at Mechanics Bay, which saw the dissolution of the majority of the stream bed.

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By 1860 the Waipapa Stream was the only surviving stream of the five major streams that defined the central Auckland boundary. Initially, access to the Domain was by a footbridge over the Waipapa Stream near Birdwood Crescent, but it was demolished in 1864. The second main entrance was via the Ngahere Terrace Steps, where a second bridge was built over the Waipapa Stream and the first railway line, however was removed when the second railway line was installed in 1914.

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Access to Site

The site has vehicle access at 23 Cheshire Street, Parnell. Alternatively, there is pedestrian access from Parnell via the Ngahere Terrace steps off Gibraltar Crescent. These steps will take you to the southern end of the site, passing over the remnants of the Waipapa Stream, and through the tunnel under the railway to the Domain. Accordingly, you can access the site from the Domain.

Views

The views north looks towards Auckland city, including Auckland’s skytower in the distance. In contrast, the western boundary backs onto the Domain lined with native bush and trees. The eastern boundary, however, is rather crude in comparison. This boundary consists of a number of four to five storied concrete apartment and office buildings. The somewhat plain facades lack visual appeal compared to the typically intricate colonial style buildings and houses in Parnell. The view facing south looks towards the Ngahere Terrace steps and path connecting to the Domain, and further into the distance a mix of old and new residential houses/housing blocks.

Site Conditions

The highest point on the site is at the entrance from Cheshire Street. The site slopes down approximately 5 meters, after which the gradient then lessens and flattens out in the valley. The railway is elevated about 1-1.5meters above the site, with the elevation increasing as the site heads south until it reaches a pedestrian tunnel. Once under the railway, the site then inclines back up towards the Domain. The Waipapa Stream is a low gradient valley, with steep slopes to its catchment.

The geology is a similar nature to other lowland areas in the Auckland CBD and around the Waitemata region, with underlying weathered greywacke and sandstone with alluvial deposits.136

136 Ibid.
Photographs exploring the pedestrian route from Ngahere Terrace steps through to the Domain.
View looking south towards the Parnell railway tunnel
Surrounding Buildings

Lower Parnell to the end of Cheshire Street is majority office buildings, a maximum of approximately four to five stories high. From Gilbraltar Crescent (which begins at the south end) to upper Parnell there are mainly residential houses ranging from traditional colonial style to modern. Directly adjacent on the eastern boundary is medium density housing coupled with three multi-storied dwellings. Also adjacent is a three to four storied office block with carpark, and a separate carparking building with a tennis court located on the roof.

Existing Buildings

Mainline Steam is an organisation that restores and operates historic steam locomotives. They provide tours throughout New Zealand so tourists can experience historic New Zealand while experiencing the countryside. Their principal depot currently sits in the centre of the Waipapa Valley, between Parnell Road and Auckland Domain. The buildings are steel structures that measure 100m long by 12m high, and store up to twelve steam trains. The buildings were originally owned and built by New Zealand Railways in 1954 as a workshop to provide diesel to the trains. These buildings were then leased out by Mainline Steam in 1989. Now, the railway sheds are utilized for light industrial work.

New Zealand sculptor David McCraken occupies a section at the southern end of the existing building. His work, influenced by his strong welding background, incorporates materials such as corten steel, aluminum, stainless steel, and bronze.

Future Plans and Likely Conflicts of Interest

Waitemata Local Board members have been working on the restoration of the Waipapa Stream by planting trees, shrubs and grass along the stream bank and removing rubbish and pests. Auckland Council have identified that Waipapa Valley’s tourism potential should be exploited, and accordingly, approved an extension to the Mainline Steam site that will involve the construction of a Parnell train station. Auckland Transport is currently working on plans to develop a new train station in the Waipapa Valley, between Parnell Road and Auckland Domain just north of the existing Mainline Steam structures. The Parnell Station has been proposed for a number of years and is listed as highly desirable in the Regional Public Transport Plan for 2013. The aim of the project is to improve the public transport connections to the city fringe. The brief is for there to be two station platforms linked by a pedestrian route integrating the old Newmarket station building into the design, as well as restoration of the Mainline Steam buildings, a new café, conference and venue spaces, artist quarters, and landscaping and planting to visually enhance the area. Plans expect the station to be under construction by 2015 and opened and operating by 2016.

This project proposes the relocation of the current mainline steam structure to a location of more heritage significance e.g. the original Auckland train station. For the purpose of this project the future proposal by Auckland Transport will be disregarded, although the significance of the railway will be of significant importance to the project and will influence the final design outcome.
Reinstating the Waipapa

The remnants of the Waipapa Stream can be seen to the south of the site where stormwater catchments then drain the water to Carlaw Park. For years, the best way to manage stormwater has been by using engineered infrastructure. This has resulted in many waterways becoming contaminated, piped, and the historical landscape altered, as per Waipapa Stream. However, designers and managers are now recognizing the value of reestablishing historical waterways, “providing for community well-being, including aesthetics, recreation, habitat, stormwater treatment (polishing), and flood management.”

The restoration of closed or channelized historical stream systems is referred to as ‘daylighting,’ which is the practice of bringing buried streams to the surface in an effort to restore their natural systems and processes. This is an initiative that Auckland Council has suggested will occur in the near future for Waipapa Stream.

Reintroducing the stream will not only have positive environmental impacts, but will also have symbolic significance to many cultures and faiths. Water symbolizes life and renewal. The metaphor of the passing of water is symbolic to the passing of a life, and a reminder of our inherent briefness on earth. The stream could become part of the cremation ritual process, for example, instead of placing a petal on the coffin as it leaves the hearse (common in New Zealand funeral ceremonies), you could float a flower or other significant gesture down the stream. This is a scenario that connects back to the lack of finality associated with cremation.

Character and Atmosphere

Despite the proximity to the CBD, the atmosphere is quiet and serene. The passing of a train every fifteen minutes pierces through such calm. The sheer noise as the train passes through the site makes the silence after the noise more apparent and makes one truly appreciative of the tranquility of the space in each train’s aftermath. Cocooned in the Waipapa Valley, you are separated from the busy streets of Parnell. Upon first discovering this site, its magnetism was immediately apparent with such quiet spaces such a rarity so near to the CBD. The heavy greenery that surrounds the perimeter of the western and southern boundaries emulates this feeling of serenity, as the sound of birds chirping and leaves rustling is a reminder of the existence of life on earth, and the beauty and spontaneity of it.

145 Ibid.
Wider Context

Zoning and Landmark Buildings
- Green = Commercial
- Red = Residential
- Purple = Historic

Traffic Flow
- Pink = State Highway 16
- Red = Arterial
- Orange = Side Streets
- Yellow = Back Streets

Pedestrian Flow
- Pink = High
- Orange = Medium
- Yellow = Low

Walking Chart
- Pink = 10 minutes
- Purple = 5 minutes
- Yellow = 2 minutes
Design Process

What Design Methodologies should be used to generate secular crematoria in the Auckland City Fringe?

Before the design process can be generated, it is fundamental to acknowledge the main drivers for this project. These ideas derive from the first section of this document where a number of issues surrounding the funerary process and crematoria in New Zealand have been addressed:

- Current land shortage and lack of space for burials
- The loss of ritual associated with cremation
- Lack of finality in cremation ceremonies
- Diversity in New Zealand

The site analysis indicates the site is not utilised to its optimum potential. Proposing the restoration of the historical Waipapa Stream has environmental and historical significance, but also evokes a sort of psychological serenity with the symbolic reference of water. The design should also acknowledge the railway, with such being of particular historical significance to early Auckland and also connecting back to ideas of transience and a reminder of our briefness in life. While responding to site conditions and retaining connections to the Domain, the design outcome should also address all of these ideas.

Functional Requirements

- Carpark
- Public Entry
- Hearse Entry
- Admin Office/Reception
- Managers Office/Meeting Room
- Staff Room
- Coffin Lounge
- Chapel 20 Seats
- Chapel 50 Seats
- Chapel 100 Seats
- Chapel 300 Seats
- Prayer/Reflection Room
- Toilets/Changing Rooms
- Crematorium:
  - Covered Car/Hearse Entrance
  - Hall for receiving coffins
  - Cold Storage Room
  - Services: Coolers, Accumulators
  - Control Room
  - Furnace Room
  - Sorting Room/Grinder Room
  - Inurnment Room
- Kitchen/Lounge Area
- Memorial/Ash Wall
Understanding the Funerary Process

In order to make judgments about the funerary process, an analysis was carried out at Purewa Cemetery and Crematorium located in Meadowbank. The following is the sequential analysis of the funerary process:

**Entry to cemetery buildings:**

While parking is located in close proximity to the rest of the buildings, the street entrance off St Johns Road is through a park-like driveway surrounded by greenery. The change in atmosphere softens the shift between the busy main road and the entrance to the cemetery, and the distance allows a slow transition. Inside Purewa grounds, parking is located opposite the main chapel. The grounds are sloped to allow easy wheelchair access. There is also parking outside the admin offices, two parking bays at the back of the main chapel and off street parking available.

Hearse arrival and departure is separate to the rest of the public. The hearse enters through the main entrance, bypassing the admin office. The hearse circulates around a cul-de-sac, where it parks to offload the casket upon arrival.

**Issues:**

Parking too close to entrance to chapel, doesn't allow mourners the same distance that the main entrance does.

Figure 36: Processional journey starts from St John Road

Figure 37: Route shown from main road. Red = public access, yellow = hearse
Chapel Service:

During this period of time close family and friends perform hymns and tributes to reflect upon the lives of the deceased. At Purewa they have two chapels, the smaller chapel seats 56, and the larger chapel seats 208. Afterwards, if the body is getting interred it will be carried out of the chapel and into the hearse. Here, final rituals may be performed before the body is taken to a burial plot in the cemetery grounds or to an alternate location. If the body is being cremated, it might sit on the catafalque during the service. At the end of the service the family may choose to partially lower the catafalque, allowing mourners to come forward and pay their last respects. Then once everyone has left the chapel, it lowers further down into the crematorium.

Issues:

Chapel doesn't allow people to peer over the catafalque and view the casket descending to the crematorium.
Crematorium:

Some families may choose to witness the final committal, as some traditions require final rituals at the time of committal. If they wish, they may enter the crematorium, in which you make your way around the back of the chapel. The crematorium is located underneath the chapel. The final committal is then performed and the ashes held onto by the funeral director until the bereaved are ready for the next step.

Issues:

Purewa crematoria is very industrial with no view to the outside and the design isn't inviting.
Lounge:

The lounge area offers a place where mourners can gather after a service. It is a time when those closest to the deceased can comfort each other after the funeral and offer their condolences, often over tea, coffee and refreshments. The path from the chapel to the lounge descends down past the hearse arrival and across the road. Often when mourners exit the chapel after a service they are very emotional, thus, the physical separation between the chapel and lounge, coupled with the fresh air, can have positive psychological effects on mourners.

Memorial Gardens:

Recently Purewa designed a Walk of Memories, where memorial plaques or plots for ash interments can be placed through the landscaped gardens. The memorial gardens allow families the opportunity to visit loved ones and reflect on positive moments in times of grief.
From here, a further exploration into the grieving process and the idea of silence and stillness was carried out. Death is the most extreme form of silence, for both the person that has died as well as those in grief, i.e. the idea that death is final and in order to come to grips with death of a loved one, one must go to a place far beyond where they would ever normally go to seek emotional peace, to a place of silence in their hearts.

Admin Office/Reception Area:

The admin offices and reception area are in a separate building altogether, located just off the main entrance on Parsons Road. There is also a separate parking bay here for staff. Here, funeral directors work with bereaved families on the planning of the funeral service.
Healing Silence

As Christopher Day explains, healing is an individual process that can only take place from within, however this process can be triggered and supported by things outside of a person, be they such as actions, forces or certain situations. Day determines that silence is the greatest of these healing forces.\(^\text{146}\) However, to define the meaning of silence is difficult, as it varies from person to person, just as grief itself is not a standardised process. To quote from Christopher Day, “gentle, unobtrusive, calming, life-supporting, holy sounds allow us to be quiet within: eternal sounds, like the breath of air, the quiet endlessness of water, sounds of the ephemeral moment, can be calming.”\(^\text{147}\) This design should therefore seek to embrace such eternal sounds so as to aid the process of healing, of reaching a place of silence within necessary for helping the bereaved through the grieving process and to come to terms with the finality of death.


\(^{147}\) Ibid.
The relationship between earth and sky became an important overlapping idea in the design process. The Maori story of creation is a well-told legend about the relationship between Ranginui ‘sky father’ and Papatuanuku ‘earth mother,’ who wished to be together forever, however their child, Tane Mahuta ‘god of the forest’ longed to be free from the darkness. Tane Mahuta tore his parents apart in his efforts to be free from the darkness by digging his shoulders deep into Papatuanuku and forcing Ranginui to the heavens, flooding the world with bright light. This story is significant as it expresses the tension between these two axes. In order for a person to come to terms with the passage between life and death, thus from earth to sky, they must reach the notion of silence within themselves. However, just as Tane Mahuta struggled with this concept, so too do humans and thus a design which aids the grieving process will ultimately bridge the gap between the living and the dead.

Furthering this idea, a link can also be drawn between the idea of earth and sky with the eternal and the momentary. The sky is a place of eternal silence, the earth a place of momentary habitation. Ultimately a person must make the passage between the momentary and the eternal and it is important for the design to in some way acknowledge this transition so as to act as a trigger for the bereaved to reach a place of acceptance. The location of the site in reference to the train tracks cannot be ignored, and in fact, should be encompassed as an intricate part of the entire design process. The train is a reminder of our presence in the world, our life, if not brief, and our exit to another destination. It also represents people coming and going, and life always being part of a journey. Giorgio de Chirico (1888-1978), an Italian surrealist painter, constantly painted trains into his artwork. To him, they were an almost magical means of being removed rapidly from everyday reality to strange and exotic places. Thus, references to the train tracks in this design also reference this idea of the passage between the momentary and the eternal.


Design Exploration 1

Application to site:

Designing the Floor Plan:
The overlapping ideas were then used to design the floor plan for the first concept.
The floor plan identifies the important thresholds that were then explored further as the design developed.
Key:
1. Process of arrival
2. Hearse arrival/Courtyard
3. Car park
4. Chapel
5. Crematorium
6. Memorial Walk

Massing Option 1

Process of arrival:
The driveway uses the existing access to the site, descending straight down from Cheshire Street, creating a slow progression to the cemetery buildings, allowing mourners time to mentally prepare to say goodbye to loved ones.

Hearse arrival/Courtyard:
Hearse arrival and courtyard space is combined, allowing mourners to become involved in the early stages of the funerary process.

Carpark:
Located hard against the boundary, leaving the rest of the site available for buildings.

Chapel:
The location exposes the chapel to the view of the Domain and railway line. Subtle movements in the leaves of trees nearby contrasts with fast moving trains and connects back to the idea of the eternal versus momentary.

Crematorium:
Sequentially, cremation is part of the final stages of the funerary process, hence the location. From the crematorium, views to the tunnel underneath the railway suggest a walk through the Domain if desired. This could relieve some of the emotion brought on by the funerary experience.

Memorial Walk:
This is located at the highest point on the site, looking down into the valley, and connects back to the idea of earth and sky. The access is via Ngahere Terrace steps and allows visitors to access loved ones memorial plaques without having to disturb mourners gathered at the main entrance, as it could become congested if there is a large service.

Issues:
Location of the crematorium makes vehicle access difficult and awkward. The car park could be located near the entrance of the site so it remains less connected to the overall scheme and limits the number of vehicles on site.
Massing Option 2

Process of arrival/Carpark:
The car park, located hard up against the northern boundary, is less imposing on the rest of the site. The proximity to the entrance makes it clear to visitors about where to park, and prevents cars from interfering with hearse vehicles. This area is the least desirable of the site as it is surrounded by four storied office spaces and backyard to three single dwellings.

Hearse arrival/Courtyard:
The hearse descends past the car park to the yellow mass. This area is dedicated for hearse arrival, but also a courtyard/waiting area for visitors before services commence. The casket is then carried to the chapel. In many cultures being asked to carry the coffin is an honor. This also connects back to the idea of human involvement in the funerary process, said to have positive effects on mourners. After the service, the hearse then heads back up the hill the same way it entered.

Chapel:
The purpose of physically separating the chapel from the hearse arrival and crematorium was to extend the journey between each threshold. The idea was that exposing mourners to moments of serenity between each part of the funerary process would have positive psychological effects, and make the funeral more memorable.

Crematorium:
Bridging the journey to the crematorium exposes the funeral process across the railway. This placement engages passers-by through the Domain and train goers with the constant reminder of death. This is something which as previously referenced, is lacking in urban areas in the city.

Memorial Walk:
The degree on which the memorial walk is angled on engages passers-by entering the site from the Domain, forming a closed loop. The sense of journey is thus enhanced.

Issues:
Location of the crematorium makes vehicle access to services almost impossible.

Precedent analysis highlights the importance of the chapel and crematorium in close proximity due to practical issues such as transporting the casket. This proposed separation would affect the funerary process.
Massing Option 3

Hearse arrival/Courtyard:
The hearse arrival is now separate from the chapel courtyard space. Separating the two emphasizes that each area is separate and of its own importance in the funerary process.

Chapel: Locating the chapel over the railway exposes the funeral service, using the idea that a funeral is a public event rather than hiding it. The transient passing of the train is a constant reminder of the briefness of life.

Crematorium: The proximity of the chapel to the crematorium serves a practical function, thus for each of transportation of the casket after a service.

Lounge: The lounge (number 7) is commonly the most social aspect of the funerary process. After the funeral, mourners can take a walk through the domain, then, when they are ready, catch up with family and friends, offer condolences and comfort one another over refreshments.

Issues: Location of the chapel could be troublesome with rail noise. The separation between the crematorium and lounge feels too disconnected and could be confusing to mourners.
Development of Option 1
Option 1 was then developed further.

Process of Arrival:

Figure: Exploring in plan thresholds of arrival
A recurring theme with the process of arrival is the notion of descent, in which the natural fall of the site lends itself. Manipulation of the path was necessary in order to elongate the journey and slow down the pace. Descending also links to traditional burial rituals, where the casket is lowered into the ground in the final moments of the service. A slow descent following the natural contours also links to the idea of rootedness in the earth, connecting back to ideas of earth and sky and maintaining the tension between the two elements.

**Process of Arrival to the Chapel (Hearse arrival and courtyard):**

Further exploring the notion of descending, the section drawings explore gradient level changes, which change the pace of the journey. By leveling out flat at the chapel entrance, this allows mourners a space to gather before or after the service.

Alvar Aalto is known for using this technique, for example, in church centres in Riola, Italy.

![Figure 52: Church centre in Riola, Italy, Alvar Aalto](image)
Figure 53: Exploring through plan and section the process of arrival to the chapel
Chapel Space:

Developing the Floor Plan:

A study in plan of the proposed chapel space explores circulation, axis and seating arrangements. Circulation through the chapel is important as enough room must be allowed for coffin bearers through isles and for masses of people leaving and arriving. Option 5 is most successful as the off centre axis creates a slightly diverted visual connection to the casket. This means the casket is not the central focus, allowing mourners to focus on the service.
Developing the Roof:

Option 1:
Option 1 explores the connection to the sky, alluding to the form of clouds. The pockets the roof form creates allow varying heights of spaces, and create some intimate moments. The fragmented roof pieces allow light to enter through thin slits at varying angles, without being intrusive on mourners. The roof encloses the space, keeping that close tension between earth and sky.

Figure 53: Bagsvaerd Church by Jorn Utzon; exploring the cloud
Option 2:

Option 2 explores the idea of the roof as one single element, swooping upwards to generate feelings of uplift and awe. The asymmetrical slit sends a sharp, skewed shadow on the floor of the chapel, which could be distracting when in a service. Being one single element, light into the space is also a potential issue.
Option 3:

Option 3 explores both the idea of the earth and sky connection and also the roof generating uplift. As you enter the space, the roof height is low, creating a sense of intimacy. As you make your way inside the chapel, the roof begins to rise, splitting into two separate elements. The roof cocoons the space due to its circular nature and rises above the altar, disappearing beyond the wall.
Process of saying goodbye to the body (crematorium):

The first line of drawings explores the process of the casket leaving the chapel. At Purewa Cemetery, the casket lowers down to the crematorium located beneath the chapel. Here, an above ground crematorium is proposed.

Figure: Early Explorations of crematorium layout in plan and section
The second line of drawings explores the crematorium in section, showing exploration of the roof form. Connection to the sky at the final committal seems appropriate since the smoke from the crematorium rises into the sky. The visual connection to the smoke connects back to the idea of finality, allowing mourners to witness the entire cremation process. The plan drawings explore circulation routes into the crematorium, and also start to plug in spaces for mourners to sit and view the final committal. The circular shape gives mourners privacy. The door to the outside allow mourners the option to leave at any point of the cremation process.
Memorial Walk:

The sections show above ground inurnment plots. The design was generated by the natural form of the contours, which was then manipulated in certain areas to suit the program. The idea was to generate a form that had movement that would tie into the natural landscape on site and ultimately link up to the existing pathway to the Domain. Seated areas are located in pockets of empty space, thus providing areas for solitude, as well as larger spaces to cater to groups of visitors.

Figure: Developing the memorial walk with circulation and areas for ash interment in mind.
Concept 1
Issues with concept one:

More development needed to address the loss of ritual and lack of finality associated with death in the crematory process. Access to the site needs closer attention. The location of the car park should be further up the site which would solve issues about cars on site. Access to the site should address the wider connection to the Domain. There is no connection to the railway line and this is a major theme on site. Also no connection to the historic Waipapa Stream, as reintroducing it was a strategy discussed earlier. Development needed to explore secularity and designing for various religious and cultural groups.
Concept two builds on the ideas explored through concept one, and also deals with some of the issues that came up through development work.

KEY:
1. Public Entry
2. Car park
3. Hearse arrival
4. Chapel Entry
5. Larger chapel
6. Smaller chapel
7. Reflection/prayer/chapel space
8. Courtyard
9. Toilets and Changing Rooms
10. Lounge
11. Kitchenette
12. Main viewing room
13. Cremator
14. Control room
15. Smaller viewing room
16. Services: coolers and accumulators
17. Grinder room
18. Hall for receiving coffins
19. Cooler room
20. Covered Hearse arrival
21. Admin and Reception
22. Waipapa Stream
23. Memorial Walk

Concept 2

Development: Floor Plan

Chapel:
The issue of diversity in New Zealand drove the idea for proposing three separate chapel spaces. Depending on the nature of the deceased, funeral services can vary in numbers of attendants. Therefore, flexible space is of key importance. The fan form (as seen in chapels one and two) allows each chapel to function perfectly as separate spaces, however, in the event of larger funerals, the pivot doors swing open and the spaces fuse together to form one larger space.

Dependent on the nature of the deceased, funerals can also vary in atmosphere, i.e. some families may require a small, intimate ceremony. This led to the design of the smallest chapel (number 7 in the floor plan) which also functions as a prayer/reflection room when it is unoccupied by a service.

Courtyard:
The courtyard centralizes the entire funerary process, providing visual connections to the separate areas of the building. The perimeter of the courtyard is sheltered, the rest open to the sky, connecting back to the idea of the relationship between earth and sky.

Lounge:
Centrally located between the chapel and crematoria, mourners can gather after a service and share in refreshments and tea or coffee. Seating around the perimeter of the courtyard provides areas for solitude, as well as socialising.

Crematoria:
Issues of servicing the crematoria were present in concept one. The floor plan for the crematoria no longer has these same issues as a separate, private driveway (number 20) is dedicated to service and hearse vehicles only.

Viewing rooms (large and small) cater to a diverse range of cultures and religions, as the preference for the view of the charging of the coffin varies from person to person. Number 12 is the larger viewing room, with kitchenette provided for cultures that prepare rituals before the final rites. The space is designed to allow bereaved families to be part of the final committal, as far as pushing the casket into the furnace set back into the wall. The smaller viewing room is separated into two rooms. One room has the cremator which staff can access and the other, a place for families to view the final committal through the protection of a glass window.

Camera Obscura:
Acknowledging that the train was an external feature of the site, embodying the train instead of shutting it out was an important consideration in the design process. To this end, an experiment was successfully undertaken with the use of a lens and a blackened out cardboard box (camera obscura), which concluded that it was possible to project a clear image of the passing train into the smallest chapel.
Conclusion

The proposed crematorium, chapel and other ancillary facilities in the Waipapa Valley effectively offer secular funerary facilities catering to a wide range of cultural and religious diversities within Auckland. The design offers a new array of rituals specific to the crematory process, pointedly encouraging the confrontation of the bereaved with the concept of death and the funerary process, specifically the transition of the body into the furnace, thus forcing acceptance of the finality of death. The design draws upon various elements of nature, specifically the stream and surrounding bush, the natural contour of the land together with the stark contrast of a moving train to force the acknowledgment of the transition between life and death and the discovery of silence within. Funerary facilities that provide for a social space within the confines of and as an intricate part of the cremation process is a concept that has of yet not been developed in New Zealand. This design thus offers a viable alternative to the population at large to the current funerary facilities available in Auckland. Cremation is not accessible only from a monetary perspective but also from its ability thus to be flexible and cater to each person's individual desires and unique needs. Cremation should be seen foremost as an aid to help those struggling with the process of grief.
Bibliography

identity/religion.aspx

“2013 Census Quickstats About National Highlights: Cultural Diversity.”
Figure 1: Collage of raw emotion across a variety of cultures.

Figure 2: Funeral of New Zealand poet James K Baxter (known at the time as Hemi, the Maori version of his name), 1972. In order to defy the destructive effects of urban capitalism, Baxter opted for Maori communal values and his final wishes were for the community to be involved throughout his funerary process.

Figure 3: Days of the Dead ceremony, Mexico.

Figure 4: The Dance of Death, fresco from 16th century Europe.

Figure 5: The Dance of Death, commonly referred to as the Danse Macabre, a late-medieval allegory of the universality of death.

Figure 6: "The Dance of Death,"resco from 16th century Europe. The Dance of Death, commonly referred to as the Danse Macabre, a late-medieval allegory of the universality of death.

Figure 7: "Tane Mahuta’s Triumph," by Jane Crisp, 2007.

Figure 8: Kyoto Cemetery, Japan.

Figure 9: Looking at Auckland City from the Waipapa Valley of Parnell.

Figure 10: Land Area in Auckland’s most popular cemeteries.

Figure 11: The cremation of Patroclus (companion of Achilles) was one of the most well-known and documented examples of cremation in ancient times.

Figure 12: Spiritual leaders perform a Maya ritual inside the “Naj Tunich” (“Stone House” in Mayan language) caves in the municipality of Poptun, Peten, north of Guatemala City. Mayan people are highly ritualistic and have many traditions to commemorate the recently deceased and worship their ancestors.

Figure 13: The Ghats at Varanasi, India.

Figure 14: A mother cries over the loss of her husband and son when her city Aleppo, Syria, was hit by Syrian Army missiles in the Feb. 23, 2013 tragedy.

Figure 15: The grieving process transcends all cultures.

Figure 16: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 17: Funerary art from the Cistercian abbey at Rievaulx, Yorkshire, England.

Figure 18: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 19: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 20: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 21: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 22: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 23: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 24: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 25: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 26: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 27: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 28: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 29: Figure: Crematorium Hayllerm courtyard spatial qualities.

Figure 30: Looking east from Constitution Hill over Mechanics Bay showing Augustus Terrace (left to right), Parnell Road (diagonally up hill), H Nixcy’s shipbuilding yards (foreground), 1866.

Figure 31: A map outlining the reclamation stages of Auckland’s foreshore from 1841-1998.

Figure 32: Early photo of the Domain, showing the Domain Spring in 1869.

Figure 33: Locating Original Stream that fed from the Domain Spring at the entrance to the Domain, 1998.

Figure 34: An indicative perspective view showing Auckland Transport’s future plans for the redevelopment of the Waipapa Valley.

Figure 35: Artist’s impression of a wetland at Carlton Gore Road at the entrance to the Domain, 1998.

Figure 36: Groundswell, “Constructing the Contemporary Landscape,” The Museum of Modern Art, New York.


Figure 38: Locating Original Stream that fed from the Domain Spring.

Figure 39: Figures 22-25: Groundswell, “Constructing the Contemporary Landscape,” The Museum of Modern Art, New York.

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Figure 45: Figures 22-25: Groundswell, “Constructing the Contemporary Landscape,” The Museum of Modern Art, New York.

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Figure 50: Figures 22-25: Groundswell, “Constructing the Contemporary Landscape,” The Museum of Modern Art, New York.

Figure 51: Figures 22-25: Groundswell, “Constructing the Contemporary Landscape,” The Museum of Modern Art, New York.

Figure 52: Figures 22-25: Groundswell, “Constructing the Contemporary Landscape,” The Museum of Modern Art, New York.

Figure 53: Bagsvaerd Church by Jørn Utzon; exploring the cloud.

Figure 54: http://www.pinterest.com/pin/392376186257492552/
Final Presentation Drawings
VIEWING ROOM IN CREMATORIUM