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The *Taualuga*: A Spatial Study

A considered look at Space and Movement

Master Thesis explanatory document

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ABSTRACT

This explanatory document aims to develop a spatial analysis of the *taualuga*; a Samoan traditional dance, as well as analysing Samoan architecture in terms of the village spatial organisation relating to the *taualuga*. The spatial analysis of the dance is based on a sequence of observations with the use of motion tracking. It generates architectural strategies such as central openness, interaction space and duality which become a tool to develop the design. Also the central public space is the core of this design which supports all elements within the site. It is the *vā* relationship that supports and unites the community together. The design is based on these cultural explorations and the programme is a Manukau Pacific community centre.

The community centre provides exhibition spaces, galleries, library, archives space, private function rooms, retreats area, youth activity areas and recreational activities. These programmes are geared principally to benefit and attract the young people in Manukau city, but it will also be of use for the general community.

The centre is a place of ritual and social activity which binds almost everything together. The courtyard or the *malae* is the core of this design which supports all these functions through Samoan principles of the *vā*. 
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1.0 INTRODUCTION

1.1 RESEARCH QUESTION

How do the spaces of Samoan architecture relate to the *taualuga* and how can this architecture apply to Auckland, New Zealand?

My research topic looks at the *taualuga*; a celebrated Samoan dance custom performed at the end of a Samoan family, community or public ceremony/event such as a wedding reception or a church fundraising activity.

By tradition, the *taualuga* was performed by a high-ranking chief. The *taualuga* is a spontaneous dance which includes a *taupou* and an *ai’aiuli*. The *taupou* represents the community, organisation and family. The *taupou* moves in a stately manner and her movements are graceful and refined.

1.2 AIM

The aim of my project is to analyse the movements of the *taualuga* and the role of the *taupou* and the *ai’aiuli*. I will use the *taualuga* as a generator, or concept, for my architectural design. The dance will generate the spatial structure of the design and the spaces will be developed according to the analysis of the Samoan village organisation and the layout of the dance.

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1 *Taualuga* - a final dance performed with the *taupou* and *ai’aiuli* during the final part of an event.
2 The *taupou* is the main female dancer for the *taualuga*. Traditionally, the *taupou* was the chief’s daughter who represented the chief and the village for this ceremonial dance.
3 The *ai’aiuli* is a group of participants or ‘clowners’ surrounding the *taupou* in the *taualuga*. 
1.3 OBJECTIVES

In taking this approach, my research aims to meet the following objectives:

i. To analyse the spatial arrangement and movements of the Samoan dance: The *taualuga* (the final dance)

ii. To analyse the spatial arrangement of traditional Samoan architecture, such as the village organisation.

iii. To design a Samoan cultural complex from this analysis of the *taualuga* dance.

The main objective is to revive the cultural values of the Samoan community in New Zealand. The *taualuga* is one way to revive and sustain *Fa'a Samoa* in New Zealand. My proposition is that the *taualuga* is related to Samoan spatial organisation.

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4 The Samoan way of life.
1.4 SCOPE AND LIMITATIONS

My project will be an interaction between the spirit of traditional Samoan culture and the culture of contemporary New Zealand. The project is based on the outcome of the *taualuga* analysis, and how it might determine a space.

The *taupou* represents the central space and will be supported by the *aiuli* that surrounds her. This makes the space statelier. These two distinguished dancers will be part of the theoretical approach towards my design. These dancers will map out a spatial form and the architectural qualities for my initial design. The main elements of traditional Samoan settlement patterns are the spaces of the *fale tele* (guest house) and an open space like the *malae* (open green). These elements will influence the planning and overall design.

The design will be based on these cultural explorations and the programme is a Manukau Pacific community centre. The centre will provide exhibition spaces, galleries, library, archives space, small museum, private function rooms, retreats, administration, youth programmes and recreational activities. These programmes will be geared mainly to benefit and attract the young people in Manukau city. At the same time it will also be of use to the general community.

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*Fale tele* is a guest house in the Samoan village. It hosts meetings and a form of gathering with the chiefs.
1.5 GLOSSARY

Here are the terms in italics that are used throughout my research paper.

ai’aiuli to perform choreographic jest or to pay respect to the central dancer
aiuli clowners or supporting dancers
aitu spirits or ghosts in Samoan culture
ali’i high chief
atua gods or spirits in Polynesian culture
Fa’a Samoa the Samoan way of Life
fa’aluma a comedian or clown in Samoan cultural performances
fa’amatai hierarchy of ancestral names and titles associated with rule and government of Samoan society
fale house
fale afolau long council meeting house
fale tele oval or round council meeting house
fofo a shaman who performs rituals to exorcise spirits from the body
i tai towards the sea
i uta towards the back or inland
luma front
malae ceremonial ground or the village green
malama light and illumination
matai an individual vested with an ancestral name
measina treasure or a thing of utmost value
poula Joking Night
sa’o straightforward, fair, honest
siva dance
tapu sacred or forbidden
tatau proper or apt
tau’olunga Tongan dance or the Tongan version of the tauualuga
tauualuga dignified dance, putatively danced by the highest-status person present
taupou village princess
tū stand
tua back or behind
tufuga builder’s guild
tulafale orator
tupua sacred spirits or chiefs
ula to joke
vā opening between or space between, to denote relationships
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1.7 CHAPTER OVERVIEW

CURRENT STATE OF KNOWLEDGE

This chapter gives an insight into dance with architecture, the Taualuga dance and Samoan architecture.

METHODOLOGY

The methodological approach of the research is based on three sections: firstly, research through literature; secondly, research through dance analysis and thirdly, research through design.

PROJECT DEVELOPMENT

This chapter focuses on the development of the design and how it applies the research and theoretical approaches from the current state of knowledge.

CONCLUSION

A critical appraisal of the project and the conclusions made from this research.
2.0 CURRENT STATE OF KNOWLEDGE

The following chapter looks at the application of dance principles in architecture concerning space, the influences and history of the *taualuga*, duality, the Samoan ritual of performance, central openness and Samoan architecture.

2.1 DANCE WITH ARCHITECTURE

The reason for incorporating dance with architecture is derived from the idea that “Choreographers and architects often say that dance and architecture share the same concern, and the shared concern is space; dancing bodies and the architectural built environment manipulate space.”

There are insights available from making dance a tool to enhance an understanding of architectural space.

Dance can be defined as patterned, rhythmic movement in space and time. The theoretical stance of dance associated with architecture is seen in the works of Bill Hillier and John Peponis. They suggested that the relationship between architecture and dance is similar to form and movement. Hence: “While dance realises some of the patterns of movement that are potentially implied by empty space, architecture restricts potential movement through the imposition of boundaries and the creation of spatial structure.” With this approach, architectural boundaries control spatial fluidity or movement. This architectural intervention will embrace the movement always depending on what type of function the space is.

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Evelyn Gavrilou’s research paper “Inscribing structures of dance into architecture” looks at the alternative models of dance as ‘spatio-temporal form’ which is used as a basis for discussing the interaction between the bodies of buildings and subjects in architectural environments. Gavrilou attempts to draw her conclusions on the basis of the “definition of the dance subject, the viewing subject and the manner in which dance is generated over time.” These criteria look at the dance work of well known ballet choreographers George Balanchine and Merce Cunningham.

The dance choreographies of Balanchine and Cunningham are seen as two contrasting paradigms of dance. Gavrilou addresses the principles of generative dance movements as interaction with the body. She states that the dance studies:

Involve a vocabulary of individual moves, a syntax governing the sequence of such moves in time, and a syntax of co-ordination between different moves occurring simultaneously or in parallel. Most importantly, principles that generate dance include a reflective awareness of the interplay between a locally applied rule, or force, that becomes visible as a movement, and an overall form that unfolds over time as the collective effect of such rules or forces.\(^{11}\)

In relation to the *taualuga*, applying an architectural strategy with the dance sequence must embrace the forces acting within the dancer’s movements. The aim of the dancers is to show a form of interaction with each other. The architectural elements are the constraints which shape human spatial experience and applying this approach is fundamental within the design. Therefore, an explorative comparison between dance and built space has been used to propose that our understanding of space involves an exploration of how generative forces interact with constraints, how patterns of movement reveal underlying patterns of order within everyday spatial experience\(^{12}\).

\(^{11}\) Gavrilou, “Inscribing Structures of Dance into Architecture”, 32.2.

\(^{12}\) Ibid.
My intention in allowing the *taualuga* as part of my architectural investigation is implementing this form into a culture engaged with many participants. The Pacific perspective is made through stories of chants and dance; not by a written document. Preserving history and maintaining ethnic pride can be accomplished through traditional dance which has not been touched by outside influences in the past. Therefore, dance and chants are the history books of our (Samoan) ancestors. These dances had a sense of *tapu* or spirit, which made an impact on indigenous knowledge transfer.

My dance analysis focuses on the movement of the arms, head and feet of the human body from the *taualuga*. The hands are an important element for Samoan dance in general. The subtle movements help accentuate the expression of the dancer and also the storytelling of the song.

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DANCE INTERPRETATION WITH DATA: SYNCHRONOUS OBJECTS\textsuperscript{14}

William Forsythe’s choreography of One Flat Thing has been explored with various data outputs. The data outputs from this choreography looks into various disciplines such as geography, architecture, engineering, and animation data. The point of making these outputs is to show how a dance can mean so many things and be applied other than just as a way of performance, instead producing data from these movements. The main aim was to explore the dance using these various techniques and to see the possible outcomes that the data can produce. The dance interpretation was based on animations and visual effects tools that looked at the type of data useful for a particular discipline. The dance sequence was set out with cameras positioned at all orthographic views.

For my investigation of the taualuga, the dance is not choreographed but improvised. The dancers in my exploration have to follow their roles, such as the taupou who must be elegant with her movements as opposed to the aiuli who is being the opposite and circling the taupou to indicate her high stature to those watching the taualuga.

\textsuperscript{14} William Forsythe, “Synchonous Objects for One Flat Thing Reproduced,” http://synchronousobjects.osu.edu/content.html#
2.2 TAUALUGA DANCE

Samoan dance occurs at special occasions and increasingly in more recent times, as entertainment for tourists. It can also be a form of ritual or ceremony. Traditionally, Samoan dance is an expression of Samoan culture and is still embraced. Dance was a way of recording historical events and communicating them to the younger generation. There are movements for most Samoan dance styles which reflect daily activities and the history of Samoa. The movements depend on the space provided for the dancers and the setting. The dance which carried a lot of meaning was the taualuga.

Figure 2 - The taualuga dance series
The taualuga is a solo, spontaneous performance that has become an iconic dance for Samoan culture. There has been some analysis of the taualuga dance, referencing social status and earlier dance forms that have evolved today due to Christianity and other external influences. The dance consists of the taupou (who is traditionally the virgin princess, or the chief’s daughter) or central dancer (chief or a special person). Today, anyone can be appointed as the central dancer from a community or village. During the taualuga, the taupou or central dancer is accompanied by either a group of men or women also known as aiuli from the village located around the edge of the centre stage.

According to Jeanette Mageo’s analysis, the taualuga had developed from the forms of the poula dance, or Joking Nights, prior to missionary contact. Mageo states that from the observations of the missionaries in Samoa, the Joking Nights had dance sequences that were mixed with a formal and comic style, the comic style showed harsh and sexually explicit references. The missionaries wanted to abandon the dance overall. However, the local chiefs wanted to retain the dance by restricting the dance styles that were offensive to the values of Christianity. The Joking Nights programme was performed at night and it had two parts:

i. Part one was the synchronised dances with a leader such as the taupou (village princess) and ali’i (high chief). The sequence begins with sitting dances, then standing dances and the last one, ‘the top of the house’ or taualuga.

ii. Part two was the comic dances which contained explicit and loud movements which were opposite to the stately movements of part one.

From the Joking Nights programme, the dance is seen as a combination of both parts. The formal dancing and the comic dance styles work together as one. The event takes place in the fale afolau (long house). The fale afolau has a rectilinear section in the middle with each end rounded.
Figure 3 - Fale afolau plan of the Joking Nights dance
Today, the *taualuga* is performed at special events, such as ceremonies, fundraisers and cultural dance competitions in New Zealand, Australia and the United States of America. The *taualuga* originally, performed in the guest house (*fale tele* or *fale afolau*) or the open space (*malae*) in Samoa, has changed in New Zealand. The dance can be performed in a large hall, or an open area in churches, community halls, or the car-park. The participants are not obliged to dance like the *aiuli*, their dance style is of a stately manner, similar to the *taupou* or main dancer.  

Although the *taualuga* today does not display the essence of the *taupou*’s movements with the *aiuli*, the *tau’olunga* from Tonga today presents the sense of what the *taualuga* was like before. The dance was introduced to Tonga in the beginning of the twentieth century where the dual dancing styles have been preserved when the centre stage is engaged by one female dancer. It is essential for the *taupou* to be at the centre. Her arm movements had to keep her balance and poise, while her movement is always centred. Therefore, the *tau’olunga* still preserves the original movements of the *taualuga*.

The *tau’olunga* is a Tongan dance that is performed at nearly any cultural event or gathering today. It is also a spontaneous, solo performance like the Samoan *taualuga*. Although the dance style was introduced from Samoa, it has evolved from the impact of the conflict of Tongan ideals and values of the Western world. The *tau’olunga* is a development and a replacement of the *ula*, another dance style from Tonga. The *tau’olunga* uses more movement in the legs (borrowed from Samoa) compared to the *ula*. Similar to the Samoan *taualuga*, the beauty of the movements are emphasised, such as the graceful soft movements in the rotation of the arms, with the flexion and extension of the wrists.

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16 *ula*, a standing dance performed by young women in Tonga.
2.3 DUALITY

The significance of the *taualuga* dance is that it represents many aspects of Samoan society and culture. Duality has been apparent within the *taualuga* and it is seen as equal opposites, or a balanced entity.

The origin of the *taualuga* has evolved from a harsh and comic entertainment to a Christian version, where layers of hidden emotions and expressions from the Joking Nights are expressed differently. Mageo states:

The name *taualuga* itself is euphemistic: this dance might more fittingly be called the *taualuga-*’ai’aiuli, as it is most often a choreographic duet. Calling it a *taualuga* is a way of highlighting the respect elements of a dance that in fact layers the less than respectful segments of Joking Nights into a Christian style of dancing.\(^\text{18}\)

Another dual relationship of the *taualuga* is based on the social status of chief and orator according to Richard Moyle in “Polynesian Music and Dance”. The *taualuga* is seen as a reflection of social status in Samoan culture and the idea of a metaphorical dualism. Richard Moyle talks about the roles of the Samoan titled hierarchy of *matai*: The positions of the *ali’i* (chief) and the *tulafale* (orator). He claims that the *taualuga* is an example of how Polynesian dance can strengthen and maintain social structures. This metaphorical dualism expresses the social significance of the dance. For example, the bond between the *taupou* and *aiuli* is an important role for the *taualuga* compared to the bond between the *ali’i* and the *tulafale* for the operating of a village. During public occasions the *tulafale* makes every effort to praise his *ali’i*. The *ali’i* continues his loyalty from his *tulafale* by offering generous portions of any gifts received during events, such as weddings or funerals. It is clear that the two roles within the *taualuga* and the chiefly events must be embraced at all times. If there is no *aiuli* in the *taualuga*, then the dance would not represent the *taupou* very well. “Either person acting alone is relatively ineffectual, but, as a complementary pair, their influence permeates Samoan society as a whole.”\(^\text{19}\)


Also, the dance movements of the ali’i and the tulafale on centre stage demonstrate another aspect of duality. The ali’i would demonstrate movements that are sa’o (formally correct), similar to the movements of the taupou to be stately, dignified and kinesically limited. As opposed to the movements of the tulafale, who is positioned on the edge, or the periphery, of the dance floor known as the aiuli. The tulafale will move violently and will be unpredictable by making loud noises, climbing house posts and ramming the floor.

From the taualuga dance the role of the taupou traditionally holds ali’i status and is shown respect by the supporting dancers, or aiuli. The role of the aiuli is to demonstrate respect to the taupou or the central dancer or “to humble oneself so as to draw attention to another”. This cultural definition is disguised in the movements of the aiuli for the event. Yet these two roles complement each other creating a dualism that supports the society, or any group, dancing on behalf of this. What is essential from this analysis is that:

The more vigorous and frenzied the periphery, the more tranquil and controlled is the centre. And the more vivid the contrast in the size, speed, manner and even sound of the movements, the clearer the complementary characteristics of the central figure, and thereby the greater the respect shown. In this way, the social code is acknowledged and strengthened.

According to Albert Refiti’s “Forked Centre: Duality and Limit in Polynesian Spaces and Architecture”, the Samoan story of the tatau shows an example of duality and how it is central to Samoan architecture. Refiti also relates the tatau story of the Siamese twins to the “central post” of the fale tele. This duality is one that can be applied to the many aspects of Samoan culture particularly in the dance. There are always opposite forces which act against each other.

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2.4 SAMOAN RITUAL OF PERFORMANCE

The *taualuga* can be traced back to earlier performances in Samoan culture, with the two forms: *fofo* (shaman) and *fa’aluma* (clown). These are specialist performers. According to “Traditional Performance in Samoan Culture: Two Forms” by Victoria N Kneubuhl, the *fofo* and *fa’aluma* demonstrate that in early performances of Samoan culture, there is a relationship between theatre and ritual. Ritual is seen as efficacy and theatre as entertainment. In Samoan culture, the differing roles of a *fofo* is the efficacy and a *fa’aluma* is the entertainment.\(^{23}\)

The two forms: *fofo* and *fa’aluma* relate to each other, where they mediate with spirits or *aitu*. The concept of Samoan spirits is classed in three types by John Stair\(^{24}\):

i. *Atua* - original archetypal gods that appear in Polynesian myths such as *Tagaloa*

ii. *Tupua* - sacred spirits or chiefs. Today they are used only for stone idols.

iii. *Aitu* - are descendants of the original gods with some that are chaotic with powers that can possess humans causing injury, illness or death.

In the Samoan way of life, the *aitu* are common and they symbolise chaos, danger and darkness, compared to *atua* and *tupua* who symbolise order. Victoria N Kneubuhl states that “when chaos is acknowledged, order is maintained; this symbiosis serves as the basis for the two forms of performance in Samoan culture.” The role of a *fofo* is to “ritually exorcise spirits from the body”. The role of a *fa’aluma* “adopts a persona of an *aitu* in order to perform comedic satire for village entertainment”\(^{25}\). Their performances differ in external purposes but share a common foundation in the social and religious concept of *aitu* in Samoa. Samoan society utilises this chaotic world as a healing power in civilised village life.

Moreover, the Samoan village has a carefully organised social structure, which is known as the *Fa’a Samoa*, or Samoan way of life. Strict rules define correct social behaviour, and a heavy emphasis is placed on proper social relationships. This is far from the common stereotype of

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\(^{24}\) John Bettridge Stair, *Old Samoa* (London: Religious Tract Society, 1897), 211.

\(^{25}\) Kneubuhl, “Traditional Performance in Samoan Culture: Two Forms, 166.”
an idyllic existence free of rules and regulations.\textsuperscript{26} However, applying the chaotic world into the Samoan society helps release social tension and restore health. Therefore this element allows for a balanced existence.

On the other hand, Bradd Shore’s description of the Samoan concept and spatial organisation relates to the function of \textit{aitu}. A typical Samoan village would have a coastal linear settlement, \textit{i tai} (towards the sea) and \textit{i uta} (towards the back of the village or towards the bush), which act as directions depending on where you are positioned in the village (see 2.6 Samoan Architecture, Village Organisation). These two sides indicate the ordered and chaotic zones. \textit{i tai} would suggest light, clean work, controlled behaviour, supervised by a dense population and chiefs. However, \textit{i uta} embodies the bush inhabited by \textit{aitu}, rather than people. Hence, it is dangerous, uncontrolled and of physical and moral darkness.\textsuperscript{27}

From the \textit{taualuga}, the spatial relationship and movement produces a centre (\textit{taupou}), with secondary elements (\textit{aiuli}) circling it. Although the dance is spontaneous, the spatial arrangement remains as close to a circle, or a semicircle, as possible. From this discovery, the circle is an important element in Samoan culture. According to Albert Refiti in “Whiteness, Smoothing and the Origin of Samoan Architecture”, he explores “how Samoan architecture and craft operate by fashioning material things: they are stripped (\textit{olo}) and organised (\textit{teu}) towards ‘whiteness’ (\textit{sina or molama}), because they are to be placed before the ancestors, who are continually present via the circle of \textit{fa’amatai}.”\textsuperscript{28} This ritual of “fashioning material things” is marked by an opening, the \textit{vā}.\textsuperscript{29} In relation to performance, “Samoan choreographer Lemi Ponifasio suggests that rituals readily activate this \textit{vā} opening and, if this is the case in performance, then it should be added that architecture is, as its setting, the instrument of this opening.”\textsuperscript{30} My dance movement spatial analysis will be omnipresent within my site, like a circle guideline which helps indicate the movements of space and also the hierarchy of space. From this, my architectural intervention of adding walls, openings, roof, levels, foundation and columns will either control the fluidity movement, or create opportunities for my proposed design.

\begin{flushleft}
\textsuperscript{26} Ibid.: 171.
\textsuperscript{29} For writings on the \textit{vā} see Wendt (1996) and Mageo (1998:81).
\end{flushleft}
In relation to the *taualuga*, the *taupou* is an important figure within Samoan culture, especially during the process of council meetings in a village. According to Refiti:

The *taupou* is to be dressed and chaperoned for the cultivation of social manners. Confined to the interior of the house, she becomes a captive of the circle of *matai*, and paradoxically this will, in turn, make her increase the finesse and lightness that are required of *measina*. *Measina*, as the bleaching and whitening of the materiality of the world, turns things and people into treasures, to be presented and touched and exchanged by the ancestor-beings that sit at the circle of *fa’amatai*.\(^{31}\)

This reinforces how important the *taupou* is, and how the movements and the space locates everything within Samoan culture. Therefore, this spatial organisation of the circle becomes a template or a guideline for my architectural strategies.

\(^{31}\) Ibid.: 15.
2.5 CENTRAL OPENNESS

Central openness\(^{32}\) is an idea which describes the Polynesian architecture of open huts, especially in Samoa. The open structures of the huts in Samoa are arranged towards the open centre of the *malae*. This relates to the vā relationships where it is not about separating entities, but connecting them as a unifying structure.\(^{33}\) Mike Austin highlights this open aspect of Pacific architecture when he writes:

> It is suggested that the architecture of these islands is an architecture of spaces open to the sky rather than closed rooms, of sticks and grass as against mud...This difference has the potential to make another architecture that requires another way of looking - an architecture of openness and possibility.\(^{34}\)

Furthermore, the spatial connections of a house or building to the overall scheme of a village is “more like that of a rippling effect in water when a stone or an object is dropped in the liquid causing waves in ringed formation to spread outwards getting larger and larger.”\(^{35}\) This analogy takes on the movements of the individual dancers in the *taualuga* and how they interact with each other.

The horizon of vā relationships is the binding of past, present, future, family and community. This proposition is posed by Refiti and it allows an opportunity for the perceptions of Polynesian space and an architectural language for Samoan architecture. What is critical in his proposal is that he makes an attempt to challenge western architectural thinking. He tries to create a Pacific view and develop it. He claims that the theory of vā relationships is still in the process of development.

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32 Mentioned in Albert Refiti’s paper “Whiteness, Smoothing and the Origin of Samoan Architecture” about the origins of Samoan architecture.
33 Refiti, “Whiteness, Smoothing and the Origin of Samoan Architecture.” And more about the vā concept in Albert Wendt’s *Tatauing the Post Colonial Body*.
2.6 SAMOAN ARCHITECTURE

Samoan architecture is seen as huts or a village oriented towards an open green space. This section will look at the types of *fale* to give an understanding of the general use of buildings in Samoa. This will give a background about Samoan architecture before I continue with my proposition of the *tau'aluga* dance, having a similar relationship with Samoan architecture.

**FALE SAMOA**

*Fale* is the Samoan term for a built house of any kind. There are different types of *fale* such as the *fale o‘o* (small house), *fale va’a* (canoe shed), *fale afolau* (long house) and *fale tele* (round house). The *fale tele* and the *fale afolau* are the main types which have been the source of Samoan architecture and culture. The roles for the *fale afolau* and *fale tele* are to shelter a village family, to host meetings and to welcome guests. There are no walls to divide spaces under the one roof of the *fale*. Therefore, the *fale* is an open structure.

![Figure 4 - Samoan Fale](image-url)
Figure 5 - Fale tele or round house in a Samoan village
According to Sir Peter Buck, the design of the *fale* in Samoa was influenced by the environmental conditions, such as the heat (open walls), the rain and wind (screens as barriers) and also the customs of the chief’s organisation. The climate in New Zealand is moderate compared to the tropical climate of Samoa. A strategy to avoid getting exposure to the rain or the sun is having sub structures to connecting the separate buildings. My design approach will focus on the village spatial organisation and the qualities of traditional Samoa. The meeting house will not be a replica of the traditional one.

**VILLAGE SPATIAL ORGANISATION**

The traditional settlement is generally seen outside the capital of Samoa, Apia. Each family’s land extends in strips from the sea inland if on the coast, or from the bush towards the road if there is no sea frontage.

All families in a village build their houses following the same basic pattern from an established tradition. At the front of each family property is the *fale tele* or guest house. The *fale tele* is always round. Behind the *fale tele* is the *fale afolau* (long house), where the *matai* and his immediate family live. These *fale* are constructed by highly specialised carpenters (*tufuga*). The *fale* are built from a variety of selected timbers, decorated and elevated on stone platforms.

The *fale tele* and the *fale afolau* are the most complex in Samoan architecture. The other traditional constructions are variations of them and use the same techniques and materials. Sir Peter Buck examines the buildings and the construction of these houses and claims there were a lot of ceremonial events to host.

Smaller houses are lined up behind the *fale tele* and *fale afolau*. Some of these houses are intended for family members to live in, others are for manual activities and another for cooking.

The other buildings in the village are shared facilities in the village: the school, copra sheds, long boat and outrigger canoe sheds, a cricket pitch, a village water pipe where people come to bathe and collect water for the family and, most important, one or more churches.

The Samoan spatial organisation has been described by anthropologists, ethnologists, and, recently, architects.

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37 Ibid.
Figure 6 - Samoan Village Organisation and analysis
There are two models by Bradd Shore which attempt to analyse the spatial arrangement of the village. The first one is the Samoan Model of Village: Diametric Dualism (Figure 1). “In this linear model, villages are conceived of as having front (*luma*) and back (*tua*) regions. Most modern Samoan villages do in fact conform to this linear organisation”\(^{39}\).

![Diagram of Samoan Model of Village: Diametric Dualism](image)

**Figure 7 - Bradd Shore’s Samoan Model of Village: Diametric Dualism**

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In the second model, the reference points in village orientation are not sea and bush, but rather the central *malae* (village green) and the outskirts of the village. The front of the village, in this model, is interior to the back of the village, which is considered the exterior. The second model has clearly different empirical and logical properties from the first. *I luma fale* (at the front of the houses) refers, in this model, to the area facing towards the *malae* while *i tua fale* (at the back of the houses) is defined moving away from the *malae*.\textsuperscript{40}
The social organisation of Samoa has leaders in every village. These leaders are part of a dual hierarchy of matai (titled persons). Dualism can be seen in the example about the chiefs. There are two types of leaders, the ali’i (chief) and the tulafale (talking chief, or orator). “Being a matai carries heavy responsibility and most of the matai take their role seriously”. The ali’i is more powerful than the tulafale, however, the tulafale is empowered to speak in village councils where official decisions are made affecting the family and the village.

The village model that Bradd Shore proposes connects to the investigation of Samoan spatial organisation. It is proposed here that these models connect to the dance of the taualuga.

THE FALE TELE AND FALE AFOLAU

The fale tele has between one and three centre posts the top of which is the ridge of the vaulted roof and the height of which is determined by the number of so’a – vertical collar beams.

The fale afolau is essentially an elongated fale tele with long sides.

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Both types of *fale* use wall screens, or blinds, for protection, called *polasisi*. The *pola* (the shortened term) are made of plaited coconut leaf mats, which are raised or lowered when needed on the outer side of the posts. The *pola* are lowered when rain and wind blow into the *fale* and are, therefore, usually lowered on the windward side only. It is interesting to note that they are never lowered for privacy. When the rain has stopped the *pola* are raised.

The *fale* is mostly constructed by hand with sennit (braided coconut fibre) used to tie the whole structure together. The raised platform is traditionally covered with sea-rounded pebbles, with a sleeping mat on top. The mat is occasionally made of pandanus leaves. These days the raised platform is a cemented floor.

When there are participants gathering for a meeting in a *fale tele* or *fale afolau*, they instantly proceed to take their seats in front of pre-assigned posts. One’s place in the circle is determined by the relative rank of each village *matai* attending when it is a village meeting. On the other hand for an outsider, it is determined by the role each visitor is expected to play in the meeting.  

The *fale afolau* and the *fale tele* have a lot of elements that help build Samoan society. The next step from the analysis of the Samoan *fale* is applying these architectural techniques to a programme that will work with and for, a broad Pacific Island community.

There is existing work which looks at how Samoan architecture in New Zealand is manifested. However, there is not much research on contemporary Samoan architecture. There are buildings which are influenced from Pacific images, such as the canoe, or the *fale* rather than specific designs of Samoan architecture.

Samoan communities in New Zealand reinforce their culture at church, such as the Samoan Congregational Church where everything is spoken in Samoan. Christianity is the dominant religion in Samoan communities and their strong faith has influenced their participation activities, such as choir commitments, prayer groups, Sunday school and youth groups. Culture is reflected in Church activities in order to maintain language and customs. There are bilingual early childhood education centres connected to some churches where children are taught the Samoan language.

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42 ibid., 12.
3.0 METHODOLOGY

My methodology is broken down into a sequence of three stages:

i. Research through literature.

ii. Research through dance.

iii. Research through design.

These are the methods I have applied in order to respond to the architectural question and objectives.
3.1 RESEARCH THROUGH LITERATURE

The gap that I am investigating is how Pacific architecture, in particular the Samoan spatial organisation of a village and the *taualuga* dance, can be applied in New Zealand. The aim is to enhance the understanding of architectural perception in a Pacific way.

From the literature review on the *taualuga*, there have been observations of the dance based on concepts related to social status and the origins of the dance. However, most of the sources which describe these are not related to architecture. They focus on the content of the dance, rather than what the dance can offer in terms of how the body occupies space similar to how spaces are designed to inhabit, move and elevate.

As a New Zealand-born Samoan, I have grown up in an environment where the *taualuga* dance is performed either the traditional way or a casual way, where the *taupou* or main dancer has no *tuiga* or standard dress and no choir. The following method explores the movement of the dance rather than the costumes the dancers use.

I have used Bradd Shore’s model as a guide and development in my design and research process. I have analysed the model and applied the data output to formalise my idea about the relationship between Samoan spatial organisation and the analysis of the *taualuga* dance. Therefore, all Samoan aspects of culture relate to the Samoan spatial organisation.
3.2 RESEARCH THROUGH DANCE

AIM

To investigate the movements of the *taualuga* dance and use the dance sequences to develop spatial arrangement and movement flexibility.

THE ANALYSIS METHOD

Observation of the dance - The movement between the two dancers (*taupou* and *aiuli*) and how they interact with each other during the *taualuga* dance sequence. The task was to record abstract movements of the dance and also the motion paths occupied from each dancer as they moved around.
ANALYSIS ONE

The observations of the dances at the ASB Polyfest 2010 Samoan Stage and Pasifika Festival 2010 Samoan Stage.

The task for Analysis One was to observe the *taualuga* dance performed at both the Pasifika and Polyfest\(^*\) festivals. This was done by drawing the plan view of the stage, then using symbols to label the dancers, track their movements on the stage. During the dance, lines were drawn to represent the motion path of the dancers.

Figure 11 - Dance sequence from the dances at the Pasifika.

Polynesian festivals that are very popular in New Zealand. The drawing observations were not accurate enough for the qualities of movement in the dance.
The lines in the drawings have created a cluster in the diagram. However, the analysis of these drawings was broken down into different themes of the dance, developing a clearer output of the dance.

An example of the taualuga performance at the Pasifika festival showed the supporting dancers, or the aiuli, circled the main dancer repeatedly while making loud noises with dynamic movements. This performance made the central dancer more graceful and the highlight of the dance. This discovery matches the observations made by Richard Moyle and Jeanette Mageo about the aiuli dancer.

From numerous observations of the dance, the aiuli would enter the stage from the side or the back. Most of the performances from the Polyfest had the taualuga near the end. The formation of the taualuga had the group sitting on the ground in a semi circle as the choir sat facing the centre. In the centre of the semi circle the fuataimi, who composes the song and mood of the music made by the choir’s rhythm by the beat of their hand claps.

What I have discovered from the analysis of the dance, is that the movements of the aiuli occupying the space were dependent on the size or shape of the stage. The location of the aiuli is crucial, as they try to support the central dancer, or taupou, by moving around in circles. They adapted to what was on offer, for example, the stage was a short platform with no roof. The aiuli would run around the periphery of the stage platform and slam the stage creating havoc.

The interesting part is when there are more than two aiuli dancers encircling the central dancer. Their movements are limited because the dancers may collide, causing a disruption to the central dancer. However, this view can make a difference as Richard Moyle points out about the “more vivid the contrast in the size, speed, manner and even sound of the movements, the clearer the complementary characteristics of the central figure, and thereby the greater the respect shown. In this way, the social code is acknowledged and strengthened”.  For the central dancer, or the taupou, the movements cannot cover the whole dance floor; their focus is on the centre stage.

The data collected from these dance sequences is based on visual interpretation from the literature review of the taualuga. The ideas of duality are roughly seen in many of the performances. However, the formal translations are not enough to develop from. Therefore, I continued with another analysis that simplifies the format of the dance in order to gain accurate information of the movement between the central dancer/taupou and the aiuli.

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44 Moyle, Polynesian Music and Dance, 38.
ANALYSIS TWO

Motion tracking method of the tau'aluga focusing on the role of the taupou and the aiuli.

I used the motion tracking method to record and trace the movements of the dancers from the tau'aluga. The movements are based on the hands, feet, and the head, as they are important parts for Samoan dance and they express certain emotions in a subtle manner. This motion tracking output embodies the structure of the design. The physical models were generated from this experiment and an attempt to create an architectural space and form. The criteria were based on the relationship between the aiuli and the taupou, and also on how they move around the space. There is a contrast between the aiuli and the taupou. The aiuli occupies the space all the time and the taupou gracefully moves forward, back and side to side.

My analysis of the tau'aluga illustrates these two dancers as a corresponding element to the Samoan village layout. I consider the taupou as a spatial element, where her movements map out a new space. On the other hand the ai'aiuli represents the formal aspects, or the structure enclosing, or supporting the space. The two contrasting characteristics of the dancers indicate the sense of balance of the tau'aluga and the dual representation of Samoan society. Wherever the taupou moves the ai'aiuli embraces and accompanies her thus creating a harmonious space. These two cannot be separated or the space becomes an unused space. The more the ai'aiuli encircles the taupou the more the space acquires a hierarchical value, or becomes a sacred space. There is an aura within the two dancers that forms the movement.

The dancers involved in this project are professional Samoan dancers. They have done intense rehearsals for the dance sequence, experimenting with composition and style. There were three film sessions of the tau'aluga.
SESSION ONE

The dancers in this session were one aiuli and the taupou dancer. One camera was used to record the dance, located at the front. The first session mainly tested the type of markers used for the motion tracking such as the red and blue balls shown in the first dance figure. There was no choreography of the dance since the dance is spontaneous. However, the brief given to the dancers was that they fulfil their roles. The dance of the taupou is required to be strict with the movements and controlled. The aiuli has to be the opposite of the taupou, being a clown and moving rapidly around the taupou. The aim is to embrace her from the ground level to higher ground.

My initial approach from developing this motion capture output was translating the information through a series of drawings. The output was obtained by selecting important moments in the dance. These moments were selected as frames. A photographic sequence showed all the possibilities of how this design will work. There was no clear way to translate the output drawings into the physical models.

Figure 12 - First dance analysis of the tauauluga
Figure 13 - Output of the first dance analysis
SESSION TWO

The second test looked at the space used for the two dancers. New markers were tested such as flouro sheets of pink, blue and yellow. The dance choreography had to be arranged to reflect the analysis of the *taualuga*.

From the two tests prior to the final screening, there were concerns with the markers. There were too many markers placed on the dancers. The output displayed a clutter from the movements. However, this clutter created an interesting visual image, shown in the output figure. The main aim from this footage was to create a three dimensional form. The process to select the output was determined by the movements created between the *aiuli* and the *taupou*.

![Figure 14 - The dance analysis showing the markers](image-url)

First test for Motion Markers

New test for Motion Markers

Example of the *taupou* and *aiuli* moving. The focus is on the relationship between the two dancers.
SESSION THREE (FINAL)

There were five cameras positioned at five orthographic views (plan, front, back, left and right), the various views facilitated with the analysis of the dance movement and sequence. Also, the quantity of markers attached to the dancers was reduced to only the head, hands and feet. They were critical for the output analysis, creating clear big movements. The development of the data considered the approach of the different spaces, and a holistic view of the programme. There were two aiuli dancers and one taupou dancer. The markers used were attached to the head, hands and feet.

The final dance sample was structured according to the traditional way a tau'aluga is performed. The plan shows the zones of the choir, audience and the direction of movement for the taupou and aiuli. There is an axis showing the front of the dance and the back, similar to the Samoan village models from Bradd Shore. This analysis shows the connection between the tau'aluga and the village space. The analysis looked at the traditional tau'aluga dance with the choir controlled by the fuataimi, or composer, who creates the mood of music for the taupou’s dance sequence.
Figure 15 - The *taualuga* plan and elevation

- aiuli
- initial position aiuli
- taupou
- initial position taupou
- composer (fuataimi)
- choir
The diagrammatic plan summary of the *taualuga* indicates the motion path of the *aiuli* and the *taupou*. The *aiuli* is more than one in the general *taualuga*, the diagram shows the positions of how the dance takes place. The main conclusions from the *taualuga* were:

i. That the main interaction was between the *taupou* and the *ai’aiuli*.

ii. Their distinct movements had to be articulate in order to record on film.

iii. The dancers had to focus on timing with fast and slow movements.

iv. The *ai’aiuli* had to be at a lower stance at certain times to show respect for the *taupou*.

v. That the whole dance needed to be performed to a medium-paced *taualuga* song in order to better assess the interaction between the *taupou* and *ai’aiuli*.

Figure 16 - The Final dance footage
EVALUATION FROM THE FINAL TESTER

From the output of the final test, the three dimensional model on the computer displayed a disorder of forms. The model showed a lot of paths which were uninhabitable for the design spaces of the building form. The movements did not clearly show any clear form for the spaces I wanted to investigate.

The aim of this analysis was to investigate the motion paths of the dancers and how they interacted with each other. However, the framework of the analysis looked at the spatial movements of the dance. The movements displayed the relationships between the aiuli and the taupou clearly. This also encountered the relationship between the spatial village organisation and the dance clearly through this data. The analysis linked back to communication between the dancers as followed from Jeanette Mageo’s description of the taualuga.

Figure 17 - Motion paths of the dance in concentric circles

Incorporating the dance analysis into the existing site.
The main focus is producing the interrelationship between the taualuga and the village organisation into an architectural language.
Overall in terms of the analysis and design process, the spatial fluidity and movements of the dance are important to my investigation. The formal research was my initial approach. I looked into spatial movement and the outputs were used as a spatial encounter, rather than a form discovery. The key element from this motion tracking is the study of space from the *taualuga* dance.

From the analysis of the dance data and video, I decided to stop further investigation of the movement of the *taualuga*. The data shown above is enough to prove that the relationship between the *taualuga* and the village spatial organisation exists. I applied concentric circles on each of the dancers like a ripple effect. Each of these concentric circles became its own public to private gradient.

From the motion tracking technique of the following dance movements, I have realised that the output shows a lot of clutter and there is no clear indication of form other than complex lines. Therefore, I moved on by specifically looking at certain points in the body which work well with the analysis of the *taualuga*. This indicates how unreliable motion tracking can be when applied as a design technique. There were also issues, like the lack of funding to perform proper motion tracking or capture.

From this experience, I have confirmed the essence of the central dancer, or the *taupou*, having a corresponding interaction with the *aiuli* to create a dignified performance. My interpretation of this is that the spaces will create a sacred space for applying the architecture where the forces act upon the central dancer.
3.3 RESEARCH THROUGH DESIGN

This research through design was sketched, physically modelled and digitally designed. These methods were a tool for both discovering new design possibilities and identifying the missing information from my research and literature review.

The programme is focused on the youth and the community at large. The main spaces I am looking at are the main, open space for interaction or unity, the other is the main guest house space where events, formal occasions and activities, such as sports or games, occur.

The proposal of a *fale tele*, or guest house or meeting house will be introduced in my design. The *fale tele* will not be replicated, but the space will act as one. This *fale tele* will host many events and the ground floor will have no furnishings. Many Samoans sit on the ground and elders are seated on a chair.

The analysis of the design was presented through a log book and design process. My findings related to the literature.

![Figure 18 - Research through design examples](image_url)
4.0 PROJECT DEVELOPMENT

The design of my proposed building began after the video editing and interpretations of the movements. The analysis of these movements was based on the analogy of the *taualuga* dance theory and how important the central space is to the site.

4.1 THE PROGRAMME

The project is a Manukau Pacific Community Centre called the Dream Centre. The Dream Centre targets youth in Manukau City and the general community. The programme for the Dream Centre is a balance of recreation and education for the well being of local young people.

Although my research investigation looks at the Samoan space and culture, it is still open to the diverse cultures within Manukau City. My proposed centre will have an open central space which ties all the different functions together. The proposed centre aims to be a social, public and communal space. It is also a space that is accessible and connects both the local community and its visitors. It is also a space that responds to the imagination and expectation of the visitors (tourists and/or migrants) and local community. Most importantly, this space searches for interaction and is open to diverse and communal ranges of activities.

The Dream Centre will provide:

i. Community Art Gallery - Providing an exhibition space and gallery spaces to display local and international artists’ work.

ii. Workshop space - A space for local artists to generate their work and an opportunity for the community to be involved with the workshops.

iii. Library and academic space - A facility that will encourage and help the youth and the local community who are at school or enrolled at a course.

iv. “$2 Gym” - A modern health and fitness centre equipped with free weights and cardio section. The entry and membership fee is two dollars per session hence, its name. This is to make it affordable for the community in the area and encourage people to avoid living a sedentary lifestyle.
v. Cafe Koko - A cafe which will specialise in healthy recipes and alternatives, using Maori and Pacific Island food, such as taro and corn-beef.

vi. Youth programmes, such as the DYCE (Dream Youth Centre Extreme) which target 12-21 year olds into establishing a positive lifestyle and to expose young people to people, events and attitudes that will empower them to become a blessing to themselves, their families and the wider community.

vii. The guest house - The largest space in the area functioned for main events and the visitor house and is part of the welcoming ritual of international and privileged guests.

viii. Events and function room that will host a range of small to large scale community events, such as the “Voices Choir Challenge” competition and “Stomp Gospel” hip hop dance competition.

ix. Outside will be used as a market. The markets will sell arts and crafts created from local artists and the community who are involved with the arts workshop programme. The market will provide services of a tourist type. This area will be seen as the gateway to Manukau given that the motorway is exposed to the site.
4.2 SPATIAL ORGANISATION

The functions of this design project are set out into four categories.

BODY

Focusing on the physical well-being and recuperation
a. recreation space
b. spaces that offer rest (elements that offer rest) in between the different functions of the building.

MIND

A private space, a place of serenity and silence for the reader and the intellect.

a. reading spaces
b. private realms
c. a place of discussion and presentation

SPIRIT

A ritual, a place of worship.

a. large communal spaces for a congregational service
b. retreat
c. a place for team building
CREATIVITY

A place to create things and to showcase them.

a. exhibition
b. gallery
c. workshop
d. storage

Each function will be designed around the spaces in between the proposed vå.
The exploration of these spaces begins with the output and information from the analysis of the *taualuga* and also the proposition in relation to the spatial organisation of a village.

The output is then applied to the site. The site analysis merges my proposition creating these concentric circles. As shown in the figure they are considered guidelines which separate, arrange and embellish the different spaces. As these spaces are arranged, an architectural intrusion occurs which relates to the vā relationships and how the spaces in between are designed to create different movements to and from the different spaces.

The concentric circles are used as a guideline and reference to an architectural language based on the dance and village organisation studies.

Figure 20 - Concentric circle guidelines
The required space or area for each function:

- main space 1200m²
- gallery 200m²
- archive room 10m²
- storage 100m²
- function room 30m²
- toilets 20m²
- circulation core
- dance studio 40m²
- office and administration 10m³
The four functions are located on the plans:

Figure 21 - Basement Plan
Figure 22 - Ground Plan
Figure 23 - Level One Plan
Figure 25 - Level Three Plan
4.3 THE SITE

The site is located at Lakewood Court, Manukau City, Auckland. Manukau City\textsuperscript{45} is home to the largest population of Pacific islanders in New Zealand. The site is the old Village 8 Cinemas next door to the Shell service station and sits opposite the fast food restaurants of KFC, Dennys and Gengys. There are several key buildings in relative proximity to the site, such as the Manukau City shopping centre, Manukau City Council, Manukau Court, Rainbow’s End Theme Park and the Telstra Clear Pacific Events Centre, all being within five to ten minutes walking distance. On the south side of the site is the new motorway junction connecting State Highway 1, SH1 and State Highway 2, SH20.

In comparison to the Samoan village model by Bradd Shore, the site in Manukau shows the cooking hut’s (\textit{fale umu}) to be KFC, Dennys, Valentine’s and Gengys. These are places where people would go to eat within New Zealand.

From an urban design perspective, Manukau City Centre, at present, has very little spatial structure, and is characterised by commercial and industrial developments, car parks, and large-scale intersections. This has reduced pedestrian access, communal activity and the general safety of the area.\textsuperscript{46} I am proposing to develop a programme within the proposed site that will fulfil the needs for Manukau City, such as communal activity and pedestrian access.

\begin{itemize}
\item[45] December 2007 NZ Statistics indicates that Manukau City has the largest Pacific island community in New Zealand.
\end{itemize}
Figure 26 - Site Analysis of the site
According to the Manukau Built Form and Spatial Structure Plan (BFSSP) Health Impact Assessment in 2009, Manukau City is evidently lacking vibrancy, regardless of an intense mix of cultures and people. The main place of interaction is in the Westfield mall and there are not many places for casual exchanges and meetings outside the mall. Therefore, the quality of interaction is limited and reduces the cultural vitality of the area.

To make Manukau city a better place to work and live together, the BFSSP considers that there is “a need for pedestrian scaled street networks; streets with reduced and navigable corners, active edges, well designed paving, good lighting, and consistently aligned buildings. Intensification of the built fabric is also an effective means of promoting active living. By constructing the city centre to be denser, more differentiated, and encouraging mixed land use, the intention is to encourage residents to meet their daily basic needs without resorting to vehicular transport.”47

My aim is to create a mixed use area for the people of Manukau. The notion of amenity, or activity, in the area aligns with the idea of ‘live, work and play’ where people should be able to reside in or near, work, or be educated near, and take leisure time all in the same area. Other factors that influence my design approach is having community function rooms, shelter and resting spaces for outdoor activity, linkages to the Telstra Clear Pacific Events Centre, Rainbow’s End Theme Park and the Manukau city centre, also to consider disabled access within premises, social participation within town centres, space for public good.

The selection of the site was determined by the demographics of Pacific Islanders, particularly Samoans, living in New Zealand. Another factor with the proposed site is the visual connection with public buildings and icons surrounding the site which represents the wider Pacific community of Manukau.

47 ibid, 29.
Figure 27 - Proposed site in Manukau City
The old Village 8 Cinemas has been sold to Harvest Group Trust, a church community. The aim for the Harvest Group Trust was to propose a church facility. However, the funding for this large scale project was considered for a community purpose by the City Council. Hence, Harvest Group Trust has proceeded with a project called the “Dream Centre”. Due to the finances of the project, they are refurbishing the old Cinemas block for the Dream Centre in stages.

Figure 28 - Site Analysis
The chairperson and Pastor of the Harvest Group Trust explained that the current building is not seen as a significant building. People use the site as a rubbish dump and vandalise the building. Therefore, the community of the Harvest Group Trust are appealing for a new building which will make an architectural statement. They want the building to visually represent the face of Manukau City as a Pacific Island community.

**DESIGN DECISIONS FROM THE SITE**

My changes to the existing site involve excavating the slope on the south east of the existing car park. This level change will allow for private zones to be protected from the view of the motorway. I have demolished the existing building as the Harvest Group Trust suggested for this new building.

There were options of having a series of buildings laid out on the southern periphery of the site, included a developed model of the village organisation and the spatial mapping of the dance. The first approach is to have an open courtyard, or *malae*, but not to replicate the studied models.

The car park area on the east is open to the neighbouring buildings on street level. The southern side of the site has clear views of the Telstra Clear building. The opportunity exists of creating vistas from iconic buildings, such as Telstra Clear Events Centre.
4.4 CONCEPT

CONCLUSION FROM THE INITIAL ANALYSIS

The complexity of form generated by tracking the movement of various points on several dancers from multiple cameras became rapidly apparent. By analysing the gestures and body postures repeated within the dance, it was possible to determine a more generic spatial form based on movement, rather than being a literal visual translation. This helped me realise the importance of the movements and not literally take the dance as a way to fully design my building, but an architectural strategy.

Figure 29 - The output of the dance in plan
FROM THE DANCE OUTPUT TO AN ARCHITECTURAL STRATEGY

The dance was structured according to the standard way that a *taualuga* dance is performed, with the usual choir sitting at the back and the audience in the front. Translating the motion path of the dancers was a way to create form, or geometry, of the building.

The chairperson and Pastor of the Harvest Group Trust explained that the current building is not seen as a significant building. People use the site as a rubbish dump and vandalise the building. Therefore, the community of the Harvest Group Trust are appealing for a new building which will make an architectural statement. They want the building to visually represent the face of Manukau City as a Pacific Island community.

Figure 30 - The dance translated to an architectural strategy of space and form
4.5 DESIGN DEVELOPMENT

DEVELOPING THE DANCE ANALYSIS INTO THE PROJECT

My proposition of this dance according to the social organisation is the way that the dance overlays the Samoan village spatial organisation. The plan drawn below shows the zones of the choir, audience and open space for the *taupou*.

Figure 31 - Plan of the mapped out *taualuga* dance
Using the analysis output of the *taualuga* dance, I have come with a concentric circle template, or a guideline. The sizes of the concentric circles are dependent on the type of function. The concentric circles help indicate what is central within the site by moving the template around the site on plan view. The main space is the courtyard (*malae*) and the main space (*fale tele*).

Figure 32 - Conceptual plans with the concentric circle template
The main focus is on the three zones indicated in the figure below, which form a circle, or central space, when together. These areas have their own characteristics, such as light, materiality, density, volume and flow of movement. Later in the project, the designs for the smaller spaces applied this strategy and what was important was the way they connected with the movement guidelines shown.

Figure 33 - Three zones: Central public space, space one and space two
4.6 ARCHITECTURAL STRATEGIES

INTERACTION SPACE (DUALITY)

The interaction space is the transition space which links the three zones of the central public space, space one and space two in the figure above. The interaction space is a threshold to any other space vertically and horizontally. The interaction space is a point of social interaction and a movement strategy at certain points. Ideally, the interaction spaces are the architectural boundaries which control movement through a range of elements, such as openings, columns, screens, walls, and level changes.

I made sure that the central part of the three zones, which is part of my proposition, is still consistent. The figure below shows where interaction space occurs in the guidelines of the circle template.

Figure 34 - Interaction space and the location in the building
The interaction space has been explored in various spatial sequential opportunities regarding architectural elements. This links to how the aiuli and the taupou interact with each other, creating a complementary relationship. The interaction space is explored in the following conditions:

- complementary scale
- interior and exterior
- different textures, or material change
- simple and complex forms
CENTRAL OPENNESS

The design of the main public zone is to reflect the *taupou*. The circulation diagram shows the opportunity of viewing the centre regardless of what level the occupant is positioned within the adjacent spaces. The central space is embraced by the circulation diagram shown below.

![Figure 36 - Circulation diagram of the central openness](image-url)
Central Openness
Focus towards the centre.
All the different programmes working together.

Figure 37 - Model analysis showing the forces towards the centre
APPROACH

Car access is provided via the underground car-park at the rear, which has 300 spaces. The original access is located at the front and has the potential to cause traffic and interfere with pedestrian access. Therefore, pedestrian access is located at two entry points on the north and west sides of the site.

Figure 38 - View of the entrance towards the central public space
MASSING

THE FORM AND MASSING OF THE BUILDING

The dance motion of the *aiuli* in the *taualuga* dance sequence. The height of the motorway bridge that wraps around the southern side of the site. The area lacked density and required an increase in elevation for the overall building. Also matching the volume of the Telstra Clear Pacific Events Centre and some of the elevated rides at the Rainbow’s End Theme Park.

Figure 39 - Mass model view from the front
THE MAIN SPACE (FALE TELE)

From the plans the main space is located on the north side of the site. There were issues with the area being overheated, since many activities will occupy that space.

I have changed the location of the main space on the southern side to connect with the amphitheatre and added screens on the north and west face to prevent direct light and overheating.

THE COURTYARD (MALAE)

As mentioned in 2.0 Current State of Knowledge and 3.0 Methodology, the malaes will be called the “courtyard” for design purposes. The courtyard holds all the surrounding buildings together as the central point. The courtyard is a place of ritual and social activity and has been developed from the analysis of my proposition (relating to the taualuga and the spatial village organisation mentioned in 3.2).

The courtyard is raised up by two metres to allow for an elevated transition to this sacred space. The massing model shows the difference in levels, the point of raising the courtyard being to indicate the importance of the space. The courtyard is centralised with views from all the different spaces in the building.

CIRCULATION CORE

The main design feature is the circulation core. It is the architectural element that allows vertical flow between levels of the building. The whole design is based on circulation paths and the core is crucial for the design. The design of the core has two lifts and a public stairway which links to all the levels.
AMPHITHEATRE

The amphitheatre is used as a link for the main space. This allows for flexibility with the programme when there are many visitors and participants using the Dream Centre on the same day. Flexibility and choice of movement were influences in including the amphitheatre to create an open space or provide an opportunity to move around.

The other influence for the amphitheatre is the view to the Telstra Clear Pacific Events Centre. The amphitheatre faces the southern side to avoid direct sunlight and there are screens on the west and south side to avoid the south westerly winds.

Figure 40 - View of the amphitheatre towards the central public space
SCREENS

The screens are an important element in terms of different functions.

There are two screens in the building:

SCREEN ONE - mainly covers the north side of the building(s). They help prevent heat, or direct sunlight, entering through the facade. The angle of the screens is orientated to reflect the sun away from the building, to avoiding overheating in the rooms.

SCREEN TWO - is a wind barrier to prevent the south westerly winds entering the public spaces on the southern side. The overall site is fairly flat, thus it is exposed to the motorway junction.

The screens located on the south side will be applied as a visual effect, that will showcasing cultural themes of Manukau City and local artists’ work.

Figure 41 - Diagram of the screens and facades protection
5.0 CONCLUSION

5.1 CRITICAL APPRAISAL OF THE FINISHED WORK AND ITS THEORETICAL FRAMEWORK

The aim of the project was to analyse the spatial movements of the *taualuga* dance and applying architectural strategies, such as interaction space (duality) and central openness. The *taualuga* is about the relationship between the *aiuli* and the *taupou* (as mentioned in 2.1). The challenge was to apply these strategies into the design of the Dream Centre (Manukau Community Centre) and develop them in the courtyard (*malae*) and the main space (*fale tele*).

The choice of making the *taualuga* a means of an architectural development was based on the movements of the dance, which allows for a place of unifying and bringing the community together. The Samoan community still perform their customs in New Zealand and integrating the *taualuga* becomes a sense of community and a cultural revival.

For the design, this analysis has created a momentum for the development of spatial relationships and movement.

However, the theoretical framework was missing from the analysis. The formal designs were developed from tentative design discoveries and were later tested by similar building form examples, listed in the literature review. The geometric forms from the design were from the motion paths of the *aiuli*, developed into a sequence of conceptual models.

The assessment of the design below was based on the research question (1.1) and the main objectives (1.2).
INTERACTION SPACE

The design of the Dream Centre shows the interaction spaces located between the main space and the courtyard. The main space is on the same level as the courtyard, allowing a constant transition. The interaction space needs more development in order to emphasise the central space and be more dynamic, reflecting the theories of the dance.

Also, the movement between the different functions of the building will involve a more dynamic flow compared to the usual transition at one level. The circulation space will have openings towards the courtyard and screens covering private zones. This will be appropriate for public and private access and movement when various functions are happening at the same time.

Figure 42 - Plan showing the movement flow and the interaction space (nodes)
CENTRAL OPENNESS - COURTYARD (MALAE)

The design demonstrates spaces that elevate, move and flow towards the openings and views from the centre outwards. The focus of the movement is emphasised at ground level, compared to the circulation in the basement and upper levels. The design will include openings and terraces which view from the centre outwards.

The courtyard is in the centre of the site and the visual emphasis has been based on its elevation (platform) and formal treatment towards its surroundings. For example, the courtyard is emphasised with the angle of the screened facades angled at eighty degrees, facing downwards towards the centre.

The design of the courtyard is shaped by the overall building. At one end, the building does not create a boundary for the courtyard, but is enclosed by the landscape and a massing of the site. The massing reflects another aspect of Pacific architecture regarding platforms. This has not been explored concerning the objectives, however, they relate to the architecture which shapes the events taking place in a Samoan village. For example, the idea of the ritual, when an event takes place, the architecture is in the background which shapes these events.

The idea of central openness looks at the courtyard being central and how the spaces which surround or accompany it. This relates to the theory of the taualuga explained in 2.3. The courtyard follows this theory, but it does not literally apply these characteristics except that the movement inside the building will be more dynamic. The main concern is the movement and provision of spaces regarding the programme (4.1).

The design of the courtyard will incorporate materials which reflect the Pacific such as timber for the light constructions, or screens, and stone or concrete for the massing and platforms. The courtyard will remain the central space and simultaneously allow for formal, or informal, events to take place, such as cultural exchange of gifts and youth team bonding activities. Having the balance of mass and light structure allows for a contrast in space.
Figure 43 - The angled facades emphasising the importance of the centre
MAIN SPACE (*FALE TELE*)

The design of the main space is based on the functions of a *faile tele*. There is an issue with the design of the main space being a squared geometry compared to the *faile tele*, which is circular. The geometric forms in the design were influenced from the analysis of the *taualuga* (see 4.4 or 4.5) and how the dance is a place where the community comes together. Therefore, the architecture will serve as a venue to create boundaries for these spaces.

The design of the *faile tele* was influenced by the concentric circles. These circles were used as guidelines to design my spaces for the three zones mentioned in 4.5.

SCREENS

The screens for the wind barriers were not designed properly and can be seen as a detachment from the overall design. To improve this situation, the screens will be further explored applying the notion of the concentric circle guidelines. This will allow movement through the screens. Also, adding multiple layers of screen will achieve dynamic visual effects that will respond to a range of events at different times during the day. For example, the screens will move horizontally and vertically, depending on the climatic conditions.

CIRCULATION CORE

The circulation core is located at the back of the gallery space and exhibition zones. There is an issue with the range of activities occurring at the same time when accessing the circulation core. As a result one circulation core will cause congestion.

The design solution is to have alternative stairs on each of the three main zones of the building. This decision will also incorporate a proper fire stairs and fire exit.

Overall, the main objective of designing a Community Centre based on Samoan culture has been met according to the development of spatial movement and the arrangement of space towards the courtyard. From the development of the design, the main space and the courtyard have been carefully designed according to the theoretical framework and research. Therefore, the design will develop the other, remaining, spaces by incorporating the experience from the two functions (the courtyard and the main space).
5.2 SUMMARY

The architectural question as stated in the introduction: How do spaces of Samoan architecture relate to the taualuga and how can this architecture apply to Auckland, New Zealand?

The aim of the project was to analyse the spatial movements of the taualuga and the Samoan village organisation, as well as developing an architectural strategy from this spatial analysis.

The following objectives:

• To analyse the spatial arrangement and movements of the Samoan dance: The taualuga (the final dance)

• To analyse the spatial arrangement of traditional Samoan architecture, such as the village organisation.

• To design a Samoan Cultural complex from this analysis of the taualuga dance.

The main objective was to revive the cultural values of the Samoan community in New Zealand. The taualuga is one way to revive and sustain Fa’a Samoa48 in New Zealand. My proposition is that the taualuga is related to Samoan spatial organisation.

From my findings, the analysis of the spatial arrangement of the taualuga has been met. The dancers show a form of interaction with each other. The taualuga reflected the Samoan society of the ali’i and tulafale. Also, the interaction is based on the aiuli and the taupou being equal opposites or seen as a dual representation. Also, the movements of the taupou were soft, elegant and stately compared to the aiuli who moves violently and creates havoc. The essence of the central dancer, or the taupou, has a corresponding interaction with the aiuli which creates a dignified performance. This was applied as an architectural strategy, where the forces were acting upon the central dancer.

The analysis of the spatial arrangement of the traditional Samoan architecture of the village organisation has been met, where the ceremonial open ground (malae) is the force of the village. This is also known as the vā, which holds everything together. In relation to the taualuga, the movements of the aiuli circulate the taupou and embraces her creating a sacred space. This is the vā relationship which supports the separate entities.

48 The Samoan way of life.
Also, from this vā relationship are the concentric circles located in the centre of each dancer during the performance of the taualuga. The concentric circles represent the space, or zones, of each dancer and the taupou represents the central open space or the malae. The concentric circles of the dancers interact with each other, these nodes of interaction created architectural elements which shaped human spatial experience, such as openings, change of scale, contrast in material, contrast in texture and the opportunity to develop movement and flow. The Samoan complex has been a challenge to design a community centre that focuses on the spatial analysis and data from the taualuga dance. From the design, the main elements from the Samoan complex focused towards the courtyard (malae) and the main space (fale tele). The limitations of the selection of space were based on connections to the theoretical framework of duality, interaction space and central openness.

The gap that I am trying to investigate is how Pacific architecture, in particular the Samoan spatial organisation of a village and the taualuga dance can be applied in New Zealand. The aim is to enhance the understanding of architectural perception in a Pacific way.

Also, from these findings the design of a Community centre provides functions for the body, mind, spirit and creativity. These functions were fashioned to create a balance of calm and dynamic spaces. These spaces were controlled by architectural strategies based on the spatial analysis of the taualuga dance and the Samoan spatial organisation.

Throughout the design process, there have been limitations of the design models relating to dance and architecture, such as the strategies and theories within the Samoan culture, the lack of resources concerning dance and architecture, limited staff assistance within the field of motion tracking which led to a delay in the design and the opportunities to observe the dance in Samoa.

This research has expanded my interests in researching the Samoan principle of the vā. The vā overlooks traditional aesthetic appreciation in Samoa, from oratory to boat building, tattooing to the fabrication of buildings and space. There will be potential to expand this topic as it is proposed to be an architectural language for Pacific architecture.
6.0 BIBLIOGRAPHY


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7.0 APPENDICES

APPENDIX A - DANCE ANALYSIS

THE TAUALUGA FINAL DANCE VIDEO FOOTAGE
THE TAUALUGA DANCE
BEHIND THE SCENES VIDEO AND PROPS
APPENDIX B - LITERATURE REVIEW

The following sources are background research in formulating the research question. This research began with an understanding of Samoan architecture and the culture. Also the research on Polynesian architecture in New Zealand.

Making Spaces Polynesian Architecture in Aotearoa by Albert Refiti

This piece talks about Polynesian architecture in New Zealand and the many examples of how the Polynesian architecture applies. There are several points Refiti mentions regarding the cross culture, or hybrid style, applied in churches in low income suburbs, the urban *fale* and interiors. He makes a point about the architecture of the Pacific through elements of motifs and symbolism as an aesthetic.

He talks about the art and architecture in Polynesia based on the ocean. The ocean is a driven concept for its architecture. He makes a point about locating Polynesian architecture in Aotearoa New Zealand through the theory of the *vā* relationships.

Central Openness

*Vā* means the space in between or the relationships. The *vā* relationship is similar to the *wa* in Maori and *ma* in Japanese. Albert Wendt describes the meaning of this *vā* relationship. An important concept is “the *vā* is a spatial ordering concept that exists between things and administers a code of good (ideal) behaviour, an invisible language that enables space and things to be configured in a positive manner. It governed traditional aesthetic appreciation in Samoa...from oratory to boat-building, tattooing to the fabrication of buildings and space.”

Malae

The *malae* in Samoa is best represented as the spatial make-up of *vā* in terms of architecture. Also the *malae* is a social or ritual space open to the sky, with the perimeter bounded by meeting houses. This *vā* relationship is also the same in the spatial arrangement of the interior of the *fale tele*, where the walls are open. Therefore, the architecture is present within this *vā* relationship of the spatial arrangement once the space is activated by a fono, or council meeting.

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Central Openness & Community

In relation to the community programme is the *malae*, or open ceremonial ground, was important for village meetings or ceremonies “when high chiefs from each family took their places in proper order on the *malae* according to their *vā* relationships and the hierarchy of their placement in the village fono, or council. It is the place where one stands or *tū* in the presence of the community.\(^{50}\)

Albert Refiti states that:

Polynesian and Pacific architecture and design aesthetics are now commonplace in the homes and public places of New Zealand. Some of these designs seem detached from the larger Polynesian community, which finds them somewhat alienating and inaccessible although, ironically, these manufactured environments are borrowed from their culture. This seems to point to the development of a new Polynesian culture in architecture and design that accesses a wider global community of ideas and capital, and whose focus is on the cross-cultural mixing of identities and experiences that can paradoxically be inclusive but exclusive at the same time.\(^{51}\)

Space as Social Construct: The Vernacular Architecture of Rural Samoa

This journal article talks about the three Samoan dances (*taualuga*, Poula and *talolo*) and how they are important in Samoan society. The dance creates a place of bringing the community together and, at the same time, locating the architecture within the village. The location of architecture in a Samoan village reflects the societal framework while providing spaces for performances. The dance in Samoa takes place in two areas: the *malae* and the guest house.

“In Samoa dance has played a vital role in the creation of place and the construction of community as organised pattern movement becomes an apparatus of active social formation.”\(^{52}\)

To justify my decisions on making the *taualuga* a method of exploring the spaces and the movement, is that “movement is...intrinsic to place”\(^{53}\). The movements of the dance allow for a place of unifying and bringing the community together. The place where an architecture will

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\(^{50}\) Ibid., 210.

\(^{51}\) Ibid., 217.

\(^{52}\) Anne Elizabeth Guernsey Allen, “Space as Social Construct : The Vernacular Architecture of Rural Samoa” (1993), S.

serve as a venue and to create boundaries for these spaces.

The research investigation does not depend too much on Margaret Mead and Samoa.

Adapting the *taualuga* to other disciplines

New applications of the *taupou*: in the Catholic Church the procession allowing the Samoan culture to weave into the procession with the *taupou*.

APPENDIX C - DESIGN AND RESEARCH

SITE ANALYSIS
AUDIENCE

composer (fuataimi)  
auli (accompanying dancers)  
auli from the choir  
taupou (village maiden)

AIULI SEQUENCE  
taupou basic sequence  
aiuli basic sequence

A1  
A2  
A3  
A4

T  
T  
T  
T

FRONT (LUMA)  
BACK (TUA)