The Influence of *feng shui* on Cemetery Design: A spatial analysis of the Chinese Cemetery in Victoria, BC

by

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Abstract

The Chinese Cemetery at Harling Point in Victoria, BC is the oldest Chinese Cemetery in Canada and has been recognized as a National Historic Site since 1994. However, despite the cemetery's huge cultural and historic importance, it is poorly documented and has been the site of very little research. What is known about the cemetery is that the site was chosen because of its *feng shui* – the Chinese philosophy of wind and water which guided the organization of Chinese people in life and death. However, despite studies on other Chinese Cemeteries in North America discussing the *feng shui* of graves within each cemetery, no mention is made of the role *feng shui* may have played in guiding the layout of the graves at the Chinese Cemetery at Harling Point. Thus, the goal of this research is twofold: one, to analyze the layout of the cemetery using Geographic Information Systems (GIS) from a spatial archaeology viewpoint; and two, to produce a digital map of the cemetery that can be made accessible to the public, as currently no map of the cemetery is available that can act as a resource for further preservation and research.

Keywords: Cemetery, Chinese Cemetery, Chinese Diaspora, *feng shui*, Spatial Archaeology, GIS

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Acknowledgments

First and foremost, I want to acknowledge the lək̓ʷəŋən peoples whose land I have lived on for most of my life and continue to do research on at the University of Victoria, as well as the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day. I also want to acknowledge that study site for this project at Harling Point, while important to Chinese Canadian history, was already an important area for the Songhees nation who called the point Sashima ("harpoon") as the rocks at the point are said to have once been a harpooner who was turned to stone by Hayls the Transformer.

This project would not have been possible without the help of multiple people including my friends and family who were a constant source of encouragement. In particular, I also want to give a huge thank you to Xue Ma for all her hard work in translating many of the grave inscriptions written in Chinese script as well as Gerry Buydens and the Old Cemeteries Society, who provided me with a lot of background information on the Chinese Cemetery. I also want to acknowledge my friend Em who came to help me measure some of the grave locations at the cemetery as well as a friendly neighbourhood cat and all the residents around the cemetery who came to see what I was doing and provided insight into the cemetery. Lastly, this project has only reached its final form because of all the advice and insight I was provided throughout the term by my honours supervisor Lindsay Der, honours advisor Alex Boudreault-Foutnier, and my amazing fellow honours classmates Rachel Hooton, Gabe Mara, Sally Martin-Damman, and Katherine Strom Trudel, who not only provided excellent advice throughout the term, but also made the honours seminar one of the most enjoyable classes I have ever taken.

Introduction

The Chinese Cemetery at Harling Point in Victoria, BC is the oldest Chinese Cemetery in Canada (Lai 1987: 24). Located in Oak Bay on the south-eastern tip of Vancouver Island (Figure 1), the cemetery was originally opened in 1903 by the Chinese Consolidated Benevolent Association (CCBA) and was used exclusively for the burial of Chinese immigrants in Canada until its closure in 1950 (24, 35). Today the cemetery is registered as a National Historic Site but, despite this recognition of national historic importance, and the importance of the Chinese Cemetery to the Chinese community in Victoria, the cemetery has very little documentation (Lai 1987).

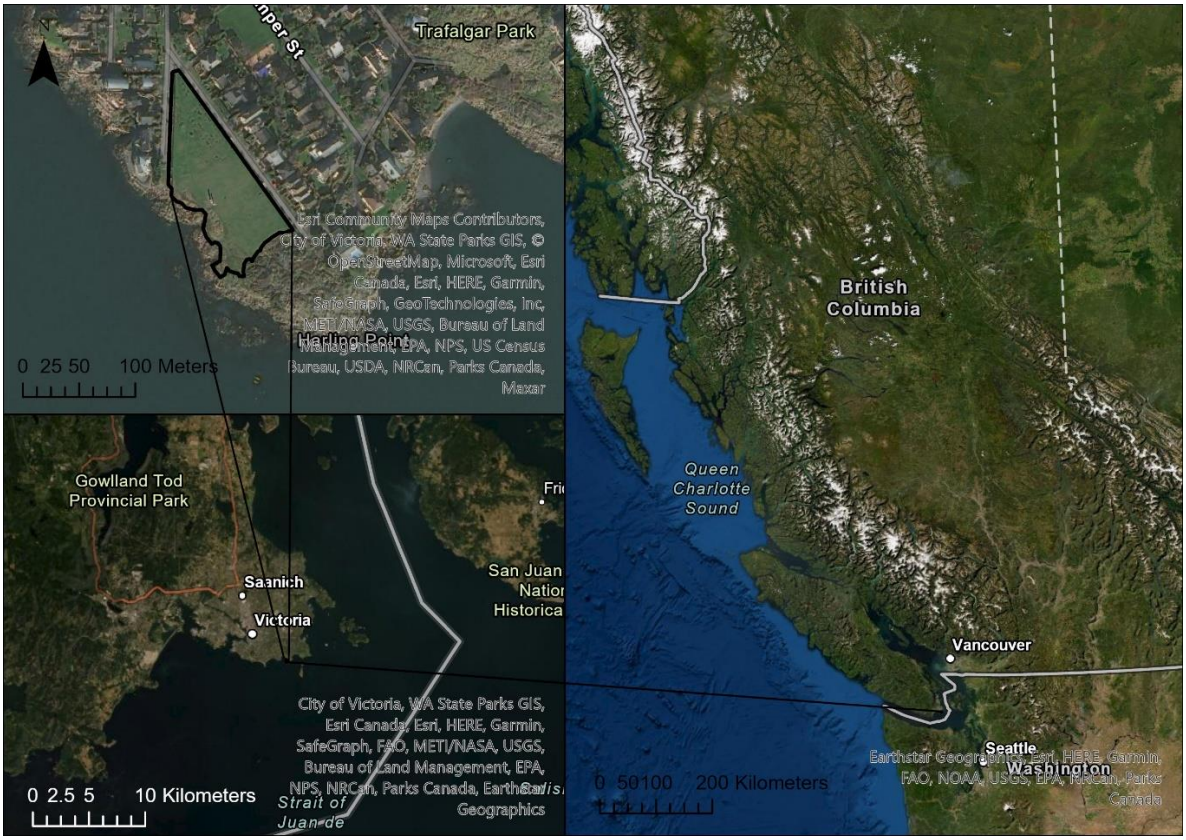

Figure 1: Map showing the location of the Chinese Cemetery at Harling Point in Victoria, British Columbia.

Much of the research that has been conducted on the Chinese Cemetery was done by Chinese Canadian scholar David Lai, who wrote papers detailing the history of the cemetery's establishment at Harling Point (Lai 1987) and the choice of the site's (and a previous unused site's) location by the CCBA (Lai 1974). The paper detailing the cemetery's establishment is of particular importance as it contains the only readable map of the cemetery I have been able to locate so far – there was once a map on a sign at the cemetery itself, but the sign is currently too faded to read (Lai 1987: 39). To my knowledge, no scholar other than Lai has directly researched the Chinese Cemetery in Victoria, but there is some information about it on the National Historic Site website (https://www.pc.gc.ca/apps/dfhd/page_nhs_eng.aspx?id=853) and it has been mentioned by other scholars (Abraham and Wegars 2003; Maxwell 2007; Ong et al. 2017) as an example of a Chinese cemetery outside of China whose location was chosen based on the principles of *feng shui.*

The influence of *feng shui* in the decision to locate the Chinese Cemetery at Harling Point is mentioned by almost every scholar and written document that discusses the cemetery. What has not been addressed however, is whether the locations of the graves within the cemetery also follow principles of *feng shui*; something other Chinese cemeteries in North America have been found to have be designed around (Molenda 2015: 194). Thus, the goal of this research is twofold: one, to analyze the layout of the cemetery through the use of Geographic Information Systems (GIS) from a spatial archaeology viewpoint; and two, to produce a digital map of the cemetery that can be made accessible to the public, as currently no map of the cemetery is available that can act as a resource for further preservation and research. This research was guided by two main research questions:

1. How may the concept of *feng shui* influenced the layout of the Chinese Cemetery at Harling Point? And how does this layout differ from more traditionally western and Christian cemeteries?
2. What other factors, besides *feng shui*, may have played a part in the organization of the Chinese Cemetery?

In this paper I will argue that the Chinese Cemetery was, at least partially, designed with the concept of *feng shui* in mind. However, while the Chinese Cemetery does appear to have been designed following principals of *feng shui*, there were also likely other factors taken into consideration when the cemetery was designed.

Historical Background

Victoria's Chinese Community

Not only is Victoria home to the oldest Chinese Cemetery in Canada, it also has the oldest Chinatown in the country. Vancouver Island as a whole is an important site of Chinese transpacific diaspora beginning as early as the late eighteenth century with the Manila-Mexico galleon trade and the development of a maritime fur trade between the Pacific Northwest and Canton, which kicked off the first major wave of Cantonese migration to North America (Chen 2019: 48). The discovery of gold along the Pacific Northwest, first in California in the 1840s and then in BC in 1858, further increased the amount of migration from China to North America. As the capital of the colony of Vancouver Island and an important gateway to the rest of BC, Victoria grew and a Chinatown was established as a base for merchant leaders to organize transportation between China and BC (Chen 2019: 50). By the peak of the gold rush in 1861, almost four thousand Chinese migrants were said to be working in the Fraser River goldfields

(51). While many of these workers returned to China or migrated to California in the winter, almost all of them likely passed through Victoria at some point.

The gold rush was not the only event that brought Chinese migrants to Victoria, however. Another wave of immigrants, said to number at around seventeen thousand, arrived in the 1880s as labour forces for the construction of the Canadian Pacific Railway (CPR; Chen 2019: 52). After the completion of the railway in 1885, again some Chinese migrants returned home while others settled on Vancouver Island and established communities in many of the cities and towns. By 1901, the Chinatown in Victoria had 2,978 residents and with the growing number of Chinese migrants in Victoria, those who died had to be buried somewhere – at least temporarily (Chen 2019: 55).

The Chinese Cemetery at Harling Point

While the Chinese Cemetery at Harling Point in Victoria is the oldest Chinese Cemetery in Canada, it is not the first place that Chinese people were buried in Victoria. In actuality, the first "Chinese Cemetery" in Victoria was the northeast corner of Victoria's first cemetery – the Quadra Street Cemetery which is known today as Pioneer Square (Lai 1987: 24). The Quadra Street Cemetery was used between 1858 and 1873 until overcrowding led to the opening of the Ross Bay Cemetery in 1872. Like the Quadra Street Cemetery, the Ross Bay Cemetery had a specific section in which Chinese people could be buried – alongside First Nations peoples and immigrants from Asia – which was separated from the Christian burials (Lai 1987). The location set aside for these 'non-Christian' people in the Ross Bay Cemetery burials was never ideal however, as it was at sea-level, making it prone to flooding and damage from high waves during storms. The low-lying and featureless landscape also meant the area had poor *feng shui,* making

the location even more unsuitable for burials (Lai 1987). Thus, the Ross Bay Cemetery was deemed a less than ideal burial location, in 1891 the Chinese Consolidated Benevolent Association (CCBA) purchased a plot of land for their own cemetery near Swan Lake with suitable *feng shui*. This site that was never actually used for burials however, and Chinese people who died in Victoria continued to be buried at Ross Bay Cemetery until the CCBA bought the parcel of land where the Chinese Cemetery now sits in 1903 (Lai 1987)..

These burials of Chinese migrants in Victoria were never intended to be permanent, however. According to Chinese beliefs, people's souls existed and hovered above their tombs after their deaths and if one died in a country other than the one they were born in their soul would be homeless until their body was retuned to their homeland (Lai 1987: 32). As the shipping of bodies was expensive, and it was not possible for the bodies of Chinese migrants who died in Canada to be shipped back to China immediately after their death, the practice of burying bodies for seven years before they would be exhumed, dried out, and shipped back to China in mass shipments, began (32). As the location of the oldest and largest Chinatown in the country at the time, the bones of Chinese migrants from all over Canada were sent to Victoria after being dug up. These bones were then dried out and were stored first in a wood "bone house" in Chinatown, and later in a brick bone house at the Chinese Cemetery, until enough bones were gathered for a large shipment back to China (32). The first of these mass shipments took place in 1909, but only a few more shipments were completed before the final shipment took place in 1930 (33).

The reason so few shipments of bones were able to be completed was primarily financial but was also exacerbated by racial tensions in Victoria. Ever since Chinese migrants began to arrive in North America, they have faced backlash from the white majority. After the completion

of the CPR in 1885 the Canadian government issued a head tax on the Chinese in an effort to slow down immigration to Canada, but Chinese migrants still continued to come to Victoria (Chen 2019: 47). The racism towards Chinese immigrants in Canada only continued to worsen. Before the establishment of their own cemetery in Victoria, Chinese immigrants were only allowed to be buried in the most undesirable corners of the Christian cemeteries in Victoria, and then when the CCBA tried to establish a Chinese Cemetery near Swan Lake, the local landowners complained to the city (Lai 1987: 30). The CCBA then faced similar complaints when they finally opened the Chinese Cemetery at Harling Point, and even hosted a mock funeral in 1903 at the site in order to test the reaction of the neighbours, which resulted in a shotgun being fired by a neighbour to interrupt the fake funeral and the perpetrator being arrested by the police (Lai 1987: 32).

Following this event, the CCBA was able to open the cemetery without further direct harassment from their white neighbours, but they still faced various complaints, which threatened to close the cemetery multiple times. The CCBA was then forced to combat these various complaints, while struggling to pay the frontage tax imposed by the Municipality of Oak Bay, which not only made it hard for them to maintain the cemetery, but also made it nearly impossible to pay for shipments of bones back to China (Lai 1987: 33-35). The start of the Sino-Japanese War in 1937 and then the establishment of the People's Republic of China in 1949 stopped any shipments of bones after 1930 from being sent out. As bones were not being sent back to China, hundreds of crates of bones had accumulated in the bone house at the cemetery by the time it was closed in 1950. These bones were then either picked up by relatives or buried in thirteen mass graves at the cemetery in 1961 (Lai 1987:39).

The complaints about the cemetery from the locals did not stop after the cemetery's closure, however. Due to a lack of funds to hire a full-time caretaker for the cemetery in the 1960's, the Chinese Cemetery would often become overgrown with grass. When neighbouring residents complained the CCBA was forced to ask for donations to fund a cleanup, until the nearby Stuart family was eventually hired to look after the cemetery in 1977(Lai 1987:39). As an alternative to keeping up with the upkeep and costs of the cemetery, the CCBA had tried to close the cemetery in 1956, but their proposal was turned down by the Oak Bay Council, on the grounds that the Chinese remains could not be legally removed from the site, even if it was closed (Lai 1987:36). Further attempts by the CCBA to close the cemetery or develop part of the cemetery land to fund the upkeep of the graves took place in the 1990s. The CCBA proposed the development of the rocky southeast section of the cemetery where graves were unable to be located, or the potential closure of the cemetery altogether in order for it to be turned into a park. These plans were never actualised as the Oak Bay zoning bylaws would not allow the CCBA to develop the land. The CCBA also received backlash from the community who were opposed to the development of the land as it would both ruin the aesthetic of the area and damage the cemetery's historical integrity (Parkinson et al. 1993a, 1993b). The issue as to what to do with the cemetery eventually came to a head in 1994 when rather than closing the cemetery or developing part of the land, the cemetery was designated as a National Historic Site, which came with national funding (Parks Canada). More recently the cemetery received a two-million dollar restoration grant in 2003 to celebrate the one hundred year anniversary of its opening and saw a new ornate gate placed at the entrance, among other improvements (Howatson 2008; Maxwell 2007).

Feng Shui

Feng shui (風水) translates to "Wind and Water" and, as described by the anthropologist Špela Kryzanowski (2020: 775), "is a traditional Chinese art of designing the environment that incorporates both rational and irrational (mystical) paradigms." It is based on principles of Chinese philosophy and is tied to the concept of the life force *qi* and a belief that the well-being and success of individuals are dependent on the *feng shui* of the remains and spirits of their ancestors (Kryzanowski 2020: 775; Lai 1974: 507). It has also been described as "a mystical combination of Chinese philosophical, religious, astrological, cosmological, mathematical, and geographical concepts" (Lai 1974: 507). Lai argues that the concept was likely created out of the fear of devastating forces of nature that were beyond the control of the ancient Chinese, like droughts and typhoons, and the belief that Nature's strict laws and orders could not be escaped, even in death (507). The Chinese also worshiped their ancestors and believed that their souls hovered above their own graves after death, so if their graves had good *feng shui* the spirits would be comfortable and as a result their descendants would have prosperous lives (507).

According to Lai (1974), for a cemetery location to have good *feng shui* it had to meet four main criteria. One, it should have smooth surrounding features (no strait lines or rugged mountain ranges). Two, it should have a view of water (water is an emblem of wealth and affluence). Three, it must have a proper balance of Yin/Yang energies: achieved by being bordered by low ridges and taller mountain ranges. Lastly, the site should have a well-drained slope towards the water (preferably south facing): for energies of spirits to drain into. The ideal site for a Chinese Cemetery that follows all these locations would be somewhere like the location pictured in Figure 2a. The Chinese Cemetery at Harling Point follows these rules of *feng shui* as

it is backed by Gonzales Hill, flanked on both sides by rock ridges, and slopes slightly towards a southern open view of the ocean (Figure 2b).

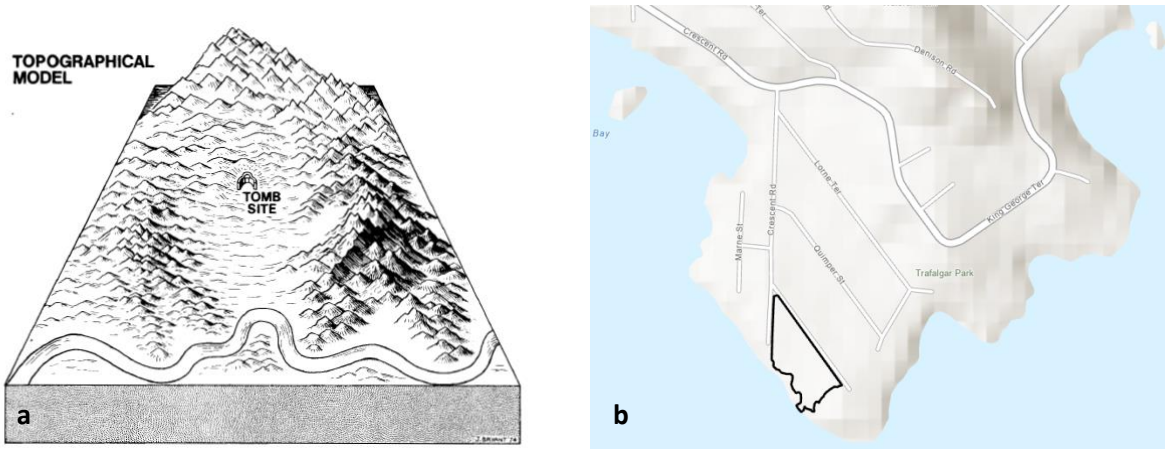

Figure 2: Model of the location for a Chinese cemetery site with ideal *feng shui* (a; Lai 1974: 509) and a topographic map showing the location of the Chinese Cemetery at Harling Point which also has proper *feng shui* (b).

The association between grave orientation and water is particularly relevant to the study of the Chinese Cemetery at Harling Point as the location was chosen because of the *feng shui* of the site (Lai 1987: 30). If the graves at the cemetery are found to mostly point with their feet towards the ocean and heads toward the ridges or Gonzales Hill, it would suggest that the *feng shui* did play in role in the layout of the graves. As there are multiple different types of grave markers in the cemetery, which makes it hard to tell where the foot of the grave is versus the head, I will use the inscriptions of the graves as a proxy for orientation. For graves that are flat against the ground, the bottom of the inscription will be considered the foot and the top will be considered the head of the grave. For graves with the upright headstones, I will assume that the side with the inscription faces toward the foot of the grave.

As I am not of Chinese ancestry, I want to acknowledge my own cultural biases and plan to approach the study of the cemetery with the utmost respect for the people buried there, as well as their descendants who still mourn and remember them. To do this, I have tried to approach *feng shui* as not just a 'belief system' or 'religion' or "cosmology', like it has been viewed by anthropologists in the past, but instead approach it as spatial paradigm based on personal and cultural connections to nature, by describing my own experience at the cemetery (Kryzanowski 2020).

Archaeological Perspectives

Spatial Archaeology

Since the technology's early adoption by archaeologists in the 1980s, Geographic Information Systems (GIS) has become a valuable tool for many archaeologists (González-Tennant 2016: 24). There has been an increase in the use of GIS in archaeology since the late 1990s, linked to what has been called the "geospatial revolution" in archaeology – a term which compares the increased use of geospatial technologies by archaeologists to the *radiocarbon revolution* and the ways that the invention of radiocarbon dating fundamentally changed the practice of archaeology (McCoy 2021). Like radiocarbon dating in the second half of the 20th century, geospatial technologies have begun to transform archaeological studies by allowing researchers to investigate the "spatial domain" of sites of interest as well as the "temporal domain" (Chase et al. 2012: 12917). One major difference between the radiocarbon dating and geospatial revolutions, however, is that unlike radiocarbon dating, geospatial technology is composed of multiple tools. These tools include GIS, Ground Penetrating Radar (GPR), GPS, and Remote Sensing, which can be used in different combinations with each other, depending on the purpose of a particular

study, with GIS representing only one of the many types of geospatial software (McCoy 2021: 1).

GIS was first used by archaeologists as a tool to help in the inventory and mapping of artifact distributions (González-Tennant 2016: 24). While GIS is still used in these ways today, GIS is now applied to a much wider variety of archaeological investigations in complex analyses of the spatial layouts of archaeological sites (González-Tennant 2016: 24; McCoy 2021: 7). While specific fields of archaeology have utilized GIS software in different ways, I will highlight some of the ways researchers have used GIS to study burials and cemeteries.

Historical archaeological investigations that use GIS have tended to fall into three categories: the creation and management of inventories and geospatial databases; more complex geospatial analyses; and mapmaking and data visualization (González-Tennant 2016: 25). Studies on historic cemeteries can fall into all three of these suggested categories, depending on the aim of the project. These categories arise primarily due to the aim of many researchers being to aid in the documentation and preservation of historic cemeteries and the unavailability of more traditional archaeological data from excavations (Indratmo et al. 2014: 2158: Liebens 2003; 56).

The documentation and preservation of historic cemeteries through GIS software can be approached in multiple ways. One way GIS has been used to study historic cemeteries in the past was to create a centralized database for all the cemeteries in Alberta (Indratmo et al. 2014). Indratmo et al. (2014: 2160) aggregated the location of each cemetery in Alberta in an interactive online map that could allow researchers and the public to easily locate graves in the province, as well as study the layout of the cemeteries across that landscape.

A study with a similar goal was conducted by Lemke (2020) on the cemeteries of marginalized groups in the United States. Like Indratmo et al., the aim of Lemke's project was to

create a centralized database of African/African American and Hispanic cemeteries in Texas, which, as a result of racism in the state are more likely to be vandalized and neglected than primarily 'white' cemeteries (Lemke 2020: 606). Lemke's project sought to locate and document these endangered cemeteries in Texas through the analysis and digitization of historic maps to limit any further damage to the cemeteries (Lemke 2020).

The large-scale mapping of multiple cemeteries across a province or state is not the only method used by archaeologists. In a slightly older study Liebens (2003) used a combination of data points collected via handheld GPS devices and a total station to make a digital map of St. Michael's Cemetery in Pensacola, Florida. Liebens and his team mapped each grave in the cemetery with associated attribute information on each grave marker in order to create an interactive digital map of the cemetery for use by the general public, as well as analyse spatial trends that exist between the burials. Like the projects conducted by Lemke and Indratmo et al. this study was conducted primarily to aid in the preservation of St. Michael's Cemetery. Beyond documentation of the cemetery, Liebens conducted a basic viewshed analysis on the site in order to determine the ideal location for the construction of a new building on the site that would be hidden from general view (Liebens 2003: 66).

Beyond the spatial layout of cemeteries themselves, GIS has also been used by archaeologists to study more abstract concepts associated with cemeteries, including memory and mourning timeframes. Tzortzopoulou-Gregory (2010) used GIS to analyze the length of time graves at active cemeteries in Greece are remembered and maintained. Graves at two currently in-use cemeteries in Greece were monitored for signs of mourning to map the location of graves still being actively maintained in comparison to the graves that seemed to have been forgotten.

Archaeology of Chinese Cemeteries

Archaeologists have been studying Historic cemeteries for a long time, and while the use of GIS has allowed for non-invasive spatial analysis to be conducted, other researchers have investigated the typography of gravestones or conducted excavations at historic cemeteries (Veit et al. 2009). The study of historic Chinese cemeteries in North America has been no different. Of particular note for this project are the studies conducted by archaeologists Sue Fawn Chung, Fred P. Frampton, and Timothy W. Murphy (2005) as well as Wendy Rouse (2005), on Chinese American cemeteries. Rouse (2005) details the excavations of three Chinese Cemeteries in Virginatown, California conducted by Jerald J. Johnson, Melissa K. Farncomb, and the archaeological field class from California State University. In their investigations they asked the research question: "Is there evidence for a deliberate orientation of the cemetery or individual graves according to the principal of *fengshui*?" and found that the graves were oriented with the heads of the graves towards a hill and the feet towards the water of a nearby river. This is in contrast with Euro-American burials that tend to be oriented in rows with walkways at the heads and feet of each graves (Rouse 2005: 84). Rouse (2005) also discusses how the Chinese burials were oriented primarily based on the location of the geographic features of the river and hill rather than based on cardinal directions like Euro-American burials. This difference in burial orientation led the researchers in Virginatown to argue that the Chinese Cemeteries were deliberately oriented in accordance with *feng shui.*

A similar study conducted by Chung et al. (2005) at a Chinese Cemetery in Carlin, Nevada also found the graves to be oriented in association with the locations of nearby water and mountains. Unlike the graves in Virginatown however, the burials in Carlin were still oriented in a relatively straight line along a low sloping ridge. Further, the researchers were less focused in

studying the *feng shui* of the cemetery and more concerned with the identifications of the individuals in each burial and the ways those individuals adopted to life in America (Chung et al. 2005).

Methodology

The Data

The data for this project consists of both spatial data and attribute data. Spatial data is the information on the location of the graves and other features at the cemetery including the ceremonial altar and chimneys on site, as well as the fence that surrounds the cemetery and its three gates, the main path through the cemetery, and the four informational signs present on site. While spatial data allows a map of the location of each feature at the cemetery to be made, attribute data including the orientation and type of each grave is required for a more detailed map to be made and for any analysis to be conducted on the graves.

Data collection

The spatial data for this project was collected in two ways. First, some locational data was collected through the digitization of a 0.10m resolution aerial image of Victoria taken in May 2021 that is available freely through the Capital Regional District (CRD) geospatial data website ("Geospatial Data" 2015) in a GIS program. This project used version 2.8 of the GIS Program ArcGIS Pro. This method is the way the location for all the non-grave features in the cemetery have been recorded, as well as the locations of some of the graves that have footprints that are visible in the CRD aerial imagery.

The second way spatial data was being collected was through on-site measurements. As many of the graves are not visible on the CRD aerial image, their location was collected by measuring the distance and bearing of at least three corners of each grave from a set datum for which a GPS point was taken using a Garmin GPS 62sc device. A similar method was applied by Johan Liebens (2003) to map St. Michael's Cemetery in Pensacola, Florida. All these measurements were then recorded on sheets in the field and then transferred to an excel spreadsheet.

The attribute data I chose to collect consists of the type of headstone for each grave, whether the headstone has an inscription, if that inscription is legible, the direction the inscription or grave is facing, the language(s) the inscription is written in, any information written on the headstone, and a picture of each grave. All attribute data was either recorded on site or taken from photographs of the graves. Any information written on the graves in Chinese script that was legible was translated by Xue Ma, a PhD student at the University of Victoria. Each grave (recorded via digitization and on-site measurements) has also been assigned an arbitrary, but unique feature number to allow all spatial data to be matched with the correct attribute data and combined in ArcGIS Pro. The types of attribute data being collected were specifically chosen to facilitate the creation and searchability of an interactive web map, as well as allow for the analysis of the cemetery.

Data analysis

The Chinese Cemetery was analyzed for influences of *feng shui* on its layout primarily through analyzing the direction the graves are facing, as the graves of Chinese Cemteries tend to be oriented differently then those in Western or Christian cemeteries (Chung et al. 2005; Rouse

2005). If the graves at the cemetery are found to mostly point with their feet towards the ocean and heads toward the ridges or Gonzales Hill, it would suggest that the *feng shui* did play in role in the layout of the graves.

While the collection of attribute data on the orientation of each grave will help in the analysis of the possible influnce of *feng shui* on the cemetery's layout, other data on the type of headstone of each grave as well as the language inscriptions are written in, and information provided by the inscriptions, like the date of death and county of origin, was used to analyze other ways in which the cemetery's layout may have been influenced. By assigning a different colour to different attributes, like each type of headstone or graves with only Chinese script versus graves with Chinese and English, I am able to see if there is any pattern to the location of these grave types. If there is a clear and visible pattern in the layout of graves by a particular attribute, it would suggest that that attribute was taken into consideration when designing the layout of the cemetery.

Creation of online webmap

The idea to create a digital map of the Chinese Cemetery that can be accessed by the public was inspired by the project conducted by Liebens (2003). For this project, an interactive web map was similarly created by combining all the data collected and then converting the map to an ArcGIS Online web map. The link to this map has been shared with the CCBA and the Old Cemeteries Society of Victoria who will hopefully put it on websites about the Chinese Cemetery to allow the public to access and use the map to find graves. The names on the graves are primarily being collected to allow people to search for and locate graves of particular people

in the cemetery, but people will also be able to search for graves through other known attribute data like date of death or county of origin if that information is written on the graves.

Results

After being mapped, the Chinese cemetery was found to have 361 visibly marked graves. In actuality, the number of graves at the cemetery is probably higher than this as I only counted graves with visible markers, despite there being areas that showed possible signs of sunken graves. The were also a few cases where a big rock or cement piece with no markings or inscriptions was placed between graves. In assessing whether these counted as grave markers I looked at whether these features were unique or seen multiple times throughout the cemetery. In the case of the square cement markers (Figure 3) seen at the cemetery, these markers were counted as graves. The few unique rocks were not counted.

Figure 3: An example of the square cement markers seen at the Chinese Cemetery

Of the 361 identified graves at the cemetery, 27, or 8%, did not have an inscription or were broken in a way in which it was not possible to determine the orientation of the graves (Figure 4). Of the remaining 334 graves, 300, or 90%, were oriented with the inscription facing towards the water (therefore, likely with the foot of the grave pointing towards the water). The remaining 34 graves were oriented facing towards elevation and with their backs towards the ocean.

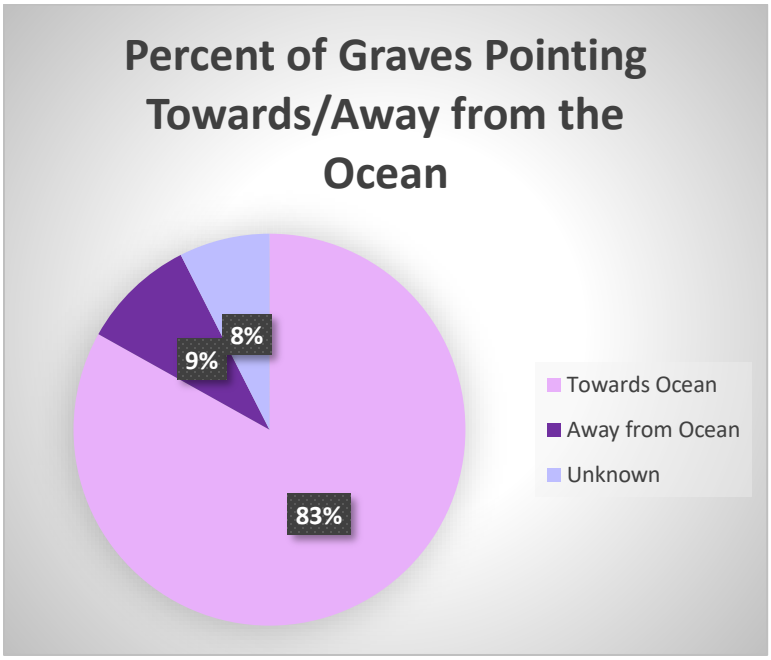

Figure 4: Pie chart showing the percentage of identifiable graves oriented towards and away from the ocean at the Chinese Cemetery.

The majority of the graves oriented facing away from the ocean were found in one section of the cemetery. As can be seen in Figure 5, there is one section in the north-western corner of the cemetery in which the graves are oriented in a different direction to most of the graves in the cemetery. Of this section of 32 graves, only two have unknown orientations because of a lack of visible inscriptions. The remaining 30 graves account for 88% of all of the identifiable graves in

the cemetery found to be facing away from the ocean as they are all facing towards a ridge on the eastern side of the cemetery. The other four graves found to be facing away from the ocean are spread out amongst the graves in the central part of the cemetery with two being located beside each other and the remaining two being evenly dispersed.

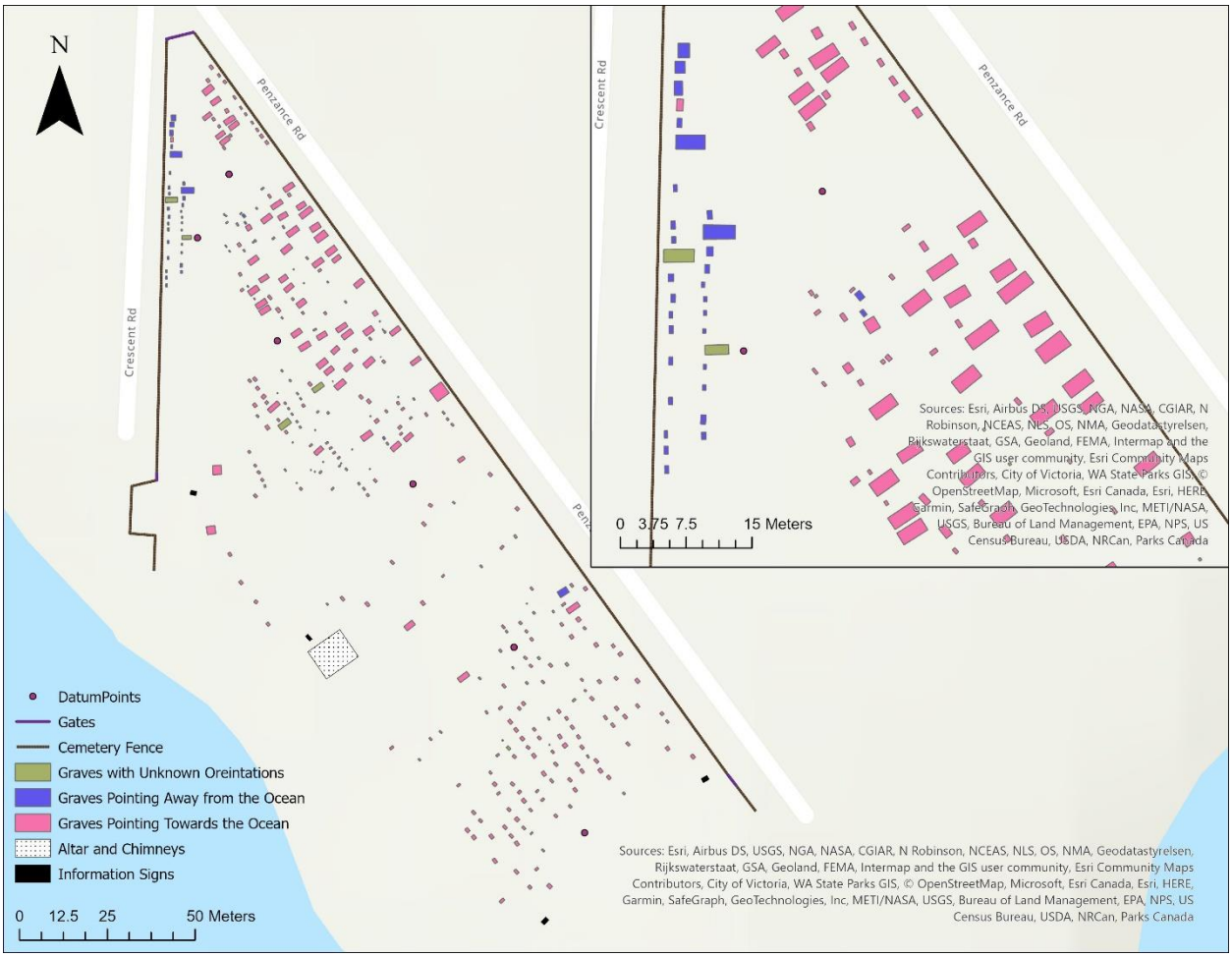

Figure 5: Map of the Chinese Cemetery showing the location of each mapped grave and their orientations.

Discussion

The layout of the Chinese Cemetery

Based on the results listed above, I argue that the Chinese Cemetery at Harling Point in Victoria, BC was designed in accordance with feng shui. This argument was originally based on the fact that the location of the Cemetery was specifically chosen for the site's *feng shui* because it is backed by Gonzales Hill, flanked on both sides by rock ridges, and has an open view of the Strait of Juan de Fuca (Lai 1987: 30). Since the location of the Chinese Cemetery at Harling Point was specifically chosen for the site's *feng shui*, it stands to reason that the principles of *feng shui* would have also been considered as bodies began to be buried in the cemetery.

As has been found, the majority of the graves (83%) at the Chinese Cemetery appear to be oriented with their heads towards Gonzales Hill and their feet towards the Strait of Juan de Fuca. This high percentage alone shows clear evidence of the graves being placed in accordance with *feng shui*, particularly when the orientation of the graves at the Chinese cemetery are compared with the orientation of graves in more Western Christian cemeteries.

More Western and Christian cemeteries tend to have graves that are oriented with the heads and feet of each grave pointing towards the east and west and are usually laid out in rows with walkways at the heads and feet of the graves (Rouse 2005: 84). This layout of graves in distinct rows with graves orientated east-to-west is seen at the Ross Bay Cemetery, just down the street from the Chinese Cemetery. It is not, however, seen at the Chinese Cemetery. The small number of Chinese graves that remain at the Ross Bay Cemetery follow this orientation and are also organized in rows with their heads and feet pointing roughly towards the east and west with their sides parallel to the ocean.

While the graves at the Chinese Cemetery are organized in loose rows, these rows more closely follow Penzance Road and run roughly northwest to southeast, rather than north to south. The graves in these rows also mostly face the same direction towards the ocean, rather than fluctuating in direction with each row. This placement of the graves suggests that most of the graves in the Chinese Cemetery were purposefully oriented in accordance with the geographical features of Penzance Road, Gonzales Hill, and the Ocean, rather than by cardinal directions. This orientation of graves based around natural features is characteristic of Chinese cemeteries that were organized in accordance with *feng shui*, offering a strong argument for the use of *feng shui* principals in the design and layout of the Chinese Cemetery at Harling Point.

What is still uncertain however is why 9% of the graves are oriented facing away from the ocean and why the entire section of graves in the north-western point of the cemetery are oriented differently than the vast majority of the graves. While there is a possible argument to be made that these graves were placed following the orientation of Crescent Road, which acts as the western border to the cemetery like the rest of the graves appear to be laid out roughly following the orientation of Penzance Road, this does not explain the placement of the graves in this portion of the cemetery to begin with. The central section of the cemetery, roughly placed behind the ceremonial alter and chimneys, has a much lower density of graves than the sections on either side of it (Figure 6). If it was an issue of space and the graves with different orientation in the northwest part of cemetery were placed there because they were the last graves buried in the cemetery, this would not explain why these graves were not placed in the open section in the middle of the cemetery instead. Of course, there could still be graves in this location that were simply not marked or had markers that have since degraded, but without using ground penetrating radar or other geophysical techniques, it is impossible to tell.

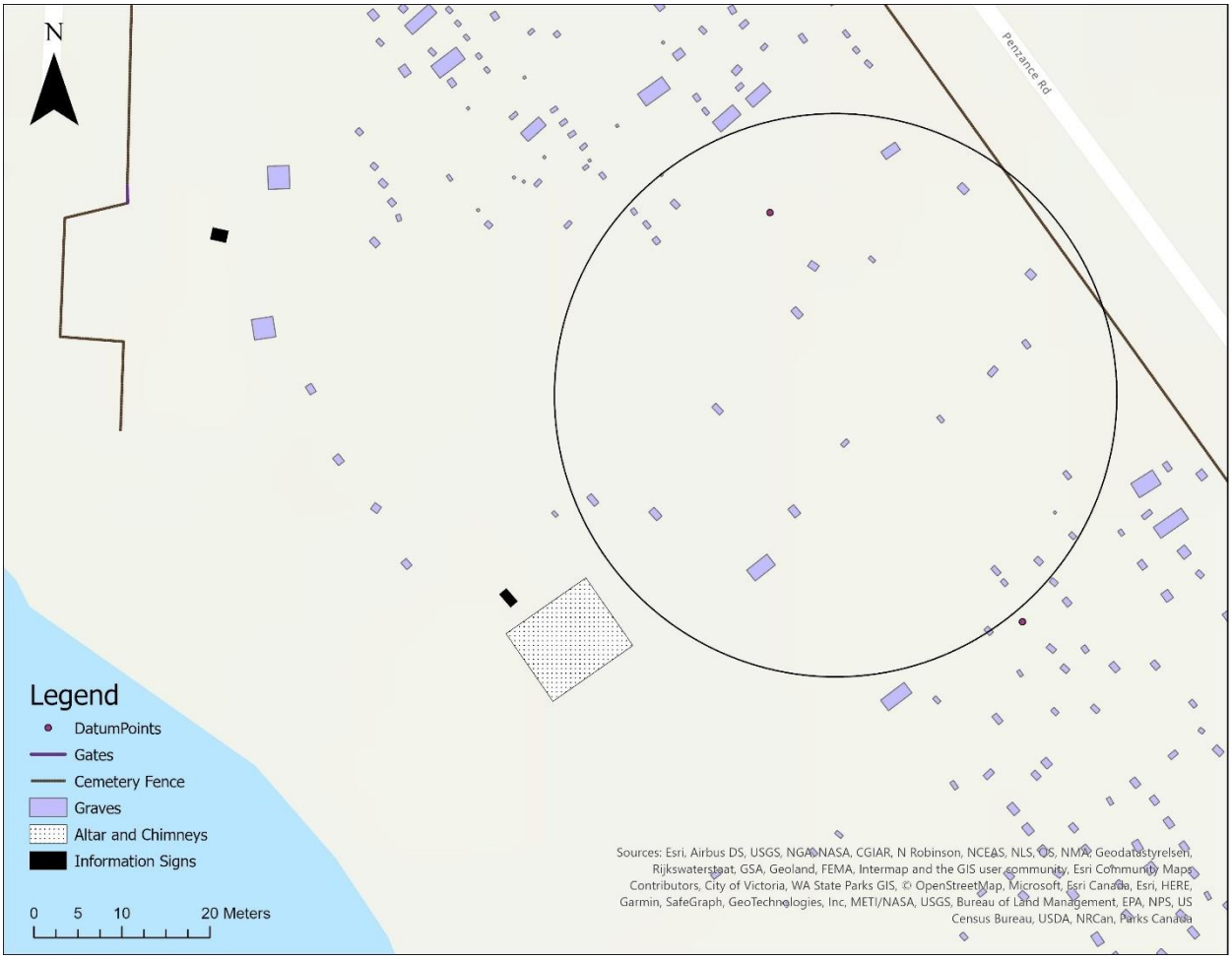

Figure 6: A map showing the low density of graves in the central section of the Chinese Cemetery between the altar and fence.

Another possible explanation for the placement and orientation of the graves in the northwest corner of the site is that it is the newest section of the cemetery. If the graves in this section were the newest, the change in orientation could be evidence that the longer people were away from China, the more they strayed from the principals of *feng shui.* Based on the low readability of the grave markers however, the dates of deaths for only two of the graves in this section were able to be determined and these dates are not much different from the remainder of the cemetery (Figure 7).

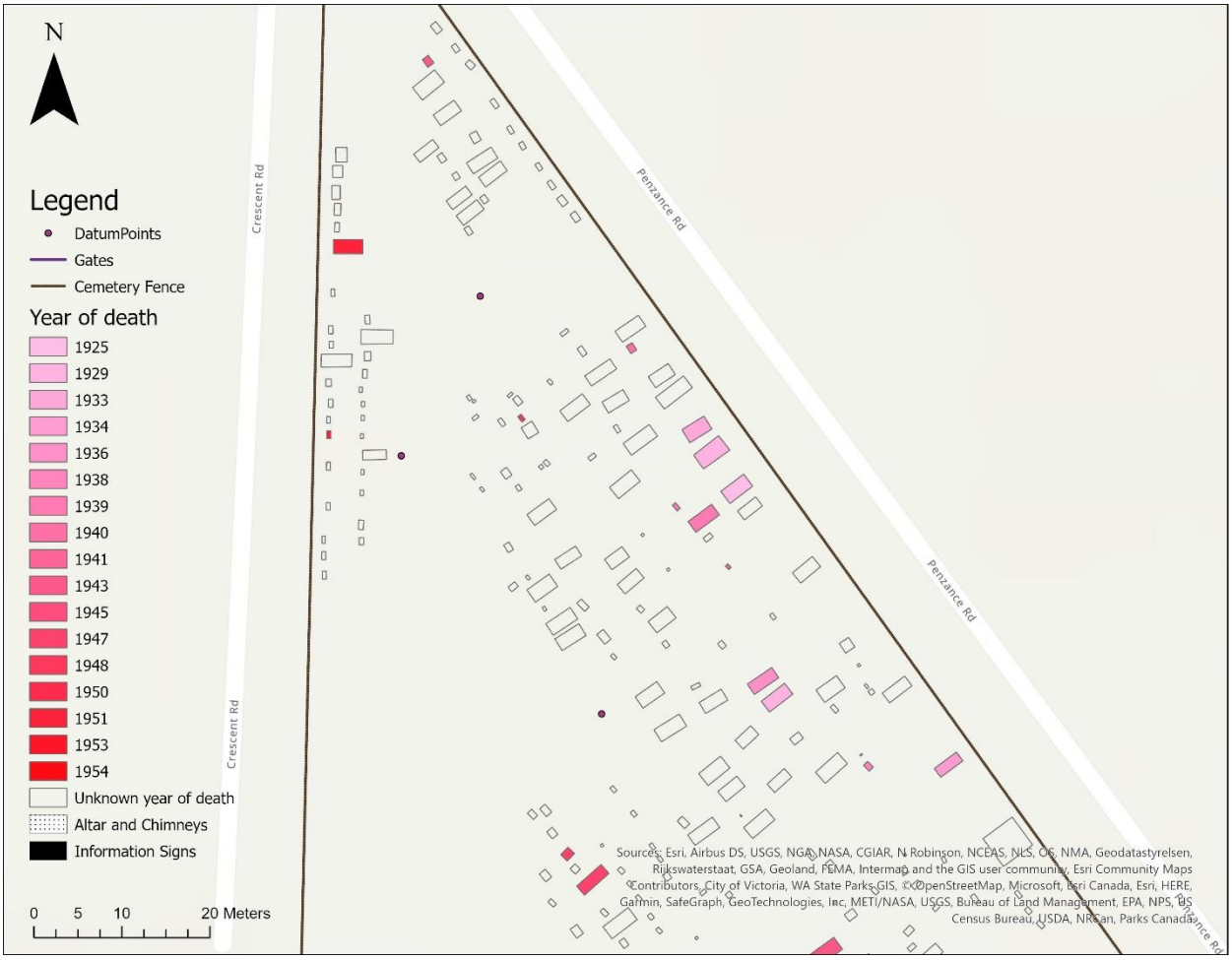

Figure 7: A map of northern, outlier portion of the Chinese Cemetery coloured by the year of death for the graves for which that information was available.

I also considered the possibility that the people in these graves were from a province in China that followed the principals of *feng shui* less closely than they do in some of the other provinces. While *feng shui* was not universally accepted in all provinces of China, it was important in the Guangdong province where 90% of Chinese migrants in North America were born (Chung and Wegars 2005: 5). It is also where every person buried in the Chinese Cemetery for which a province of birth could be determined was born. While the people buried in these graves did not hail from a province that as a whole chose not to accept *feng shui*¸ they or their

families may have personally chosen to reject the principles. Unfortunately, without any further information regarding the individuals in these graves it is impossible to tell why they were placed the way they were.

Creating a digital Map of the Chinese Cemetery

The second major component to this project besides studying the orientation of the graves at the Chinese Cemetery at Harling Point for the influnce of *feng shui*, was to create web map of the map of the cemetery (Figure 8). As previously discussed, this web map was created from the map used to analyze the orientation of the graves at the cemetery and contains all the data collected on the graves in the cemetery. It also has the location of other features at the cemetery mapped including the ceremonial altar and chimneys, the four informational signs, the three gates, and the fence which surrounds the cemetery. This map has been made accessible to anyone with the link (https://arcg.is/W1je4). This link has also been shared with the CCBA and the Old Cemeteries Society of Victoria. Once anyone clicks the link, they are brought to ArcGIS's map viewer online and will be able to click on any grave to see all the information I have collected on it as well as a photograph of the grave. My hope is that this map will be linked to on websites about the cemetery, so that anyone who currently does not have access to a map of the cemetery will be able to find graves more easily. The public nature of this map will also hopefully allow future researchers to take the preliminary research I have done on the cemetery and add to it.

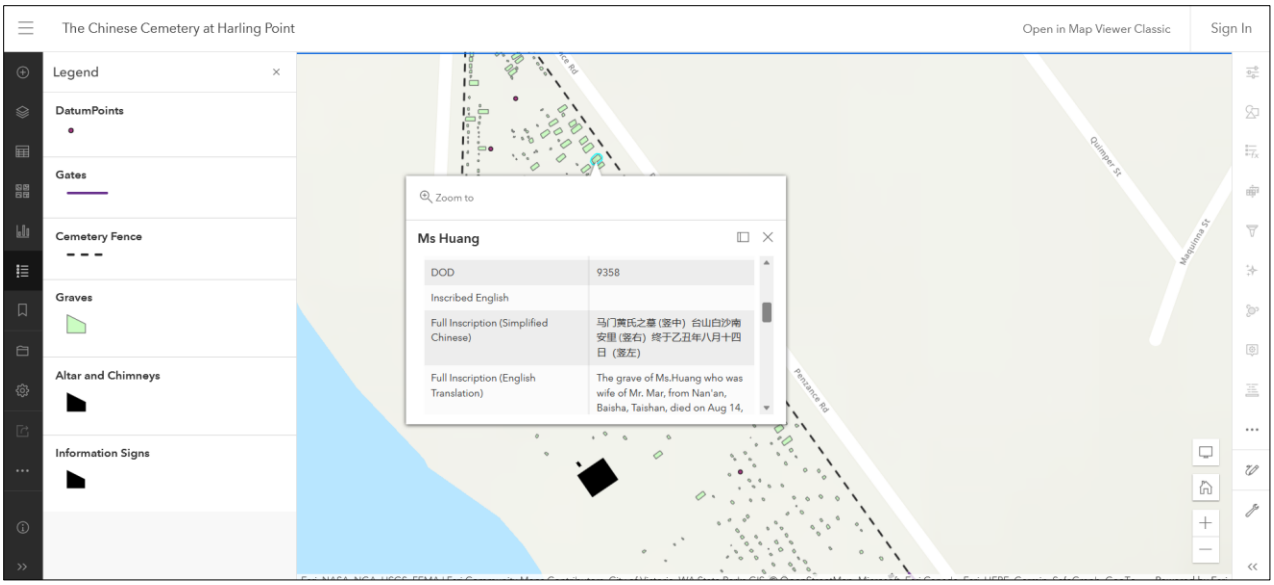

Figure 8: A screen shot of the webmap of the Chinese Cemetery accessible through this link: https://arcg.is/W1je4.

Limitations

Choosing to design this project this way comes with both benefits and shortcomings. Choosing to collect all the data for this project myself means I am very familiar with exactly what information is being collected and can experience the *feng shui* of the Chinese Cemetery for myself, like anthropologist Kryzanowski (2020) advocates for more anthropologists to do. Being on-site and experiencing the *feng shui* of the cemetery was intended to help me to avoid only viewing *feng shui* in a rational and scientific framework that overlooks the spiritual part of *feng shui* that is about personal connections to nature. While I understood why the Harling Point would have been chosen as a site for a cemetery from an aesthetic viewpoint, from the first time I visited the cemetery, I often found my self getting too caught up in the measuring of grave locations to really stop and try feel the *feng shui*. There were however a few moments where the sun was shinning, the waves were crashing lightly against the rocks, and I just sat down between

the graves that I think I began to understand the more spiritual side to *feng shui.* For a few quiet moments the cemetery would feel alive, and then a bird would crow or some kids in the neighbourhood would yell in laughter and the cemetery would feel alive in a different way. The experince of spending the majority of my time at the cemetery for almost a month straight gave me an appreciation of the duality of cemeteries that I think people sometime fail to acknowledge; while they are a place of death and morning, cemeteries like the Chinese Cemetery are also public parks alive with activity. While I am still not sure if I entirely understand the more spiritual nature of *feng shui*, spending as much time at the Chinese Cemetery as I did not only allowed me to make a more accurate map because of my familiarly with the site, but also allowed me to connect with the cemetery on a personal level.

Despite the benefits to collecting much of the data myself on-site, this method also has its downsides. Primarily it was extremely time-consuming and could be prone to user error caused by inconsistencies in measuring practices and miscounting of graves (Lunga et al. 2022). However, as I was the only researcher on the project, all the measurements were done by me which reduces some of the potential inconsistencies caused by having multiple researchers in the field. Another shortcoming of collecting data on-site is that all measurements were based on GPS points recorded by a Garmin GPS 62sc device with 2m accuracy. The 2m accuracy of the device is in regard to the exact location of the datum, therefore the measurements of the graves could be up to 2m away from where they are in actuality but would all be accurate compared to each other. That being said, once the data collected in the field was uploaded into ArcGIS Pro I was able to somewhat correct the points and measurements to make the grave locations fit with the digitized graves, and my analysis was mostly based on orientation so the exact location of the graves is not of the utmost importance in this project.

Conclusion

While this research has not been able to completely decipher the reasoning behind the placement of all of the graves at the Chinese Cemetery at Harling Point, it did find that the vast majority of the graves in the cemetery appear to be oriented in association with the ocean and ridges. The orientation of 83% of the graves towards the ocean along with the lack of defined rows of graves suggest that, like the site of the cemetery was chosen because of its *feng shui*, so too was the cemetery, at least partially, designed with *feng shui* in mind. There were, however, likely other factor at play, particularly in the one outlier section of the cemetery. While it is possible this section was the newest of the graves to be placed at the cemetery, or were all from a particular area of China, the preservation of the graves made it impossible to determine what many of the inscriptions said. Without further information on the people buried in the cemetery, whether it is derived from the inscriptions on the graves or any burial records, it is impossible to say why some of the graves appear to be oriented in a different way than the majority.

While the reasoning behind the placement of the one outlier section of the cemetery remains a mystery, the majority of graves at the cemetery do appear to have been designed following the principles of *feng shui.* The placement of graves in accordance with *feng shui* is of particular importance when these graves are compared to the Chinese graves at the Ross Bay Cemetery just down the road from the Chinese Cemetery. At the Ross Bay Cemetery, Chinese graves were allocated the least desirable area where they were the most susceptible to damage from storms as well as being in a location with bad *feng shui.* Even the graves themselves are oriented following the same pattern as the remainder of the graves in the cemetery (roughly facing East or West depending on the row). It was only when the Chinese community in Victoria opened their own cemetery, that they were able to bury their dead following their own customs.

Further research:

By mapping all the graves at the Chinese Cemetery, this project has hopefully laid the groundwork for future research at the Chinese Cemetery. Now that a map of the cemetery will be available online, my hope is that future researchers will be able to add any more information that can be derived from the graves to the online database in order to increase the documentation of the cemetery beyond what I was able to achieve. In particular, I was never able to access any of the burial records for the cemetery, but should these records be located and digitized, they could be linked to the webmap so that when a grave was clicked on the user could view the burial record for that grave. More expensive technology than was accessible to me could allow the inscriptions of the graves to be more readable and once translated this info could be added to the webmap. With more data available, future researchers could potentially try to analyze other ways the cemetery could be organized. Looking at the graves by county of birth in Guangdong province for example could be a valuable direction for future research as the 13 mass graves of bones from the bone house were divided by county of birth, so it stands to reason that people buried in the main portion of the cemetery may have been buried along side others from the same county of birth (Lai 1987:39).

Further, this project focused entirely on documenting the cemetery based on visible markers which tell us nothing about the actual remains currently buried at the cemetery. The Chinese practice of digging up bones after seven years and sending them back to China means that many of the people documented on the gravestones may no longer be buried in the cemetery. Just as likely is the possibility that people were buried at the cemetery without a proper marker, or if they were buried with one it may no longer exist. While some documentation on which people were exhumed and sent back to China may exist, a future researcher could also use GPR

to determine where bodies were actually buried at the cemetery. This GPR data could then be compared to the map of the gravestones in order to the determine where the bodies are at the cemetery in comparison to the actual gravestones.

While there is much that is still not clear about the Chinese Cemetery, what is clear is that it offers many avenues for future research. David Lai laid out the early groundwork on documenting the Chinese Cemetery at Harling Point, and while I may have carried that mantle for a short while, I am hoping to pass the torch on to the next researcher who will hopefully contribute to the preservation and documentation of this fascinating site.

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