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Baha’i Sacred Architecture and the Devolution of Astronomical Significance: Case Studies from Israel and the US

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Baha’i Sacred Architecture and the Devolution of Astronomical Significance: Case Studies from Israel and the US

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in Geography

by

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Bachelor of Arts in International Relations and Middle Eastern Studies, 2014

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This thesis is approved for the recommendation of the Graduate Council.

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Abstract

Sacred architecture is a complex conglomerate of different ideals of a faith. Within modern terms, the Baha’i faith is an excellent example of modern sacred architecture. Within ancient times the architecture of temples and shrines oftentimes had celestial alignments meant to connect the adherent to the gods. With this in mind, the Baha’i faith is evaluated with the use of cartography, celestial measurements, orthophotography, and archival research to evaluate the significance of the Baha’i sacred architecture and the symbolism embedded within it.

The Baha’i faith came out of Persia during the 19th century and relocated to Israel late in that century. The faith itself is comprised of four founding leaders of the faith known as The Bab, Baha’u’llah, ‘Abdul-Baha, and Shoghi Effendi. After the death of Shoghi Effendi the faith institutionalized and became an elected body governing the adherents and discerning religious law.

Baha’i symbolism borrows many symbols from other faiths as well as creating their own. The main symbols of the Baha’i faith are the haykal, stretched haykal, nonagonal star, octagonal star, and ring-stone symbol. These are often incorporated within the sacred structures of the faith. Furthermore, the Baha’i temples reflect the local inhabitants of the country in which the temple is located and incorporate local traditions and styles in the architectural design. Celestial alignments can be found within the structures of the Baha’i faith. Overall they are not a dominant part but are seen in the Samoan Temple and Indian temple. This could be due to the Baha’i incorporation of local religious practices or the metaphorical Sun spoken of by Baha’u’llah.
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Dedication

This thesis is dedicated to Shelly and Terri Pitman, local Baha’i who taught me the faith and showed me incredible hospitality. It is also dedicated to future Master’s students, this is a possible thing. Keep your head up and truck on through, you’ll do fine.
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Chapter One: Introduction

The Baha’i faith is a young religion originating in 19th century Persia. With a new religion comes new areas of study. The Baha’i faith is similar to most organized religions but its goals are different. They seek a unified and peaceful world and actively do not proselytize. Usually with a religion that does not seek converts, it eventually fails and disappears. However, this is not the case with this particular faith. Founded in 1863 from as a sect of a Shi’a sect, it has seen rapid growth and spread throughout the globe. Over the last 153 years the fledgling faith has grown to roughly 5 million adherents globally; an average of roughly 32,000 converts a year since its founding. Granted the faith has had its highs and lows when it comes to conversion, but regardless 5 million adherents within 153 years says this faith is well worth academic study (BWNS 2016).

When a religion grows it oftentimes leaves evidence of its growth. Sacred architecture is an essential part of an organized religion; they are monuments and testaments to the power and spread of a faith. Furthermore the realms of the divine are often associated with a cosmological significance; whether this ranges from the importance of the sun in Egyptian mythology to the Christian concept of Jesus returning from the east. Religion has usually had some connection with a celestial concept, so is the Baha’i faith any different or is it the same as its predecessors? This research seeks to address and answer the question of architecture, sacrility, and celestial relationships.
Symbolism has also been critical to understanding a faith and its role in society. Every religion has symbols that are meant to convey a message or story to the adherents of that faith or those outside of it. Oftentimes the symbols are integrated into the religious architecture of its particular faith; understanding the symbolism helps to understand the faith. The Baha’i faith is unique in the sense that it views itself as a continuation of every world religion so naturally it would seek to incorporate the symbolism of other faiths. However, it is a distinct faith and has a different origin story from other faiths, thus its symbolism will differ. This research seeks to understand the religious symbolism of the Baha’i faith and explore how the adherents incorporate it into their sacred architecture.
Location also has a lot to do with the growth of a faith. Judaism began with Abraham in Israel, Christianity with Jesus also in Israel, Islam with Muhammad in Arabia with connections to Palestine and now the Baha’i faith out of Persia now headquartered in Israel. Location and politics play a specific role in the formation of religion. Israel has historically been the place of expansion for monotheism. Judaism founded its first kingdom here, Christianity spread from Israel, Israel was also the first place Islam conquered, and likewise the Baha’i hold Israel as a sacred place. Israel has been and still is pivotal to monotheist traditions, due to its conjunction to Africa, Europe, and Asia. Specifically in regards to the Baha’i faith, the cities of Haifa and Acco are worth studying due to the fact that the faith became organized within these boundaries. This study will look at the historical foundations of the faith within the holy land and the current demographics of these cities.

Overall this research seeks to explore the astronomical or environmental significance of Baha’i sacred architecture and the symbolism incorporated and used in adornment. This study uses historic, theologic, and photographic evidence in order to answer these questions. Moreover, with the use of satellite imaging, cartography, orthographics, and statistics this study will contribute to the understanding of Baha’i sacred architecture and contribute to the broader geographic analysis of sacrality and architecture.
Chapter Two: Study Site

2.1 Physical Geography

Israel is a Jewish state situated within the Middle East. Israel is bordered by the Mediterranean Sea to the west and Jordan and the West Bank to the east. Egypt and Gaza are on Israel’s south western border; Lebanon and Syria border to the north of Israel. The land area compromising Israel, before 1967, was roughly 20,700 square kilometers, this also includes around 445 square kilometers of water inland. Israel’s length from 114 kilometers, going north to south. However, if you include the occupied territories of Israel, occupied during the 1967 war, Israel added an additional 7,477 square kilometers. The areas included are the West Bank, Gaza Strip, East Jerusalem, and the Golan Heights (Metz 1990).

Israel can be divided into four regions. There is the coastal plain, the central hills, the Jordan Rift Valley, and the Negev Desert. The coastal plain ranges from the Lebanese border to the north, and the border of northern Gaza, to the south. This plain is only interrupted once by Cape Carmel at Haifa Bay. The coastal plain is roughly 40 kilometers wide at Gaza, but narrows to five kilometers near the Lebanese border in the north. The plain is a very fertile region and is noted for its citrus and wine making. There are only two permanent sources of fresh water in the coastal plain and they are the Yarqon River, in the center coastal plain near Tel-Aviv, and the Qishon River near Haifa Bay (Efrat and Orni 1976).
Figure 2.1: Basic map of Israel and surrounding countries. Israel can be divided into four regions. There is the coastal plain, the central hills, the Jordan Rift Valley, and the Negev Desert. The coastal plain ranges from the Lebanese border to the north, and the border of northern Gaza, to the south (GlobalSecurity 2016).

Traveling east of the coastal plains lie the central highland region. These highland regions are divided into four different subregions. In northern Israel lie the upper and lower hills of Galilee. South of these are the Samarian Hills, which have numerous fertile valleys. Further south, south of Jerusalem, lie the Judean hills, which are mainly barren and unfertile (Metz 1990).
The central highlands reach 610 meters in height and hit their peak at Mount Meron, roughly 1,200 meters in elevation. Mount Meron is located in the Galilee region, in northern Israel. There are several valleys that cross these highlands, most notably is the Jezreel Valley, which starts near Haifa and stretches roughly forty-eight kilometers south east to the Jordan River Valley. The Jezreel Valley is only nineteen kilometers wide at its widest point (Efrat and Orni 1976)

The Jordan Rift Valley, which lies east of the central highlands, is a small part of the big, 6,500 kilometer long Syrian-East African Rift Valley. The Jordan Rift Valley central figure is the Jordan River. The Jordan starts in the Dan, Baniyas, and Basbandi Rivers near Mount Hermon and is Israel largest river at around 322 kilometers long. The Jordan flows south, through the Hula Basin, in northern Israel, into Lake Tiberias. From Lake Tiberias’s southern end, the Jordan flows onwards towards its mouth at the Dead Sea. Lake Tiberias is 165 square kilometers in size, and depending on seasonal rainfall, resides around 213 meters below sea level. Lake Tiberias is also Israel’s principal reservoir and holds an estimated 3 billion cubic meters of water. The Dead Sea at 399 meters below sea level, and is Israel’s lowest point as well as the lowest point on earth. The Dead Sea is also highly saline and only holds small microorganisms within its water (Metz 1990).

In southern Israel lies the Negev Desert. The Negev encompasses roughly 12,000 square kilometers and totals more than half of Israel’s land. This desert, on a larger scale, is an addition of the Sinai Desert found in Egypt, to the west. In Israel, it starts near Beersheba, continues eastward to the Dead Sea, and has its end point being near Eilat, on the Red Sea. This region also mimics the same type of topography as Israel. It has lowlands in the west, hills in the center, and the Nahal HaArava, a valley in the east (Efrat and Orni 1976).
2.2 Climate

Israel exhibits a Mediterranean climate with long, warm, dry summers; and short, cool, wet winters. These conditions vary depending on the local altitude and latitude. This climate makeup is due to Israel’s location. Israel lies between Egypt’s arid climate and the Levant’s subtropical humidity. In Israel, January is the coldest month of the year. Temperatures average from 5-10°C. August is the hottest with temperatures from 18-38°C (Efrat and Orni 1976).

![Haifa, Israel Climate Graph (Altitude: 33 ft)](image)

Figure 2.2: Climograph of Haifa, Israel. Israel lies between Egypt’s arid climate and the Levant’s subtropical humidity. In Israel, January is the coldest month of the year. Temperatures average from 5-10°C. August is the hottest with temperatures from 18-38°C (ClimaTemps 2014).

The wettest months in Israel range from November to March. The driest months are June through August. However, precipitation is unevenly distributed in Israel, as it drops dramatically
further south towards the Negev desert. The average rainfall, in the south, is less than 100 millimeters, but in the north the rainfall averages 1,128 millimeters. Oftentimes the rainfall comes in very violent storms which can cause high levels of erosion and flooding. During the winter months perception can take the form of snow near the central highlands (Metz 1990).

2.3 Demographics

Israel defines its population by two different categories. The first demographic group is grouped by religion; such as Muslim, Arab Christian, Druze etc.; the second category Jewish and Other. The Jewish and Other category encompasses Jews, non-Arab Christians, and those not affiliated with a religion. Both demographics are based on religion, however, they are more so looked at as ethnic groups within certain religions (Kruger 2005).

In 2009, the religious categories number Jews at 5,703,000, Muslims at 1,286,500, Christians at 510,700, and Druze at 125,300. In 2009, the population of Jews are around 5,704,000 million. Arabs were around 1,535,000 million, and the other category numbered around 312,700 thousand (CBS 2010).

With the founding of the modern state of Israel in 1948, immigration has been key to its population growth. According to Kruger (2005), Israel defines itself by being a homeland for the Jews and democratic institutions. This is a balancing act that can only work if the assumption is that Jews are the dominate demographic in Israel. Israel seeks to maintain this by encouraging high birthrates amongst Jewish people and high levels of immigration of Jews from across the globe due to higher birthrates amongst non-Jews (Kruger 2005).
2.4 Cultural and Social Landscapes

Modern Israeli society has been altered by many forces and circumstances. A few dominate forces are historic, immigration and population, and religion. Israel incorporated many of the customs and institutions from both the Ottoman and British rule of Israel, pre-1948. Early Zionists, called Yishuv, also lived in the area before the modern state of Israel and wielded considerable influence in Israel’s early foundations. (Metz 1990).

Immigration has also had a key shaping feature of contemporary society. From 1882 to 1948 large numbers of immigrants from Eastern Europe and Central Europe migrated pre-independence. Post-Independence large numbers of Middle Eastern, North African, and Asian Jews immigrated to Israel and upset the balance of the dominate Ashkenazi class in Israel at the time (Efrat and Orni 1976).

Jews in Israel can be categorized into two dominate groups, the Ashkenazi and the Sephardi. Ashkenazi Jews originate from northern and eastern Europe. Sephardi Jews originate from Middle Eastern, Balkan, Aegean, and Mediterranean lands. There are very distinct differences in how these two categories of Judaism worship and practice their faith. However, both are regarded as legitimate in the eyes of each other. Historically, these groups have not evolved in isolation but often times mingled with one another. In Israel, the defining line comes down to not Ashkenazi or Sephardi, but rather an Ashkenazi and Oriental divide. Oriental Jews are defined as those from Asia and Africa and has become a derogatory term to refer to poor people. Many Sephardic Jews refuses to refer to themselves are Oriental Jews (Metz 1990).

Oriental Jews are divided into many different sub-categories. Two examples of biased-views of Oriental Jews are the Moroccan and Yemeni Jews. Yemeni Jews are viewed with a positive image, while Moroccan Jews are viewed as participants of crime and violence.
There is also a very small minority called the Samaritans. They number roughly 500 people and are believed to have been in the region of Israel/Palestine during the Jewish exile in Babylon around 722 B.C.E. These people intermarried with the locals and their religious practices mimic ancient Judaism (Efrat and Orni 1976).

The biggest non-Jewish minority in Israel is nearly exclusively Arab. Roughly three-fourths are Sunni Muslims. In this category are the Bedouins, which the majority reside in the Negev. This group has been culturally and administratively distinct from their Muslim counterparts. They are further sub-divided into forty different tribal-based functions. There are Sunni Muslims in the Galilee region who are non-Arab. They are called the Circassians, who immigrated here from southern Russia and live in two small villages within the previously mentioned area (Metz 1990).

Lastly, but more importantly to the thrust of this research, are the Baha’i who live within Israel. They are located predominantly near Haifa and Acco, in northern Israel, where they have built their administrative and spiritual headquarters. There are only a few hundred in Israel at a time. Baha’i are not allowed to live within Israel and so they cycle out on varying schedules. The Baha’i here are multi-ethnic and come from all over the globe to work at the Shrines or administration. Historically, arrived, in exile, following their Prophet, Bahaullah, in the mid-18th century from Persia. Two of their most revered prophets are buried in Haifa and Acco. Bahaullah died, and is buried, in Acco while the Bab was transferred from Persia and buried in Haifa, on the slopes of Mount Carmel (Esslemont 2006).
2.5 Economics

Israel has gone through two economic periods since its founding in 1948; one from 1948 to 1972, and the other from 1973 to 1988. The first economic period, after independence, was very difficult for Israel as they did not have any natural, financial or monetary resources. They also had no economic infrastructure or financial resources. Israel also had the native Arab population fleeing the new state with new, poor, Jewish migrants flocking to it (Teubal 1993).

During this phase, the government stepped up and began to invest into the country. Since there were no private funds to build the country, the public sector provided the basic needs for its citizens. This laid the foundation for public sector involvement within the country and created a quasi-socialist economy. Ownership was divided up into three areas, private, public, and the Histadrut. The Histadrut was a collection of trade unions that gained immense power during this phase. They behaved like privately own firms and almost achieved a monopoly over public transportation and agricultural products. The Histadrut also acquired two of Israel’s largest banks and two of the largest insurance companies during this time. Next, the Histadrut became involved in the industry sector. After the 1967 war, the French placed an arms embargo on Israel. The government decided to begin to manufacture its own military weapons. The Histadrut owned Tadiran Electronic Industries became a major Israeli defense contractor, while the raw resources aspects were almost exclusively owned by the government. During this phase the Israeli GNP only grew 10 percent per year on average. After this phase the GNP only grew roughly 2 percent a year. After 1972 it was much less stable, as well. This slowdown is often times pointed to the increase in defense spending, the energy crisis in the 1980s, and the increased investment in social welfare. Before the 1967 war, the defense budget was only roughly 10 to 16 percent of the GNP. After this war it skyrocketed to 25 percent of the Israeli GNP. After the 1973 war, the
Israeli military imports ranged around 17 percent of the GNP. Roughly a quarter of this was paid for by the United States (Metz 1990).

2.6 Government

The Israeli governmental system is characterized by several West European democratic and Eastern European political styles. They have an elected government, multi-party system, and a very high level of voter participation in both local and national elections, similar to that of Western European democracies. Collectivism and the lack of expression of the liberal component in Israeli politics are Central and Eastern European in design (Metz 1990).

Israel has no written constitution, but instead has a building block method. In 1950, Israel adopted a resolution entitled the, *Harari decision* that approved a constitution in principal but put off its establishment until a later date. In this building block method, the Israeli parliament passed several laws called the Basic Laws. They cover everything from Israeli Lands, the Presidency, economy, and elections, just to name a few. Israel also has no written bill of rights, but instead relies heavily on the judicial system to safeguard civil rights within the state. Israeli citizens have enjoyed a high level of civil liberties, however, there have been some issues in regards to Israeli Arabs, Lands, and refugees. These are oftentimes thrown under the umbrella of security issues (Kretzmer 1992).

In the Israeli government, the President, in title, is called the Head of State. The Israeli president is elected through a secret ballot in the Knesset, the Israeli Parliament. The president is not allowed to serve two consecutive terms and any Israeli citizen is allowed to run for President. The Presidential powers are usually exercised based on the recommendations of the government ministers. The President also signs into law Knesset legislation, but has no veto power. The
President can appoint diplomatic advisors, receives foreign envoys, appoints the state comptroller, judges for both civil and religious courts, and the leader of the Bank of Israel. The Presidents roll is non-political and holds little authority over the state of Israel (Metz 1990).

![Knesset](image_url)

Figure 2.3: The Israeli Knesset at night. The Knesset is a single legislative chamber that has 120 members. It is elected by universal suffrage and it has proportional representation. (Press 2013)

The real authority in Israel is the Knesset. The Knesset is a single legislative chamber that has 120 members. It is elected by universal suffrage and it has proportional representation. The people vote for a party, and depending on the amount of votes it determines how many seats that party will obtain in the legislature. The Knesset also has unlimited legislative power. The legislation cannot be vetoed by either the President or Prime minister. The Knesset also has power over the government functions. They decide budgets, monitors government, provides a public forum for debate of issues, goes into wide-ranging legislative inquires, and can disband a cabinet through a vote of no-confidence. They also determine the Prime Minister, the ultimate
power source in Israel. The President nominates the Prime Minister, based on recommendations from the Knesset, and they approve the appointment in the Prime Minister (Gutmann 1963).

The Judicial system in Israel is divided up into three parts, The Ministry of Justice, Ministry of Religious Affairs, and the Ministry of Defense. Civilian cases fall under the Ministry of Justice, religious courts under the Ministry of Religious Affairs, and military courts under the Ministry of Defense. Some aspects of the judicial system are based on the Torah, but they are mostly based on the British system of law. American legal practices have heavily influence Israel in regards to civil rights. The head of the judicial system is the Supreme Court. The number of judges is determined by the Knesset and they oversee appeals from the lower courts. They also have power to restrain government agencies but not overrule Knesset legislation (Metz 1990).

2.7 History

The area that became Israel in 1948 has a long history, dating to ancient times. However, for the topic of this thesis, the history has practical concerns beginning in the 1800s. During the 19th century the area was ruled under the Ottoman Empire, based in Turkey. The Ottoman Empire obtained Palestine, as it was referred to before the founding of Israel, from the Mamluks in the early 1500s. They continued to hold power over this region until World War II. Palestine was administratively linked to Damascus. This changed a few times and was settled in 1887-1888 when Palestine was divided up into the administrative districts of Nablus and Acco. Jerusalem was its own individual administrative district with ties directly to Constantinople/Istanbul (Divine 1994).

After the Ottomans took over the area from the Mamluks, the Ottoman Sultan, Suleyman the Magnificent, began a series of building projects within Jerusalem, specifically to rebuild the
walls. However, after Suleyman other Sultans simply ignored the region, happy to collect the taxes, and did not invest in the area. This led to Palestine being a mainly rural area with little economic benefits. The area was left to be governed by the pashas, an Ottoman governor. Palestine, up until end of the 1800s was relatively isolated from outside influences. Napoleon attempted to establish a base in the Middle East but it did not last long. The Ottomans regained control of the area in the 1840’s with the help of western powers. This however, began a push of western influences into the region (Stedman 2000).

The Ottomans, beginning in the mid-1800s, was at a point of decline. The Ottomans had begun a phase called Tanzimat, which literally means regulations or reorganization. These reforms were aimed at centralizing the government and not social liberalization. Late into the nineteenth century, there was a constitution and a national assembly, but it was quickly disbanded by Sultan Abdulhamid II. Even those these reforms were incredibly important to the empire, they were largely located near or around the capital, Istanbul. Areas like Palestine were largely left alone (Kushner 1986).

The Baha’i come into the Ottoman historical frame within the 1850s. They become banished by the Shah of Iran, due to accusations of his involvement in a botched assassination attempt. Originally they were banished to Baghdad, but later an envoy was sent from the Shah to the Ottoman Sultan asking that he be moved further away from the border, possibly to further inhibit his communications with other Baha’i in Iran. From Baghdad he was sent to Constantinople/Istanbul, then to Adrianople, and finally to the prisons in Acco. His further banishments were due, in large part, to locals agitation and distrust towards Baha’u’llah and the Baha’i (BIC 2016).
Even though the *Tanzimat* marked the decline of the Ottoman Empire, they continued to limp on until WWI. During WWI, the Ottomans aligned themselves with Germany and the Austro-Hungarian Empire. They lost the war and the Ottoman Empire was partitioned amongst the French and British. France obtained, what would later become, Lebanon and Syria. Britain gained Palestine, Jordan, and Iraq (Kent 2005).

Demographically the area was largely Arab Muslims with a strong Christian business class within the cities. There were very little Jews within the region, only numbering around 25,000. They had no interest, at this point, to establish a Jewish homeland. Many simply came here to be buried in the Holy Land and were supported through alms from the Jewish communities abroad (Stedman 2000).
2.8 Haifa and Acco

Figure 2.4: Tourist map of Haifa detailing points of attraction. The city of Haifa is seated on the slopes of Mount Carmel. Mount Carmel is a significant place within the context of Judaism and Christianity due to the actions of the prophet Elijah in this area as well as Baha’i due to Baha’u’llah choosing the mountain as the site for the Shrine of the Bab (Mappery 2008).

Haifa’s growth and economic importance started in 1700s with an Ottoman governor named Dahir al-Umar. Al-Umar realized that Haifa lacked proper defenses. At this time, Haifa was built on a thin coastal plain that had no advantageous regarding defense. Haifa also had no walls. Al-Umar rebuilt Haifa three kilometers southeast of its original location. This new Haifa was no longer on a poorly defendable piece of land, but rather it was moved directly in front of Mount Carmel. This protected the city’s back and Al-Umar built walls on its eastern and western boundaries to further defend it (Yazbak 2002).
Haifa was important at this point because northern Palestine was beginning to become economically viable. Al-Umar and his predecessor, Ahmad al-Jazzar started a rapid cultivation of cash crops in northern Palestine such as cotton. Haifa and its sister city of Acco, were the ports in which these crops were exported out of (Orser 1996).

Haifa is labeled as a mixed city, which means that it has a sizeable portion of both Jews and Arabs living together. Currently Haifa has a total population of 270,348. Jews make up roughly 217,600, Arabs 27,800, and Others are 24,900. Others are defined as immigrants from the former Soviet Union. Acco has a much different demographic makeup. The city is much smaller than Haifa and only holds 46,464 people. Jews are 30,000, Arabs 14,000, and Others are 2,500 (Rekhess 2014).
Haifa’s economic importance in modern day is dependent on the local agriculture outside of the city. Haifa also has a good glass industry that is equipped by the glass sands near Eilat. Haifa is also home to several science based industries such as Haifa Chemicals, as well as a deep sea port located in the bay. In the city there is a large metal producing factories that use the port as a means of distribution. Haifa focuses on the rolling and casting rather than the actual smelting of metals. Furthermore Haifa is home to a University and the Technion, an Israeli Institute of Technology. Within the city most industry is focused on trade, banking and other enterprises connected with the port (Efrat and Orni 1976).
Figure 2.7 Knight Hospitaller fortress located in Acco. Acco has recently undergone many archeological restorations in order to draw more tourists to the crusader city. This Knight Hospitaller fortress is an example of the investment made within the city (Meizler).

Acco is similar to Haifa due to having the same economic situations. For instance, Acco relies heavily on agriculture and the metal industries. The proximity to the Haifa Bay helps Acco to distribute their products quickly and easily. Acco also has a large tourism industry within its old city. The old city is located on the coast and used to house different kinds of Templar orders, such as the Knights Templar and the Knights Hospitaller. There has been a recent push and investment, starting in the 1990s, to reinvigorate and draw more tourism to the Old City (Stein 1998).

The history and place of this region help to explain the symbolism and sacred sites of the Baha’i faith. It helps to understand these areas to better relate to the mentality and priorities of
the early Baha’i immigrants to the area. Furthermore it helps to understand the current climate of
the faith within these cities and regions, specifically in regards to sacrality, symbolism, and the
Baha’i sacred architecture.
Chapter Three: Literature Review

3.1 Sacred Architecture

Sacred architecture is found throughout every culture and religion. It is an inevitable result of the human longing for divinity and immortality. Usually the buildings are built in such a way that it is perceived to connect the society and individual to the divine. Furthermore, they are constructed of materials that have a long lasting capabilities as well as a connection with celestial alignments. However, celestial alignments change depending on the intended function with each faith, installation, or congregation.

3.2 Stonehenge

Figure 3.1: Map detailing the celestial alignments and important aspects of Stonehenge architecture. Currently Stonehenge is one of the biggest tourist attractions in the United Kingdom (O’Connell 2015).
Stonehenge is believed to be one of the oldest examples of sacred architecture. It dates back 6000 years and is located on Silbury Hill in England (Carr-Gromm 2008). Stonehenge is important to the thrust of this research due to the deliberate significance that its makers put into Stonehenge’s creation and shows that the people of this time were building it for a specific religious and ceremonial purposes, unlike the more inner spirituality that the modern sacred architecture of the Baha’i shrines convey.

Stonehenge served a number of purposes. These included a sacred ceremonial center, a priestly observatory, measuring device for calendars, a burial monument, and a container or transmitter of powerful earth energies. All of which signify some sort of religious or sacred function and importance (Mann 1993).

Stonehenge is one of the most famous tourist attractions within Great Britain. It is located on the Salisbury Plains, a large featureless green area. Stonehenge itself is a large circle that contains thirty upright large stones, each roughly weighing 26 tons and extending to an average height of 13 feet. The outer circle of Stonehenge has a diameter of 97.5 feet. Inside the outer circle were a circle of bluestones roughly 76 feet in diameter. Opinions differ on the number of bluestones, but they range from 59 to 61 and only nine remain today, in an upright position. These bluestones are not native to the Wessex landscape, but rather brought to this location (Brown 1976).

Stonehenge is often seen as somewhat disappointment from visitors. It is seen as very small from a distance, but when up close its purpose and grandeur become apparent (Carr-Gromm 2008). Stonehenge was built for religious purposes and is a sacred site. Its purpose was to deal with rituals involving the Sun and astronomical calculations. The evidence of this is that the axis of the structure points towards the midsummer sunrise on the horizon (Stone 1925).
What makes megalithic structures, like Stonehenge, to be significant is their orientation in regards to celestial bodies and the religious geometry associated with them. The calculations the architect of Stonehenge used, relied on the Megalithic Yard. This is a unit that was seen as sacred to early humans. The biggest intersecting circles within Stonehenge measure 666 Megalith Yards. This is significant and shows purposeful calculation considering 666 is a sacred number of the sun. The alignment factor, as previously stated, shows deliberate purpose due to its orientation allowing solstitial sunrises during the Megalithic time period. Outside of Stonehenge are fifty six Aubrey holes and these could have been used in order to predict lunar eclipses (Mann 1993).

There are numerous other facts and figures in order to prove that Stonehenge was a deliberate mechanism for religious events. This monument is one the earliest sacred structures man has built and helps to show the evolution of sacred architecture over time. Within Stonehenge, it seems, every detail showed complexity and purpose with every stone placed and every ditch built. This trend does not continue down the line of sacred architecture, but molds and changes as time moves on, arguably becoming less precise and detailed as Stonehenge.
3.3 Newgrange

Figure 3.2: Aerial view of Newgrange in Ireland. It was built as an artificial mound covering roughly one acre of land. Recently, it was renovated and a large white quartz while was built along the edges of the mound; this was not done without controversy. (Zeballos 2012).

Newgrange is located in Ireland and is one of the oldest remaining human structures known to man. It was built in 3,000 BC and was considered the home of the Irish god Dagda, also the god of the sun (Mann 1993). Newgrange is similar to Stonehenge in the same sense as it shows the evolution of sacred architecture. It is a great example of how a simple mound can hold extreme nuances and thought beyond what the current Baha’i shrines show.

Located southwest of Tara, Ireland, is the Boyne Valley. In this valley lies Newgrange. It was built as an artificial mound covering roughly one acre of land. Recently, it was renovated and a large white quartz while was built along the edges of the mound; this was not done without controversy. This area, besides Newgrange, is filled with myths and legends. The river Boyne, which runs through the area, is named after the goddess Boann. This area is also, supposedly,
holds the magical Well of Segais. It was discovered in 1699 by a local landowner Charles Campbell (Carr-Gromm 2008).

When Newgrange was discovered and excavated by Charles Vallancey, the interior contained a cross-shaped passage that was lined with large flat stones. During the Winter Solstice, the sun’s light went all the way back into the monument and displayed on the wall roughly 30 meters in. This is allowed by a roof-box above the entrance of the mound (Mann 1993).

On the outside of the Newgrange mound there seemed to be several decorative motifs surrounding the monument. For instance, Brown (1976), states

The Tomb at Newgrange in Ireland shows various decorative spirals, chevrons, and other motifs, but particularly significant are the lozenge oculi ('eye-goddess') motifs first manifest in the Upper Paleolithic context and suggesting a very long

Not only do they hold symbols of fertility but there are also a series of waves and spirals. These waves and spirals were later found to show the sun’s rays from a sundial projected onto the surface. This was done on a yearly cycle in order to get a rough schedule of time. They also showed the phases of the moon and divided them up into quarters (Mann 1993).

Newgrange is an excellent example of purposeful sacred architecture. The nuances involved in its construction were not put into place carelessly, but rather they were thought out and meticulously designed to serve a religious purpose. While Newgrange’s outer face is a simple earthen mound and pales in comparison to the detailed craftsmanship of modern architecture, its purpose is beyond looks and does not require the glitz and glamour of modern Cathedrals to show its function. It shows that the people of this time were more concerned about function than monuments of grandeur.

3.4 Pyramids of Giza
Figure 3.4: View of the Pyramids of Giza. There are three pyramids and they correspond in size to the family of King Khufu, for example, Khufu’s is the largest, his son is the second largest, and his grandson is the smallest pyramid (Less 2016).

There is no other ancient sacred architecture that captures the idea of function and purpose more so than the temples and pyramids in Egypt. The origins of Egyptian sacred architecture are usually attributed with the first known architect in Egypt, Imhotep. He was a counselor and vizier to the Pharaoh. Imhotep also was a priest, scholar, astrologer, magician, and doctor. This man had a mythological nature as well. He would be later deified as the god of medicine. He also shows up in the masonic rituals of the masons who built the cathedrals, as the Cosmic Architect. The Egyptian people used numbers in buildings through the use of proportions and ratios to convey subtle spiritual truths. The Egyptians were able to communicate astrological and astronomical ideas beyond what the basic building expressed (Mann 1993). Furthermore Mann (1993), states,

_The Egyptians used their mythology to further understanding because it was more than simple history... Their myths were cosmic myths, describing planetary movements, and brought the mathematical reality of the stars to humanity_ (Mann 1993).

The Pyramids of Giza are located in Egypt near the city of Cairo. They were built around 4600 years ago as tombs to house of the bodies of King Khufu and his family. There are three pyramids and they correspond in size to the family of King Khufu, for example, Khufu’s is the largest, his son is the second largest, and his grandson is the smallest pyramid. Beside each of these pyramids are smaller pyramids that are the tombs of their wives (Carr-Gromm 2008).

The Pyramids go beyond the obvious functions of being tombs, for example, Mann (1993) states,

_The Great Pyramid has been described as many things: an ancient initiation temple; an astronomical observatory; a telescope; a standard for systems of weights and measures; a surveying instrument useful in lower Egypt; a geodetic_
The Pyramids required very complex astronomy mixed with geographical skills unknown to others at the time. Furthermore, the pyramids base is exactly the same length on every side (Mann 1993).

Figure 3.5: Section of the Great Pyramid of Giza detailing the star alignments. The Pyramids required very complex astronomy mixed with geographical skills unknown to others at the time (SUI 2001).

The Pyramid was designed to be seen from the side, to help give the impression of both ascending and descending. Within the Pyramid, at the center, was the mummified body of the Pharaoh. Outside of the Pyramids there are several pits made to be filled with boats. This is due to the Egyptian mythology of traveling to the afterlife in a boat. Furthermore the ancient Egyptian religion hinged on the reappearance and disappearance of certain stars. For instance, the Pyramids at Giza are directly oriented with Orion’s belt. In the Egyptian mythos, Orion’s belt

marker for the geometric centre of the known world; and the most powerful and perplexing example of sacred geometry of the Ancients (Mann 1993).
was linked with Osiris, whom was murdered and reborn. Orion’s belt disappears during certain seasons. (Humphrey and Vitebsky 2005)

The Egyptian sacred architecture of Giza further strengthens the point of the lack of complexity within modern sacred architecture, specifically, the Baha’i faith. The Egyptians were incredibly concerned with the material being brought into the afterlife and sought means to ensure that. However, the Baha’i do not believe in materialism, especially with regards to the afterlife. Their buildings do not necessarily need the alignments of the stars or other mathematical equations to convey the spiritual truths of their faith, but rather their temples and shrines are a simple reflection of pure inner spirituality. The material does not matter, but rather the inner-intentions.

3.5 Islamic Sacred Architecture

Islamic sacred architecture is critical in understanding the case study of the Baha’i sacred architecture. This is due in part as the Baha’i faith sprung forth from Shi’a Islam, naturally the architecture would mimic it in some sort of way. However, there are some differences between Baha’i sacred architecture and Islamic sacred architecture such as function and decoration.

An important sacred site to the Islamic faith is the Temple Mount, or known to Muslims as the Noble Sanctuary. There are two sacred sites in this area, one being the Dome of the Rock and the other, and more sacred, is the Al-Aqsa Mosque. The Dome of the Rock, although important, does not represent Islamic architecture, due to its design being incorporated from Christianity. However, the Al-Aqsa Mosque is a good representation of Islamic sacred architecture (Rina 2010).
Even though the Dome of the Rock is not a good example of Islamic sacred architecture, it is important enough to do a brief note on before diving into the Al-Aqsa mosque. The Dome of the Rock is located in Jerusalem within Israel. It was built in the year 692. What makes this place special to Islam is that Muhammad, according to legend, flew in a dream from Mecca to the Temple Mount in Jerusalem and ascended into Heaven and received instructions from Allah. They also believe Abraham attempted to sacrifice Ishmael on the rock located within the Dome. This place is also sacred to both Jews and Christianity. The Jews first and second temples were built on the Temple Mount. They were both destroyed, the last one destroyed by the Romans in 70 AD. The only piece that remains of the second temple is the Western Wall right next to the Dome, also known as the Wailing Wall. Subsequently, this place has become the holiest place in Judaism. Christians venerate this location due to Jesus frequently visiting this area (Carr-Gromm 2008).

Figure 3.6: Eastern side of the Al-Aqsa mosque in Jerusalem. The original building was built during the Umayyad Caliphate at around the same time the Dome of the Rock was built (Shiva 2014).

The Al-Aqsa mosque is a good example of early Islamic architecture. The original building was built during the Umayyad Caliphate at around the same time the Dome of the Rock was built. The original building was a small building and was eventually destroyed in an earthquake. Furthermore, the building was destroyed several times before its final, and current,
representation was constructed in 1035. The mosque itself is constructed out of marble, wood, and stone. It has a silver colored dome, made out of lead sheeting, with 14th century decorations on the intention of the dome; it is encircled by four minarets (Elad 1995).

Islam is also a good example of showing lack of solar importance. Baha’i originated out of Islam and so the overall architecture plays a critical role in the understanding of Baha’i architecture. Mosques do not have significant celestial alignments; they are aligned towards the direction of Mecca, the Islamic qiblah. They did use solar calculations to determine the direction of the qiblah, but the sun was not incorporated for religious reasons. For instance, in Egypt and Spain the mosques were often times oriented with the midwinter raising sun. This can also be seen in Central Asia when mosques in Iran being orientated towards the setting midwinter sun. The sun is used in Islam as a means of determining a religious obligation, not as a part of the obligation itself.

What makes Islamic architecture important to the thrust of this thesis is that in Islamic architecture today the function becomes more important than the decoration, symbology, and celestial alignments. The Al-Aqsa mosque is often dwarfed by the nearby Dome of the Rock, due to its lack of comparable decoration. However, Al-Aqsa is designed and meant to house worshippers. And to even heighten the theory thrust of this thesis, this sacred building has no greater celestial alignments or mathematical functions; it was built in order to provide a place for Muslims to come and worship at a place that has extreme significance to the Islamic faith. Furthermore this sacred site was built in order to solidify a religious story that occurred at that site, not to investigate the cosmos or require a religious ritual—a crucial point of Baha’i sacred architecture that architecture may celebrate place with no relationships to celestial orientation. Celestial alignments are also seen to continue devolving as religions abandon incorporating the
sun into religious obligations. Mosques are seen to have celestial alignments but they are not critical to religious obligation. The Baha’i, since they branched from Islam, mimic this by devoiling further from celestial alignments.

3.6 Cathedrals

Cathedrals are awe-inspiring monuments that are predominately found across Europe with vital origins in France. They focus heavily on symbolism and expression rather than astronomical purposes. Cathedrals start to appear in Europe when the focus turns from a building occupying space, to a church having power in time. The general focus also becomes more directed towards symbolism as a whole and the Chartres School helps to push these ideas further. They incorporate Pythagoras, Plato, Plotinus, Augustine, biblical prophecy, and new archetypes; some pagan influences are also incorporated into the architecture (Mann 1993). Mann (1993) furthermore, states, “The primary principle behind the movement was that number provided a meaning through which the Divine could be communicated to the mundane world.” The Chartres School, unlike previously discussed ancient buildings that focused on the sky, they focused more so on the immediate people surrounding the sacred buildings in order to convey a message.
Figure 3.7: Floor plan of the Chartres Cathedral. Cathedrals are designed in a specific way as to be aligned west to east. The whole concept of the cathedral was founded on sacred geometry. This discipline believed that the structure of creation could be revealed through the use of numbers and proportions (CCCP 2015).

Figure 3.8: Aerial photo of the Chartres Cathedral. The Chartres Cathedral, located in France, was originally built over a pagan shrine. The Celts considered this area sacred due to a well located in a grotto underneath the cathedral (Craven 2015).
The Chartres Cathedral, located in France, was originally built over a pagan shrine. The Celts considered this area sacred due to a well located in a grotto underneath the cathedral. To them, wells and springs were seen as portals to the underworld. It has gone through numerous phases of reconstruction and damage repairs. However, the present form was constructed in the 12th century. The whole concept of the cathedral was founded on sacred geometry. This discipline believed that the structure of creation could be revealed through the use of numbers and proportions (Gomm 2008).

Many of the common people could not read or write so the Chartres Cathedral helped to convey the message of Christianity to a people who could not read the Bible. The stained glass windows depict biblical stories and events. The sacred geometric symbol is idealized in the rose window. The rose window correlates with the maze inscribed on the floor of the cathedral. The rose itself is symbolic in nature. It can convey the ideas of the soul, eternity, universe, and love. The rose also represents enlightenment and redemption. Furthermore the rose was associated with ancient deities such as Isis, Venus, and Aphrodite. In Christianity, the rose symbolizes the Virgin Mary, and the rosary is based off the symbolic nature of the rose. The main window at the Chartres Cathedral is the North Rose Window. This window is profound and unorthodox. They used squares to create a geometry which goes outwards from the center. The squares are all aligned perfectly with the radii of the circle. The whole concept of the window also mimics a flower opening up. The window also expresses the Golden Mean, which is the ultimate means of organizing geometry. When it is drawn into the center, the points of the squares produce a spiral effect (Mann 1993).

When pilgrims visited Chartres they would traditionally approach barefooted. The inside of the church is flooded with light through the rose window where above the entrance is the solar
nail, a flagstone that caught the sun’s rays, at noon, on the summer solstice. The maze at the center of the nave represents the pilgrim’s path to Jerusalem. The maze was comprised of eleven circles in both blue and white stones. Once they walked the path to Jerusalem it was believed the pilgrim would attain salvation (Westwood 1997).

Overall the cathedrals help to convey a message to the illiterate people. The focus becomes less on sacred buildings deciphering the will of the gods, and more so on conveying gods will to the people. This is the sole purpose of the cathedral and the evolution of sacred architecture and its purpose over time.

Christianity has been known to adopt pagan traditions and customs into its holy days and celebrations. For instance, Sol Invictus was a Roman God of the Sun and was celebrated on December 25th. This was later adopted by the church as the celebration of Christ’s birth; moved from January 6th. This was due to the pagan inclination of celebrating this specific day. Solar days were added to the Christian holy days in order to influence the pagans to embrace Christianity, although not necessarily to venerate or worship the sun. This advances my speculation supporting the devolution of celestial significance in religion over time (MacMullen 1999).

Another case that may hypothesize linking Christianity to the Sun -- however tenuous in its significance -- is the Basilica of St. Mary of the Angels and the Martyrs in Rome. This church was built in the mid-1500s with a monumental sundial was added to its interior in the early 1700s. Pope Clement wanted to identify the exact date for Easter each year, and to check the accuracy of the Gregorian calendar over time. It was used by the Vatican Observatory to foretell of the Solar marker days each year: the solstices and the equinoxes. It was during this period that these marker days were merged with important Saint’s Holy Days an birthdays in the hopes
of linked the omnipresent Sun with the omnipotent God. These solar connections continued since the days of Newgrange when the Sun's solstices were used to define the passing of time, in addition to a manifestation of the divine. However over time that significance will wane in its link to deity worship, displaying the slow devolution of solar significance in religious customs and traditions, and as humanism, enlightenment, and rationalism gain popularity (Heilbron 2009).

Overall the cathedrals help to convey a message to the illiterate people. The focus becomes less on sacred buildings deciphering the will of the gods, and more so on conveying gods will to the people; this is the sole purpose of the cathedral. Furthermore, in earlier instances of Christianity we see that the sun is incorporated but not necessarily religiously significant. The role of the cathedrals, their layout and design, and their incorporation of the sun for study and understanding shows the decreasing influence of celestial significance within institutional religions.

3.7 Hindu Temples

India is a country filled with temple traditions. According to Champakalakshmi and Kris (2002), Hinduism is,

... a conglomeration of heterogeneous traditions and plurality of beliefs and worship with a long history of development from the Vedic sacrificial religion through the worship of epic and Puranic heroes and personal deities, cults and sects, as well as philosophical systems rather than to a monolithic tradition or a structure based on a single system of beliefs and worship or a single text as scripture. (Champakalakshmi, Kris 2002).

Hinduism is essentially a semi-organized conglomeration of local traditions and religious structures that share common stories and interests. Moreover the texts vary as do the customs, but this is accepted within Hinduism and one tradition does not seek to convert the others.
Throughout the subcontinent there are numerous temples to different deities. Many of these temples predate Christianity. The evolution of the sacred architecture in India was promulgated by several Indian dynasties from the 4th century to the 17th century. These dynasties helped to make the temples institutions of social, economic, and political power. The architecture does vary from region to region but overall it helps to symbolize India. Historically India is a good example from how a temple evolves from an aesthetical structure to an institution of society, politics, and divine worship (Champakalakshmi, Kris 2002).

The temples in India are generally built following three or four patterns, often modeling the sky in their construction. The design of a semi-circular shaped dome helps the adherent with their mantras. A mantra is a chant that is used by an adherent in order to bring stillness, focus, and closeness to a deity. The semi-circular dome helps to echo the mantra back to the person. This represents a complete circle which helps to create a divine experience within the temple (Osmen 1990). Osmen (1990), describes the experience as, “Outwardly a circle of sound is formed, inwardly all thought comes to an end and the worshiper might simply sit there forever like the Buddha statues we see sitting in padmasan or siddhasan.”

Also, the Hindu religion holds many forms of symbolism and its temple’s architecture helps to activate these symbols. On top of the apex of the dome are several umbrellas. These umbrellas symbolize the passage of the soul through consciousness. The temples also contain four gates and aligned with the four cardinal points. Each of these gates are marked with a wheel, tree, trident, and a lotus; all religious symbols of Hinduism. The wheel symbolizes law, the trident symbolizes the Hindu god Shiva, the tree represents long life, and lastly the lotus represents culture and politeness. Hindus also incorporate the idea of the temple with astronomical and astrological symbols. This is a common theme amongst most religious
communities and their sacred architecture. The internal arrangement of a temple is decided by a specific pattern once the orientation of the sun has been established. Inside of the temple the mandala form is established and the squares of it correspond to the major and minor purposes of the temple. In the middle of the mandala is a larger square that represents the place of Brahma, a Hindu god who is outside the cosmic order (Mann 1993).

![Shiva Temple Cross Section](Image)

**Figure 3.9**: Cross section of a Shiva temple. The main part of the temple is the vimana. This was proportional and was conceived of the house and body of a god. The rest of the temple, including the entrances and hallways are considered subservient to the vimana. Furthermore the vimana symbolizes, strictly through its architecture, the whole universe (Kartapranata 2015)

Within India, the early Hindu Temples follow the *Vastu Sastra*, which is the Indian science of architecture. This text is treated as a subsidiary to the Vedas, the holiest Hindu books. The *Vastu Sastra* is typically attributed to the Hindu god *Visvakarman*, who was considered the divine architect of the universe. This text prescribes the details of a Hindu temple. The main part of the temple is the *vimana*. This was proportional and was conceived of the house and body of a
god. The rest of the temple, including the entrances and hallways are considered subservient to the *vimana*. Furthermore the *vimana* symbolizes, strictly through its architecture, the whole universe. Champakalakshmi and Kris (2002) describe the temples by stating,

*It incorporates in its structure all the images. The pillar of the universe is believed to be inherent in it as the main shrine is believed to be the universe in its likeness. As the symbol of the world mountain, the prasada carries all the world’s strata along its axis, which is the central pillar of the temple visible about its curvilinear super structure, in the form of its neck (griva). The amlaka (ribbed myrobalan) and the stupi (finial) are the shapes and symbols of the vertical axis of the temple where it emerges into visibility. Thus, the finial extends into mid-space. The finial rises about the harmya (high temple) (Champakalakshmi, Kris 2002).*

Both the *amlaka* and the *stupika* represent the limits between the manifested and the unmanifested. Overall the temple is meant to show the hierarchy of divine manifestations through its architecture (Champakalakshmi, Kris 2002).

![Figure 3.10: Aerial photo of Angkor Wat in Cambodia; designed using the principals of Vastu Sastra. The Vastu Sastra is typically attributed to the Hindu god Visvakarman, who was considered the divine architect of the universe. (Garnhum 2007).](image)
Indian temples, while they do not focus exclusively on astronomy or astrology, they more so focus on the symbolism of the architecture in order to convey the hierarchy of the world. The design process, as seen above, is outlined in a sacred text in which an architect priest presides (Champakalakshmi, Kris 2002). Moreover, the designs and details of the temple are meant to show and explain the purposes of the gods of Hinduism. Every detail of the temple is meant to serve a symbolic purpose, even if it is small. It symbolizes an aspect of the Hindu faith. This is unlike the Baha’i shrines and temple in which the details are more so involved in the beauty of the building, not necessarily the symbolism behind it.

Figure 3.11: Map featuring the temple complex of Angkor Wat. The equinox aligns east to west for seasonal observations (Paradise 2015).

3.8 The Baha’i Faiths Foundations and Beliefs

The Baha’i faith is a relatively new faith in the modern context. Founded in the mid 1800s, it has seen rapid expansion and growth within the century and a half of its existence (Arthur 1980). With such a rapid growth and influence, it is important to answer some questions
regarding the faith, such as when and where was it founded, who are the main leaders, what do they believe, how is it organized, and where do they worship?

The faith’s founder, Mirzá Ḥusayn-ʻAlí Núrí, who would later be called Baha’u’llah, was originally from Persia. At this time in Persian history, the Persian government was under the control of the Qajar dynasty. They originally came to power towards the end of the 18th century and ruled until the beginning of the 20th century. The Qajars were a group of Turkic peoples who conquered the region and used the educated Persian population in order to govern; a tactic originally used by the Mongols to govern conquered lands and kept by the Qajars. The Persian’s already had a strong bureaucracy before the Mongols, so they used this system to govern and converted to the local religion, Islam (Momen 1985).

In the historical foundations of the Baha’i faith there are four specific men who helped to create the modern day institution. In chronological order they are, The Bab, Baha’u’llah, ‘Abdul-baha, and Shoghi Effendi. These four men are essential in studying the faith as a whole, and more importantly to the subject of this study, how the temples and shrines originated both in Israel, and across the globe.
3.9 The Bab

Figure 3.12: a Da'ira and haykal drawn by The Bab. The Bab commanded his followers to create these talismans and carry them with them. The Baha’i would later abandon this practice. (Winters 2000).

The Bab was born in Shiraz, Persia, in 1819. His birth name was Mirza Ali Muhammad, he would later go on to adopt the title, The Bab, meaning the Gate, after his proclamation of his prophethood. There is some disagreement as to when the Bab’s father died. He either passed away when the Bab was an infant, or when he was nine years old. Either way, the Bab’s guardianship was passed over to his maternal uncle, Ḥaji Mirza Sayyed ‘Ali (The Bab 1989).

At age fifteen, the Bab started working in his families business and moved to Bushehr with his uncle. However, early reports of the Bab suggest that he had very little interest in his families work and decided to start studying religion. During this period the Bab started to write a series of prayers and sermons. The Bab, however, was excluded from the Ulama, the Islamic Clergy, due to his lack of training in a formal madrasas, which is an Islamic religious school. (The Bab 1989)
In 1839, the Bab went to Iraq and spent the year in Karbala. This time is very important for the Bab, even though there are few documents to account for the time he spent here. But according to some accounts, he may have been influenced by another movement going on throughout the Shi’a world: Shaikhism. Shaikhism was a sect of Shi’a Islam that focused more on the philosophical aspects of religion and actively sought for a more infallible leader of Twelver Shi’a Islam, more so than the mainstream Twelver Islam group (MacEoin 1979).

This is a critical moment in the development of the Babi sect as the Shaikhis are the ones who influenced the Bab to declare himself the one who would herald in the Twelfth Imam. Thus the reason behind his title, The Gate. In the year 1844, the Bab openly declared himself as the one who would lead the people to the Twelfth Imam. This initiated a power struggle amongst the mainstream Shi’a ulama and the newly developed Babi sect (Keddie 1983).

The popularity of the Babi movement spread throughout the Persian region and created discomfort amongst the Ulama in the area. The numbers are difficult to narrow down as the organization of the early Babi movement was disorganized. The Bab, in one of his works, wrote there were 100,000 adherents converted during the first four years after his declaration. But, the academic community cannot be certain to the numbers of Babis during this time period. However, his popularity led to discomfort from the government and ulama in the Persian regions and eventually led to the Bab being imprisoned and moved around the country numerous times (Smith 1984).

During the Bab’s prophetic career, he wrote many books and spiritual readings. The most significant of which is the Commentary on the Surah of Joseph. In this writing, the Bab, declares himself the Manifestation of God, however, it is often times not directly stated, but eluded to.
This writing is considered the cornerstone of the Babi movement during the time and is also considered a revelation by the modern Baha’i (MacEoin 1992).

The end of the Babi movement began in 1850. The Bab was put on trial in Tabriz by the Ulama and the Shah. They questioned him regarding his claims and ultimately the trail findings were indecisive. The ulama wanted capital punishment for the Bab, however, the government did not want to execute the Bab, due to his popularity. The trial ended with the Bab receiving corporal punishment and being imprisoned in a fortress in Chihriq (Cole 1995).

The Bab was eventually executed, later that year, by firing squad. This is probably due to the popularity of the Bab having waned a bit after his imprisonment. During his time at Chihriq he wrote the Persian Bayan, a book that he never finished but is claimed by modern Baha’i to have pointed out Baha’u’llah as his successor. His death led to an assassination attempt by the Babis on the life of Naser al-Din, the Shah of Persia. This attempt, which was unsuccessful, led to the mass persecution and execution of Babis throughout Persia and the fragmentation of the faith. However, out of the fragmentation of the Babi movement, Baha’u’llah emerged (MacEoin 2009).

3.10 Baha’u’llah

Baha’u’llah, originally named Mírzá Ḥusayn-`Alí Núrí, was born in Tehran in 1817. His father was Mirza Abbas Nuri, also known as Mizra Buzurg, and he served as a minister to one of the sons of Fath Ali Shah. He was also a governor of Burujird and Luristan. However, he lost this position when Muhammad Shah came to power. Luckily, the Shah allowed him to keep his families estates in Tehran. Baha’u’llah was offered a government post, however, he refused the position as, according to Cole (1995) he had more “contemplative leanings.”
In 1844, a follower of the Bab showed up in Tehran, where Baha’u’llah happened to be at the time, and began to spread the message of the Bab. Shortly after, Baha’u’llah accepted this message and began to follow the Bab. He returned to his hometown and had some successful converts. Baha’u’llah did not become a great Babi evangelist, but rather set about helping to organize the sect. He hosted several Babi meetings in his house during the time the Bab was imprisoned. During this time, Baha’u’llah became the covert de facto leader. It is not clear whether or not the Bab specifically told Baha’u’llah this, or if he just assumed the role (Cole 1995).

After the Bab was executed, the Babi faith was splintered. Many Bab converts assumed the role of prophet, some even claiming divinity. One of the Babis warned Baha’u’llah that the
Persian government had infiltrated the Babi community, and it was best if he left town for a while. Baha’u’llah went to Karbala, in Iraq, where he joined a small but active Babi community. While here, it is recorded that Baha’u’llah began to tell some of his closest friends, that he was the next prophet after the Bab. He did not, however, proclaim this to the rest of the Babis (Balyuzi 1963).

Baha’u’llah eventually returned to Tehran, during the time the assassination attempt was being planned. When Baha’u’llah discovered the plot, he denounced it and attempted to stop it. However, some young Babi fanatics attempted the assassination, but it failed. Baha’u’llah was imprisoned and made to walk through Tehran in chains. Baha’u’llah was put on trial and found innocent in the assassination attempt, however, Persia was no longer safe for the Babi community and Baha’u’llah moved to Baghdad. While in Baghdad, Baha’u’llah wrote a few of his readings such as the Seven Valleys, the Hidden Words, and the Book of Certitude, all of which would later become a part of the Holy Books of the Baha’i faith and institution (Cole 1995).

At this time the institution of the Babi faith was split: Baha’u’llah ran the administrative side of things, and the head of the Babi community was a man named Mirza Yahya Azal, his half-brother. However, Azal spent most of his time in seclusion and remained largely isolated from the Babis. In 1863, Baha’u’llah openly proclaimed to a group of his disciples that he was the ‘Promised One’ and started to openly oppose Azal. Ultimately, Azal fought back but eventually lost face, by demanding a test of the divine and not showing up for the challenge. This was the birth of the Baha’i faith (Balyuzi 1963).

Baha’u’llah would spend the remainder of his life being transferred by the Ottomans from prison to prison. He was viewed as a troublemaker and they often sent him to remote areas.
Which is exactly how Baha’u’llah arrived in Acco, in 1868 where he would eventually be buried. After Baha’u’llah’s death his son Abbas Effendi, later called Abdu'l-Baha, assumed the leadership of the emerging Baha’i faith and began the westward expansion of the faith and institution (Cole 1995).

3.11 Abdu'l-Baha

Abdu'l-Baha, born as Abbás Effendi, was born in Tehran in 1844, on the same day the Bab proclaimed his prophetic mantle. He was the son of the prophet Baha’u’llah and assumed the leadership of the fledging Baha’i community after the death of his father. Unlike the death of the Bab, in which there was confusion as to who was leading the Babi community, Baha’u’llah specifically stated in his will that Abdu'l-Baha would be the leader. Even though there was clear and distinct will claiming him to be the leader, he did face challenges from his brother during his stay in Acco. This caused the imprisonment —that Abdu'l-Baha previously faced —to be reinstated. This was a short lived schism and those who followed his brother eventually left the faith or came back under Abdu'l-Baha’s leadership. His biggest accomplishments during his lifetime was to spread the faith westward and to establish the temple in Wilmette, Illinois, near Chicago (Balyuzi 1971).
Abdu'l-Baha, born as Abbás Effendi, was born in Tehran in 1844, on the same day the Bab proclaimed his prophetic mantle. He was the son of the prophet Baha‘u’llah and assumed the leadership of the fledging Baha’i community after the death of his father (BIC 2016).

After Abdu'l-Baha’s imprisonment in 1905 he began to plan for a tour to the west. At this time there was a large number of people in America who had converted to Baha’i after an Egyptian follower came and began to share about the faith. These followers wrote to Abdu'l-Baha asking him to come and visit. Before he went on his tour, the remains of the Bab had been exhumed from Iran and placed in a modest shrine on the slopes of Mount Carmel, the future site of the Shrine of the Bab (Balyuzi 1971).

In 1911, Abdu'l-Baha set sail for France and a few cities within Europe including London, Bristol, and Paris. In Paris, Abdu'l-Baha met with a few, formally prominent, Persian
exiles. He also met with many Europeans and other diverse groups. Abdu'l-Baha’s visits and talks focused on science and religion, as well as aspects of international peace. For example, Perkins (1999) records Abdu'l-Baha’s first comments on science and religion stating,

There is an existence a stupendous force, as yet, happily, undiscovered by man. Let us supplicate God, the Beloved, that this force be not discovered by science until spiritual civilization shall dominate the human mind. In the hands of men of lower material nature, this power would be able to destroy the whole earth.

His teaching show the caution Abdu'l-Baha places when it comes to the advancement of science without, in his belief, the expansion of spirituality (Perkins 1999).

In 1912, Abdu'l-Baha arrived in New York City. His first public address was at the Church of the Ascension and focused on national unity and conciliation. Later, he went to Columbia University to spread the messages and stories of the Baha’i faith. He continued his tour and spoke of American issues, such as racial inequality (Stockman 2012). Perkins (1999) records Abdu'l-Baha stating, “When the racial elements of the American nation unite in actual fellowship and accord, the lights of the oneness of humanity will shine, the day of eternal glory and bliss will dawn…”

While Abdu'l-Baha was in Washington D.C., he met with President Theodore Roosevelt and the treasurer of the United States. After this Abdu'l-Baha set out towards Chicago. April 30th, 1912, Abdu'l-Baha was at the groundbreaking for the Temple in Wilmette. He laid the cornerstone and Perkins (1999) quotes him saying, “Thousands of Mashriqu’l-Adhkars, dawning points of praise and mention of God for all religionists will be built in the East and in the West, but this, being the first one erected in the Occident, has great importance.” This quote is hugely important, because Abdu'l-Baha was correct. This statement was made before the destruction of the temple in Turkestan, the original Mashriqu’l-Adhkar, and the temple in Wilmette now remains the oldest Temple in the Baha’i faith.
Ultimately Abdu'l-Baha wrapped up his tour and Mojen (1995) sums up his travels in America and later Europe, by stating,

He visited Chicago, Cleveland, Pittsburgh, Washington D.C., going back to New York by 11 May. For the next few months he remained in New York with occasional brief visits to Boston, Philadelphia, and a number of smaller towns as well as the Lake Mohonk Peace Conference. In August he began a more extensive journey, starting in New Hampshire and the Green Acre School in Maine and going on to Montreal, Buffalo, Chicago, Kenosha, and Minneapolis. He traveled west, reaching San Francisco at the beginning of October. In California he visited Oakland, Palo Alto, and Los Angeles before heading back eastward on 26 October. He traveled through Chicago, Cincinnati, Washington D. C., and Baltimore to New York. On 5 December he set sail from New York, arriving in Liverpool on 13 December. From Liverpool he went to London, where he remained until 21 January 1913 with a number of trips to Oxford, Edinburgh, and Bristol. In Paris, ‘Abdu'l-Bahá stayed two months before making a journey to Stuttgart, Budapest, and Vienna. After another six weeks in Paris, he left for Marseilles on 12 June and set sail for Port Said the next day. From 13 June until 2 December he remained in Egypt and then returned to Haifa.

Abdu'l-Baha would ultimately die in 1921, but not before being knighted by the British government in 1920. His remains were interred in a chamber of the Shrine of the Bab in Haifa, Israel (Ward 1971).

3.12 Shoghi Effendi

Shoghi Effendi, was one of the last great leaders of the faith. His title was the Guardian of the Faith, and he helped to bring the Baha’i faith into an organized and modern world. Undoubtedly the most educated of the early Baha’i leaders, he was trained exclusively in western educational systems and would go on to translate many of the sacred documents that Baha’i hold into English and other languages. Effendi spoke English, Turkish, Arabic, Persian, and French (Khanum 1988).
Effendi was the grandson of ‘Abdu'l-Baha and was appointed Guardian of the Faith in ‘Abdu'l-Baha’s (2015) will and testament, in which it states,

O my loving friends! After the passing away of this wronged one, it is incumbent upon the Aghsân (Branches), the Afnán (Twigs) of the Sacred Lote-Tree, the Hands (pillars) of the Cause of God and the loved ones of the Abhá Beauty to turn unto Shoghi Effendi--the youthful branch branched from the two hallowed and sacred Lote-Trees and the fruit grown from the union of the two offshoots of the Tree of Holiness,—as he is the sign of God, the chosen branch, the Guardian of the Cause of God, he unto whom all the Aghsân, the Afnán, the Hands of the Cause of God and His loved ones must turn. He is the Interpreter of the Word of God and after him will succeed the first-born of his lineal descendants.

Effendi was educated in western style systems. Early on in his primary schooling he was educated at a Jesuit school in Haifa and later at another Catholic boarding school in Beirut. He finished up his high school and early years of college at the Syrian Protestant College, later
known as the American University in Beirut (Khanum 1988). According to Danesh (1991) Effendi did not enjoy his schooling, primarily for being separated from his family for long periods of time. However, this was the period where he learned English, to be able to translate the writings of `Abdu'l-Baha and act as his secretary.

In 1918 Effendi obtained his Bachelor of Arts from the American University in Beirut. From then until 1920, Effendi spent most of his time with `Abdu'l-Baha and accompanied him on many official visits. Effendi also met the British Governor of Haifa, Sir Edmund Allenby, during this time. In 1920, Effendi went to Balliol College, Oxford to earn his post-graduate degree. Here he studied, according to Danesh (1991), “political science, social and industrial questions, logic, and English economic history since 1688”. It was during his studies in Oxford when Effendi found out his grandfather and leader of the faith, Abdu'l-Baha, had passed away. This crushed Effendi, who was very close to his grandfather, and he returned to Haifa in order to hear his will read. Effendi had no idea he was to be the leader of the faith, but in 1922 the three separate documents, written by `Abdu'l-Baha at different times, were read to Effendi, and the responsibility of the faith was placed in his hands (Khanum 1988).

Early on in Effendi’s leadership a schism arose in the Baha’i faith. Just four weeks after assuming leadership, a group termed Covenant Breakers by the Baha’i, stole the keys to the Shrine where Baha’u’llah was interred. The Shi’a had taken possession of the House of Baha’u’llah in Iraq; this place held special significance since it was designated the place of pilgrimage by Baha’u’llah. There were even doubts amongst the faithful Baha’i over the leadership qualities of Effendi and they often cited his youth and lack of experiences as a reason to see the mantle of leadership passed on to someone else (Balyuzi 1971).
However overtime Effendi dealt with these issues rationally. In 1922, Effendi summoned several high level Baha’i dignitaries to Haifa from across the globe. The purpose of this meeting was to begin the establishment of the Universal House of Justice, the current governing body of the Baha’i faith and institution. Although the Universal House of Justice were spoken about by both the Prophet Baha’u’llah and his son, ‘Abdu'l-Baha, Effendi was the first one to begin the steps in the foundation of an administrative order (Danesh 1991).

Effendi also followed where his grandfather, ‘Abdu'l-Baha, left off. ‘Abdu'l-Baha, as it can be argued, introduced the west to the Baha’i faith and Effendi then began to expand teachings globally. One of the biggest pushes during his reign was this expansion. Khanum (1988) quotes Effendi’s statement regarding the missionary activities stating, “let us arise to teach His Cause with righteousness, conviction, understanding and vigor. Let this be the paramount and most urgent duty of every Bahá’í. Let us make it the dominating passion of our life. Let us scatter to the uttermost corners of the earth.”

Out of this expansion arose the first conversion of a royal family to the Baha’i faith, Queen Marie of Romania. She was converted by Martha Root, an early Baha’i missionary who circled the globe four times and taught the faith (Danesh 1991). Khanum (1969) quotes Queen Marie comments on the Baha’i faith in the Toronto Daily News, stating,

*Their writings are a great cry toward peace, reaching beyond all limits of frontiers, above all dissension about rites and dogmas. It is a religion based upon the inner spirit of God, upon the great, not-to-be-overcome verity that God is love, meaning just that. It teaches that all hatreds, intrigues, suspicions, evil words, all aggressive patriotism even, are outside the one essential law of God, and that special beliefs are but surface things whereas the heart that beats with divine love knows no tribe nor race.*

Not only did Effendi help to spread and convert people to the fledgling faith, but more importantly to the cause of this paper, he began the construction and enhancements to the Baha’i World Centre in Haifa as well as began to plant the gardens at the Shrines of Baha’u’llah and the
Bab. During Effendi’s leadership, the Shrines of the Bab and Baha’u’llah were electrically illuminated for the first time. He also planted the first large scale lawns in Palestine, outside the shrines. Effendi designed the gardens, the Shrines, and the International Archives building located in the Arc, a series of administrative buildings of the Faith in Haifa. He also commissioned the architect of the Shrine of the Bab, William Maxwell, his father in law. In response to the Iranian government seizing Baha’i property in Iran and nullifying a planned temple being built there, Effendi drafted the ideas of the Mother Temples in Africa, Australia, and Europe. He planned for three temples to be built one in Kampala, Uganda; in Sydney, Australia; and in Frankfurt, Germany (See Figures 5.30, 5.38, 5.40) (Danesh 1991).

Effendi helped to transform Haifa into the focal point of the Baha’i faith. He had transferred the bodies of ‘Abdu’l-Baha’s brother, sister, mother, and wife to Haifa. He also expanded the size of property owned by Baha’i in this area by adding 500,000 square meters of property. Danesh (1991) summarizes the accomplishments of Effendi’s work on the architecture and development of the Haifa properties by stating,

*By 1953, in a space of less than six years, the Guardian had transformed, what he called in 1947, ‘a homely building with a fortress-like appearance’ into the “Queen of Carmel”. In 1957, ‘the first stately Edifice’ of the Ark, the International Archives Building, was completed. Three years before, Shoghi Effendi predicted that the erection of this building was a step “destined to usher in the establishment of the World Administrative Centre of the Faith on Mt. Carmel - the Ark referred to by Bahá’u’lláh in the closing passages of His Tablet of Carmel”.*

Effendi, not only helped to develop the areas of Haifa and Acco, but he also helped the faith and institution to gain world recognition. He was frequently in contact with the local authorities and global players such as the UN. In 1923, he pressured the local Haifa and Acco governor to help him settle an internal dispute, in which covenant breakers had occupied the Shrines in Acco and Haifa. The governor ruled in favor on Effendi helping to solidify his
leadership of the faith. Effendi also met several times, after the founding of Israel, the Prime Minister David Ben-Gurion. Effendi also donated over 10,000 dollars to local charities surrounding Haifa (Danesh 1991).

One of the major contributions of Effendi was his Ten Year World Crusade. In this he detailed what the goals of the Baha’i faith would be for the next decade. Effendi (1954) stated these saying,

- Adoption of preliminary measures to the construction of Baha’u'llah’s Sepulcher in the Holy Land.
- Acquisition of site for the future Mashriqu’l-Adhkar on Mt Carmel.
- Development of the functions of the institutions of the Hands of the Cause.
- Establishment International Baha’i Court in Holy Land, preliminary to emergence of the Universal House of Justice.
- Codification of the Laws and Ordinances of the Kitab-i-Aqdas, the Mother Book of the Baha’i Revelation.
- Extension of the International Baha’i Endowments in the Holy Land, on the plain of Acco and the slopes of Mt. Carmel.
- Construction of the International Baha’i Archives in the neighborhood of the Bab’s Sepulcher.
- Establishment of seven Israel branches of N.S.A.s 2 Europe, 2 Asia, 1 America, 1 Africa, 1 Australia.
- Reinforcement of ties binding the Baha’i World Community to the United Nations.
- Convocation of a World Baha’i Congress in the vicinity of the Garden of Ridvan, Baghdad...
These goals were set out by Effendi in order to further the Golden Age of the Baha’i faith in which the faith would be a global power and many countries would be part of the Baha’i Commonwealth. However, he stressed the current objective and means to accomplish this was the teaching of the faith and the spread of its message. By 1936, 10 National Spiritual Assemblies and 139 local Spiritual Assemblies were in existence (Hassall 1995).

The World Crusade would be the crowning moment in the leadership of Shoghi Effendi. In 1957 Effendi died in London. His accomplishments in the Baha’i Faith helped to lay the administrative foundation and spread the message globally. During his tenure he managed to rapidly grow the fledging faith and left it with a solid reputation on the global field and planned many sacred architectural works of the faith. Danesh (1991) summarized his achievements by stating,
The Ten Year Crusade crowned Shoghi Effendi’s ministry and his life’s work. Whereas in 1921, when Shoghi Effendi became the Guardian, thirty-five countries were opened to the Faith, on his passing in November 1957, Bahá’ís resided in 254 countries; indeed, during the first two years of the Global Crusade alone, the number of countries enrolled under the banner of Bahá’u’lláh almost doubled. By 1957, Bahá’í literature was translated into 237 languages - a sixfold increase in thirteen years. By the end of this Crusade, there were fifty-six national Assemblies, 4,566 local Assemblies, and Bahá’ís resided in 15,186 localties.

On the day of his death, a cable was sent to all the National Assemblies stating,

*Shoghi Effendi beloved of all hearts sacred trust given believers by Master passed away sudden heart attack in sleep following Asiatic flu. Urge believers remain steadfast cling institution Hands lovingly reared recently reinforced emphasized by beloved Guardian. Only oneness heart oneness purpose can befittingly testify loyalty all National Assemblies believers departed Guardian who sacrificed self utterly for service Faith.* (Khanum, Ferraby 1958).

The Baha’i faith’s foundations are essential to understanding the evolution and growth of a modern religious institution. The early founders helped to guide the young faith and to ensure a strong foundation for the institution to grow. The Bab stirred up religious expectations within Persia and created a situation that allowed for Baha’u’llah to assume leadership. Baha’u’llah created the Baha’i faith and set about rules, doctrines, and religious obligations for its followers. His son, Abdul’baha expanded the faith westward and introduced many of its tenants and ideas to a western audience. Abdul’baha’s grandson, Shoghi Effendi, galvanized the faith and created institutional structure while expanding the number converts and missionary activity to new areas. These four men were essential to creating a modern organized religion which allows for the creation of sacred architecture and symbolism. Had it not been for these four early founders, the faith itself may have never survived and its follower may have dissipated.
3.14 Principals of the Faith

The Baha’i faith came out of Shi’a Islam and shares some characteristics with it. However, it shares characteristics with all religions due to the acceptance of all faiths and incorporates many of their beliefs into their system. The faith can be summed up with nine points...
that explain a general viewpoint of the faith. They are the oneness of god and his manifestations, the holy books, the immortal soul, vision of a new world order, world peace with a united world, establishment of social order and justice, advancement of women, education, and the role of religion.

According to Cole (1982) Baha’i follow the medieval Christian concept of via negativa, the path of negation, which is understanding that the most a person can know about God is that they are unable to have any knowledge of God. The Baha’i are a strictly monotheistic religion. The Prophet Bahá’u’lláh (1976) states about God that,

Exalted, immeasurably exalted, art Thou above the strivings of mortal man to unravel Thy mystery, to describe Thy glory, or even to hint at the nature of Thine Essence. For whatever such strivings may accomplish, they never can hope to transcend the limitations imposed upon Thy creatures, inasmuch as these efforts are actuated by Thy decree, and are begotten of Thine invention.

Since the Baha’i believe in an unknowable impersonal deity, they argue that the only way to become close to God is through his Divine Manifestations. A manifestation is a prophet in the Baha’i faith, but they incorporate other major world religions founders as part of this idea. For instance, Baha’u’llah is considered a manifestation of God as is Buddha; they are both on equal terms with each other. However, they place special emphasis on Baha’u’llah since he is the more recent manifestation (Cole 1982).

Since, according to the Baha’i, God is unknowable these manifestations are the only connection to the divine. An individual cannot hope to obtain knowledge of the divine without the direction of these prophets. Esselmont (2006), explains the Manifestations, stating,

The Manifestation is the Perfect Man, the great Exemplar for Mankind, the First Fruit of the tree of humanity... So until we have seen the Glory of God revealed in the Manifestation, we can have no idea of the spiritual beauty latent in our own nature and that of our fellows. By knowing and loving the Manifestation of God and following His teachings we are enabled, little by little to realize the potential
perfections within ourselves; then, and not till then, does the meaning and purpose of life and the universe become apparent to us.

God may be unknowable and inseparable, but the Manifestations are inseparable from God. The Manifestations are not divine, which separates it from the claims of Christianity, which claim Jesus is both God and Man. The Manifestations are men, but they are special men. The best analogy, which is often used in the faith, is stated by St. Rain (2003) saying,

...we could say that we are all mirrors of the Holy Spirit. The problem is that we are so covered with dirt and muck of the material world that we don’t even recognize our ability to reflect. What we need is an example of a mirror that has been polished by God Himself—a perfect mirror... They make the qualities of an unknowable God apparent to humanity. But since this is a word [manifestation] that almost no one but Baha’i use, we often use the word ‘prophet’ to refer to this very small and very special group of people. But this word is also confusing because there are so many prophets named in the Old Testament and elsewhere in religious history. Isaiah, Elijah, Ezekiel, etc. did tell us important things about God, but were not manifestations. Baha’i refer to them as ‘lesser prophets’... In other words, they were in tune with the Holy Spirit, but were not perfect, infallible reflections of the Holy Spirit.

Basically, the manifestations are perfect men who reflect the qualities of God. Thus the reasoning as to why they are infallible and great men, according to the Baha’i.

Science and education are very important to the faith. They seek to co-op these into the faith and do not believe science and religion are contradictory. Baha’i believe that truth is one and so that any conflicts or divisions that come out of ‘truth’, in fact did not but rather came out of error. An example where science has been co-opted into the faith is that of evolution, which is contentious in many monotheistic religions. The Baha’i believe that evolution did happen, and that people did evolve from other species, however, they believe that the divine spark and the essence of man has been within whatever creatures man evolved from. Esslemont (2006) says,

Each individual human body develops through such a series of stages, from a tiny round speck of jelly-like matter to the developed man. If this is true of the individual, as nobody denies, why should we consider it derogatory to human
dignity to admit a similar development for the species?... So the human species may at various stages of its long development have resembled to the outward eye various species of lower animals, but it was still the human species, developing into man as we know him today, nay more, of developing in the future, we trust, into something far higher still.

Education is also very important to the Baha’i. They believe in the individual search for spiritual truths. However, it also expands to practical education. For instance St. Rain (2003) quotes ‘Abdu’l-Baha stating,

*Among other teachings and principles of Baha’u’llah counsels the education of all members of society. No individual should be denied or deprived of intellectual training... None must be left in the grades of ignorance, for ignorance is a defect in the human world. All mankind must be given a knowledge of science and philosophy...*

One of the more radical ideas to come out of the 19th century Baha’i faith that is more common now, is the complete equality of men and women. Women are to be treated as absolute equals to men. They believe that the equality expands into equal rights, privileges, education, and opportunities. Baha’i also argue that the education of girls is more important than that of boys, due to girls becoming mothers in the future (Esslemont 2006). To reinforce the importance of women to the Baha’i faith, Esslemont (2006) states,

*When woman’s point of view receives due consideration and woman’s will is allowed adequate expression in the arrangement of social affairs, we may expect great advancement in matters which have often been grievously neglected under the old regime of male dominance—such as matters as health, temperance, peace, and regard for the value of the individual life. Improvements in these respects will have very far reaching and beneficent effects.*

Another critical aspect and goal of the Baha’i faith is that of world peace. The Baha’i faith identifies racial, ethnic, political, and religious tensions as the cause of war and suffering. They see themselves as more citizens of the world rather than individual countries. Furthermore, Baha’i do not divide themselves on ethnic or racial lines. They view humanity as one indivisible family. So with the previously mentioned causes of war, they look on it at a global scale. Baha’i
support numerous international agencies that seek to remedy these issues. They also do not believe that peace is a dream but rather can it can achieved through the elimination of the aforementioned prejudices. (St. Rain 2003). St. Rain (2003) quotes ‘Abdul-Baha as saying,

_In the days of old an instinct for warfare was developed in the struggle with wild animals; this is no longer necessary; nay, rather co-operation and mutual understanding are seen to produce the greatest welfare of mankind. Enmity is now the result of prejudice only._

With world peace comes the next Baha’i belief, world unity. This also expands into a unified religion and language. Baha’i, early on, sought to establish a universal auxiliary language and they chose the relatively unique and uncommon invention of the Esperanto language. This language was invented by a Polish linguist named Ludovic Zamenhof. It did not catch on as well as expected and the current Baha’i administration has agreed to not push for a specific universal language; but rather, they believe that the nations of the world will have to decide a universal language (Esslemont 2006).

Next is the idea of a unified religion. Baha’i followers do not disregard other religions and by unifying faith they do not mean under the umbrella of one religion, but rather that they all are able to co-exist peacefully. Furthermore the idea of world unity is the same way. They believe that there should be institutions of international power that are able to supersede the sovereignty of individual countries in order to have a method of distributing justice and enforcement of international laws. With this in mind, the Baha’i work closely with current international organizations such as the United Nations on humanitarian issues and human rights (Esslemont 2006).

The Baha’i have numerous holy books. The idea of a holy book in the Baha’i faith does not necessarily mean they were written by the manifestation Baha’u’llah exclusively. For instance, his son, ‘Abdul-Baha wrote numerous letters and books on the faith that are still highly
regarded and revered, as well as Shoghi Effendi. One of the holiest books is entitled *al-Kitáb al-Aqdas*, which literally means The Most Holy Book. This was written by Baha’u’llah while he was in Acco and special because the Most Holy Book was one of a few actually named by Baha’u’llah. The purpose of this tablet was to answer some questions presented to the manifestation and set a code of laws. The tablet also designated the leadership of the Baha’i faith, after the death of Baha’u’llah, to ‘Abdul-Baha (Winters 2002).

The immortal soul is also essential to understanding the Baha’i faith. The soul is immortal to the Baha’i and after death the soul continues on a similar journey that people alive on earth undergo; it is believed that the soul continues to grow in death. Furthermore, to reinforce the idea of unity, the Baha’i believe that the physical and spiritual reals are connected to one another. They believe that all human beings are part of the same organism, but they are intimately dependent on each other. The Baha’i also do not believe in the existence of evil; like the devil or demons. For if God is good, according to the Baha’i, and unified there can be no evil. They argue that evil is created by immature and underdeveloped men. The soul even after death continues this philosophy, and so a soul of a man who is underdeveloped will feel like he is in hell, however, there is still potential for growth and renewal. Evil is just the lack of good, not the existence of something opposite of good. Baha’i do not have a doctrine in terms of what the afterlife looks like besides the idea of eternal growth and progression (Esslemont 2006).

Last, the Baha’i faith have a distinct position on the purpose and role of religion within the world. Religion has a special place within society and is argued by the Baha’i that religion helped to create society in general. All religions and faiths are derived from one source, according to the Baha’i. Therefore, religion is unified and its purpose is to further unify
humanity and bring tranquility to all the people in the world. On the individual level the role of religion is to reveal the good and reveal the self within each individual (Sarwal 1996).
Chapter Four: Methodology

During the summer of 2015, research and information gathering was concluded on the Baha’i holy sites and shrines in Israel. During my research in Israel, I was able to take all available tours allowed to non-Baha’i. The Shrine of the Bab is administered by the Israeli government and not members of the Baha’i faith. The Shrine of Bahji, however, had a mix of both Israelis and Baha’i members present during the touring hours; the Israelis guarded the entrance while the Baha’i monitored the shrine.

Photographic evidence were taken of the sacred structures and symbols that adorn the outside. Unfortunately no photographs were allowed in the interior of the Shrine of the Bab or the Shrine of Bahji, because of the respect and sacrality of the tombs. However, numerous photos were taken of the gardens, fountains, and varied decorations surrounding the shrines. As well as conversations with Baha’i administrators and guides of the property.

I managed to visit the Deputy Secretary General at the Baha’i World Centre. She provided great insight regarding her personal faith, temples, and complex aspects of the structures and grounds. A few months later, she corresponded via email with more information and images.

In January 2015, I was able to travel to Wilmette, Illinois to gather information on the Mother Temple of the West, and the oldest extant Temple Baha’i. Access to the archives was granted where it is located beneath the Temple. Here I was permitted to view photocopies of primary documents detailing several aspects of the Temple’s design, construction, and grounds.

Orthophotography was implemented in order to compile a birds-eye view of the Temple and grounds in Wilmette, and the Shrines in Israel. Moreover with the use of orthophotos I made
cartographic representations in order to create maps detailing the celestial alignments of the Shrines and Temples.

I examined historic, geographic, and theologic resources in the hopes of finding the symbols and functions of the sacred sites of the Baha’i faith in both primary and secondary sources. This, in the hopes of divulging, explaining, and understanding the symbolism used in Baha’i temple design, construction, and adornment. This combination of archival research, site visitation, orthophotography, cartographic analysis, and earth-sun calculations, and decegramining were crucial to the compiled findings of this research project.
Chapter Five: Results & Analysis

Initially, I hypothesized that the Baha’i sacred sites and temples would have some sort of celestial alignments or mathematical significance. However, as my research expanded I realized that this was not the case. Instead the focus of my research turned towards the lack of celestial connection and the importance of the symbology that adorn the shrines and temples.

5.1 The Shrine of the Bab

Figure 5.1: A north eastern facing view, looking downhill at the Shrine of the Bab in Haifa, Israel. Each terrace is filled with gardens and other decorative additions. The Cyprus tree seen in front of the Shrine is where Baha’u’llah stood said the shrine should be built. (Meizler).

The Shrine of the Bab is located in Haifa, Israel. It was completed in 1952 and its construction was overseen by Shoghi Effendi. The Shrine was built a series of phases. The first
phase was constructed by ‘Abdul-Baha, under Baha’u’llah’s command and included a six
roomed mausoleum made out of local stone in 1909 (BWNS 2003).

Figure 5.2: Uphill and south westerly view of the Shrine of the Bab on Mount Carmel in 1909.
This was the original shrine the interred the body of the Bab; later expanded and embellished
upon by Shoghi Effendi (BWNS 2003).

After ‘Abdul-Baha passed away and Shoghi Effendi became the Guardian of the Faith, he
took up the Shrine of the Bab project. Effendi hired William Maxwell, a Canadian architect, to
oversee the design and construction of the Shrine. However, Effendi did incorporate some of his
own designs into the building, such as elements of eastern and western architecture. Furthermore
Effendi secured the resources necessary for the construction of the Shrine of the Bab, such as
marble from Italy. Effendi had specific symbols placed within the design of the Shrine. For
instance, the number eight is a predominate number within the design of the shrine. This is due
to Effendi specifically stating that this is a must. The symbolism of the number eight deals with
the Baha’i perceived number of religions at this point. They believe that The Bab founded the eighth major religion that continues to have adherents. Moreover, the Baha’i argue their faith is the ninth major religion, thus the reason for the nine pointed star. This synchronization of the number eight is clearly seen in the support system built to hold up the octagon structure built on top of the original. Furthermore, there are eight doors into the Shrine that are named after significant figures of the Baha’i faith and those who helped on the construction of the Shrine. There are also eight sections of the balustrade, and this is significant due to Islamic architecture. These balustrade were designed to mimic minarets and according to Quranic verses represent eight angels that show the way to the throne of God (Giachery 1973).

Figure 5.3: Presumably an eastern view of the shrine of the Bab after the completion of the second tier in 1952. The balustrades can be clearly seen and were designed to mimic minarets and according to Quranic verses represent eight angels that show the way to the throne of God (BWNS 2003).
Figure 5.4: Diagram illustrating the concrete beams that support the octagon. The symbolism of the eight pointed star is due to the Baha’i belief that the Bab started the eighth major religion. This synchronization of the number eight is clearly seen in the support system built to hold up the octagon structure built on top of the original. (BWNS 2003).
Figure 5.5: Layout detailing the names of the doors to the Shrine of the Bab. These doors were named after important people of the faith and those who helped in the construction of the shrine (BHF 2010).
Figure 5.6: View of two of the balustrades meant to mimic minarets. These balustrades were designed to mimic minarets and according to Quranic verses represent eight angels that show the way to the throne of God (BWNS 2016).

After the octagonal foundation for the super structure was set, the clerestory was then constructed. The clerestory is cylindrical in shape and holds eighteen windows. These windows are symbolic in nature as well. They represent the first eighteen disciples The Bab had in his prophetic career. The last component of the Shrine is the dome. The dome is constructed out of several hundred pieces of golden gilded terracotta tiles. This was considered one of the most important elements of the construction to Shoghi Effendi. He viewed the three tiered building’s balustrades as crowns. One on the original structure, a second on the octagonal structure, and the
third encircling the dome. The third one, according to Effendi, represents celestial sovereignty (Giachery 1973).

Figure 5.7: Facing north east a view of the Shrine of the Bab after completion of the superstructure. The dome is constructed out of several hundred pieces of golden gilded terracotta tiles. This was considered one of the most important elements of the construction to Shoghi Effendi (BWNS 2003).
Figure 5.8: A view looking south west at the fenestration and gilded dome of the Shrine of the Bab. Shoghi Effendi viewed the three tiered building’s balustrades as crowns. One on the original structure, a second on the octagonal structure, and the third encircling the dome. The third one, according to Effendi, represents celestial sovereignty (Meizler).

6.2 Terraces

The next critical aspect of the Shrines construction are the terraces that ascend the slopes of Mount Carmel. These terraces, heavily influenced by the Baha’i view of nature, are riddled with gardens going up the slope to meet the Shrine in the middle and continuing past the Shrine. There are nine descending towards the German Colony and nine ascending up the slope behind the Shrine. While there is no definitive evidence to suggest what the number of terraces symbolize, it is possible to speculate that the eighteen terraces hold the same symbolism as the eighteen windows on the dome; they represent the first eighteen disciples of the Bab. Each of
these terraces hold a garden and a plethora of different kinds of flora. There are also several fountains placed on different areas of the terrace. Also on the terraces and throughout the Shrine area are statues of eagles and peacocks. Furthermore, at night the terraces are lit up. This is symbolic in nature mainly due to The Bab being imprisoned without light, thus the Baha’i light his shrine up to pay homage.

However, besides the number of terraces, the terraces themselves have no symbolic nature or significance. The gardens reflect a view of nature, not necessarily a symbol within the Baha’i faith. The eagle statues and peacocks also have no significance other than decoration. This is probably the most surprising thing I have found during my research was the fact that within the terrace gardens there is absolutely no symbolic or calculated purposes on placements, other than the beautification of the gardens.

This idea was confirmed by a communication with the Deputy Secretary General at Baha’i World Centre in Haifa, Israel. When I asked specifically about the statues, it was stated that they hold no special symbolic significance other than for decorative aesthetic purposes.

The axis of the terraces, with the Shrine in the middle, do align to the Shrine of Bahji. This was done on purpose and not accidently. The reason this is the case is due to the Bab’s affiliation with Baha’u’llah. The Bab was considered the herald to Baha’u’llah and so thus his tomb and shrine point to the tomb of Baha’u’llah (see figure 5.10). However, there are no other alignments or celestial alignments to either of the shrines besides this one.
Figure 5.9: Facing south, the Shrine of the Bab showing the terraces lit at night. This is due to a story about the imprisonment of the Bab. He was left without lights for several nights, so his shrine is kept lit at night in honor of his imprisonment (Meizler).
Figure 5.10: map showing the alignments of the Shrine of the Bab and Bahji in association with celestial alignments. The Shrine of the Bab’s axis is aligned with the Shrine at Bahji. This is due to the relationship between Baha’u’llah and the Bab. According to Baha’i the Bab pointed to Baha’u’llah (Meizler).
5.2 Symbols

Etched onto the sides of the doors to the Shrine of the Bab are symbols important to the understanding of the faith; these symbols consist of four specific ones: 1. the stretched haykal, 2. the haykal, 3. the Baha’i ring stone, 4. a nine-sided rosette symbol.

The stretched haykal and the standard haykal are very similar in appearance and symbolism. The haykal is a talisman that the Bab told his followers to make and carry with them. This practice was abandoned by the Baha’i faith, but they still respect its importance and symbolism. The haykal symbolizes the human body and means temple in Arabic, thus the reason there is a stretched version in order to better mimic the human body. ‘Abdul’baha confirms this by stating,

*The star is a symbol of man's body (Haykal). The Bab designed the star and wrote 360 forms of the Name of Bahá'u'lláh in the center. These represented the Lights of the Perfection of God which could be contained in the body of a perfect man--Manifestation.*

There are two different versions on the Shrine of the Bab, since these haykals are meant to represent the manifestations, it can be assumed that the reason for multiple versions is to represent both the Bab and Baha’u’llah (Goodall, Cooper 1979).
Figure 5.11: standard haykal on Shrine of the Bab presumed to represent one of the manifestations. The haykal is a talisman that the Bab told his followers to make and carry with them. This practice was abandoned by the Baha’i faith, but they still respect its importance and symbolism. (Meizler).
The next symbol is the Baha’i nine-sided rosette. This is a distinctive symbol that is not seen anywhere else besides on the Shrine of the Bab. The Baha’i nine-pointed star is the symbol of the faith because of the importance of the number nine and how it represents unity and perfection; the Baha’i faith is also the ninth world religion, according to Baha’i. Similar as to how the Star of David, the crucifix, and the crescent and star are symbols of their respective faiths. While the symbol on the Shrine of the Bab isn’t found anywhere else, I speculate the symbolism is the same as the Baha’i star. Shoghi Effendi explains the significance by stating,
...regarding the significance of the number nine: its importance as a symbol used so often in various connections by the believers lies in three facts. First, it symbolizes the nine great world religions of which we have any definite historical knowledge, including the Babi and Bahá’í Revelations; second, it represents the number of perfection, being the highest single number; third, it is the numerical value of the word ‘Baha’ (UHJ 1999).

Figure 5.13: nine sided rosette on the Shrine of the Bab with the number 9 etched on top. This symbol is only found on the Shrine of the Bab and not in the mainstream Baha’i symbolism. However, it is presumed to represent the same thing as the nine-pointed star (Meizler).
Figure 5.14: The number nine and nine nonagonal stars over a door at the Shrine of the Bab. Consisting of a stone plaque, metal medallion in the center, and nine smaller medal medallions encircling the center one. The number nine represents perfection and unity in the Baha’i faith. (Meizler).
Figure 5.15: official variation of the nonagonal star of the American National Spiritual Assembly. The Baha’i nine-sided star can come in a variety of forms, however, this one is specifically purposed for official business by the American National Spiritual Assembly (BUS 2016).

Next is the Baha’i ring stone symbol which is multilayered in its symbolism. It consists of three horizontal bars and one vertical bar intersecting the horizontal bars. The whole thing itself is a calligraphic style of the word Baha, which means glory in Arabic. The symbolism is as follows: the top bar represents the realm of God, the second one represents the realms of the prophets or manifestations, and the final bar represents the domain of man and creation. The intersecting vertical bar represents the manifestations and how they join together the worlds of creation and God. Furthermore this was designed by ‘Abdul-Baha and his original concept held two haykals on each side; one to represent the Bab and the other to balance the design. This design can be found on numerous accessories such as rings, necklaces, or other adornments (Faizi 2002).
Figure 5.16: Baha’i ring stone symbol on the side of the Shrine of the Bab. The top bar represents the realm of God, the second one represents the realms of the prophets or manifestations, and the final bar represents the domain of man and creation. The intersecting vertical bar represents the manifestations and how they join together the worlds of creation and God. (Meizler).

Figure 5.17: original Baha’i ringstone symbol featuring the haykals on each side. ‘Abdul-Baha and his original concept held two haykals on each side; one to represent the Bab and the other to balance the design. This design can be found on numerous accessories such as rings, necklaces, or other adornments (BUS 2016).
Figure 5.18: one of the doors to the Shrine of the Bab featuring the complete symbol set. The ring stone symbol, the haykal, stretched haykal, and the nine-sided rosette. Furthermore the star and crescent can be seen which represent Islam. (Meizler).

Another thing to take note of at the Shrine of the Bab is the significance of a chunk of white decorative wall located on the garden premises. It appears incongruous to the Shrine of the Bab, so in my meetings with the Shrine administrators, I asked about it. They said that the wall connects the Shrine of the Bab to the Temple in Wilmette. During the construction of the superstructure of the Shrine, the construction of the Wilmette Temple was also under place. They sent a sample of the design to be used in Wilmette to Haifa for confirmation; which they
confirmed. The piece stayed there to memorialize the connection between the Shrine and Temple.

Figure 6.19: sample of the Wilmette Temple sent to Haifa. During the construction of the superstructure of the Shrine, the construction of the Wilmette Temple was also under place. They sent a sample of the design to be used in Wilmette to Haifa for confirmation; which they confirmed. The piece stayed there to memorialize the connection between the Shrine and Temple. (Meizler).

5.3 Shrine of Bahji

The Shrine of Bahji is the holiest site in the Baha’i faith and institution. In Bahji, the prophet Baha’u’llah lived, die, and is interred here. The site itself is unlike the other Baha’i sacred sites; the gardens are ornate and take up most of the area and the buildings are not embellished or large. This place, since it’s the holiest, is more focused towards the adherents of
the faith. In the building housing the tomb of Baha’u’llah, there are side chambers that are designed for adherents to pray and meditate on the words of Baha’u’llah. Also, next to the tomb is the mansion in which Baha’u’llah lived in during his stay in Acco; this is the Bahji Mansion. Non-Baha’i are only allowed access to the tomb and a few walkways in the gardens.

The adornment of symbols at the Shrine of Bahji are the same as the adornments on the Shrine of the Bab. The symbols placed here are the eight-pointed star, nine-pointed stars, and ring stone symbols, all previously discussed. A thing to note is that the gardens appear incomplete and with plans to expand them (See figure 5.26). There is no architectural or celestial significance to be found at the shrine. It is unusual for a founder of an institutional faith, with a known grave site to have a relatively modest shrine; I speculate this has to do with the uncompromising view of monotheism and the desire to not worship Baha’u’llah but rather contemplate on his words. The shrine allows for the latter by providing a space for patrons to walk through quietly; the shrine is tucked away from the main highway and isolated. Within the shrine, as previously stated, are rooms for quiet mediation and tourists are not allowed to speak within the Shrine. The entire environment is conducive for prayer and reflection, not to create a grand story about the founding prophet or magnify his works, but to focus on deep reflection and meditation on the word of the prophet.
Figure 5.20: entrance to the Gardens and Shrine of Bahji facing southward. The entrance is surrounded by flora and decorative pieces such as the water fountain in the center (Meizler).

Figure 5.21: past the entrance to the Gardens and Shrine into the walkway facing southward. The walkway is covered in white pebbles. Moreover there are gardens surrounding the walkways. (Meizler).
Figure 5.22: gate to the Shrine and Gardens with key stone symbol seen on top. The ring stone symbol was conceptualized by ‘Abdul-Baha and is a critical symbol of the faith that is often seen in adornments and decorations (Meizler).

Figure 5.23: view of the Bahji Gardens with various flora. The flora is arranged in designs that are symbolic of the faith. As seen in the photo, the eight pointed star that is also featured on the Shrine of the Bab. I speculate the color red may represent power considering these flower beds surround the Shrine of Bahji (Meizler).
Figure 5.24: Mansion of Bahji where Baha’u’llah lived and died while in Acco. Tourists are not allowed near or inside this building. It is built in typical Ottoman Levantine style. This mansion is reserved for adherents of the Baha’i faith (Meizler).

Figure 5.25: Front of the Shrine of Baha’u’llah at Bahji. This building is very modest and has no adornments on the outside besides the featured gate. Inside the shrine is just a small garden with adjoining rooms for prayer and meditation (Vreeland 2014).
Figure 5.26: Orthophotograph of the Shrine and Gardens. This image shows the North West and Eastern side of the gardens that are complete. The South Western and Eastern sides look incomplete but with plans to expand them (Google 2016).

5.4 Mother Temple of North America

The Mother Temple of North America is located in Wilmette, Illinois; a suburb of Chicago. This temple is the oldest and longest standing temple in the Baha’i faith. It also holds extreme significance as its cornerstone was laid by the manifestations son, ‘Abdul-Baha. The design for the temple was selected based from a design competition held by the local Baha’i community. They chose the French-Canadian architect Louis Bourgeois. He used concrete for the construction, and it was casted in order to provide an intricate design on the face of the building. The Baha’i began construction in 1930 and finished in 1953. As required by Baha’u’llah, the building is nonagonal in shape and surrounded by gardens. The total costs of the structure was roughly 2.6 million dollars at the time and it occupies 6.9 acres (Christian 1975).
The actual name of the temples in the Baha’i faith are *Mashriqu’l-Adhkár*, this is translated to the Dawning-Place of the praise of God. The purpose of this building is to not proselytize or provide ritual for the adherents of the Baha’i faith but rather it is to serve as a place for meditation, prayer, and unifying people. It is forbidden to preach or conduct a sermon within the auditorium of the temple. The Baha’i faith has no organized clergy, so most services within the temple are limited to prayer, meditation, and selected readings from the major religions across the globe. Music is allowed within the temple, however, it is also limited to soloist or an acapella choir (BIC 2016).

The temple was designed in order to allow as much light as possible to enter the building. The main structure is supported by pylons that follow the perimeter of the building. This allows for the walls and divisions to be non-weight bearing and essentially become intricately designed...
windows. This is clearly seen on the inside of the temple where windows surround the auditorium and the dome allows for light to enter in as well. Following the commands of Baha’u’llah, the temple is surrounded by gardens: large green spaces with fountains (NSAUS 1942).

The symbolism that adorns the temple is multi-religious. For instance, on the pylons have several religious symbols engraved in them and include: the cross, Star of David, crescent and star, and the swastika. There is also an engraving of a cathedral with a rose window below the final symbol, the Baha’i nonagon star. The symbolism seems to be in chronological order depending on when the faith was founded. While it may seem unusual to have a swastika on a religious building, it should be noted that this was originally a religious symbol in both Hinduism and Buddhism. These symbols reinforce the idea that the temple is meant for all faiths and seeks to unify these various beliefs.
Figure 5.28: one of the casted pylons that show a few of the religious symbols such as the Star of David, cross, swastika. The other symbols not seen are the star and crescent, rose window, and cathedral (Liedl 2011).

Within the building the primary symbol at play here is the greatest name symbol, which is a stylized calligraphic Bahá’; meaning glory and another name for God in Arabic. (Lambden 1993). It resides at the apex of the dome in the temple; this is partly due to the concept of God being in the heavens. However, I speculate that this is placed within this specific area of the temple in order to further reinforce the idea that this is a meeting place with God. As previously stated, the design of the dome allows for light to enter the ceiling, the dome represents the universe and domain of God, thus the name being placed there. The light coming in can represent the heavens descending; a person standing in the auditorium can look up and see this, thus the meeting of the two are complete simply by standing within the building.
Figure 5.29: view of the inside of the dome with Bahá’ seen in the center. The design of the dome allows for light to enter the ceiling, the dome represents the universe and domain of God, thus the name being placed there. The light coming in can represent the heavens descending; a person standing in the auditorium can look up and see this, thus the meeting of the two are complete simply by standing within the building. (Jasser 2011).

5.5 Celestial Alignment Evidence

Generally the temples and shrines have no celestial alignments however, there are in fact two that have some sort of significance; the temple in Samoa and India. These two have specific solar alignments with the summer solstice aligning to the main entrance of the temple. The other examples of maps prove this point by showing the lack of correlation between any temple and shrine. The only alignment that is viable within these shrines and temple is the geospatial relationship between the Shrine of the Bab and the Shrine at Bahji; the axis of the Shrine of the Bab is aligned to point to the Shrine of Bahji. The following maps are provided for the temples in Uganda, United States, India, Panama, Germany, Australia, Samoa, and the respective shrines.
in Israel. Furthermore, a table is included with the sun’s azimuth angles in order to reinforce the notion of no association between celestial pathways and the Baha’i structures—a common relationship found in sacred architecture.

Table 6.1: solstice and equinox sun azimuths for the temples and shrines. These are the angles in which the sun rises and sets on the days of the solstices and equinoxes. Helps to reinforce the notion of no association between celestial pathways and the Baha’i structures—a common relationship found in sacred architecture (Meizler 2016).

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<tr>
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<th>Uganda</th>
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<th>India</th>
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<td><strong>Equinox Sunrise</strong></td>
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<td>Sunrise</td>
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Figure 5.30: Map detailing the footprint of the Uganda temple and where the sun hits the building on the solstices and equinoxes. The alignments are relatively linear due to the proximity of the structure to the equatorial area (Meizler).

Figure 5.31: Photograph of the Temple in Kampala, Uganda. The temple itself is a simple design as well as the grounds surrounding it. Unlike other temples which have very detailed landscaping, this one has a simple one. This is possibly due to Africa being majority wilderness, so the gardens around the temple reflect the continent; simple and unpolished (TripAdvisor 2015).
Figure 5.32: Map detailing the footprint of the U.S. temple and where the sun hits the building on the solstices and equinoxes. There is not a celestial connection, but the structure is still abiding by the basic tenants for the construction of a Baha’i temple in regards to its symbolic decorations, gardens, and nonagonal structure (Meizler).

Figure 5.33: Photograph of the Temple in Wilmette. This is the oldest temple in the Baha’i faith. ‘Abdul-Baha laid the Cornerstone of this temple during his visit to North America (Murray 2016)
Figure 5.34: Map detailing the footprint of the Indian temple and where the sun hits the building on the solstices and equinoxes. The Summer solstice sunrise enters the structure near the main entrance of the temple. This could be due to Hindu beliefs and the Baha’i respect of them or it could be due to the analogy of the sun in Baha’i theology (Meizler).

Figure 5.35: South eastern view of entrance to the Baha’i Lotus Temple in New Dehli, India. The design and architecture of the temple was built to resemble a lotus flower on the water. This symbol is a unifying one in India which represents enlightenment and is also from what many of the Hindu deities were born from (Thousand Wonders 2016).
Figure 5.36: Map detailing the footprint of the Panama temple and where the sun hits the building on the solstices and equinoxes. There is no celestial alignment on the structure like the temple in India or Samoa (Meizler).

Figure 5.37: Photograph of the Temple in Panama City, Panama. This temple, unlike the one in India or Samoa, seems to have no celestial significance (BSL 2013).
Figure 5.38: Map detailing the footprint of the German temple and where the sun hits the building on the solstices and equinoxes. Although the structure seemingly has alignments these are misleading due to the shape of the temple. The main entrance does not have an alignment and is located in the south west; the walkway underneath the Winter Solstice sunset (Meizler).

Figure 5.39: Photo of the German Baha’i temple located in the village of Langenhain. This Temple was completed and opened to the public in 1964 (BWNS 2009).
Figure 5.40: Map detailing the footprint of the Australian temple and where the sun hits the building on the solstices and equinoxes. This one does not have a celestial alignment like the temples in Samoa and India (Meizler).

Figure 5.41: Photograph of the Baha’i temple located in Sydney, Australia. Was completed and opened to the public and dedicated in 1961 (Safajou 2015).
Figure 5.42: Map detailing the footprint of the Shrine of Bahji and where the sun hits the building on the solstices and equinoxes (Meizler).
Figure 5.43: Map detailing the footprint of the Shrine of the Bab and where the sun hits the building on the solstices and equinoxes. Although this has no significant celestial alignments the Shrine does align its axis with the Shrine of Bahji in Acco. Furthermore, from the orthophoto it seems the axis of the Shrine is not perfectly straight, but slightly crooked from the top terraces to the bottom terraces (Meizler).
Figure 5.44: Map detailing the footprint of the Samoan temple and where the sun hits the building on the solstices and equinoxes. The Sumer Solstice sun rise enters into the building through the main front entrance and aligns with the main walkway into the area as well. This could be due to homage to ancient Samoan religion or to the Baha’i metaphor of the sun representing God (Meizler).

Figure 6.45: Photograph of the Temple in Samoa. The building was designed to mimic traditional Samoan housing with an elongated roof (Masters 2016).
Chapter Six: Discussion

The Baha’i faith is a diverse faith with a short history, eclectic and inclusive beliefs, and the newest modern organized religion to come on the world’s stage. When examining architectural and sacrality one would expect celestial alignments of structures in Baha’i; however with the evidence provided, the hypothesis was found to be false. It was concluded that the Baha’i sacred architecture has minimal celestial alignments with little function or relationships other than the symbolic, arbitrary, or minimal. These shrines and temples are beautiful and surrounded by lush gardens, but lack the sophistication of mathematics, engineering, and celestial alignments of other sacred structures in institutional religions. This is evidence of the devolution of astronomical significance in sacred architecture.

The temples serve one of principal purposes of the Baha’i faith, which is to bring people together. The beauty of the buildings and adherents of the faith allow for people of all faiths, ethnicities, and backgrounds to visit them; this is the principal function of the temples as a nexus of gathering. This is reinforced by the multi-cultural symbols that adorn the exterior and interiors of the temples. For example, the temple in Wilmette, Illinois has many different symbols casted on the walls such as the swastika, cross, crescent, and Star of David representing the multi-religious landscape of North America.

Another example of this is the Baha’i Lotus Temple in India. The lotus is a unifying symbol of a large, diverse, multi-ethnic, multi-religious country. As a symbol itself, the lotus is a great concept for India; however, to build a temple in the shape of a lotus is considered genius. The symbol of the lotus is a religious symbol for most of the faiths within India as well as a cultural symbol within India that can cross religious boundaries. In Buddhism the lotus represents enlightenment and supports Buddha and the world above chaotic waters. Moreover
the lotus is what Brahma and other Hindu deities were born from. It is also a symbol of the absolute that sustains the world (Ward 1952). This concept further reinforces the primary purpose of the temples; to unify a diverse population.

The shrines in Haifa and Acco are more intimate than the temples scattered around the world; this is due to the nature and purpose of the shrines. These shrines are more geared towards the adherents of the Baha’i faith rather than the general populace; the shrines principal purposes is to be a place of pilgrimage and administration. There are areas within these shrines that are prohibited to non-Baha’i and exclusively reserved for Baha’i pilgrimage, prayer, and meditation, thus the atmosphere is more intimate and secluded than the open door policy Temples; which are purposed for unity and diversity. Pilgrimage is required by the Baha’i faith and has three required places to visit. The first was the House of the Bab in Shiraz, Iran. However, it was destroyed during the Islamic Revolution in 1979. The second was originally located at the House of Baha’u’llah in Baghdad, Iraq. However, due to the destruction of the houses and political circumstances in Iraq and Iran, the main pilgrimage was moved to Haifa and Acco, which was the third required place of pilgrimage. Furthermore, near the Shrine of the Bab is a complex called the Arc. The Arc holds the Seat of the Universal House of Justice, the Seat of the International Teaching Centre, the International Baha’i Archives and the Centre for the Study of the Sacred Texts. I chose not to include these within the thesis due largely to the administrative purposes of these structures and the exclusivity to Baha’i only (Viswanathan 1996).

One thing I will note about my research in Israel involved a comment made by an Israeli tour guide in regards to the Baha’i. She was a tour guide office assistant in Acco, and I asked her about the Baha’i, whose holiest site is in Acco; she did not know much about them. She said that they keep to themselves and do not engage with the city residents in general. This was made
evident by the Baha’i compound situated within Acco; it was surrounded by large walls and isolated from the rest of the old city. This may be due in large part to the Baha’i commitment to not convert Israeli Jews due to a religious commandment. They do not wish to be seen as proselytizing. Baha’i who work at the administrative buildings also rotate regularly.

The maps of the celestial alignments help to reinforce the lack of correlation between all the temples, shrines, and celestial pathways. The temples have no similarities, in regards to each other and alignments. I would’ve expected the temples to be aligned with the Shrine of Bahji, similarly to the Shrine of the Bab and likewise in Islam, how each mosque has a Qibla pointing in the direction of Mecca for prayer; this is not the case. This may be due in part to the temples being for the local population and social unity. Each of the temples take on some of the local architectural characteristics of the host country. That signifies that they are meant to reflect the local society, culture, traditions, and rituals of the area. For example: the Lotus Temple’s symbology, the Samoan architecture mimicking traditional Samoan houses, and how the original temple in Ashgabat, Turkestan imitates a mosque. There are, however, some significant celestial alignments in regards to the temples at Samoa and India. The German temple does exhibit alignments with the Winter, Equinox, and Summer sunrise solstices at areas of the temple but these are not the main entrances to the temple (see figure 5.38). However, the Samoan temple has a direct alignment with the main entrance of the temple on the summer solstice sunrise (see figure 5.44). The design of the temple was based on the local architectural custom of *falés*; circular structure with large stepped roofs (Amanat 2010). This type of design does not explain how the entrance aligns with the summer solstice sunrise. It is speculated that it may be in relation to ancient Samoan religion and beliefs. Tagaloa was the supreme god in ancient Samoan mythology. He was also related to the sun (Watson 1918). Since Baha’i attempt to incorporate
local customs and traditions within the temples, perhaps this is a way to pay homage to the ancient Samoans. Moreover, the tropics hold the sun is special significance due to its longevity and that it resides directly overhead in the sky. The sun takes on a special significance and seems omnipresent and eternal. With this in mind, it seems logical that Tagaloa was the supreme god due to his omnipotence and omnipresent. In Baha’i thought, God is the only omnipresent and omnipotent deity, similar to how the sun would appear in the sky in the tropics.

Next, is the temple in New Delhi, India (see figure 5.34). This temple also has an alignment with the Summer Solstice sunrise; similar to that of the Samoan temple. It is speculated that this may be a way to pay homage to a Hindu Sun God, Surya. Surya is the deity associated with the Sun in Hinduism. Surya is not portrayed as having a generous or benevolent attitude, however, he isn’t portrayed as a maleficent God either; this is due to the Sun’s nature of bringing both good and bad events to people. Furthermore there are structures within India that are considered sun temples and dedicated to Surya. It is plausible that the Baha’i incorporated the sun into this structure in order to incorporate local Hindu beliefs. The temple itself is shaped in that of a lotus and this was done specifically because it is a universal symbol that unites the multi-religious and ethnic groups within India (Jager 2010). The lotus flower is also seen as opening on the sunrise, perhaps this is the association between the Lotus Temple and the Summer Solstice sunrise.

The Baha’i faith uses a metaphor of the Sun consistently in its teachings. Baha’u’llah views the manifestations as perfect mirrors and God as the Sun. God reflects on all people, but since people are flawed so are the mirrors. The manifestations look and sound like the divine because a perfect mirror reflects the light perfectly (Ma'sumian 1995). With this metaphor, it is plausible that both the temples have alignments to the sunrise in order to point towards a
manifestation or other prophet within the Baha’i faith. Furthermore, the Sun itself could be seen in the architecture as a symbol of God, and so thus God aligns with the temples that are meant to worship the creator. In the Baha’i scriptures it also states,

*The Sun of Truth is the Word of God, upon which depends the training of the people of the country of thought. It is the Spirit of Reality and the Water of Life. All things owe their existence to it. Its manifestation is ever according to the capacity and coloring of the mirror through which it may reflect. For example: Its Light, when cast upon the mirrors of the wise, gives expression to wisdom; when reflected from the minds of artists, it produces manifestations of new and beautiful arts; and when it shines through the minds of students, it reveals knowledge and unfolds mysteries* (Horace 1923).

The Baha’i faith uses the analogy of the Sun several times in its scriptures. I speculate that the few solar alignments fit into these religious analogies. Further study and research into these two temples may shed more light on this subject and the integration of local/regional customs into the broader Baha’i theology.

One aspect to address is Baha’i monotheism and the reconciliation of this with polytheistic faiths of their adopting communities. The Baha’i view God was believed to be absolutely beyond human comprehension. This solid tenet aligns with the Hindu belief of Brahman, the god who stands out and beyond the existence of man and gods. The Baha’i attempt to co-opt polytheism by arguing the similarities of the descriptions of God by Baha’u’llah and the descriptions of Brahman. Momen (1990) summarizes this idea by stating,

*The Upanishads teach that: Greater than all is Brahman, the Supreme, the Infinite... He is indeed the Mighty Lord who moves the hearts of men... His is the power to sense all things, even though He lacks organs of sensation. He is the Lord and Ruler of all, the great Refuge of all. Brahman is eternal, above ignorance and knowledge. He is the One who rules over the root causes and the primal forms of all things... He is the Lord who created the lords of creation (Yatis), the supreme Soul who rules over all. Even as the radiance of the sun sheds light in all regions, so does that glorious Lord, single and adored rule over all His creation... He is the One, the only God, who rules over the whole universe. Similarly, Bahá’u’lláh teaches that the Essence of Brahman or God cannot be known by man. Any ideas that mankind may have of Brahman must always be the*
creations of man's limited mind. Brahman as Absolute Reality is unlimited and infinite. Therefore any ideas that human minds may form cannot be a complete description of Brahman/God. They are only partial descriptions which emerge from limited capacity of men's minds.

Similarly this concept can be applied to Samoan polytheism as well as the other polytheistic faiths upon which Baha’i developed, introduced, or merged. In the Samoan tradition, and often in other polytheistic faiths, there is a supreme God who reigns over the lesser deities, such as Tagaloa, the Sun God worshiped across Micronesia and Samoa.

For example, during a presentation of this research a local Baha’i approached me to discuss the orientation of the temples. He argued that they will not have celestial alignments due to their orientation towards the Baha’i Qiblah, the Shrine of Bahji. However, this is not the case. The orientation of the Temple in Wilmette and the angle of prayer, he argued, is towards the Northwest and then arcs Southwest across the Atlantic. However, when examining the orientation on flat maps of various projections, and globes, it becomes obvious that neither the direct line or loxodrome points to the Shrine. No Temples were found orientated towards Bahji. Moreover, the orientation of prayer may be based on the shortest distance (or loxodrome) between the Temple in Wilmette and Shrine of Bahji, however the orientation of the structures or footprints do not display any orientation as explained to me by the visitor. Numerous websites can be found which also explain this orientation. However, the use of flat maps (mostly cylindrical projections such as Mercator) even more precludes this argument of orientation whether of prayer or structure.

Overall, this research has been critical to the understanding of sacred architecture. Could this be the future of sacred architecture? As the sun is less influential on our daily lives, and thus slowly removed from our seasonal faith and/or institutional religions, will architects continue to incorporate celestial bodies and alignments into the construction of temples and shrines? Further
research into this will help to reveal the trajectory, future trends, design, layout, and symbology of sacred architecture.
Chapter Seven: Conclusion

The Baha’i faith was founded in 1863 when the founder of the faith, Baha’u’llah, announced himself as a Manifestation; on par with Jesus, Muhammad, Moses. After 153 years the faith has grown to roughly 5 million adherents globally. They have built seven temples globally, with two shrines in Israel. This study explored the relationship of the Baha’i sacred architecture to its symbolism and to environmental and celestial relationships.

Celestial alignments are critical to the understanding of sacred structures. Stonehenge in England has alignments to the sun and also served as a ceremonial center, a priestly observatory, measuring device for calendars, a burial monument, and a container or transmitter of powerful earth energies. All of which signify some sort of religious or sacred function and importance. Newgrange is also a similar structure that holds celestial alignments and is located in Ireland. During the Winter Solstice, the sun’s light went all the back into the monument and displayed on the wall roughly 30 meters in; caused by a roof-box above the entrance of the mound (Mann 1993). The Pyramids of Giza are also similar to Newgrange and Stonehenge’s celestial concepts. The pyramids are aligned with the belt of Orion and are used for religious purposes. The pyramids were seen as a transition to the afterworld and many of its components were designed in accordance with Egyptian mythology (Humphrey and Vitebsky 2005). This is unlike the Baha’i sacred structures that focus more so on inner spirituality.

More modern examples of sacred architecture include the Chartres Cathedral located in France. This cathedral is aligned to an east-west axis due to the Christian belief of Christ returning from the east. The cathedral was also built with the style of the Chartres School which incorporate sacred geometry into its structures (Gomm 2008). Moreover, inside the cathedral there is a maze located on the floor in order to mimic a pilgrimage to Jerusalem (Westwood
as well as stained glass meant to convey religious stories and beliefs to an uneducated population (Mann 1993)—critical to this research due to the symbolic nature of the decorations in the Baha’i sacred structures meant to convey religious stories and obligations.

In Islamic architecture the Al-Aqsa mosque located in Jerusalem, Israel on the Temple Mount, is meant to serve a function and commemorate a story in Islam. Next to the Al-Aqsa mosque is the Dome of the Rock which was built in order memorialize the Prophet Muhammad’s journey to heaven (Carr-Gromm 2008). This is important to the study of Baha’i sacred architecture in order to show that sacred sites can be built in order to commensurate an important religious event with no connection to celestial alignments. Since Baha’i originated out of Islam, it is assumed the lack of celestial connection would continue to devolve within the Baha’i architecture.

The reason these structures are important to the thrust of this research is to show the devolution of astronomical significance. Originally with structures like Newgrange and Stonehenge, the astronomical significance is exhibited with the alignment of specific structures or structural features (i.e. doorways, skylights, corridors), like the roof box at Newgrange (Mann 1993). Their function was specifically used for worship of the divine, and forecasting of the celestial event. As time continues, institutional religion is becoming more organized, and it structures of worship more efficient, purposeful, and specific. In Christianity, we see the cathedrals aligned along an east-west axis, due to the belief that Jesus will return and rise in the west with the sun reversed in ascension. Furthermore, solar alignments have been created within these structures when the summer solstice sunrise illuminates specifics portions of the structure and/or grounds, like the rising Sun illuminating a specific spot in the Chartres Cathedral, France
(Westwood 1997). This was not arbitrary in design, but precise in engineering and meaning -- to link the omnipresent to the omnipotent.

Islamic mosques, which have no or rare celestial alignments, had a designed focus attached to history and worship with the interior focus on the Qibla niche and wall -- at first directed toward Jerusalem then later toward Mecca (Dajani-Shakeel 1999). Baha’i originated from Islam and carried this decreasing link further; connections between the Sun and Temple are few. However, some Baha'i temples do have celestial orientation, although this can be seen as a lesser continuation of the practice; due to the incorporation of other religious traditions of the host country and its religious traditions and rituals. It is speculated that this practice will slowly decrease as continue as a crucial link in the future of sacred architecture. As time passes, and religious are more institutionalized, societies become more communally rational, and technology becomes an active part of our lives and future, linking the Sun to the sacred will have lesser importance to adherents.

The Baha’i faith originated out of Shi’a Islam in Persia and also came out of the Babi sect whose founder was The Bab, a prophet who was from and martyred in Persia in the 1800s. The Bab studied Shaykism, a sect of Twelver Islam that sought a more infallible and philosophic leader than the mainstream Twelvers (MacEoin 1979). The Babi faith spread and grew within Persian, upsetting the orthodox Shi’as in power. This led to a trial and eventually the death of The Bab. After this the Babi faith splintered until its leadership was taken up by Baha’u’llah who was a follower of The Bab (MacEoin 2009).

Baha’u’llah was born in Persia in the early 1800s. His family was wealthy and occupied a post in the government. However, Baha’u’lllah did not follow in his family’s footsteps but rather sought more theological studies. He eventually followed The Bab and was exiled after The Bab’s
death to Baghdad, under the Ottoman control, due to Baha’u’llah’s association with him. It was in Baghdad that Baha’u’llah founded the Baha’i faith and proclaimed himself a Manifestation of God in 1863. Baghdad was close to the border of Persia and not considered far enough away for Baha’u’llah to not meddle in Persian affairs, so the Persian government asked the Ottoman Sultan for Baha’u’llah to be moved further away. He was moved several times and during these times he wrote holy books and commandments for the new faith. He eventually was moved to Acco, a fringe prison city in the Ottoman Empire. Here Baha’u’llah died, was interred, and the Baha’i faith made this their headquarters (Cole 1995). After Baha’u’llah death his son ‘Abdul-Baha took over the leadership role. ‘Abdul-Baha was critical to the growth and expansion of the faith. Under his leadership he introduced the faith to a western audience. ‘Abdul-Baha’s biggest contributions to the faith were his travels in Europe and North America, where he presented the beliefs of the Baha’i faith for the first time. Another critical aspect of his leadership was the laying of the cornerstone at the Wilmette Temple in the United States (Perkins 1999). After the death of ‘Abdul-Baha the leadership went to his grandson Shoghi Effendi. Shoghi Effendi was highly educated and spoke numerous languages and translated many of Baha’u’llah and ‘Abdul-Baha’s works into English. He is probably the most important person to the growth and institutionalization of the Baha’i faith. Under his reign the faith spread throughout the globe due to his Ten Year Crusade initiative that trained missionaries and sent them to new locations. He also oversaw the construction of the Shrine of the Bab and was in communication with local Baha’i building new Temples. His translations and explanations of the Baha’i faith helped to create the religious symbolism and structure. He also organized the International House of Justice which governed the Baha’i faith after his death (Danesh 1991).
With this as a background for the study of Baha’i sacred architecture, the results of this research follow:

- Symbolism is critical to understanding the sacred architecture of the Baha’i faith.
- Baha’i symbols include: the eight-pointed star, the nine-pointed star, ring stone symbol, haykal, stretched haykal, and the nonagonal Baha’i rosette.
- Baha’i shrines are designed for the adherents and pilgrimage, not for non-Baha’i. The purposes are for: prayer, meditation, reflection, and inner spirituality, and pilgrimage.
- The Baha’i shrines do not have significant celestial alignments but are aligned together based on the Shrine of the Bab’s axial alignment to the Shrine of Bahji.
- The temple in Wilmette is the oldest surviving temple and incorporates symbols of Christianity, Islam, and Hinduism into its architecture. Has no celestial alignments.
- Temples are designed to unify and reflect the local population. The purpose is strictly for worship and meeting with god. All people, regardless of religion, are allowed within the temples.
- The Samoan temple aligns with the Summer Solstice sunrise and may be in reference to the ancient Samoan sun-god Tagaloa.
- Indian temple aligns with the Summer Solstice sunrise may be in reference to the Hindu god Surya or to the sunrise opening up a lotus flower; the lotus is the design of the Indian temple.
- Both the Indian and Samoan temples may have alignments to the sun due to the Baha’i metaphor of the sun representing god and how he engages with humanity and prophets.

Merriam-Webster (2016) defines religion as, “(1) : the service and worship of God or the supernatural (2) : commitment or devotion to religious faith or observance”. With this in mind the implications of my research are important. People adhere to religion worldwide and believe in the multitude of tenants, this is important and worth study due to how people act due to these beliefs. The actions of those who adhere to a religion can be reflected in the architecture, beliefs, and daily life. Moreover the belief in the afterlife, supernatural events, and a superhuman entity reflect within these communities. With the Baha’i religion, their beliefs can be seen clearly in their architecture and the implications are as follows:

- Celestial alignments are not a dominant part of Baha’i sacred architecture, in most temples.
- Inner spirituality is more important than religious obligation.
- Religious symbolism plays a larger part than sacred mathematics or celestial alignments.
- With this research it is highly plausible to predict future Baha’i temple design, structure, decoration, symbolism, and celestial alignments.
- Modern sacred architecture maybe losing its connection to celestial alignments unlike past sacred structures.

This research is unique and has not been done before; this is leading research within the academic study of the Baha’i faith. The study originally focused on celestial alignments and sacrality. However, with the evidence provided, the result differed than expected. The sacred architecture of the Baha’i faith has lesser correlation with solar alignments in regards to solar alignments on the winter, summer solstices, and equinoxes. The only alignments that exist deliberately within the faith is the axial alignment between the Shrine of the Bab and the Shrine of Bahji. Moreover, two celestial alignments were found at the Samoan temple and Indian temple. It is speculated that these could be due to the Baha’i metaphorical idea of the sun representing God, and it may also be these alignments are due to Baha’i incorporation of local religious traditions. The lack of overall alignments conforms to the Baha’i theology which is more internal and spiritual, than external and physical.

As personal faith and institutional religion change, so may the nature and design of sacred architecture. With past emphasis on celestial alignments and the links between a terrestrial congregation and the divine alone, we may see a slow severing of these links between theology, architecture, and the sun – a strong finding in this research.
Chapter Eight: Bibliography


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Appendix A

Various Photographs from Acco and Haifa

Photographs by Author

A.1 Facing north, photograph of the Baha’i compound in Acco. Pilgrims and Baha’i administration work and visit in this area. Highly secluded and defended with high walls and barbed wire.
A.2 House of Abbud in Acco. ‘Abdul-Baha rented this house out while he stayed in Acco. It has been kept by the Baha’i community as a significant spot within the faith.
A.3 Decoration on the entrance to the Shrine of Bahji. This is an eight-sided star that represents the angels in the Quran showing the way to God.
A.4 Fountain at the entrance to the Shrine of Bahji. Decorations serve to beautify the area and provide tranquility. This is a non-symbolic decoration within the Shrine.
Gardens at the entrance to the Shrine of Bahji. Gardens help to present a peaceful environment and symbolize the Gardens of Eden.
A.6 Gardens at the entrance to the Shrine of Bahji. The eagle statue holds no significant symbolism but rather was placed to beautify the area.
A.7 A gate around the Shrine of Bahji. Several gates surround the perimeter and hold no significant symbolic purposes other than to make sure tourists do not go to prohibited areas.
A.8 View, facing south, of the gardens at the entrance of the Shrine of Bahji from the top of the entrance gate. This is an overview of the entrance gardens and the decorations placed here. No significant symbolic findings.
A.9 Facing southwards, view of the Shrine of the Bab from the Germany Colony in Haifa. This is one of the most popular streets for tourists to visit in Haifa. Highly populated with restaurants and cafes that line this street.
A.10 Gate to the Shrine of the Bab from the German Colony, facing south-west. This area and the first terrace are for visitors to the shrine. Access to the Shrine and rest of the terraces, from this area, is prohibited.
A.11 View facing north east towards the German Colony of the entrance to the Shrine of the Bab. The eight pointed star is seen as a motif on the ground and is a common religious symbol in the Baha’i faith.
A.12 Pathway to the Shrine of the Bab, possibly facing westward. The walkways are lined with either red pebbles or white pebbles, surrounded by gardens and illuminated by lamps at night.
A.13 Entrance to the main Shrine terrace facing northward. This is the entrance for visitors from one of the main streets in Haifa. Surrounded by gardens and large trees.
A.14 Various flora seen in the gardens at the Shrine of the Bab. Several statues like the peacock shown are also spread throughout the area. These have no symbolic purpose besides beautifying the gardens and shrine.
A.15 Decoration around the Shrine of the Bab. These are seen lining the walkways both at the Shrine of the Bab and the Shrine of Bahji. These hold no symbolic purpose but are also meant to bring beauty and decoration to the gardens.
A.16 Decorated gate at the Shrine of the Bab. No symbolism was found in the shapes chosen for the gate but they mimic the trident and sun disc.
A.17 View from one of the terraces of the Shrine of the Bab facing north east towards Haifa Bay and Acco. Each of the terraces feature gardens and running water. The water helps to provide a sound aesthetic to the gardens.
A.18 View from the top terrace of the Shrine of the Bab. Similar to the bottom terrace, the area past the gate is prohibited to visitors. This terrace provides an excellent overview of the city of Haifa.
A.19 Archives building near the Shrine of the Bab and a part of the Arc complex, which is the Baha’i administrative buildings. This building holds significant religious artifacts to the Baha’i faith as well as research materials, books, and Baha’i holy books. Designed to mimic Greek architecture due to its association with academia and artifacts.
A.20 View facing south-westward of the upper terraces from the terrace with the Shrine of the Bab. Eagle statues also are on the premises but are meant for decorative purposes. Underneath this terrace is the Baha’i visitor center, in which people can gain more information regarding the faith.
A.21 Shrine of the Bab illuminated at night, facing south-westward. The Shrine is left illuminated at night in order to pay homage to The Bab and his imprisonment without light. The terraces are also illuminated at night.
A.21 Map detailing Shoghi Effendi's ten year crusade. The map features several different goals and accomplishments. It shows the location of National Spiritual Assemblies built at the time, temples, shrines, schools, Baha’i burial grounds, and other prominent Baha’i locations (Effendi 1956).