

Imagining the Temple Known to Jesus and to Early Jews

Leen Ritmeyer

There is great value in making reconstruction drawings to imagine the Temple that Jesus and the early Jews knew. First and foremost, the process allows historical and archaeological information about this site, venerated by members of the three major faiths, Judaism, Christianity, and Islam, to be presented in a meaningful way. It also provides a fruitful focal point for collaborative work between those of other disciplines who are trying to understand the site.

However, I also realize how privileged we are when dealing with this particular site as compared to others. When I did my master's degree in Conservation Studies at the Institute of Advanced Architectural Studies at the University of York, one of the axioms I noted from an ICOMOS document (the International Council on Monuments and Sites offers advice to UNESCO on World Heritage Sites) was the following:

An all-important principle to be observed in restoration, and one which should not be departed from on any pretext whatsoever, is to pay regard to every vestige indicating an architectural arrangement. The architect should not be thoroughly satisfied, nor set his men to work until he has discovered the combination which best and most simply accords with the vestiges of ancient work: To decide on an arrangement a priori, without having gained all the information that should regulate it, is to fall into hypothesis; and in works of restoration nothing is so dangerous as hypothesis.¹

1. Viollet-le-Duc and Eugene Emmanuel, "Appendix 1: On Restoration," in *Our Architectural Heritage: From Consciousness to Conservation* (Paris: Cevat Erder, 1986), 208.

Making reconstruction drawings is not very different from actual restoration or any other form of archaeological reconstruction. In these realms also, hypothesis is the great enemy. But the vestiges of ancient work (and these need not always be physical remains on the ground) are so abundant with the Temple and its mount, that there is no need to fall into hypothesis, and these vestiges are increasing with the years.

Briefly summarizing these remains: we have rich literary sources, which provide detailed architectural descriptions; then we have the results of the daring investigations of explorers of the nineteenth and twentieth centuries. The massive excavations south and west of the Temple Mount, following the Six-Day War in 1967, provided information on the outer frame of the Temple platform; and in the absence of excavations on the mount itself (no one is foolhardy enough to attempt this, as it would start another Middle East war!), recent research into surface traces preserved there has yielded results that add detail and complete the picture.

Before we look at the most up-to-date portrayals, it is instructive to look at how the study of these vestiges has built up over time to give a more accurate picture.

The earliest known representation of Herod's Temple is found on coins of Bar Kochba, the Messianic name given to the Jewish leader Shimon Bar Kosiba, who led the Jewish revolt against the Roman Emperor Hadrian in 132 CE. On the obverse side, these coins depicted the façade of the Temple (Fig. 1.1) that some scholars believe Bar Kochba actually rebuilt, as he also restored the priesthood and began a new calendar system. Although schematic in design, the form of the Temple with a flat roof supported by four columns or half-columns can clearly be seen. We know little of this period as there are no written sources and we rely purely on the numismatic evidence, but it is intriguing to note that in the center of these coins of Bar Kochba is an opening in the Temple façade that allows one to view an object in the recesses of the Temple. This object is covered by a semi-circular cover and rests on four legs or supports. Apparently, there was such hope of the Temple being rebuilt that it was believed that the Ark of the Covenant would be restored to its place inside the Holy of Holies. Helen Rosenau pointed out:

Whereas Roman coins depicting Roman temples usually record the temples with pediments, Herod's Temple on the Bar Kochba coin is represented with four columns or half-columns and a flat roof, thereby following the reference in Middot 4.6. How far Herod's Temple was inspired by the Solomonic tradition must remain



Fig. 1.1. The façade of the Temple and the Ark of the Covenant, depicted on a silver tetradrachm of Bar Kochba.

conjectural, but a conscious imitation of the older building, including perhaps the ground plan, seems in keeping with Herod's endeavors to appear as a legitimate and benevolent ruler to his Jewish subjects. At any rate, some novel features which distinguish Herod's Temple from the simple prototype of Solomon's Temple, such as the four columns or half-columns, appear to have been incorporated on the coins and in this manner the earliest extant image of the Temple corresponds with the tradition of the latest building.²

The next representation chronologically shows the door of the Temple as closed (see Fig. 1.2). It is found in a painting over the scroll-niche in the Synagogue of Dura-Europos in Syria and was completed c. 245 CE. Here again, the Temple façade is represented as having a flat roof and four columns or half-columns.

2. Helen Rosenau, *Vision of the Temple* (London: Oresko Books, 1979), 21. *Middot* is one of the tractates of the Mishnah, the earliest code of rabbinic law.

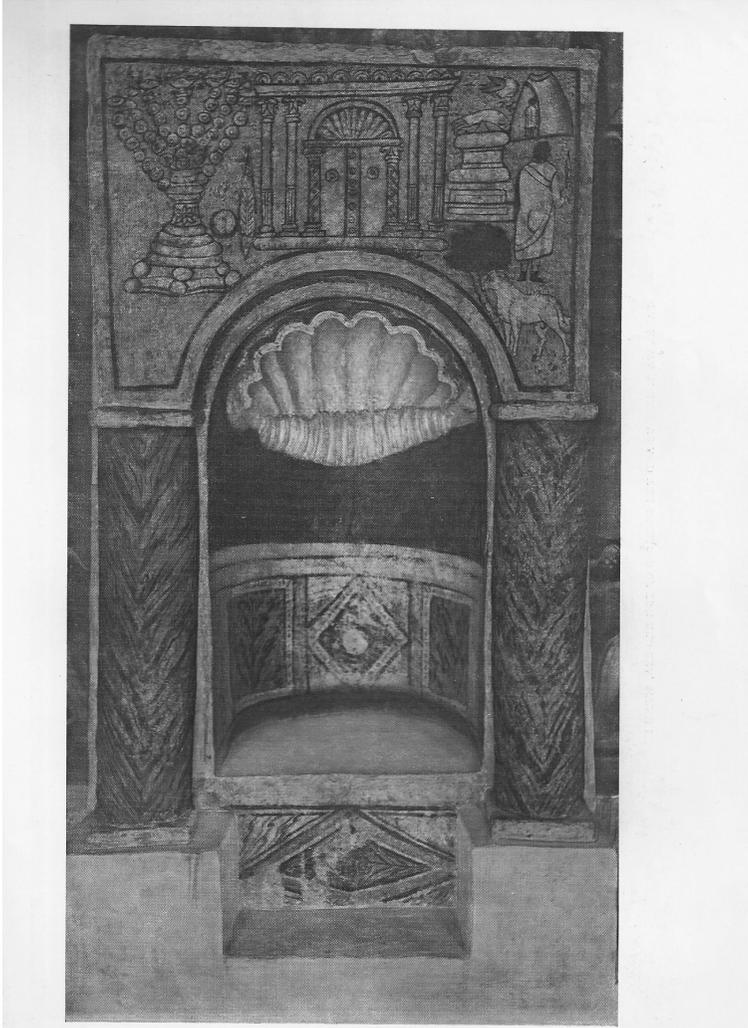


Fig. 12. The Torah niche in the synagogue at Dura-Europos, third century CE.

Looking at other representations, it appeared that the further away in time one went from the period in which the Temple still stood, the more the details lost their accuracy. The mosaic from the synagogue of Khirbet Susiya, which dates probably from the fourth or fifth century, shows a temple with its doors closed and a gabled roof.³

3. Zeev Yeivin, "Susiya, Khirbet" in *New Encyclopedia of Archaeological Excavations in the Holy Land* 4:1415–421.

All of these representations were stylized, but there is one tantalizing reference in Helen Rosenau's work⁴ to an actual drawing of the Temple by Rashi. The name is an acronym of Rabbi Solomon ben Isaac, who lived between 1040 and 1105 CE and who wrote groundbreaking commentaries on the Bible and Talmud. Rashi wrote to the rabbis of Auxerre in France concerning verses on the Temple in Jeremiah and in Ezekiel that he could not add any more to what he had already explained in a commentary (assumed to be about *Middot* 5.3, which deals with the northern outer chambers) but that he would send an explanatory plan. The plan has been lost to us, but it is fascinating to know that as early as the eleventh century someone was attempting to reconcile the various descriptions of the Temple.

There are, however, actual drawings of the Temple after the sources extant from the twelfth century. These can be found particularly in the works of Maimonides (also called Rambam), the foremost Jewish philosopher of the medieval period, who lived from 1135 to 1204. In his *Mishnah Commentary*, which he began at the age of twenty-three, he includes drawings of the Temple made either by himself or close associates.⁵ These diagrams, which include plans of the Temple itself and other details, have Hebrew captions and are surprisingly complete and accurate, if somewhat sketch-like. The drawing in his *Mishnah Torah*, a codification of Jewish Law, is more finely drawn and is clearly an interpretation of *Middot*, showing a plan of the Temple that includes the Chamber of Hewn Stone and the four rooms in the Chamber of the Hearth.

In the main, the drawings of Christian artists in the medieval period, by contrast, ignored specifications available in the Hebrew Bible and in the *Mishnah* and gave their imagination free rein. For instance, before the literary sources were translated or explorers had ventured underground on or near the Temple Mount, visions of the first-century Temple were based on one of three different types. These depicted the Temple as a structure similar to: (a) the Dome of the Rock (see Fig. 1.3), (b) a church-type building (see Fig. 1.4), or c) an oriental-type structure.⁶

4. Rosenau, *Vision*, 35.

5. The manuscript is held at the Bodleian Library; the drawing may be seen at <http://www.bodleian.ox.ac.uk/whatson/whats-on/online/crossing-borders/temple>.

6. An example of the second category is the depiction of the Temple in Petrus Cosmestor's *Historia Scholastica* (thirteenth century) in Rosenau, *Vision*, 54. See <http://images.bridgemanart.com/cgi-bin/bridgemanImage.cgi/400wm.AIS.5705920.7055475/291896.jpg>.



Fig. 1.3. *The Marriage of the Virgin*, by Raphael (1504).

With the coming of the Reformation, however, scholars and artists went back to biblical sources. There is a remarkably accurate drawing of the Temple of Solomon in the Latin Estienne Bible, which was published in Paris in 1540. This drawing was made, as the book's acknowledgement states, "following" Franciscus Vatablus, Professor of Hebrew at the Royal College in Paris, a renowned scholar of ancient languages. Because both the roof and front are left out of the drawing, almost the whole interior of the Temple is made visible with its laver, lampstands and incense altar, and even the Holy of Holies with its crowned ark and cherubim. The three levels of chambers (*tse-laot*),



Fig. 1.4. *Scenes from the Passion of Christ*, by Flemish painter Hans Memling (1470).

gradually stepping in, are faithfully shown. Another drawing, after Vatablus, shows the Temple with its courts while the sacrifices are proceeding. This is most interesting, as the Holy of Holies is clearly shown to be located on the highest part of the mountain on which the Temple is depicted. These, of course, showed the Temple of Solomon and not that of Herod. Nevertheless they exerted a great influence, notably on the architect Claude Perrault, who illustrated the Latin edition of Maimonides, *Mishneh Torah*. As the latter work was based on an original source, one would expect it to be accurate, but these two drawings (Rosenau, Ill. 85 and 86) are so accurate, particularly in the detail of the five cedar beams of graduated length that lay over the Temple lintel, that they could almost be used today to illustrate a book on the subject (Fig.1.5).

A Jewish scholar who made such a notable contribution to the understanding of how the Temple worked that he was given the name “Templo” was Rabbi Jacob Judah (Aryeh) Leon (c. 1603–1675). Rosenau writes of him that he “appears to have been the first Jew to build models for historical consideration.”⁷ In fact, his model of the Temple appears to have been brought to England from Holland, according to a letter that has been found addressed to Sir Christopher Wren,⁸ although its whereabouts are now unknown. His drawings, however, are extant and show a temple placed asymmetrically on

7. *Ibid.*, 133.

8. *Ibid.*, 135, 141n4.

the platform, according to the Jewish sources, with six large buttresses on the eastern side.

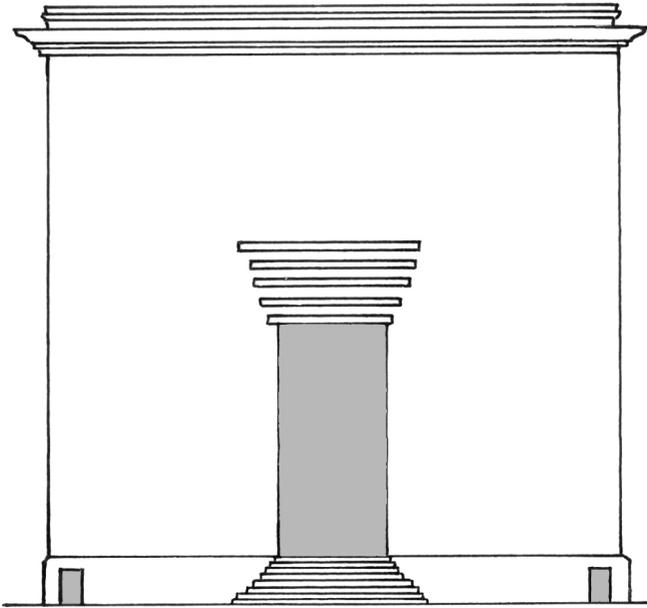


Fig. 1.5 Entrance to the Holy of Holies.

The first truly realistic drawing, which shows Herod's Temple somewhat as we know it now after our study of the sources and the archaeological remains, is that of French diplomat and scholar Marquis Charles Melchior de Vogüé. In 1864, he produced a magnificently illustrated book on the Jerusalem Temple that today is a collector's item. His concept of the Temple was clearly based on the sources and the topography with which he was intimately familiar, having made a few exploratory journeys to Jerusalem. One could indeed say that his drawing⁹ was the precursor for the reconstruction drawings that came out of the excavations one hundred years later (Fig. 1.6). It shows a Temple with an elevated porch placed asymmetrically on the Temple platform according to *Middot*. The various courts, such as the Court of the Priests and the Court of the Women, are all represented. The Huldah Gates are shown with paths leading up to them and the passageways that begin at these gates exit just beyond the Royal Stoa on the Temple platform. The Antonia stands at the northwest corner and

9. Melchior de Vogüé, *Le Temple de Jérusalem. Monographie du Haram ech-cherif, suivie d'un essai sur la topographie de la Ville Sainte* (Paris: Noblet & Baudry, 1864), plate 16.

a causeway leads over the Tyropoeon to the gate over Robinson's Arch (which, of course, had not yet been given that name). Apart from fine details, de Vogüé only gets two major items wrong. He omitted the magnificent steps leading up to the Huldah Gates (which de Vogüé could not have known lay under the hill of Ophel, which was green in his day) and the stairway that led down from the southwestern gate into the Tyropoeon Valley (the find most associated with the Temple Mount Excavations team, arrived at by a process of much trial and error).

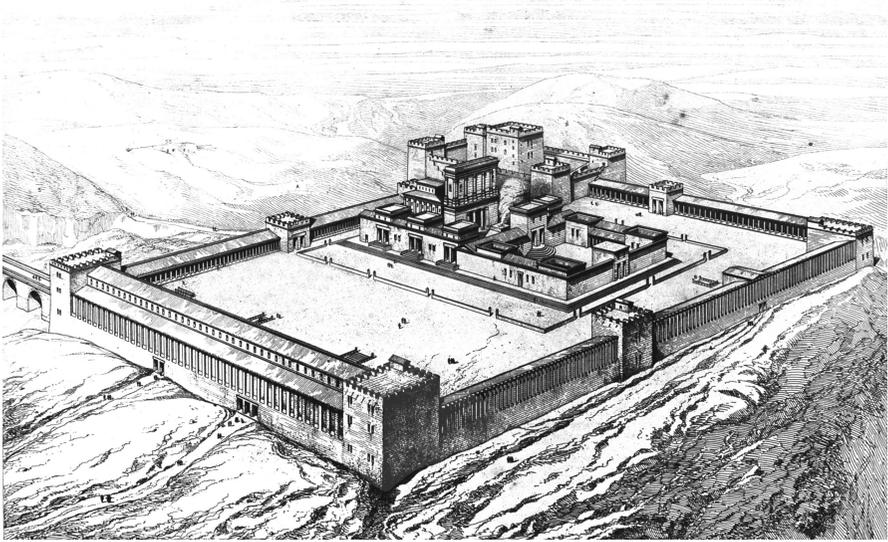


Fig. 1.6 Drawing of the Temple Mount of "Herod's temple", from Volz Paul, *Die biblischen Altertümer (Antiquités bibliques)*. 1914, Page 51, Plate 8.

Prior to the Temple Mount Excavations, Professor Michael Avi Yonah's model (which used to be located in the grounds of the Holyland Hotel in Jerusalem, and is now in the Israel Museum) came as close as was possible to determining what the sacred complex looked like during the period in question.

Following on from this, there were a number of reconstructions made after the excavations but before recent research into the architectural development of the Temple Mount carried out by the author.

My original reconstruction drawing of Herod's Temple Mount (Fig. 1.7), made in 1977,¹⁰ which has been published in many books and numerous

10. This drawing was first published in: Leen Ritmeyer and Kathleen Ritmeyer, "Reconstructing Herod's Temple Mount," *Biblical Archaeology Review* 15, no. 6 (1989): 3–42. See also Leen Ritmeyer, *The Quest: Revealing the Temple Mount in Jerusalem* (Jerusalem: Carta, 2006), 19.

periodicals, was based on the results of the excavations combined with the evidence of the ancient sources.

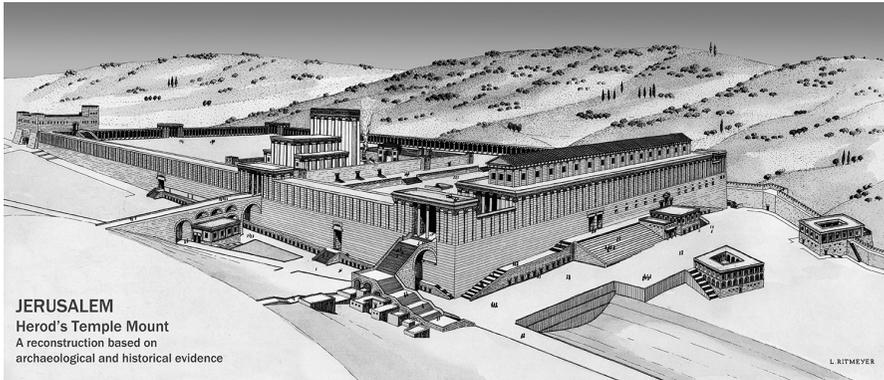


Fig. 1.7. Herod's Temple Mount, copyright © Leen Ritmeyer, 1977.

This design was the logical outcome of my work as site architect on the Temple Mount Excavations and a necessary foundation to what followed after. The perspective used in the drawing conveniently discounted any need to depict the Herodian Temple in any detail. However, it was a joint study with Professor Benjamin Mazar (who directed the Temple Mount Excavations), undertaken a few years after excavations had ceased, that gave the impetus to proceeding further with the research into the historical development of the Temple Mount. The result of this study was based on the analysis of archaeological remains on the Temple Mount that belonged to a pre-Herodian platform, 500 cubits square. In 1984, Mazar published the preliminary results of our research into the location of the original, square Temple Mount.¹¹ Using this as a basis, I went on to devote myself to an intensive inquiry into how the Temple Mount had developed and particularly into its appearance during the first century.

Other portrayals of the Herodian Temple have been based on the results of my research into the location of Herod's Temple and the surrounding courts. These include: a model built by the late Alec Garrard at Moat Farm, Fressingfield, near Ely in Suffolk (partly designed with help of the author, see Fig. 1.8), a model commissioned by the late Ben Adelman (Chairman of the American Friends of the Israel Exploration Society) of Washington, DC, and designed by the author (Fig.1.9). That design also forms a large part of a digital 3D reconstruction of first-century Jerusalem made in Poland by a

11. Benjamin Mazar, "The Temple Mount," in *Biblical Archaeology Today, Proceedings of the International Congress on Biblical Archaeology, Jerusalem, April 1984*, ed. Avraham Biran (Jerusalem: Israel Exploration Society, 1985) 463–68.

company called Sephirot, and of a computer-generated portrayal made by a Swiss foundation, called “Messiah in the Temple.” None of these depictions, including my own reconstructions, can be an exact reproduction of the structure that existed in Jerusalem in the time of Christ but are a picture of probability.



Fig. 1.8

This chapter will briefly examine, in turn, each of the vestiges (remains) of the Temple in the time of Christ and then work our way inwards from the outer walls of the platform to the Temple proper. Basically, I would like to demonstrate how reconstructions work and on what my drawings are based. Firstly, here is a compendium of the main historical sources.

The most well-drawn description of the Temple and its mount is to be found in the pages of the Tractate *Middot* of the Mishnah.¹² Compiled within a century after the destruction of the Temple, it is based on the teachings of Eliezer Ben Jacob, who witnessed the ritual of the Sanctuary prior to 70 CE. There is much information on Jewish religious practice of the time contained in other of the Mishnah’s tractates, but it is *Middot* (which means “Measurements”) that is specifically dedicated to detailing the Temple and its dimensions. It had been dismissed as irreconcilable with our other main source, that of Josephus, as

12. The quotations in this article are from H. Danby, *The Mishnah* (Oxford: Clarendon, 1933).



Fig. 1.9

it describes the Temple court as a square of 500 cubits (861 ft.). The writings of the first-century Jewish historian, by contrast, portray a court with a perimeter that is twice as long. However, my research into the location of the 500-square-cubit Temple Mount described in *Middot* convinced me that this description related to a large court inside what is known as the Herodian Temple Mount (see my drawing, Fig. 1.10). Historically, this square area constituted the Temple Mount after it was restored by the exiles returning from Babylon in the sixth century BCE.¹³ As the returnees had very few resources, they would have been unable to do much more than repair the original structure, so the configuration would, of necessity, have been much the same as that of the First Temple. My research showed that in 19 BCE, Herod preserved this original square in the rebuilding of the Second Temple, as it was the only area considered holy. As the new additions constructed by Herod were probably considered profane by the religious authorities of the time, they only referred to what was contained inside the original square, and it is this that is described

13. Ritmeyer, *The Quest*, 322.

in *Middot*, written after the destruction of Herod's Temple in 70 CE. However, if we take into consideration that the outer courts added by Herod are ignored in *Middot*, the information provided is of tremendous value and can be used to complement that of Josephus, who described the mount as it had been enlarged by Herod.

With this understanding, we realize that the gates described in *Middot* must refer to the earlier, square Temple Mount. So, the five gates described in the tractate as leading to the Temple Mount were not those whose remnants we see preserved in the present-day outer walls of the platform but must have been further inside. For instance, by contrast to the one gate assigned to the Western Wall in *Middot*, Josephus gives four. *Middot* mentions a railing or low barrier, called *soreg*, with inscriptions placed at intervals forbidding Gentiles to proceed further, that would be encountered before entering the holy precincts. The tractate goes on to describe seven gates that led to the Temple Court and then the chambers that lay around the Temple and their functions. It is here, in the description of the Temple and its courts, that, essaying to record its appearance with loving accuracy, the tractate comes into its own. Additional material on the ritual of the Temple is provided in other tractates of the Mishnah, particularly in the second division, *Moed* (Set Feasts), and in the fifth division, *Kodashim* (Hallowed Things), which contains *Middot*. We shall see later on that a vivid picture can be built up from the Mishnaic record.

The record of Flavius Josephus is vital for its description of the outer part of the Temple Mount, which Herod the Great doubled in size, creating a vast esplanade. The surpassing beauty of Herod's Temple is proverbial. That the megalomaniac Herod intended the building of the Temple to be the crowning glory of all his architectural creations is clear from the words of Josephus: "For he believed that the accomplishment of this task would be the most notable of all the things achieved by him, as indeed it was and would be great enough to assure his eternal remembrance" (*Ant.*15.380) Because of the sensitivity of his Jewish subjects, however, the originally Edomite King Herod was not permitted to make any substantial changes in the Temple building, apart from doubling the height of the Porch to bring it into line with the dimensions of the First Temple built by Solomon. Although Josephus was an eyewitness of the Temple, some scholars consider his account to be unreliable. And his measurements, in comparison to the carefully recorded measurements of *Middot*, can sometimes be misleading and prone to exaggeration, as he was trying to defend Judaism to pagan readers of his works.

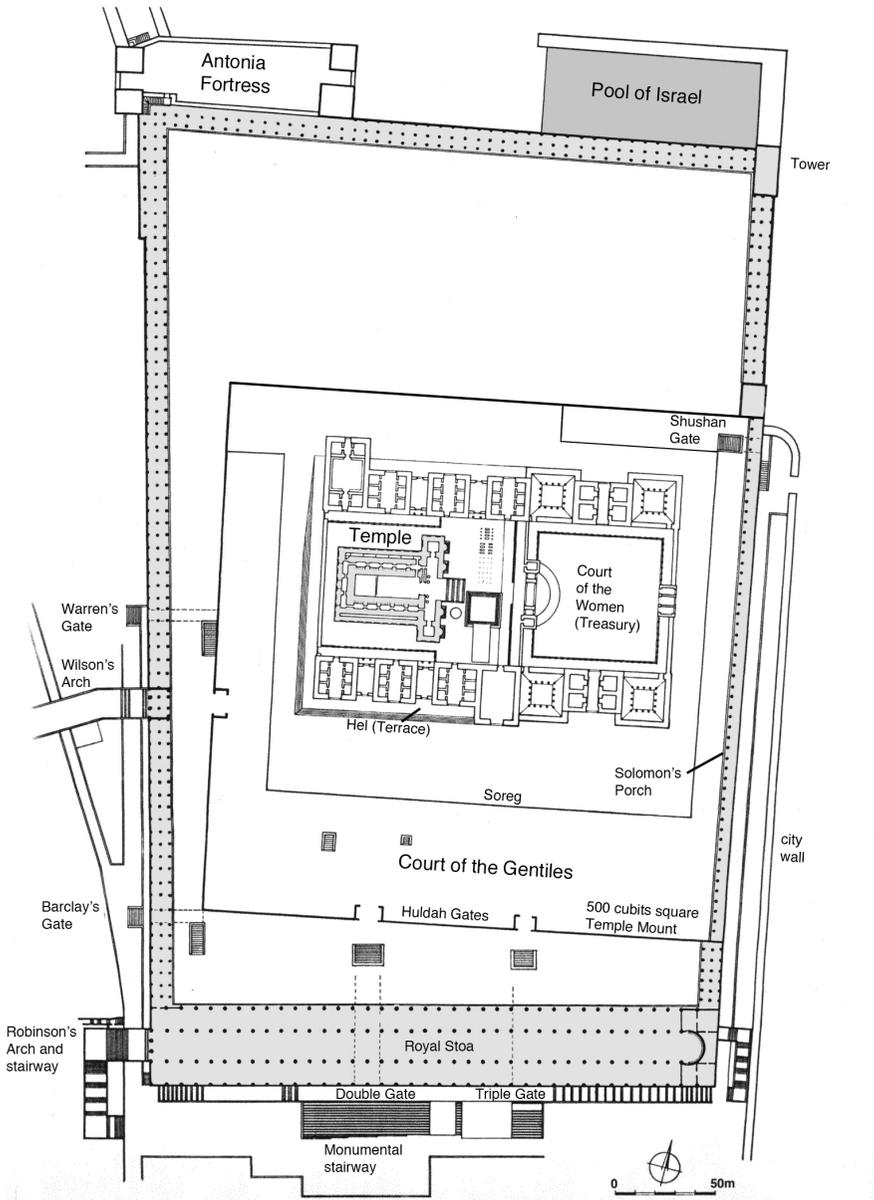


Fig. 1.10

The two main descriptions of the Temple by Josephus appear in *War* 5.184–226 and *Ant* 15.410–25, but even these records do not always agree with one another. In *Ant* 15.380, Josephus states that Herod commenced construction of

the Temple in the eighteenth year of his reign (20–19 BCE), whereas in *War* 1.401, he gives the construction date as Herod's fifteenth regal year (23–22 BCE). In *Ant* 15.420–21, he tells us that the inner courts were completed in a year and a half, but that construction of the porticoes and outer courts took eight years. However, construction related to the Temple project went on until the reign of Agrippa, and Josephus records that the work was halted in 64 CE, with eighteen thousand workmen being put out of work (*Ant* 20.219–23). This continuing construction of the Sanctuary has recently been confirmed by excavations at the foot of the Western Wall below Robinson's Arch.¹⁴

Josephus tells us that Herod expanded the Temple platform on three sides (*War* 5.187), to the north, west, and south, and erected porticoes inside these new walls. The depth of the Kidron Valley precluded any extension to the east, so that the eastern portico followed the same line as that of the earlier mount. Josephus tells us that the western wall had four entrances (*Ant* 15.410), all of which have now been found and named after the explorers who discovered them. The southern wall had two entranceways, known as the Double and Triple Gates. These led into passageways that led northwards, exiting in front of the ancient double gates that were known according to *Middot* 1.3 as the Huldah Gates. There was also one gate in the Eastern Wall and possibly another gate in the Northern Wall.

In *Against Apion* 2.103–109, he describes the four surrounding courts of the Temple. The outer court could be accessed by all, including foreigners, but excluding menstruating women. The second court admitted all Jews and non-menstruating Jewish women. Male Jews only were allowed into the third court, while priests in proper priestly attire were allowed into the fourth. The inner sanctuary was restricted to the High Priest, clad in his high priestly garments. This is similar to the degrees of holiness stipulated in Mishnah *Kelim* 1.6–9.

The New Testament provides invaluable traditions that add detail to the information provided in the other two main sources. For instance, John 2:20 tells us that the Jewish leaders said to Jesus: "This temple has been under construction for forty-six years, and will you raise it up in three days?" (NRSV). "This adds to the information given in Josephus about the length of time it took to build the Temple. Luke 1:5–22 records an angel appearing to Zechariah in the Temple announcing the birth of the John the Baptist, who would herald the coming of the Messiah. And the scene of the purification of Mary, the mother of Jesus, and the presentation of the child Jesus presumably took place in the

14. An announcement by the Israel Antiquities Authority on Nov. 23, 2011 revealed that the Western Wall below Robinson's Arch could not have been built before 17–18 CE.

Court of the Women (Luke 2:22-39). It was probably on the Temple Terrace or *ḥel*, in the company of the scribes and teachers, that Jesus was found by his parents on his visit to Jerusalem for Passover at the age of twelve (Luke 2:46). Matthew 4:5 records the temptation of Christ at the “pinnacle of the temple,” early in his ministry. This has been identified as the southwest corner of the Temple Mount. There are frequent references to the Temple as a backdrop to the work of Christ (e.g. Matt. 21:14, Luke 19:47, 21:38, John 7:14, John 18:20). The eschatological prophecy of Matt. 24, Mark 13, and Luke 21 has as its springboard the stones of the Temple, with Jesus prophesying, “there shall not be left one stone upon another that shall not be thrown down.”

Now to the explorers; the advent of the science of archaeology to Jerusalem in the nineteenth century transformed understanding of the Temple Mount. Throughout the Ottoman period, the Muslim authorities forbade access to the mount to non-Muslims. A handful of westerners did manage to disguise themselves as Muslims and gain entrance. One of the first plans of the Temple platform was made in 1833 by a team of three Englishmen, led by Frederick Catherwood, who disguised themselves as Egyptian army officers. In 1838, Edward Robinson, the American biblical scholar known as the “Father of Biblical Geography,” carried out a meticulous topographical survey of the city. Restricting himself to an examination of the exterior walls of the Temple Mount walls, he was the first to suggest that the stones jutting out from the wall near the southwest corner were the remains of an original entranceway. Robinson’s Arch, as it was called after him, was assumed to be the first of a series of arches supporting a bridge that spanned the Tyropoeon Valley. This was the way these remains were understood up until the Temple Mount Excavations that followed the Six-Day War.

In the early 1850s, Edward Barclay, an American missionary, gained access to the Temple Mount when he was appointed assistant to a Turkish architect doing repair work on the Dome of the Rock. He discovered the gate that was later named after him, from inside the platform. Part of the lintel of this gate is still visible in the southern part of the Herodian wall at the Western Wall Plaza.

The first real scientific research done on the mount was by de Vogüé. His 1864 publication, which contained the surprisingly accurate reconstruction drawing of the Temple Mount, has been mentioned above.

The following year, in 1865, the British engineer Captain Charles Wilson mapped the Temple Mount for the first time as part of the Ordnance Survey of

Jerusalem.¹⁵ This is still the most widely reproduced plan of the Temple Mount today.

At that time, he publicized the finding of a complete arch that sprang out of the Western Wall, north of Robinson's Arch, that was identified as part of the bridge that led from the Temple Mount to the Upper City. Although it may have been a Swiss scholar named Titus Tobler who originally discovered it, it has retained the name of Wilson's Arch. The foundation of the Palestine Exploration Fund in 1865 by a group of academics and clergymen was the major impetus to scientific investigation of the Temple Mount. It was under their auspices that Wilson's colleague, Captain Charles Warren, carried out landmark explorations around the mount for three years, from 1867 to 1870. Forbidden to dig inside the platform, Warren cut deep shafts alongside the wall, joining them up so that he could trace the bedrock contours of the Temple Mount and the subterranean courses of the Herodian walls. The plans resulting from these daring investigations and published in 1884¹⁶ were some of the most treasured objects in the office of the Temple Mount Excavations.

Another highlight in the history of Temple Mount research was a discovery by the French epigrapher and diplomat Charles Clermont-Ganneau. In 1871, he found a Greek inscription prohibiting the entrance of Gentiles into the Temple court. In the 1911 Parker Mission, a misguided English aristocrat caused havoc by searching for Temple treasures on the mount; his lack of diplomacy caused the Muslim authorities to ban any further scientific exploration on the Temple Mount.

Beginning in 1961, when Jerusalem was under Jordanian rule, until the Six-Day War, Dame Kathleen Kenyon of the British School of Archaeology excavated in the city. As part of her investigations, she carried out limited excavations to the south of the Temple Mount. However, most of her work was concentrated on the City of David.

Excavations of the area south and west of the Temple Mount began in earnest in 1968, under the direction of the late Prof. Benjamin Mazar, on behalf of the Israel Exploration Society and the Hebrew University of Jerusalem. Meir Ben-Dov was his assistant and the dig continued without a break until 1978. Work commenced under Robinson's Arch and eventually took in a wide area from the Mughrabi Gate to the southeast corner of the Temple Mount.

As the dig progressed, each wall and stone was surveyed and each architectural element examined and recorded until a complete plan of the multi-

15. Charles Wilson, *Ordinance Survey of Jerusalem* (London, 1865).

16. Charles Warren, *Plans, Elevations, Sections, etc., Showing the Results of the Excavations at Jerusalem, 1867–1870, Executed for the Committee of the Palestine Exploration Fund*. (London, 1884).