

## Chapter 7

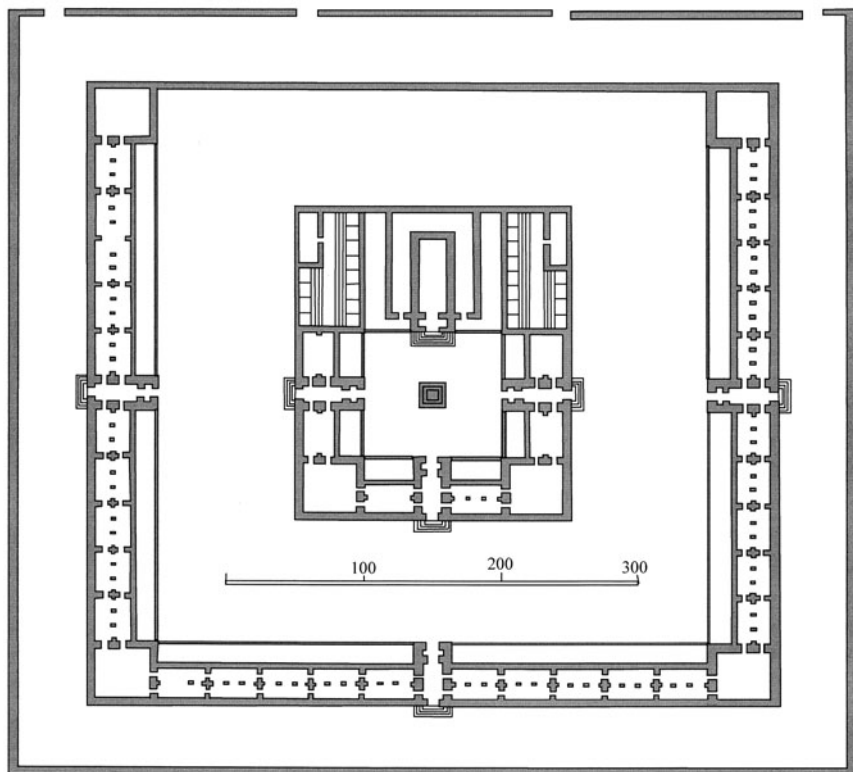
# Reconstruction

### The Differences in the Images of the Temple in the *Chronology* and Babson MS 0434

There are two main sets of surviving drawn plans for the Temple of Solomon by Newton<sup>469</sup>; the three illustrations in the *Chronology* and the six in Babson MS 0434. Of the six drawings in Babson MS 0434, three of them are incomplete and are not referred to in the text. Only four of the six drawings have sufficient detail to allow their annotations within the text to be followed. Two of these are of the gates, one of the altar and the other is the plan of the Temple precinct. The Temple precinct drawings have become synonymous with Newton's Temple. The images in the *Chronology* consist of floor plans of the Temple precinct, the Temple and the colonnades of the Temple. These images are complete floor plans, but their completeness is not backed up by the very brief and confused description given in Chapter Five of the *Chronology*. The image of the Temple precinct in Babson MS 0434 (Fig. 7.4) lacks some details, and the other images in Babson MS 0434 add nothing to complete these areas. In the two images of the Temple precinct, there are clear differences in the floor plan, but the overall appearance does seem similar. These two famous illustrations of the Temple precinct are repeatedly used to illustrate Newton's Temple.<sup>470</sup> However, the image in the *Chronology* is preferred over the Babson MS 0434 image in publications, since it fills in what seems to be the "grey" areas that Babson MS 0434 does not provide and it is a great deal clearer in its execution.

Although the floor plan in *Chronology* does have an initial similar appearance to Babson MS 0434, it is in fact different in many elements of the plan. In Babson MS 0434, Newton did not mention any stairs that led to the upper floors of the thirty rooms that surround the Temple. In the plan in the *Chronology*, there is a spiral staircase to the right of the main entrance and the priests would have to use the main Temple stairs to go to these chambers and to the lower floor. In Babson MS 0434<sup>471</sup> and the Book of Ezekiel,<sup>472</sup> the priests accessed the rooms on the lower floor from steps at the side of the Temple; neither Newton nor Ezekiel mentioned any stairs to the upper floors.

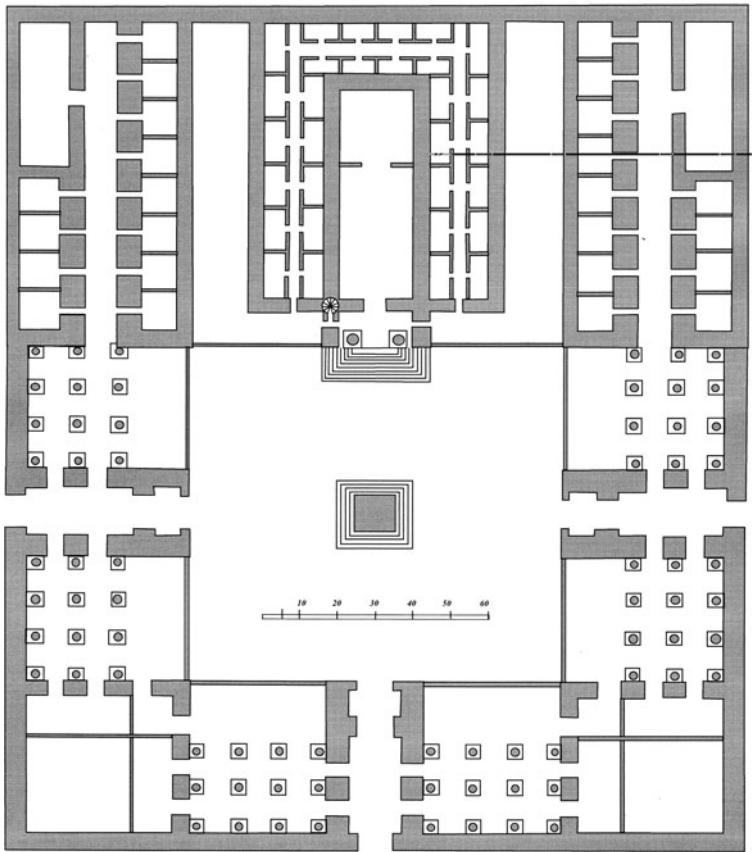
In the plan of the *Chronology*, these thirty chambers are a double row of fifteen rooms that surround the Temple. However, this would not fit the measurements given



**Fig. 7.1** The floor plan of the Temple precinct published in the *Chronology* in 1728<sup>476</sup> (Drawn by the author from Isaac Newton, *The Chronology of Ancient Kingdoms Amended* (Dublin, 1782), p. 346.)

by Newton. In Babson MS 0434, Newton clearly stated the measurement from the Temple wall to the outside of the thirty rooms as being: the Temple wall, six cubits wide; storeroom, four cubits wide; the walkway, five cubits wide; the chambers, five cubits and the outer wall, five cubits wide.<sup>473</sup> Newton claimed that the thirty chambers were six cubits in breadth making the circumference of the three walls of the Temple one hundred and eighty cubits,<sup>474</sup> the image in the *Chronology* indicates that the chambers would be at least twelve cubits in breadth. In Babson MS 0434, each chamber had its own storeroom so there were thirty chambers and thirty storerooms.

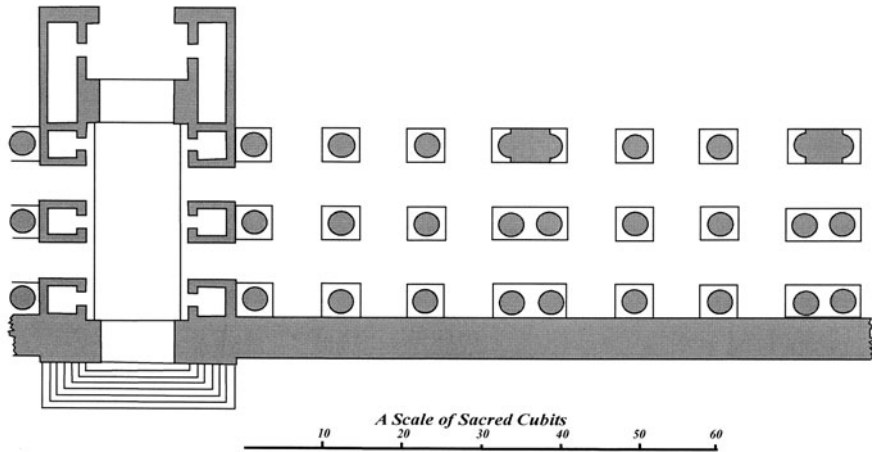
In the *Chronology*, the one hundred cubits depth of the Temple occupies the entire Separate Place, but the back wall of the Temple is also the surrounding wall of the Separate Place. This reduces the depth of the Separate Place by six cubits; a Separate Place of nine-four by one hundred cubits does not follow the proportions of Moses' measurement of the Tabernacle or the measurements of Ezekiel's text. In Babson MS 0434, this width of the surrounding wall is not counted as a part of the Separate Place.



**Fig. 7.2** The floor plan of the Temple published in the *Chronology* in 1728<sup>478</sup> (Drawn by the author from Isaac Newton, *The Chronology of Ancient Kingdoms Amended* (Dublin, 1782) p. 346.)

In the floor plan of the Temple precinct in the *Chronology*, a wall encloses the entire precinct. This wall has four gates on the western side, the Gate of Shallecheth, the Gate of Parbar and the two Gates of Assupim. This wall is not included in the floor plan of Babson MS 0434 and Newton did not attribute these gates to the Temple of Solomon but to the Second Temple.<sup>475</sup>

In the floor plan of the *Chronology*, both the chambers of the people in the exterior court and of the priest in the Interior Court are supported by a cloister of three rows of columns. Indeed the floor plan of this cloister is revealed, in detail, by its own illustration (see Fig. 7.3). In the floor plan of Babson MS 0434, there is a triple colonnade in front of the chambers in the exterior court, but no details are given in this image as to what is underneath the chambers. The floor plan gives no details about the colonnade in the Interior Court; however, in Newton's description of the Temple, he clearly stated that the colonnades are in front of the chambers.<sup>477</sup>



**Fig. 7.3** Floor plan of the cloister under the chambers published in the *Chronology* in 1728<sup>479</sup> (Drawn by the author from Isaac Newton, *The Chronology of Ancient Kingdoms Amended* (Dublin, 1782) p. 346.)

The greatest visible difference in the floor plans is in the Interior Court. In the floor plan of the *Chronology*, the two eastern corners of the Interior Court are the priest’s kitchens and stair cases. This is not included in the floor plan or the description of Babson MS 0434 and this area is occupied by the priest’s chambers. In Babson MS 0434, the priest’s kitchens are in the two western corners of the Interior Court. The stairs to the upper floors, although not included in the image, are described, but they are not in the kitchen. They are in the exterior court, they are separate and much smaller and they lead only to the upper floors.

These two two-dimensional floor plans have notable visible differences, but the differences become more extreme when the three-dimensional plan is considered.

### **The Differences Between the Description of the Temple in the *Chronology* and in Babson MS 0434**

Chapter Five, “A description of the Temple of Solomon” in the *Chronology* is very brief and quite confused, and without the three illustrations the description would make very little sense. Even with these illustrations there are great problems. The description of the buildings is so different from Babson MS 0434 that it does raise the following questions: “is this chapter in the *Chronology* the work of Newton?”; “did he change his mind about the structure of the Temple?”; and “did he want to sanitise his work by underplaying the importance of the Temple?”. The differences, the brevity, the confused description and the use of terminology that does not exist in Babson MS 0434 do strongly suggest that the plan given in the *Chronology* is not the

work by Newton. On the other hand, he did attempt to sanitise some of his work at the end of his life and his editors took this even further.

In the *Chronology* it is stated that the vestibule of the Temple is one hundred and twenty cubits<sup>480</sup>; in Babson MS 0434 Newton claimed that the vestibule was the same height as the gates of the Great Atrium, seventy or seventy-one cubits.<sup>481</sup> The Temple in the *Chronology* is three floors in height, over the Holy Sanctuary the Temple was ninety cubits high and over the Holy of Holies it was sixty cubits high<sup>482</sup>; this strange and confused stepped structure appears to have no precedents, Biblically or otherwise. In Babson MS 0434, the height of the entire Temple, with the exception of the vestibule, is one hundred and twenty cubits.<sup>483</sup>

There are expressions used in the *Chronology* which are not used in Babson MS 0434 or any other unpublished manuscript, such as the “people’s Court” for the exterior court, and the “cloister” for the columns under the chambers. The gate on the eastern side of the exterior court is the gate where Ezekiel entered the Temple precinct and in Babson MS 0434 Newton referred to it simply as the eastern gate, but in the *Chronology* it is referred to by the more secular name the King’s Gate.<sup>484</sup> This expression is not used in Babson MS 0434.

In the *Chronology*, he stated that “the cubit was about 21½, or almost 22 inches of the English foot, being the sacred cubit of the Jews, which was a hand-breadth, or the sixth part of its length bigger than the common cubit”.<sup>485</sup> This measurement contradicts Newton’s earlier work on the sacred cubit. He estimated the sacred cubit to be 2.068 English feet or 24.816 inches.<sup>486</sup> The measurement of 21.5 or almost 22 inches given in the *Chronology* was established by Bishop Cumberland (1631–1718) and was quoted as being the measurement in numerous lexicons and dictionaries of Freemasonry.<sup>487</sup> A measurement of 21.5, or almost 22 inches of the English foot, would make the vulgar Hebrew cubit 1.527 English feet or 18.33 inches. This measurement would have no connection to any of the Egyptian, Memphis or Babylonian cubits which were the starting point of Newton’s original estimation.

However, all these changes Newton did make in a manuscript held at Cambridge University Library, Additional MS 3988, which was written towards the very end of his life. He also added another floor plan; although it has even less details than his other floor plans it is a confused mixture of the features from the first and second temples. This is possibly where the artist got the design for the floor plan of the precinct for the *Chronology*. But the artist used a great deal of imagination by adding details that are not mentioned by Newton. Thus, the floor plans in the *Chronology* could not be considered Newton’s design. Although the text in Additional MS 3988 is the same as the *Chronology*, it shows no notes or corrections by Conduitt, as do the other manuscripts, in the course of editing. So it is possible that there are other unknown or lost manuscripts on the Temple with further diagrams. Questions of why Newton was playing down the role that he had given the Temple all his life cannot really be answered satisfactorily. But with the controversy of the “Short Chronology” still raging at the end of his life, perhaps he considered it to be one way of sanctifying his work without too many questions.

## The Description(s) of the Temple in Babson MS 0434

In Babson MS 0434 Newton continued to refine his plan. The text by Ezekiel is not always consistently applied. In Newton's prophetic work, he used the four-faced cherubim as an analogy of the four evangelists described in Ezekiel 1:10, but in his reconstruction he used the two-faced cherubim as described in Ezekiel 41:18. Also the text of Ezekiel is not always clear and at times his measurements did not fit the overall plan he presented. Newton attempted to make sense of the plan by Ezekiel. In certain unclear passages of the text by Ezekiel, Newton had a couple of attempts to resolve the uncertainties. However, the changes to the plan throughout the manuscript do not constitute any significant change in the ideas behind the plan; they are only refinements of the plan.

In the floor plan, there is a room marked  $\Phi$  (see Fig. 7.4 and Fig. 2b, "Translation of Babson MS 0434") in the Interior Court to the west of the northern gate; another room is drawn in the same position opposite to the court. In his first verse-by-verse explanation of the text by Ezekiel, he claimed that

Next to this northern gate was the atrium **Rjmn**, and in the room  $\Phi$  destined for the Priests that took charge of the custody of the Temple, and a similar room there were next to the southern gate for the Priests that had the custody of the altar. These rooms faced towards the most interior atrium.<sup>488</sup>

The position on the plan indicates that this room is positioned on the ground floor and separate from the other rooms. The text is repeated again with more detail and with footnotes included in the second verse-by-verse explanation of the text by Ezekiel. However, this time the description placed the rooms of the priest that guard the Temple with the rooms of the priest of the Curias<sup>489</sup> i.e. the rooms above the colonnade. In the final floor plan of Babson MS 0434, there is no room on the pavement of the Interior Court and the triple colonnade of the northern, eastern and southern sides of the Interior Court is only interrupted by the three gates.<sup>490</sup>

In his verse-by-verse explanation, Newton had problems with Ezekiel 41:10; "And between the chambers was the wideness of twenty cubits round about the house on every side". However, there is only fifteen cubits between the side of the Temple and the side of the chambers of the priest in the Separate Place according to Ezekiel's own description. Newton made two attempts to reconcile Ezekiel's words with a consistent plan; both were unsuccessful. First, he claimed that the twenty cubits refers to the thickness of **wh**, which is the building surrounding the Temple, i.e. the storeroom + walkway + rooms + wall.<sup>491</sup> However, this actually measures nineteen cubits according to Newton's plan and a further problem is that he discounted the fifteen cubits pavement that surrounds the Temple so that there are thirty-four cubits between the side of the Temple and the side of the chambers of the priests in the Separate Place. In the second attempt, he claimed that the twenty cubits is not the remaining space between the chambers, as some have imagined, but it is "here the width was that of the Separate Place that separates the side



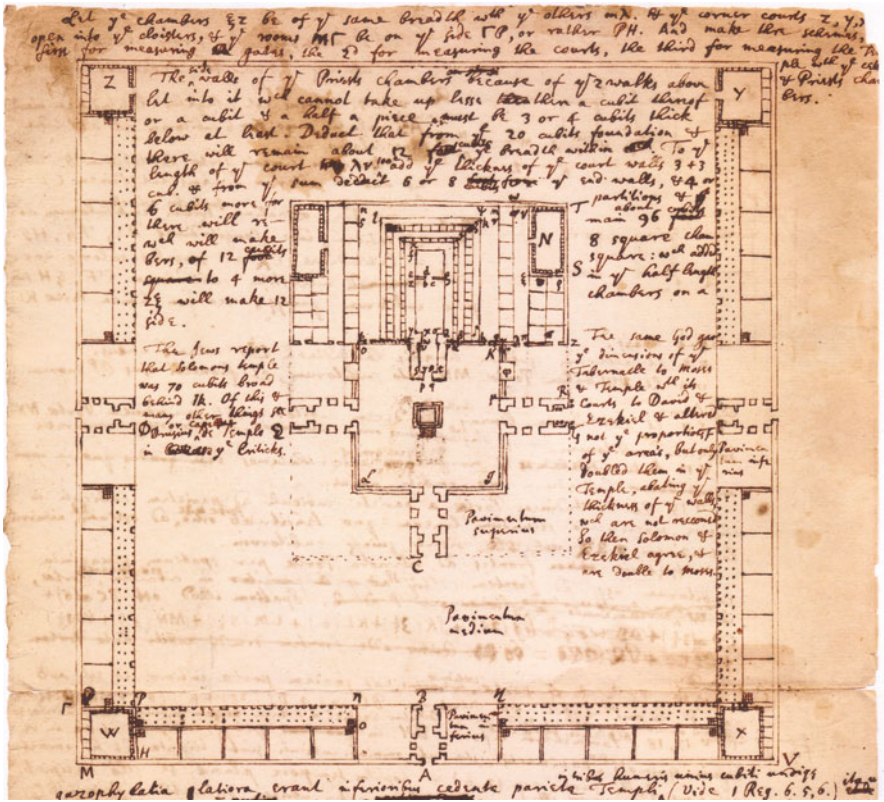


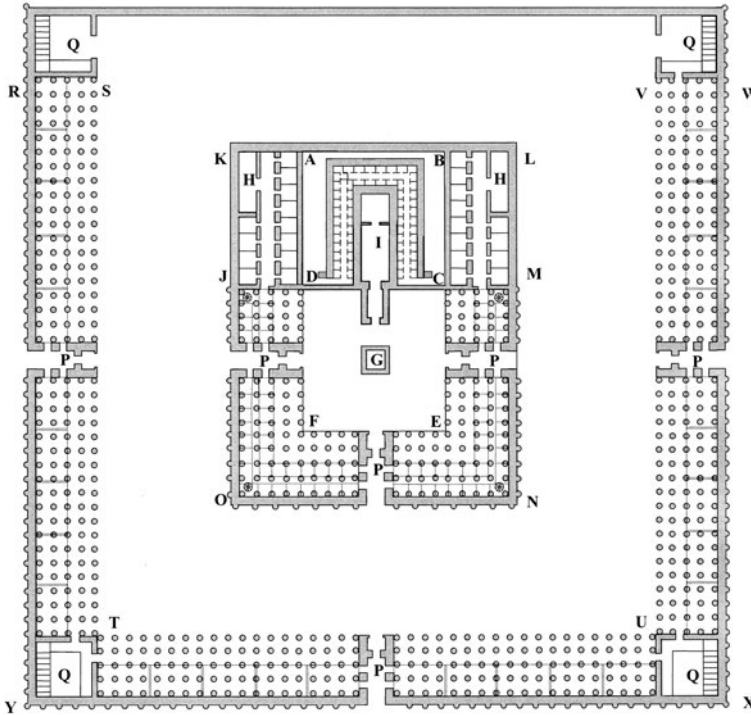
Fig. 7.4 The Temple Precinct as drawn by Newton in Babson MS 0434<sup>500</sup> (From Isaac Newton, *Introduction to the Lexicon of the Prophets, Part Two: About the Appearance of the Jewish Temple* (Babson Ms 0434) (unpublished manuscript, Babson College) fol. 9r, with kind permission of The Huntington Library.)

building and the chambers of the Priests where the sacrifices are consumed”.<sup>492</sup> He calculated it thus

if all the previously said widths of seventy cubits (the width of the Temple plus the walls) is subtracted, the width of the Temple of twenty cubits and the width of their wall of five cubits of the side and five cubits of the other, to the first reduction, they will remain forty cubits, twenty on one side and twenty on the other as the width of perimeter of the adjacent building to the Temple. Or thus the width of the side chamber is five cubits, as above it. That of the remaining space is of five cubits.<sup>493</sup>

Newton justified Ezekiel’s measurements, ensuring that his floor plan of the Temple complied with the Prophets words.

Ezekiel 42 described the priests’ chambers towards the north-west and the south-west corners of the Separate place. Although Ezekiel measured the chamber, he did not state how many chambers there were. In Chapter Two of *Observations upon the*



**Fig. 7.5** The final floor plan of Babson MS 0434<sup>501</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)

ABCD: The Separate Place that contains the Temple

DCEF: The Court of the Priests or the Inner Court

G: The Altar

H: The kitchen of the priest and where the sacrifices were prepared

I: The Temple

KADJ and BLMC: The chambers of the higher ranking priests

JDFECMNO: The chambers of the priests

P: The gates

Q: The kitchens of the people and the stairs to the upper chambers

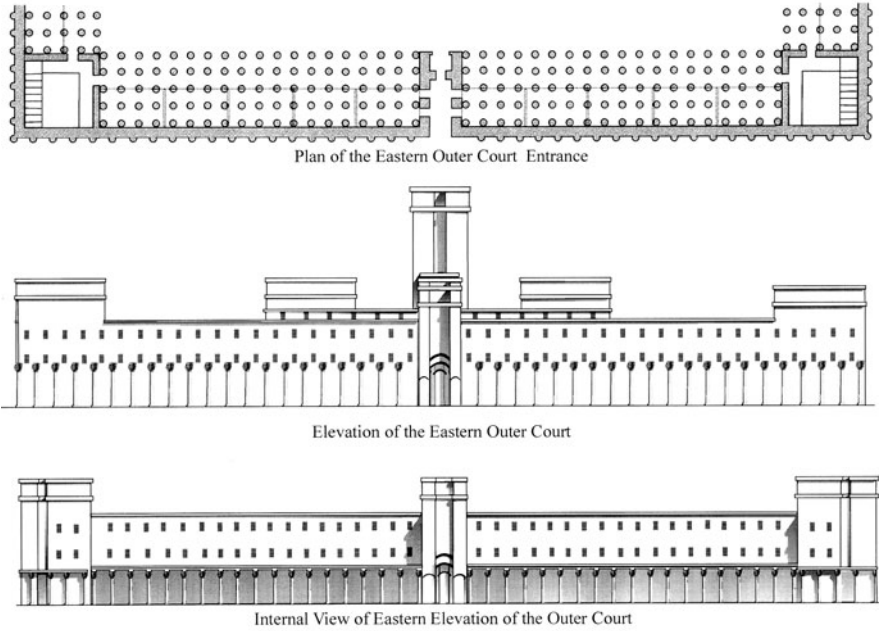
RSTUVWXY: The chambers of the people of the Outer court

*Apocalypse of St John*, Newton placed John the Divine's vision of the Apocalypse in the Temple.

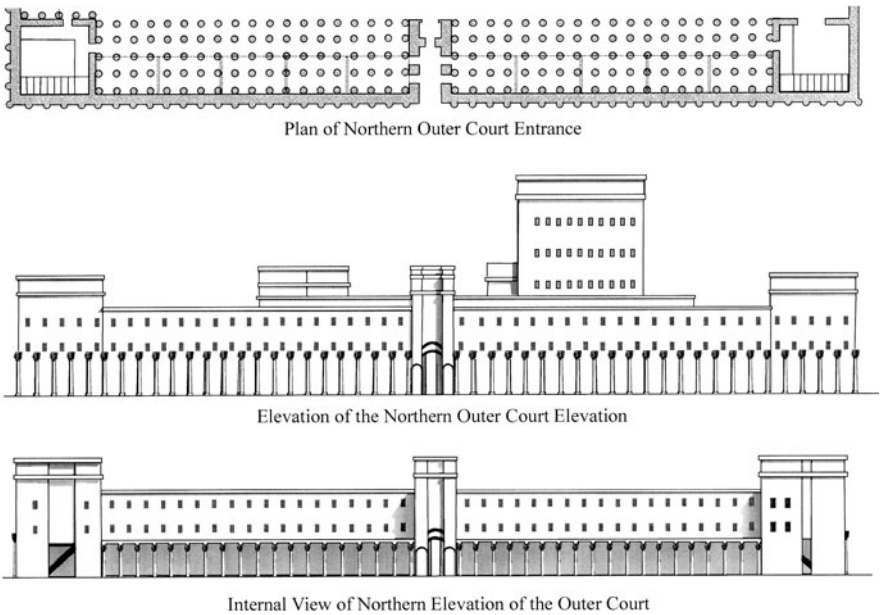
John saw the door of the Temple opened; (and John saw the throne of God). And round about the throne were four and twenty seats; answering to the chambers of the four and twenty princes of the Priests, twelve on the south side, and twelve on the north side of the Priests Court.<sup>494</sup>

In Babson MS 0434 Newton detailed the use of the twenty-four chambers.<sup>495</sup> In the floor plan, these twenty-four rooms are represented along with a justification of

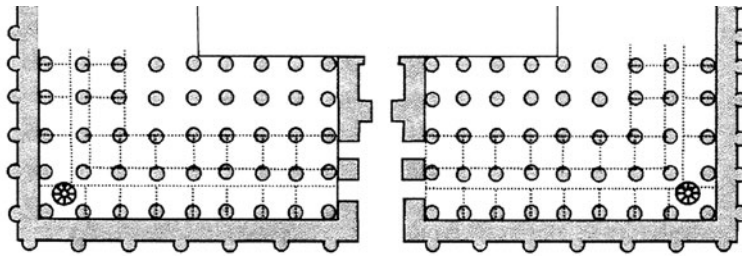




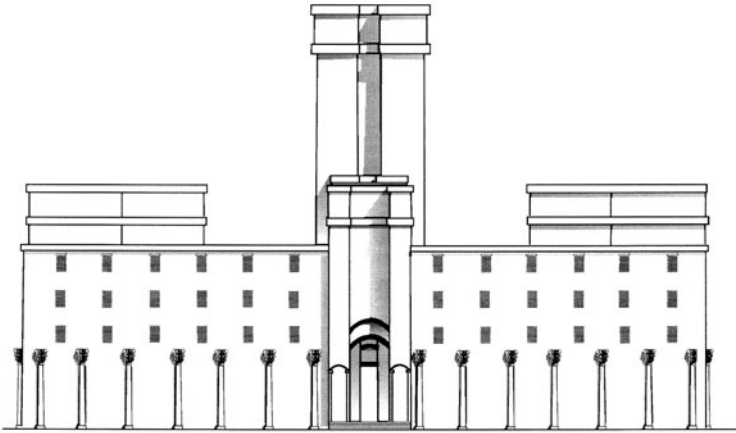
**Fig. 7.6** Elevations of the Outer Eastern Court Entrance<sup>502</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)



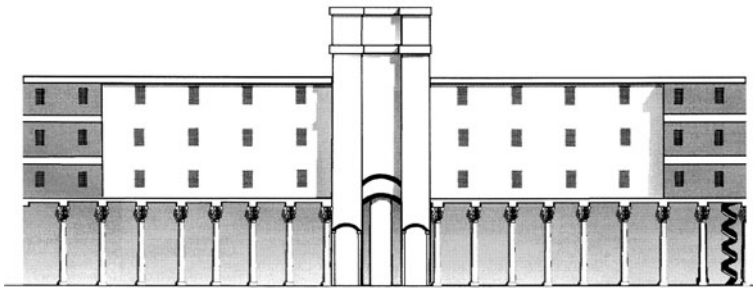
**Fig. 7.7** Elevations of the Outer Northern Court Entrance<sup>503</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)



Plan of Eastern Inner Court



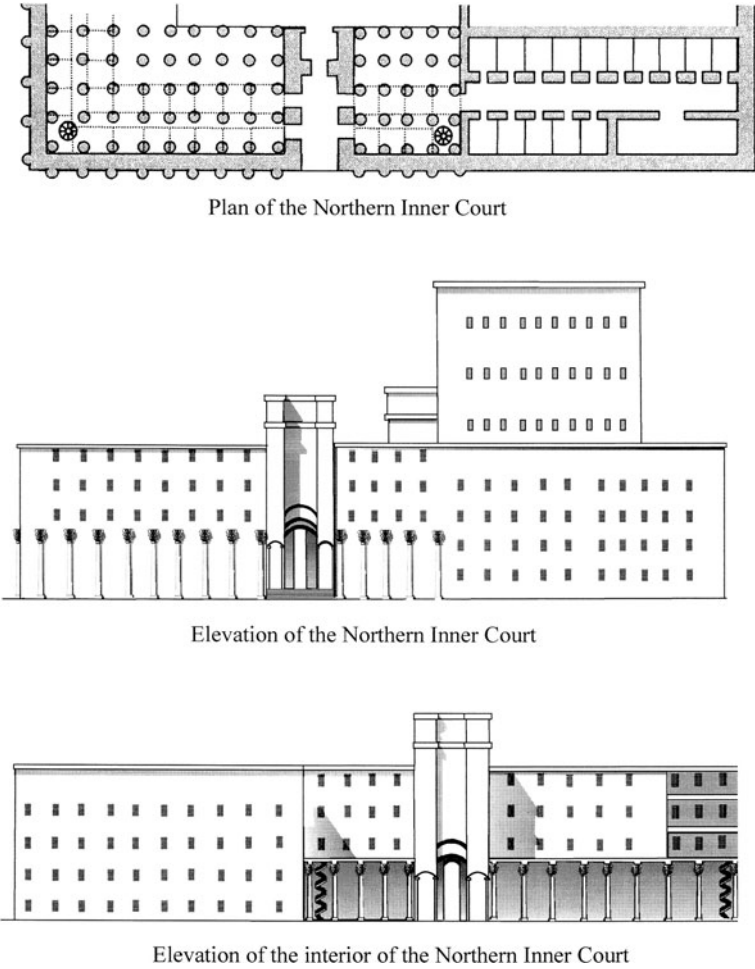
Inner Eastern Court Elevation



Inner Eastern Court interior Elevation

**Fig. 7.8** Elevations of the Inner Eastern Court Entrance<sup>504</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)

the measurements of these rooms.<sup>496</sup> These twenty-four chambers are deeply enmeshed in his ideals of the apocalypse and the ritual surrounding the apocalypse. Yet in his second verse-by-verse explanation, in his description for the floor plan there are fifteen chambers. However, this is clearly an error since at the end of Babson

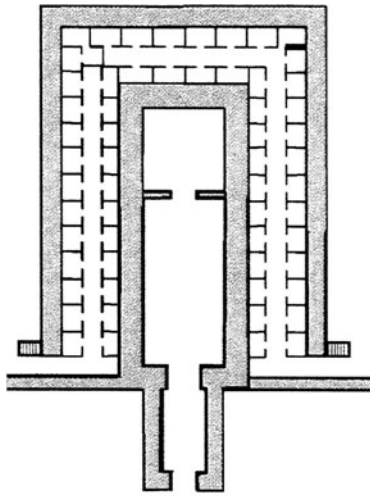


**Fig. 7.9** Elevations of the Inner Northern Court Entrance<sup>505</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)

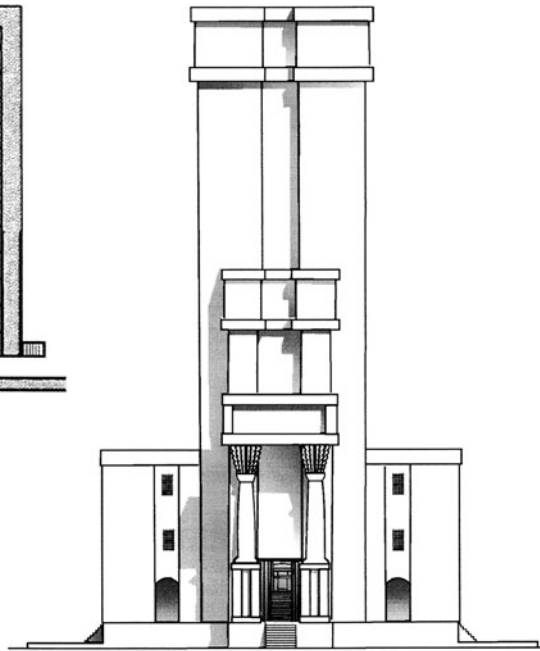
MS 0434 the rooms are being assigned to the hierarchy of priests and there are twelve rooms on each level.<sup>497</sup>

### The Reconstruction

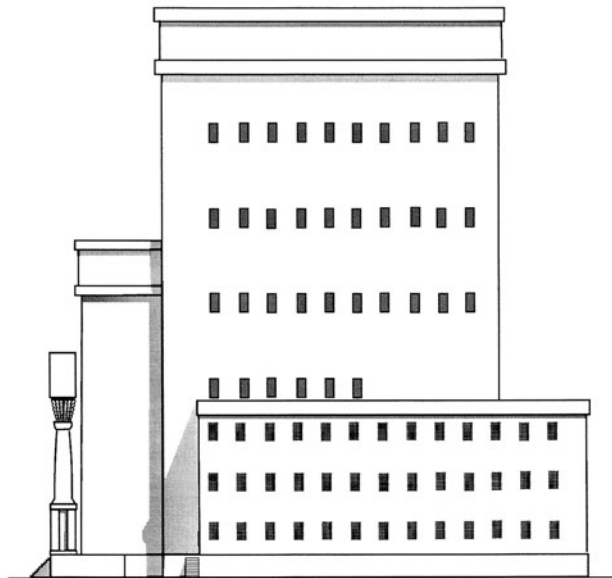
The reconstruction presented in this book is based on the final description of the Temple presented in Babson MS 0434. Newton omitted some details, for example, the stair to the upper chamber that surrounds the Temple, and there are also no stairs to the upper floor of the Temple itself. Another problem is that it is not always clear



Plan of the Temple

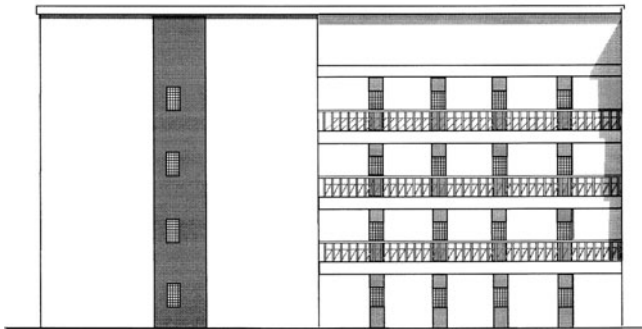
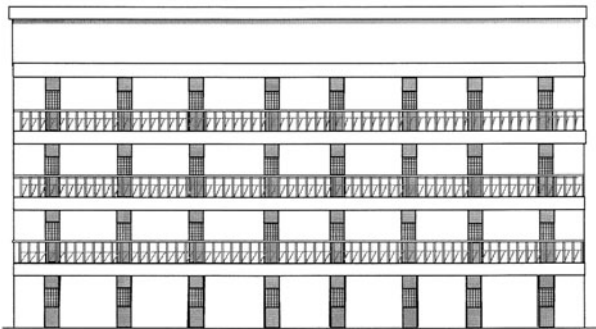
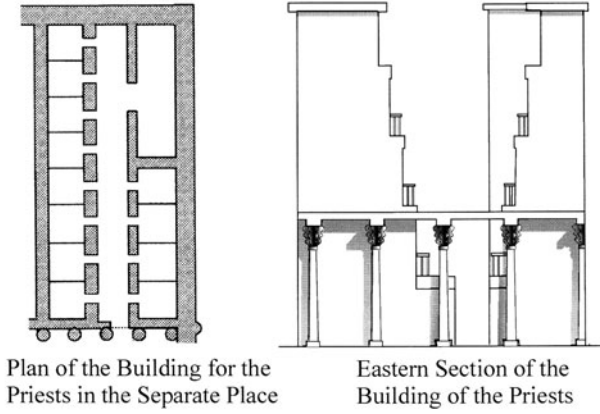


Eastern Elevation of the Temple



Northern Elevation of the Temple

Fig. 7.10 Elevations of the Temple<sup>506</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)



**Fig. 7.11** Sections of the buildings of the Priests<sup>507</sup> (Drawn by the author from Isaac Newton's description in Babson Ms 0434.)

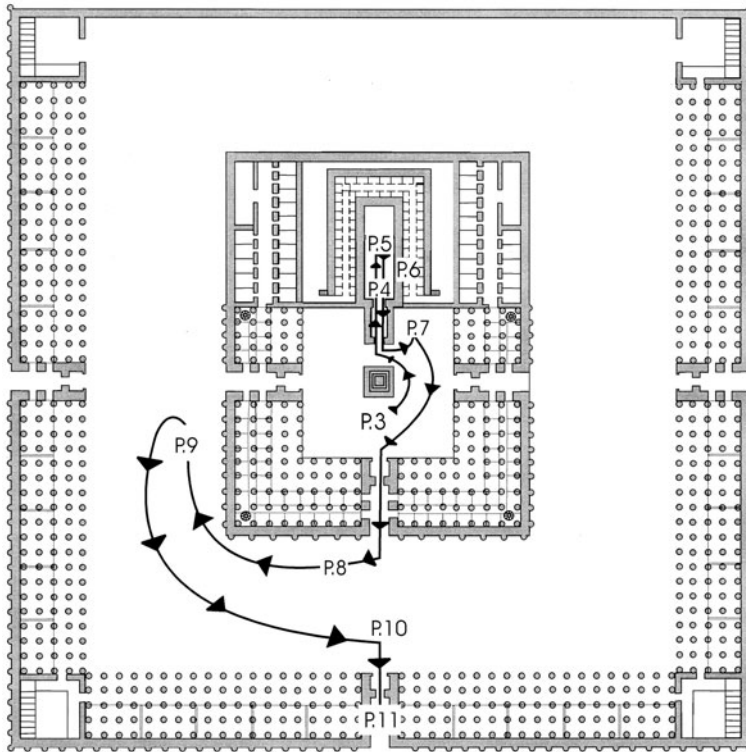


Fig. 7.12 The colour plates on pages 95–100 represent a walk through the Temple precinct<sup>508</sup> (Drawn by the author to describe the path of the coloured images)

whether the thickness of the surrounding walls is included in some of his measurements; with the gates the exterior wall is included in the fifty cubits but the wall behind the Temple is excluded from the one hundred cubits of the Separate Place. Despite these problems, the description is sufficient to construct the form of the Temple, which was Newton’s intention.

One confusing aspect of Newton’s description concerns the columns and the colonnades. Some of this confusion stems from the diagrams of the *Chronology*, which specify a cloister of three rows of columns. It also stems from the fact that Newton referred to the chambers built on rows of columns and a colonnade built in front of the chambers. In fact, they are two different construction elements that sit side by side.

Newton quoted Ezra 6:4 which states that the Temple was built “with three rows of great stones, and a row of new timber”. Interpreters of the verse have translated this to mean that the rows of stones represent the floors of the building which are separated by means of cedar timbers.<sup>498</sup> Newton interpreted this as

those three rows were of cylindrical stones of form, that is to say, columns. There were two rows of columns in the colonnade under the rooms; the third was in the external facade of the



exterior wall of the rooms these corresponded with the columns of the colonnade of the Great Atrium. The series of beams of wood was found in the panelled ceiling of the colonnade,<sup>499</sup>

There are three rows of columns of the colonnade plus two rows that support the chambers, making five rows altogether in the court and another row of columns on the exterior wall.

## Conclusion

The detailed illustrations of the Temple in the *Chronology* are not supported by the brief and confused description of its structure. The text of the *Chronology* is indeed Newton's, but is very confused and parts of it make little sense. Although the floor plan does have similarities in its overall appearance, it is very different from the plan presented in Babson MS 0434.

Newton strove to illustrate and understand what he perceived to be the God-given plan that Solomon implemented and that Ezekiel described for posterity. He also attempted to justify the text of Ezekiel and to prove that the plan and the measurements that Ezekiel gave were correct. Babson MS 0434 revealed his continual refinements of that plan. The manuscript has been dated to the mid-1680s and may not be the last development in his refinements. However, although he remained interested in the Temple throughout his life, Babson MS 0434 was the only surviving plan where it was possible to reconstruct the Temple from the outlined description.

This reconstruction of Newton's Temple follows his description as closely as possible and where Newton only gave a minimal description, i.e. measurement and the number of floors, the building is kept as the basic structure and no extra elements are added.

The reconstruction first shows the overall floor plan that was developed from the final description given in Babson MS 0434. There are differences from his first drawing, but they are minor. The main difference is that the detail in his description has been added. Second, the elevations and sections of the entire Temple are illustrated. Finally, a series of coloured plates are organised as a walk through the Temple precinct, beginning from a bird's-eye perspective of the Temple, moving into the Temple, then to its Sacred centre, around the precinct grounds and finally out through the eastern gate.

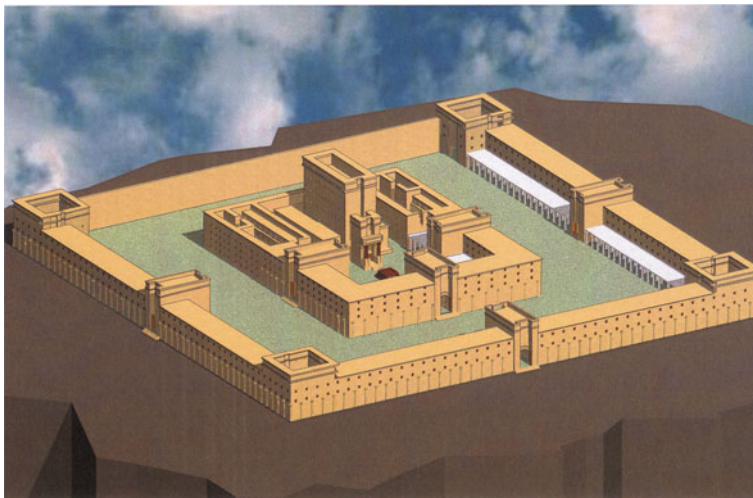
## Transcription of the English Annotation in Fig. 7.4

Let  $y^c$  chambers  $\zeta z$  be of  $y^c$  same breadth with  $y^c$  other  $m\lambda$  and  $y^c$  corner courts  $Z, Y, X, W$  open into  $y^c$  cloisters, and  $y^c$  rooms  $M\Gamma$  be on  $y^c$  side  $\Gamma P$ , or rather  $PH$  and make there schemas, the first for measuring gates the second for measuring the courts, the third for measuring the Temple with  $y^c$  cells and Priests chambers.

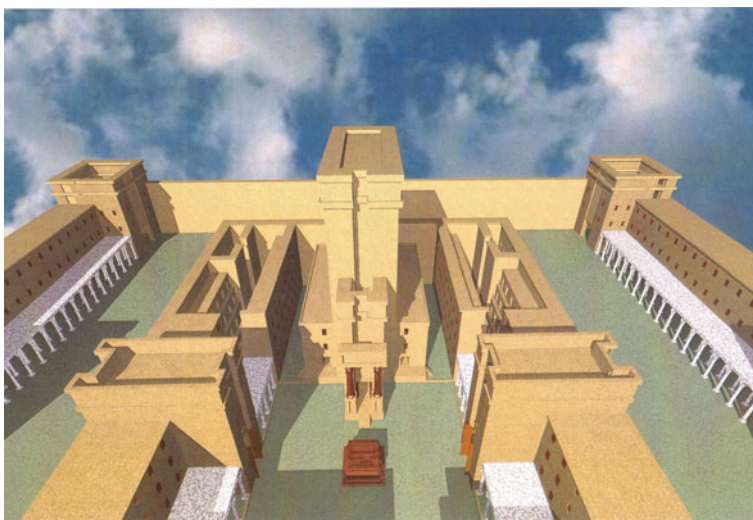
The side walls of  $y^c$  priests chambers because of  $y^c$  two walks above let into it which cannot take up less there a cubit thereof of a cubit and a half a piece must be 3 or 4 cubits thick below at least. Deduced that from  $y^c$  20 cubits foundation and there will remain about 12 cubits breath within to  $y^c$  length of  $y^c$  court  $\lambda v$  100 (cubits) add  $y^c$  thickness of  $y^c$  court walls 3 + 3 cubits and from  $y^c$  sum deduct 6 or 8 cubits from  $y^c$  end walls and 4 or 6 cubits more for partitions and there will remain about 96 cubits which will make 8 square chambers of twelve cubits square: which added to 4 more in  $y^c$  half length  $z\zeta$  will make 12 chambers on a side.

The Jews report that Solomon's Temple was 70 cubits broad behind **Ik**. Of this and many other things see Drusius & Cappel *de Temple* contrary to the critics.

The same God gave  $y^c$  dimensions of  $y^c$  Tabernacle to Moses and Temple with its courts to David and Ezekiel and altered not  $y^c$  proportions of  $y^c$  areas, but only doubled them in  $y^c$  Temple, abating  $y^c$  thickness of  $y^c$  walls  $w^{ch}$  were not recounted. So then Solomon and Ezekiel agreed, and were double to Moses.



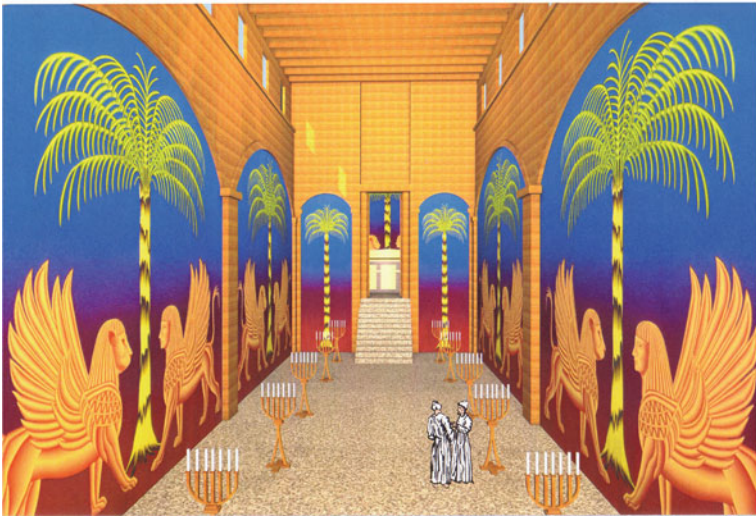
**Plate 1** Birds-eye perspective of the Temple Mount



**Plate 2** Birds-eye view of the Temple and its surrounding courts



**Plate 3** The beginning of the walk through the Temple precinct and it begins in front of the Altar and the Temple



**Plate 4** The first chamber of the Temple, decorated with cherubim and palm trees and the back of this chamber is the stairs to the Holy of Holies

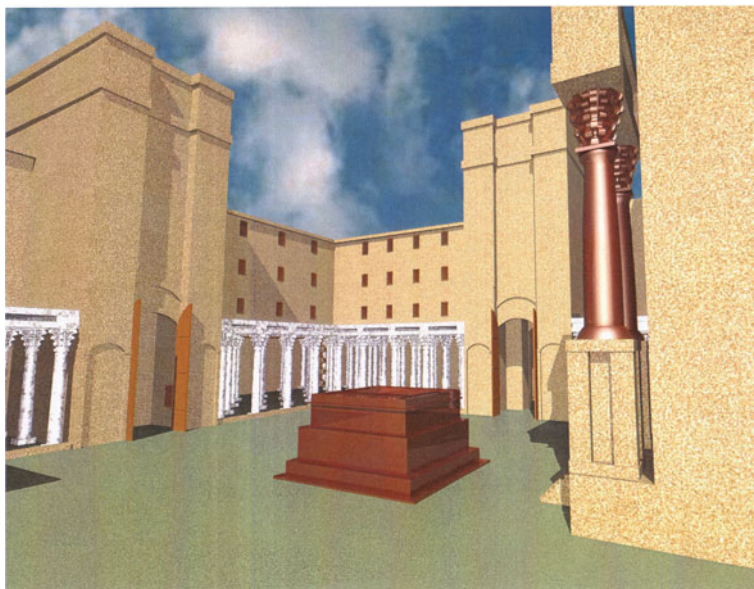




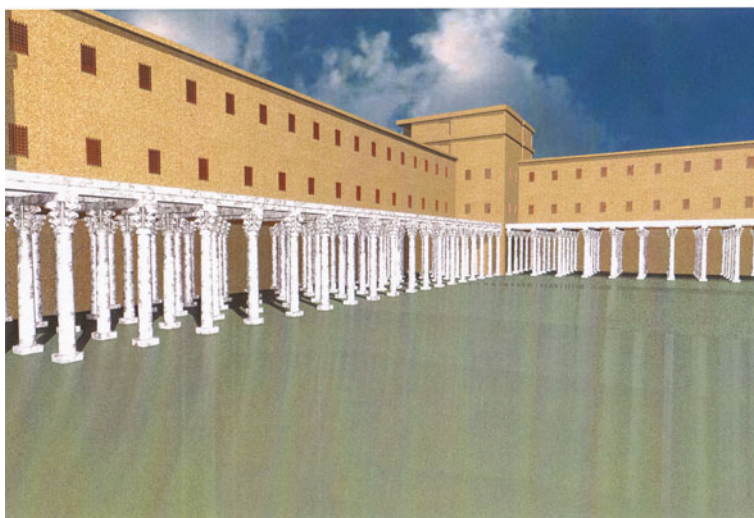
**Plate 5** The most sacred part of the Temple, the Holy of Holies, which contains the Ark of the Covenant. This room is only entered once a year by the high priest



**Plate 6** A section of the two chambers of the Temple



**Plate 7** The Temple looking at the inner court



**Plate 8** The outer court turning right

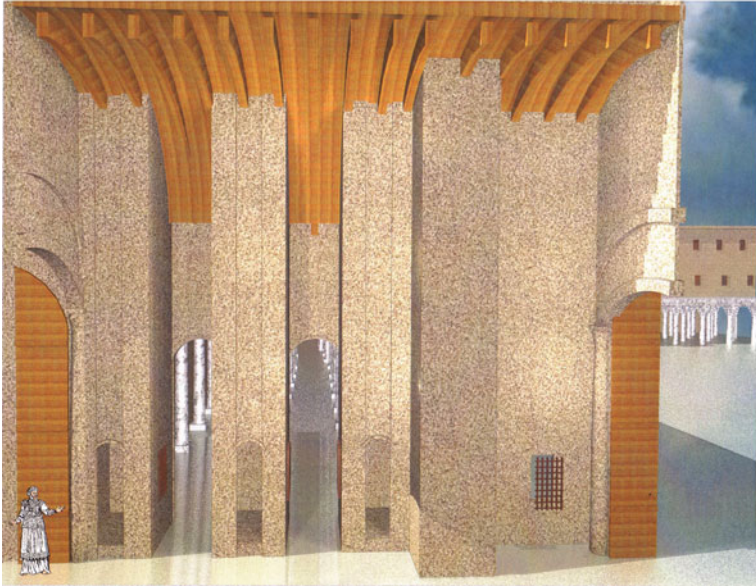




**Plate 9** The corner in the outer court



**Plate 10** Turn back to the eastern gate



**Plate 11** A section of the eastern gate. A high priest is entering at the point at which Ezekiel first entered the Temple precinct