

# Herodium: Herod's Innovative Masterpiece

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Herod the Great was a client king of the Romans and his loyalty to the Empire is unquestioned. He demonstrated his innovative and imaginative approach to building at Herodium. He brought to Judea architectural and technical inventions that transformed building practices. There is ample evidence of his unique ability to plan and build a complex multi-functional site, to mould the landscape to his will and to blend architectural forms from Roman, Hellenistic and traditional norms into an Herodian standard. He was a builder king who understood engineering and architecture. He was creative and practical and above all he demanded the highest quality from his builders. His perpetual monument at Herodium has survived for over two thousand years due to Herod's skill and ingenuity, a tribute to his innovative approach to building.

*Keywords:* imagination, architectural innovation, modernisation

## Introduction

Herod the Great was a king who ruled on behalf of the Roman Empire in Judea. He had the ability and the foresight, the genius and the ruthlessness to succeed. He knew how to handle political problems and he made the system work for Judea. He had influential connections and his expertise in Roman affairs helped his country to survive civil wars and triumvirate<sup>1</sup> squabbles.<sup>2</sup> He built temples and cities to the honour of his Roman Patrons. His reign produced security and prosperity for Judea and stable borders around his kingdom which were so crucial to his Roman masters. He was totally loyal to Rome and continually proved this during his reign. Throughout his long life he introduced many new techniques that were used in the Roman world and created imaginative and innovative buildings throughout Judea and beyond. He was at heart a practical man with the ability to turn his dreams into reality.<sup>3</sup>

Herod the Great is perhaps most widely known as the infamous killer of the Holy Innocents in Bethlehem,<sup>4</sup> a fact now widely challenged by many scholars. History has another view of him as an innovative builder and designer whose genius is recognised and respected throughout the world. Scholars across many disciplines appreciate his unique contribution to introducing innovative technologies to his realm.

As an historian, I am interested in the facts that underlie the life of Herod the Great and particularly his genius as an innovative builder. Flavius Josephus is the starting point for all scholars who want to research this

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<sup>1</sup> There were two Triumvirates in the Roman History of the period: First Triumvirate: Julius Caesar, Pompey and Crassus; Second Triumvirate: Octavian, Mark Antony and Lepidus.

<sup>2</sup> Gerry Knoblet, *Herod the Great*, Maryland: University Press of America, 2005. Xii.

<sup>3</sup> Ehud Netzer, "In Search of Herod's Tomb", *Biblical Archaeological Review*, January/February 2011. 37-48.

<sup>4</sup> Matthew 2:16-18, *Harper Collins Study Bible, New Revised Standard Version*, London: Harper Collins, 1993.

topic. The methodology for this article is to take the historiography reported in the Judean War<sup>5</sup> (JW1.409-421) and that described in the Judean Antiquities<sup>6</sup> (JA 15.322-325) as base line information. Following on from this material, I thoroughly investigate what archaeologists have found at Herodium to support my hypothesis that "Herodium is Herod's Innovative Masterpiece". This article will concentrate on Herod's inventive and imaginative ability as an architect, engineer and builder at this one site. It will not analyse his phenomenal building programme in Judea and throughout the Near East.<sup>7</sup>

Why did Herod choose this site near the Judean desert to build a multipurpose complex? It was near this site in 40 B.C.E. that he fought the defining battle of his life. "In the very place where he defeated the Jews he later built a splendid palace surrounded by an extensive complex, and called it Herodium" (JA 14.359-360). That year the Parthians (from modern day Iran) invaded Judea and took Jerusalem. Mattathias Antigonus, the last Hasmonean king, rebelled against his Roman overlords and joined forces with the invaders who were Rome's traditional enemies. Herod refused to join the revolt.



Figure 1. Herodium from the Pool Complex.<sup>8</sup>

Herodium (also known as el-Fureidis, HarHordos, Horodeion, Herodion, Jebel Fureidis) was situated about eight miles south of Jerusalem and three-and-a-half miles east of Bethelam (Figure 1). It was in the borderland between Judea and Idumea where his father Antipater had been born. It was also on the route to his mother's homeland Petra.<sup>9</sup> This area was barren wilderness that Herod transformed into an architectural gem. One cannot but be amazed at his vision and imagination or be surprised that he was an innovator and

<sup>5</sup> PACE (Project on Ancient Cultural Engagement) Judean War downloaded 6.3.2013.

<sup>6</sup> PACE (Project on Ancient Cultural Engagement) Judean Antiquities downloaded 6.3.2013.

<sup>7</sup> For more information on the Herodian Building Programme please consult the following books: Ehud Netzer, *The Architecture of Herod the Great Builder*, Grand Rapids: Baker Academic, 2006; Ehud Netzer, *The Palaces of the Hasmoneans and Herod the Great*, Jerusalem: Yad Ben-Zvi Press & The Israel Exploration Society, 2001; Duane W. Roller, *The Building Program of Herod the Great*, California: University of California, 1998.

<sup>8</sup> Barbara Bergin photograph from visit to Herodium May 2011.

<sup>9</sup> Roi Porat, Rachel Chachy, Yakov Kalman, *Herodium: Final Reports of the 1972-2010*, Volume I, Jerusalem: Israel Exploration Society, 2015.129.

entrepreneur.<sup>10</sup> The architectural layout of Herodium is quite outstanding. It was built to a comprehensive master plan and it is based on a single grid system (Figure 2). The most important points of focus are the Palace-Fortress, the large pool at the centre of Lower Herodium and the Large Palace.<sup>11</sup> Excavations at Herodium in recent years have revealed that, contrary to the previously accepted theory, the site was developed in stages.<sup>12</sup>

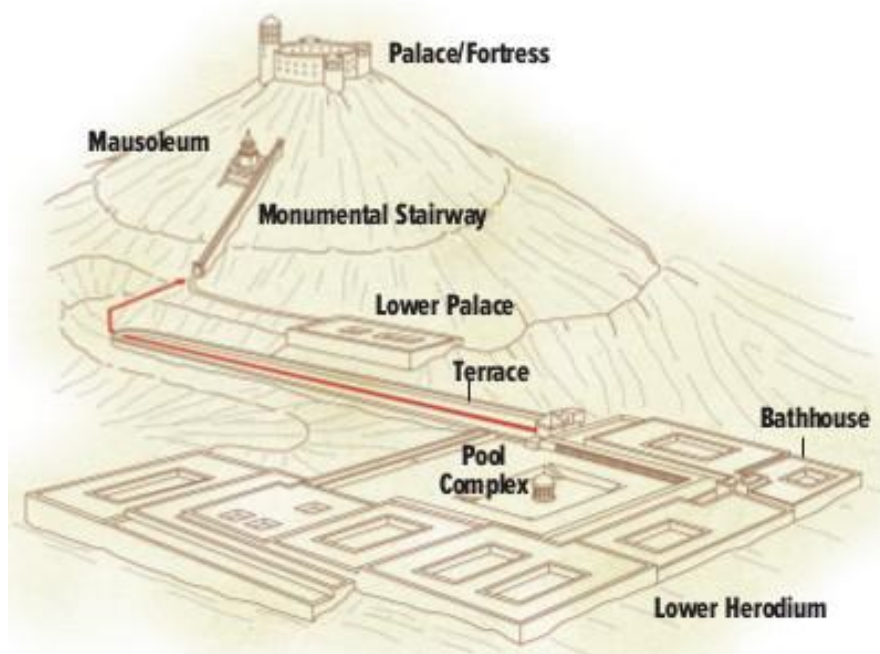


Figure 2. Schematic of Greater Herodium<sup>13</sup>.

Herodium is distinctive because it is the only site that Herod named after himself.<sup>14</sup> Josephus says, “Just as he perpetuated the memory of his family and friends, he did not neglect a memorial for himself” (JW 1.419). Herod planned the unique Palace-Fortress to stand alone at the top of the hill, at an imposing height visible from Jerusalem.<sup>15</sup> Intending to build his mausoleum here he sought to put Herodium on the map and make it visible to all from the environs of Jerusalem. He was the richest man in the East. He enjoyed beautiful places, entertaining his friends and allies in remarkable settings, in buildings designed and constructed under his direction.

Many problems faced the builder-king at this site but his ingenuity and planning ability would make this multifunctional project viable. Where would he find a constant water supply and keep it flowing? Where would he get suitable building materials? How could he create appropriate access to the Palace-Fortress from the bottom of the hill? How could he maintain and secure the site throughout the year when he and his court were not there?

<sup>10</sup> Barbara Bergin, “Herod the Innovator” Presentation to Hekhal Conference entitled *The Crazy Genius of Herod the Great*, held in Dublin in 2015.

<sup>11</sup> Ehud Netzer, *The Architecture of Herod the Great Builder*, Grand Rapids: Baker Academic, 2006. 199.

<sup>12</sup> Yadin Roman, “The Tumulus of Herodium”, *ERETZ Magazine*. 93.

<sup>13</sup> <https://goo.gl/images/1NYwVb> Accessed 11.9.2017.

<sup>14</sup> Porat, Chachy, Kalman, *Herodium: Final Reports of the 1972-2010*. 3.

<sup>15</sup> Porat, Chachy, Kalman, *Herodium: Final Reports of the 1972-2010*. [xiii].

The most urgent problem that confronted Herod and his engineers was the lack of regular stable water supplies in the immediate vicinity of Herodium. Built in the hard and barren desert soil very little of the water is absorbed and most water runs off into wadi floods. Ways of collecting and saving water had been practised for generations using rainwater channels, local springs, cisterns and reservoirs. Rain falls during the months from October through to April but rainfall in Israel is not consistent year on year. Therefore, Herod would have to find a way to supply fresh water to Herodium.

### The Palace-Fortress

The only viable way of providing water for the Palace-Fortress was to collect rainwater. It was collected in two tanks constructed below the centre of the circular building.<sup>16</sup> Another smaller water cistern was built in the base of the Eastern Tower and it collected rainwater that fell off the building in which it was housed. In addition, three very large cisterns were dug into the slope below the citadel and rainwater was directed into them via channels from the hillside at a level of about 9m below the top of the mountain. They were built with barrel vaulted ceilings to ensure that the water would be adequately protected and the ceilings would not collapse. These cisterns were located close to the monumental stairway leading to the mountain top. All cisterns were lined with hydraulic cement to prevent seepage. This innovation was created by the Romans and promoted by Herod in Judea.

Herod's approach to obtaining material for building was practical. He used the topography of the area to his advantage. Stone was mined locally in quarries around Herodium and transported the short distance.<sup>17</sup> The buildings were constructed and later plastered inside and out to make the palaces, residential buildings and storage areas look as if they were built of more expensive materials like marble. Initially, a slanted wall built of ashlar blocks of *nari* stone<sup>18</sup> approximately 6m high was erected to surround the Palace-Fortress. It was built to form a barrier with the outside area.

Josephus's description of the Palace-Fortress was that, "he built a high fortress calling both it and the mountain by his own name, Herodium. He lavished it ambitiously with curious art and built round towers at its top and filled the remaining space with costly palaces. Not only were the inner apartments splendid to behold, but he spent a fortune on the outer walls and partitions and roofs" (JW 1.419-420).

Scholars originally thought that the hill beside Herodium was levelled to make the Palace-Fortress seem higher but this has been disproved. The building was outlined by two concentric walls with a gap of 3.4m between them with an overall diameter of about 63m. Between the two walls seven stories were constructed, two cellars with barrel vaulted ceilings and five stories of corridors and rooms.<sup>19</sup> Today the upper stories are no longer extant. A cylinder like structure was built at the top of the mountain. When originally built this tubularlike structure would have risen about 30m above the bedrock and would have been clearly visible from Jerusalem. Herod's design was unique and innovative. It predated later Roman architectural curved forms.<sup>20</sup>

<sup>16</sup> Ehud Netzer, *The Palaces of the Hasmoneans and Herod the Great*, Jerusalem: Yad Ben-Zvi Press & The Israel Exploration Society, 2001. 106.

<sup>17</sup> Shimon Ilani, Tsevi Minster & Daniel Wachs, "The Geological and Morphological Structure of Herodium and the Quarries for Stones and fill Materials", *Herodium Final Reports of 1972-2010 Excavations*, Volume I, Jerusalem: Israel Exploration Society, 2015. 535-546.

<sup>18</sup> Porat, Chachy, Kalman, *Herodium: Final Reports of the 1972-2010*. 52.

<sup>19</sup> Netzer, *The Architecture of Herod the Great Builder*. 183.

<sup>20</sup> Duane W. Roller, *The Building Program of Herod the Great*, California: University of California, 1998. 166.

Four towers mark the points of the compass. Three were substantially the same. These were semi-circular and protruded outwards from the Palace-Fortress containing many rooms including storage areas.<sup>21</sup> The eastern tower was the largest by three stories. It was constructed within the Palace-Fortress and looked out towards the Dead Sea.<sup>22</sup> It is likely that this building held Herod's private palace, of modest dimensions but which would have been splendidly appointed, with floors of coloured tiles, mosaics, wall paintings and including every imaginable luxury and comfort. "Within are very rich royal apartments, that provide both for security and beauty" (JA 15.324). Herod brought Roman and local artisans together to adorn his palace. He utilised old and new practices together to create a unique and beautiful living space. The multi-storey structures he created were unusual in the Greco-Roman world.<sup>23</sup> He used his imagination and knowledge to create a unique citadel demonstrating his innovative ability.

The palace itself was divided into two equal parts by a central dividing wall. On the eastern side of the wall Herod created an enormous courtyard, open to the sky and planted with a beautiful garden (Figure 3).<sup>24</sup>



Figure 3. Interior of the Palace-Fortress<sup>25</sup>.

Herod appreciated beauty and gardens were a priority in all his palaces. The western half of the Palace-Fortress contained bedrooms and living areas that surrounded a cross-shaped room that may have been open to the sky. South of the sleeping areas was the reception room - *triclinium*, the official reception and dining room of the fortress-palace (14m long and 10m wide).<sup>26</sup> Herod brought many Roman inventions,

<sup>21</sup> Netzer, *The Architecture of Herod the Great Builder*. 186.

<sup>22</sup> Roller, *The Building Program of Herod the Great*. 166.

<sup>23</sup> Ehud Netzer, "The Palaces Built by Herod – A Research Update", *Judaea and the Greco-Roman World in the Time of Herod in the Light of Archaeological Evidence*, Klaus Flittchen, Gideon Foerster (Editors), Gottenberg: Vandenhoeck & Ruprecht, 1994. 31.

<sup>24</sup> Ehud Netzer, *The Palaces of the Hasmoneans and Herod the Great*. 101-102.

<sup>25</sup> Barbara Bergin photograph from visit to Herodium May 2011.

<sup>26</sup> Hershel Shanks & Dan P.Cole (Eds.), *Archaeology and the Bible*, Washington D.C: Biblical Archaeology Society, 1992, Vol. 2, "Archaeology in the World of Herod, Jesus and Paul". 140.



concepts and designs to Judea and to Herodium. The walls were covered with frescoes and it is possible to see today some of the decorative stucco which makes the stone look like blocks of marble.

No Herodian building would be complete without the most innovative creation from Italy. On the northern side of the sleeping quarters was a complete Roman bath-house which contained an entrance room and a dressing room *apodyterium*, a large *caldarium*, a *tepidarium* (covered by a *cupula*) and a small *frigidarium*.<sup>27</sup> The domed roof in the *tepidarium* had an *oculus* (a round opening at the top of a dome to let light in), the oldest one of its kind known in the Holy Land. This engineering breakthrough was another example of the innovation and ambition that Herod demanded from his builders.

How was the fortress palace accessed? Josephus says that it was approached by steps, that according to Josephus "had a gradient of two hundred steps of the whitest marble leading up to it, for the hill was itself moderately high and entirely artificial" (JW 10.420). Unexpectedly, archaeologists have found the remains of two staircases at Herodium.<sup>28</sup> This first stairway was built to serve the Palace-Fortress and rose from a yet unknown spot at the base of the hill. At the top of the steps it entered an entrance corridor with three levels of arches which lead directly to the palace fortress.<sup>29</sup> The remains of the substructure for this flight of steps has been uncovered. The stairs were made of white limestone called *meleke* which was found locally in the Judean Hills. The second staircase was built sometime later. Stones from the original steps were used to construct the new stairs. It was a straight ceremonial stairway but the axis was slightly different from the original stairs.<sup>30</sup> There is no clear understanding why there were two monumental stairways erected at Herodium.

### Lower Herodium

At the base of the mountain there were thirty-eight acres of barren wilderness which Herod turned into a separate pleasure complex with sumptuous gardens. Josephus describes the area, "The plain around this citadel is full of buildings, no less than a city in size and with the hill above it like a castle" (JA 15.325).

Scholars such as Virgilio Corbo, Gideon Foerster and Ehud Netzer and others thought that the aquaduct that served Herodium was from Wadi Urtas but from the extant remains it became evident during David Amit's systematic survey in the 1980's that the aquaduct was above the level of the water source. A second aquaduct was discovered that has been traced back from Herodium.<sup>31</sup>

The Hasmoneans had proved that they were able to overcome the problems of water supply in the Judean Fortresses<sup>32</sup> but Herod was innovative and engineered a unique solution, "He brought a large volume of water from a great distance, at vast expense" (JW 1.420). He built a special aquaduct from Herodium that joined into the system that supplied Jerusalem from Solomon's Pools. The water could be controlled allowing more water to be diverted towards Herodium when required.<sup>33</sup> Extra water would have been essential when the royal court was in residence. This was Herod's unique and innovative solution to providing water for his summer palace.

A colossal pool filled by its own aquaduct formed the centrepiece of Lower Herodium. Made of rough cut stones, it was 70m long by 45m wide with a depth of approximately 3m. Dug into the bedrock on the

<sup>27</sup> Ehud Netzer, *The Palaces of the Hasmoneans and Herod the Great*. 102.

<sup>28</sup> Yadin Roman, "Stairway to Heaven", *ERETZ Magazine*, 3.9.2015. 60.

<sup>29</sup> Roman, "Stairway to Heaven". 63.

<sup>30</sup> Roman, "Stairway to Heaven". 63.

<sup>31</sup> David Amit, "What was the source of Herodion's Water?" *Liber Annus* 44 (1994). 561-578.

<sup>32</sup> Gunter Garbrecht and Yehuda Peleg, "The Water Supply of the Desert Fortresses in the Jordan Valley", *The Biblical Archaeologist*, 1994 Vol. 57, No. 3. 160-170.

<sup>33</sup> David Amit, "What was the source of Herodion's Water?" 570-71.

south-western side, the rest of the surface was built on top of a terrace to bring up the level of the land and ensure the pool area was flat. Its entire surface was covered with hydraulic lime mortar.<sup>34</sup> In the centre of the pool was a circular structure like an island. The pool served as a reservoir for Lower Herodium, a swimming pool and for boating (Figure 4). This sight would have been very impressive to anyone who visited the area, seeing an abundance of water and beautiful gardens at the edge of the desert.



Figure 4. The Pool Complex Lower Herodium<sup>35</sup>.

Most of Lower Herodium was built around the large pool which was surrounded by formal gardens and aptly named the Pool Complex.<sup>36</sup> The main garden was located to the east of the pool with some garden area on the three other sides and colonnades beyond the gardens. There were two halls at opposite sides. The eastern hall was built on a circa 13m wide fill with an extremely high terrace retaining wall. There was an octagonal room at the centre of the western hall, with walls decorated with pilasters (a vertical structure that projects away from a wall and is made to resemble an ornamental column) and frescos.

In the north was a large structure that included storage areas, living quarters and stables. The topographic administrators lived here. Herod had ingeniously solved the problem of providing permanent residents at Herodium by moving the district/topography office to the site providing people who could maintain and secure the area throughout the year. A warehouse was constructed to the north-west. To the east the wadi was planted with gardens and orchards which were watered from an outlet close to the bottom of the pool.<sup>37</sup>

Between the west and the south another Roman bath-house was built comprising rooms and pools, a *caldarium* (hot room) heated by the hypocaust system invented in Italy and endorsed by Herod. The bath-house walls were decorated in painted square patterns and in imitation marble. The floors were paved with coloured mosaics in geometric and floral patterns, as well as with pomegranates, grapevines and grape clusters. Herod was

<sup>34</sup> Ephraim Stern (Ed.), *The New Encyclopedia of Archaeological Excavations in the Holy Land*, Jerusalem: The Israel Exploration Society & Carta, 1993, Vol. 3. 622.

<sup>35</sup> Barbara Bergin photograph from visit to Herodium May 2011.

<sup>36</sup> Ehud Netzer, *The Palaces of the Hasmoneans and Herod the Great*. 108.

<sup>37</sup> Ehud Netzer, *The Palaces of the Hasmoneans and Herod the Great*. 110.

careful to avoid representations of living creatures, forbidden by Jewish law. Many new forms of decoration were introduced by him.

Just at the foot of the mountain a huge building was constructed which was the central palace for Herodium. Called the Large Palace possibly because it was more than twice the size of the Palace-Fortress, it is also known as the Lower Palace.<sup>38</sup> It was built on a slope which necessitated the erection of a substructure. The southern part of this building consisted of earth fill, while underground halls were built in the northern section. These two halls extended along the structure's entire length and were used for storage. This was probably the main palace in Greater Herodium as it overlooked the whole of the Pool Complex and other buildings.<sup>39</sup>

An artificial terrace was erected in front of the Large Palace known as the Course. It measured 350m long and 30m wide, nearly three times longer than the palace above it.<sup>40</sup> At the western end of the course another building was built, it was 14m long by 14m wide with walls that were approximately 3m thick.<sup>41</sup> It has been named the monumental building. Inside there was an elaborate square hall. The thick walls were built of well-cut ashlar of soft limestone and coated with plaster, surrounded by niches with half columns set on pedestals between them. It had three entrances one on the east, one on the north and one on the south.<sup>42</sup> Decorations characteristic of elaborate burial monuments in Jerusalem and the ritual bath found here prompted the suggestions that the building was part of King Herod's mausoleum.

### The Tomb Complex

One fact acknowledged by all scholars is that Herod was buried at Herodium and Josephus describes the event:

Archelaus was hailed on his promotion, and the soldiers and the people went in groups to promise him their loyalty and prayed God to bless his rule and set themselves to prepare for the king's funeral. In it Archelaus omitted nothing that would enhance it, and brought out all the royal ornaments to increase the splendour of the deceased. There was a golden bier embroidered with precious stones and a purple bed of various textures, with the dead body upon it, covered with purple, and on his head was a crown of gold and in his right hand a sceptre. Next to the bier were Herod's sons and a crowd of his relatives, and next to them his guards and the regiment of Thracians, Germans and Gauls, dressed as if for war. The rest of the army marched in front, armed and following their captains and officers in good order. After them came five hundred of his domestic servants and freedmen, with sweet spices in their hands. The body was carried for two hundred furlongs, to Herodium, where he had wanted to be buried. That is how the Herod saga came to an end. (JW 1. 670-673).

Herod's tomb complex was built on the north-eastern side of the hill of Herodium near to the monumental stairway with a tomb garden irrigated by a separate reservoir.<sup>43</sup> Excavations and the recreation of the tomb indicate that it was a two-story structure built on a podium. It was built of hard white *meleke* quarried near to the site. When it was complete the mausoleum would have been clearly visible from Jerusalem.<sup>44</sup> Part of the structure was erected on top of a pre-existing cistern reinforced by two thick walls erected across its width to support the huge structure.<sup>45</sup> The platform for the podium was 10.7m by 10.7m in size, created from four courses

<sup>38</sup> Shanks & Cole (Eds.), *Archaeology and the Bible*. 152.

<sup>39</sup> Ehud Netzer, *The Architecture of Herod the Great Builder*. 198.

<sup>40</sup> Ehud Netzer, *The Architecture of Herod the Great Builder*. 195-196.

<sup>41</sup> Shanks & Cole (Eds.), *Archaeology and the Bible*. 155.

<sup>42</sup> Stern (Ed.), *The New Encyclopedia of Archaeological Excavations in the Holy Land*. 624.

<sup>43</sup> Porat, Chachy, Kalman, *Herodium: Final Reports of the 1972-2010*. 117-120.

<sup>44</sup> Silvia Rosenberg & David Mevorah (Eds.), *Herod the Great: The Kings Final Journey* (Jerusalem: Keter Publishing, 2013). 246.

<sup>45</sup> Rosenberg & Mevorah (Eds.), *Herod the Great: The Kings Final Journey*. 246.



of ashlar to overcome the height differences of the previously shaped bedrock.<sup>46</sup> The podium itself was 9.95m by 9.95m built of beautifully carved ashlar. In the centre of these two layers is an inner room which was 3.5m square. A square chamber was constructed above the podium with internal dimensions of 6.5m by 6.5m with a vaulted ceiling. Above was a circular area with 18 columns (each carved from one piece of stone, contrary to Herod's normal building practices), inside was a circular room to hold Herod's sarcophagus. The roof was decorated with funerary urns.<sup>47</sup> The structure is unique and it boasts exceptional architectural ornamentation.<sup>48</sup> Some scholars consider this construction unremarkable but there are none in Israel built of a similar design until decades after Herod's death.

### The Theatre

On the hillside, near the tomb, the remains of an intimate theatre that seated three to four hundred people was discovered on the eastern side of the monumental stairway. It was erected below the entrances to the two large cisterns that served the Palace-Fortress. The walls were plastered on both sides and it was decorated with stucco, architectural decorations such as pillars/pilasters and wall paintings. It was a luxurious space with twelve rows of seats divided by a horizontal walkway (aisle). Behind the theatre chambers had been built with "a royal room" where Herod and his guests could relax. It was beautifully adorned with floral patterns, imitation windows showing pastoral scenes and hanging pictures against a white background.<sup>49</sup> This unique building was dismantled when Herod decided to create the tumulus as his perpetual monument.

### Tumulus/Fill/Mantle

Josephus describes the hill of Herodium as built, "On a hill shaped like a woman's breast" (JW 1.419). It was assumed by all scholars that the artificial mountain had been created when Herod first started to build the Palace-Fortress but stunning new evidence has been uncovered by the Ehud Netzer Expedition Team that explodes this theory completely. The theatre was partly demolished to make way for the tumulus. The entrances to the water cisterns were strengthened with vaulted ceilings to withstand the pressure created by the mantle of earth that covered the hill. The staircase (discussed above) was remodelled over the fill rising to such a gradient that it is almost impossible to climb!<sup>50</sup> The creation of a tumulus by Herod was planned innovatively. Engineering tests would have been carried out to ensure that the slope was steep and impregnable and would not collapse under environmental pressure.<sup>51</sup> The fill was not just a single stratum. The earlier layers were built from chalk gravel with brown soil which was compacted to ensure durability and stability. The final deposit contains chalk blocks that were "lined up" exactly with one another and sealed against the elements.<sup>52</sup> The mantle reached a height of about two-thirds of the way up the Palace-Fortress. The conical shape was visually attractive and the Palace-Fortress was visually more spectacular with such steep and uniform slopes. It made Herodium virtually impregnable, it would be almost impossible to get a siege engine up the hill. The tumulus has endured for over two thousand years thanks to the skill and ingenuity of Herod and his engineers.

<sup>46</sup> Porat, Chachy, Kalman, *Herodium: Final Reports of the 1972-2010*. 213-217.

<sup>47</sup> Rosenberg & Mevorah (Eds.), *Herod the Great: The Kings Final Journey*. 248-253.

<sup>48</sup> Rosenberg & David Mevorah (Eds.), *Herod the Great: The Kings Final Journey*. 262.

<sup>49</sup> Rosenberg & Mevorah (Eds.), *Herod the Great: The Kings Final Journey*. 155.

<sup>50</sup> Roman, "Stairway to Heaven". 63.

<sup>51</sup> Yadin Roman, "The Tumulus of Herodium: A Lasting Memorial to Herod", *ERETZ*. 91-93.

<sup>52</sup> Yadin Roman, "The Tumulus of Herodium". 93.

## Conclusion

Herod built a multipurpose complex at Herodium which was unique and innovative. It exhibited Herod's administrative skill in his planning of this amazing site. His creative imagination and instinctual appreciation of the landscape and how it could be shaped to his own design was incredible. Josephus does not give a lot of detail about Herodium but what he does say has become the catalyst for archaeological investigation at the site since 1836.

Herod's Palace-Fortress was an original design laid out with an amazing sense of symmetry. This unique structure with multi-storied towers was innovative. Nothing comparable has been found in the Hellenistic-Roman world to date. At the base of the hill Herod moulded the uneven topography to his will and transformed the location by creating a mini-city with the Pool Complex at its centre. Furthermore, he cleverly transferred the district capital from Beth-Zurto Herodium to ensure the upkeep and security of the site. He brought water from a vast distance to service the area and ingeniously used public water for private use!

Even in death he proved how innovative he was. He should have been buried in Jerusalem with all the pomp and ceremony due to a king but instead he was buried at Herodium because of a vow he made before he was king. The Tomb Complex he built to his own design was influenced by Italian funerary monuments. The *pièce de résistance* was the tumulus which transformed the site into a Herod's Perpetual Monument.

The archaeological exhibition in Jerusalem called "*Herod the Great: The King's Final Journey*" opened to the public in January 2013 and was a spectacular success. It showcased Herod's innovation, expertise, originality and his ingenious ability to conquer nature under the most extreme conditions. Herodium was one of the largest palaces in the Greco-Roman world and is still one of the most pioneering and spacious known to archaeology.<sup>53</sup>

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