

Roman changes to the hill of Gareb in 'Aelia Capitolina' through a review of the archaeological data

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opposite page

Fig.1

View of the east side
of the old walled city
from Kidron Valley
(R. Sabelli 2007)

Abstract

Following Jewish revolts, in 114-117 and 132-136 AD, the colony of Iulia Aelia Capitolina was founded by Publio Elio Traiano Adriano on the site of Jerusalem – Aelia in his honour and Capitolina because it was intended to contain a Capitol for the Romans – so as to erase Jewish and Christian memories. On the basis of the most recent research it is possible to reconstruct the main phases of transformation by the Romans of a part of the hill of Gareb: from a stone quarry (tenth century BC - first century AD) into a place of worship, first pagan with the Hadrianian Temple (second century AD) then Christian with the Costantinian Basilica (fourth century AD). Thanks to the material evidence, historical testimonies, and information on the architecture of temples in the Hadrianic period, we attempt to provide a reconstruction of the area where the pagan temple was built, inside the expansion of the Roman town in the second century AD, aimed at the conservation and enhancement of these important traces of the history of Jerusalem.

¹ The Gehenna Valley (Wadi er-Rababi today) was for centuries used as city dump and for disposing of the unburied corpses of delinquents, which were then burned.

² The Hill of Gareb, already in the Jebusite age (one of the Pre-Israeli populations of Canaan; XIII-X sec. B.C.), was called Urusalim. Ancient Jerusalem was renamed by Titus (39-81 AD) Bezetha (Gr. Βηζαῖα = New Town), the highest of the four hills of Jerusalem mentioned by Josephus (Josephus, The Jewish War, Book V:149).

³ Golgotha was regularly used for crucifixions.

⁴ Recent excavations (2000-2015) to expand the Tower of David Museum, have unearthed the stones of the Royal Palace where the Roman praetorium, was found and transformed, during the Ottoman reign, into a prison.

The hill of Gareb in Jerusalem to the north of Mount Zion, bounded on the south and west by the Valley of Gehenna (Hinnom Valley)¹, rises to 770 meters above sea level; its lowest point is at its junction with the Kidron Valley, at around 600m asl (Fig. 1).

To the east, with a north-south axis, is the hilly complex of Sion-Ophel-Moria, bordered on the east by the Kidron Valley and on the west by the central valley of Tyropoeon, whose widest and highest point to the north rises to 750m asl.

To the northeast lies the hill complex Bezetha² which, along with the northwest elevation, was included by Herod Agrippa (10 BC-44 AD) in the third circle of walls of the Roman city (Fig. 2).

On the northern offshoot of Gareb, at the intersection between the first and second circle of urban walls, is the central spur of Golgotha³ (Fig. 3).

On the top of Gareb, Herod's palace⁴ constituted the northwest limit of the Jewish city, overlooking the Golgotha area as far as the first century extra muros.

On the basis of the most recent research it is possible to reconstruct the



Fig.2
Plan of the evolution of
ancient Jerusalem and
schematic territorial section
(M. Distefano and A. Pastorelli)

opposite page

Fig.3
Drawing of the Antique town
in the time of Christ: "Disegno
dell'antica suddetta Città in
tempo di Christo" (Amico
1620, XXXV, 56-59)

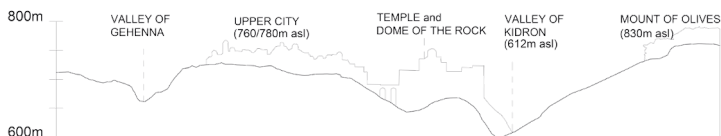
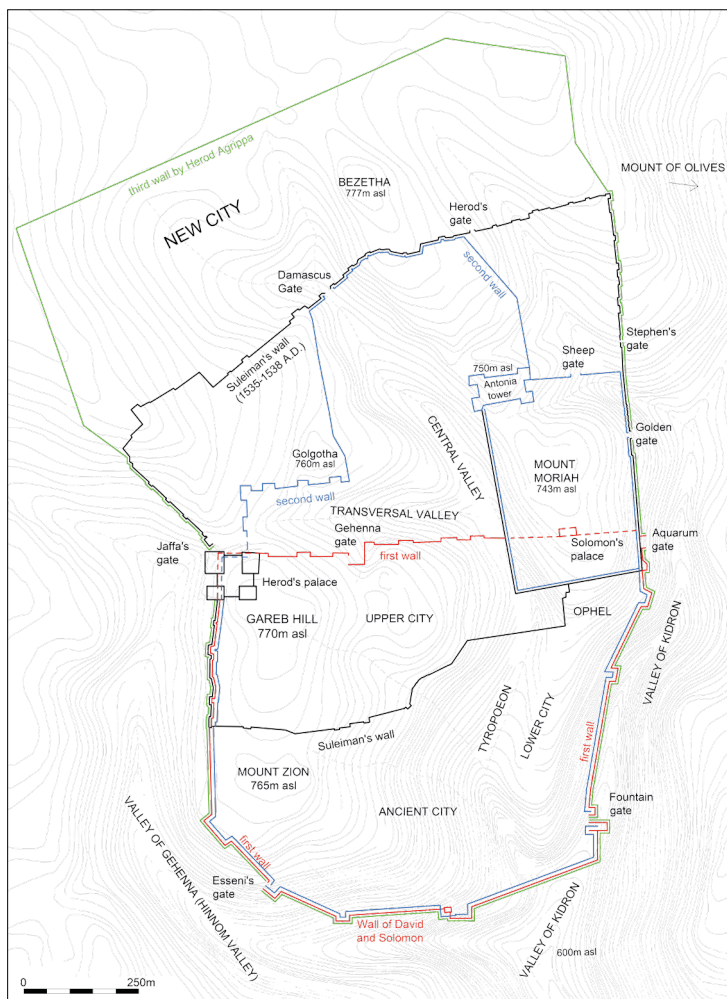
Fig.4
A Reconstruction drawing of
Jerusalem in the first century
AD (L. Ritmeyer)

Fig.4a
Our reconstruction of the
quarry over which the Holy
Sepulchre was built (A.
Pastorelli on L. Ritmeyer's
reconstruction drawing)

⁵ Palestine was won by Pompeio in 63 BC, but ruled by Herod Antipas, Herod the Great, and his three sons. After Herod Agrippa's death in 44 AD, the son of Aristobulus and grandson of Herod the Great, the Kingdom was transformed into an autonomous province ruled by a *procurator Augusti*. Due to riots in 66-73 AD and the destruction of Jerusalem by Titus, an Imperial legate was sent to Jerusalem as Governor. With Jewish revolts, in 114-117 and 132-136 AD, the colony of Iulia Aelia Capitolina was founded by Publio Elio Traiano Adriano on the site of Jerusalem – Aelia in his honor and Capitolina because it was intended to contain a Capitol for the Romans – so as to erase Jewish and Christian memories.

⁶ Main historical sources on the places between the fourth and fifth centuries are Eusebius of Caesarea (Eus., *e vita Constantini* 3, 26, 27), Girolamo (Hier. *epist.* 58, 3), and Egeria (Egeria, *Itinerarium*, XXIV-XXV).

⁷ Between 1960 and 1973, during restoration, V. Corbo conducted the most extensive archaeological study on the Holy Sepulchre, thus contributing to the definition of the key stages of the transformation process of the area of the building; the extensive documentation created by the Technical Department headed by Charles Cotiasnon is part of the three volumes produced by Corbo (see: Corbo 1981/1982; Bagatti 1984).



main phases of transformation by the Romans of this part of the hill of Gareb⁵: from a stone quarry (tenth century BC - first century AD) into a place of worship, first pagan with the Hadrianian Temple (second century AD) then Christian with the Costantinian Basilica (fourth century AD)⁶ (Fig. 4-4a).

V. Corbo⁷ has provided an image of the site, largely confirmed by more re-

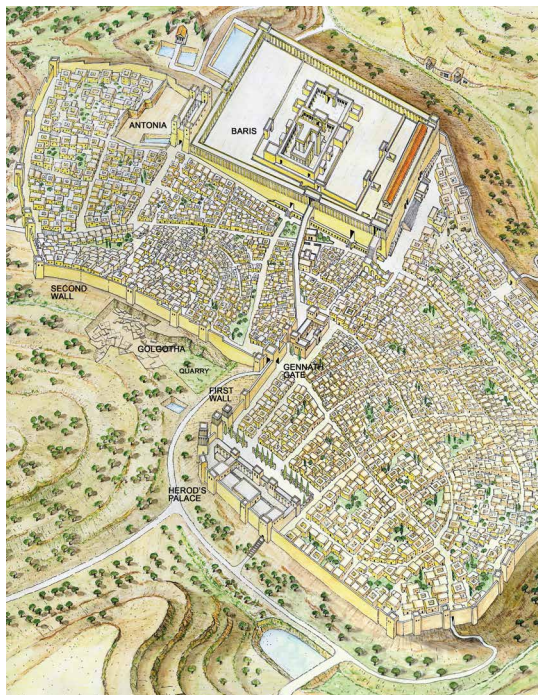
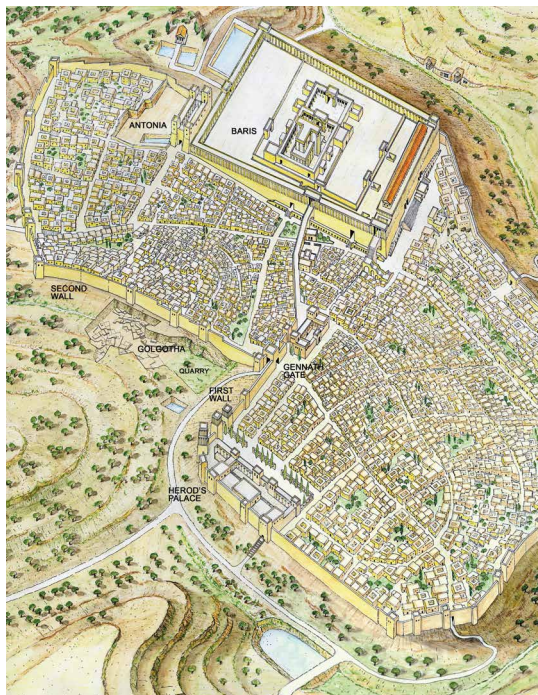
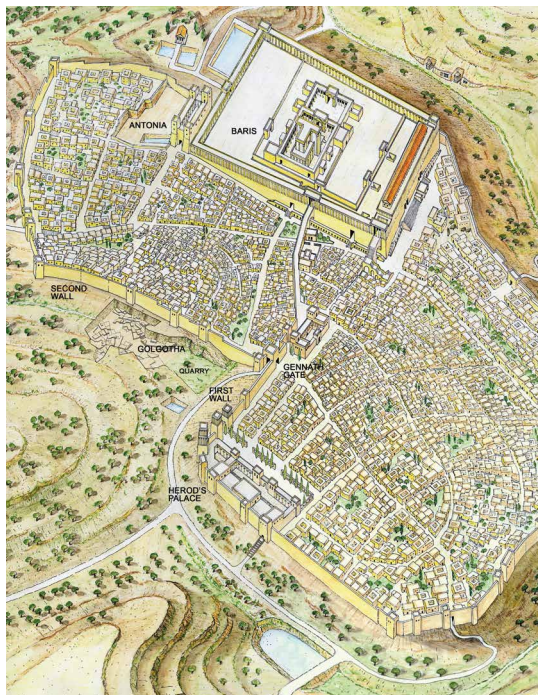
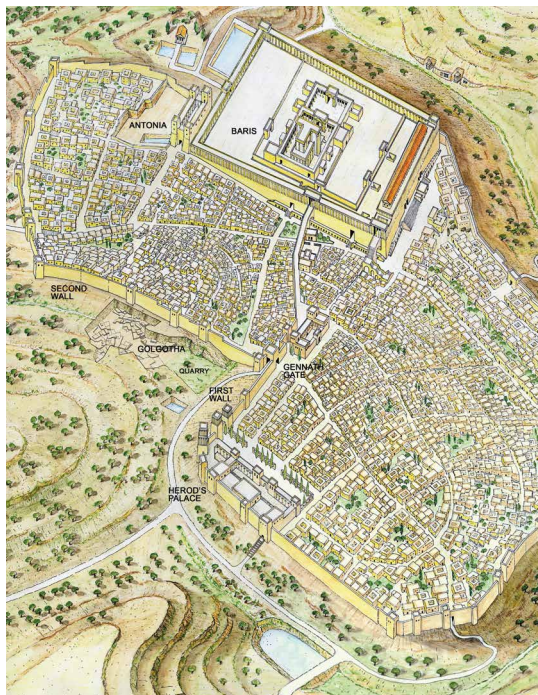
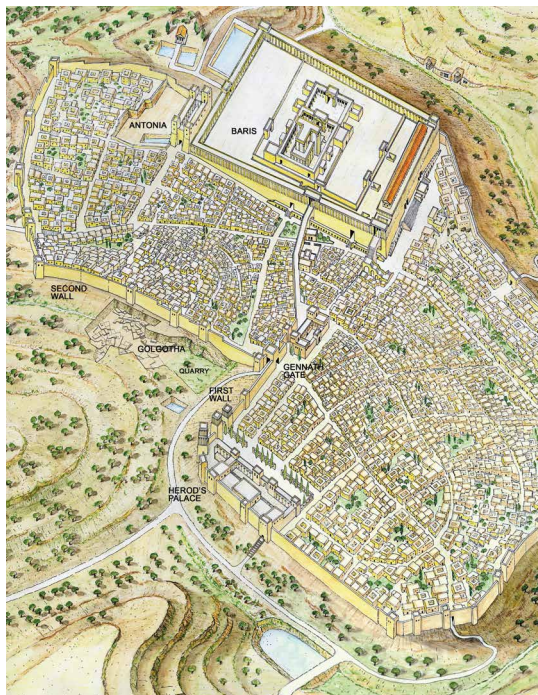
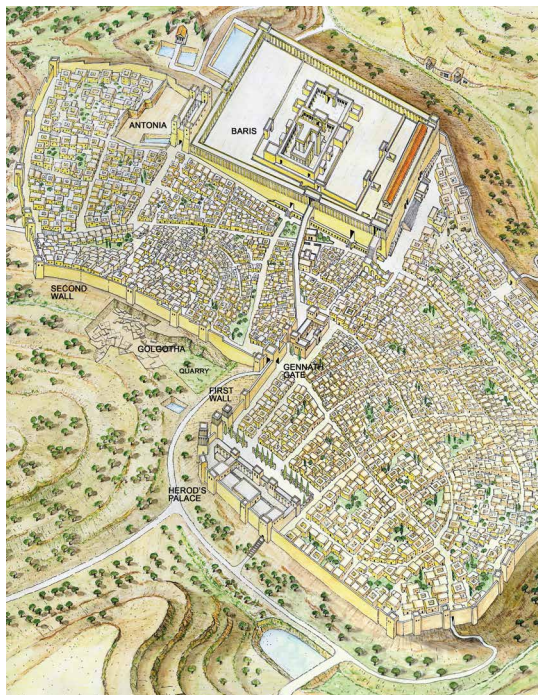
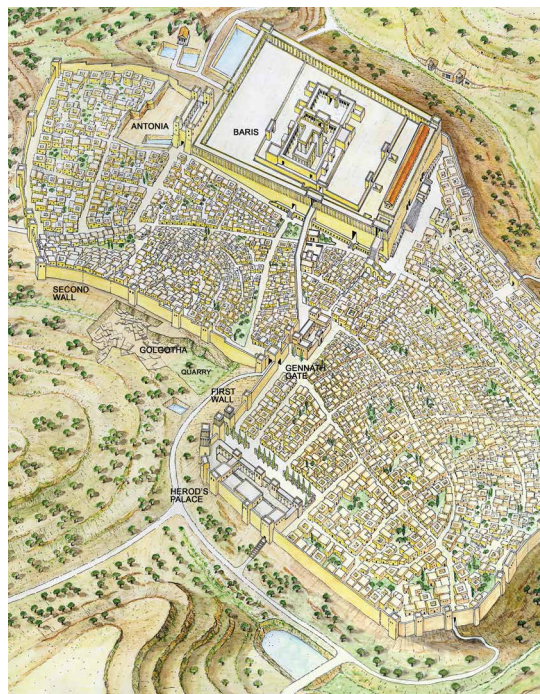
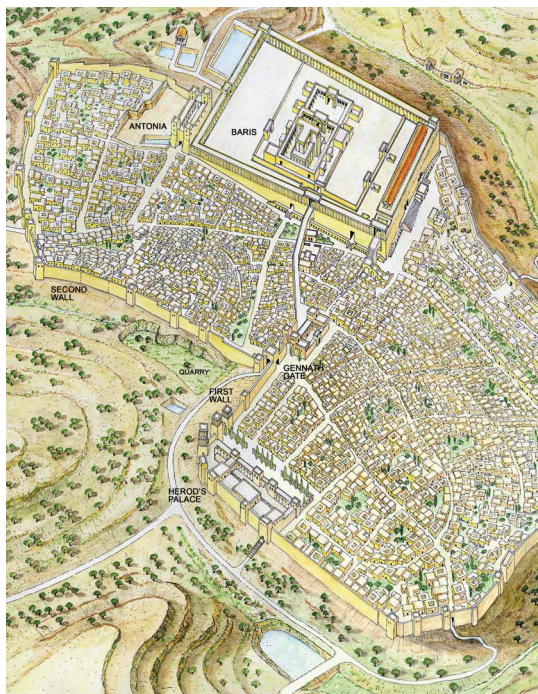
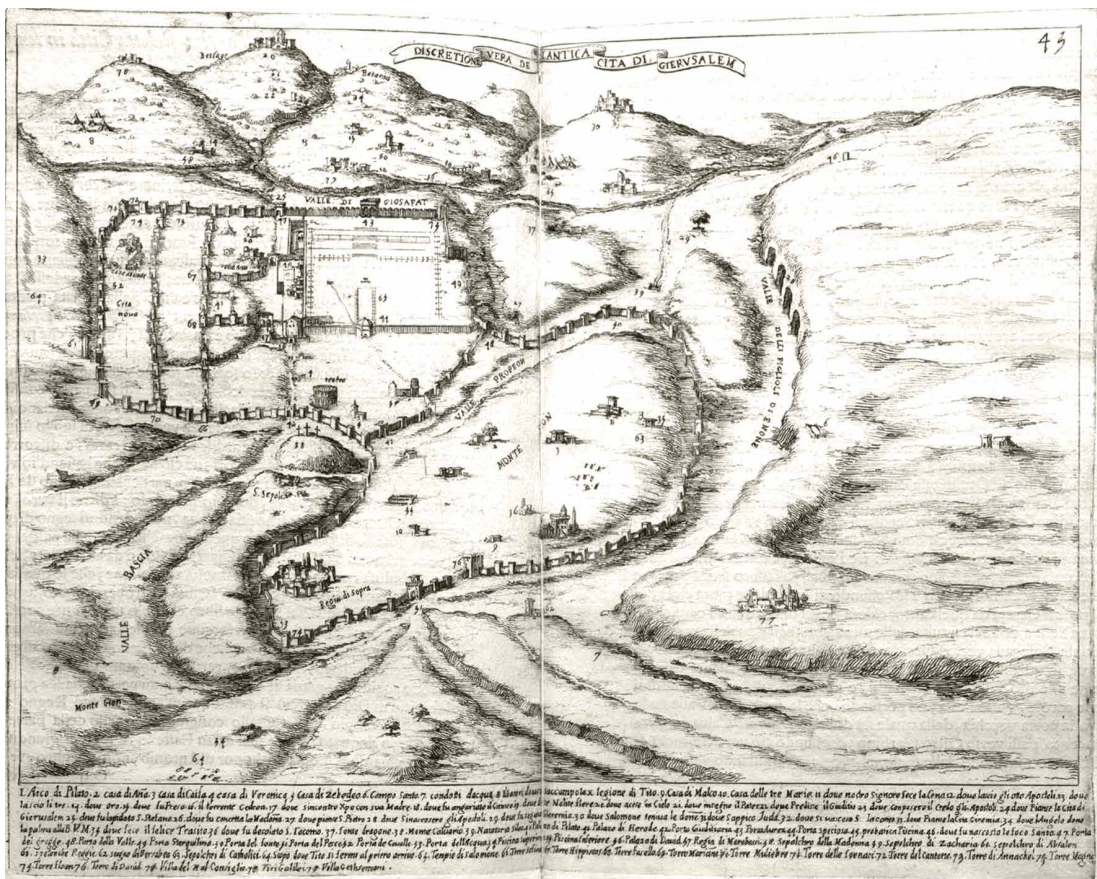
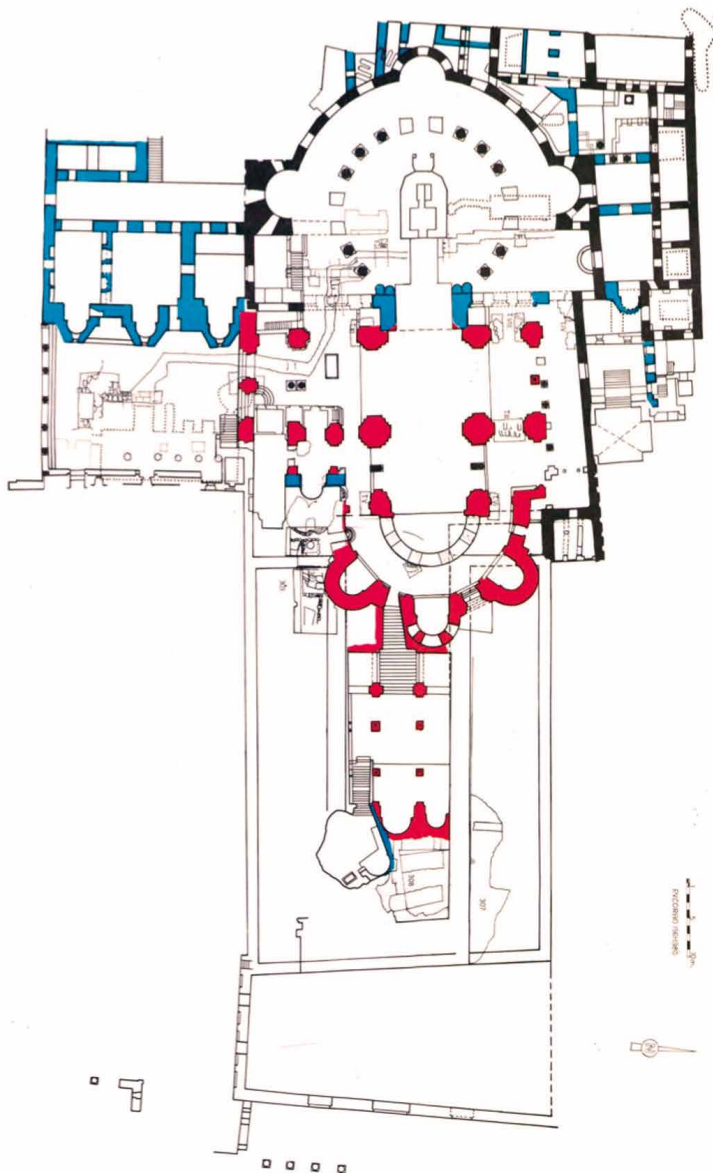


Fig.5
General ground plan of the Holy Sepulchre in the three main periods (fourth, eleventh and twelfth centuries) by Corbo (Corbo, 1981/1982, II, Tab. 1; see note 7)

opposite page

Fig.6
General ground plan of the Holy Sepulchre by NTUA and the University of Athens, Tab. A1 (courtesy of D.-D. Balodimos, A. Georgopoulos and G. Lavvas†)

Fig.7
General ground plan of the Holy Sepulchre by CABeC-UNIFI. Union reduced of the plans of the Ground floor and those (by same authors) of S. Helena and the Invention of the Cross Chapels (CABeC-UNIFI 2009, I-III; in particular Bonora et al. 2009, II, Tab. 1-2/3; see note 8)



⁸ In 1993-1999 the Laboratories of General Geodesy and Photogrammetry of the NTUA, in collaboration with the University of Athens, undertook the huge task of documenting the Church of the Holy Sepulchre at a scale of 1:50 (see: Balodimos et al. 2003; Levvas 2009). In 2006 the Ateneo Centre for the cultural heritage (CABeC) of the University of Florence (D.R. No. 52444 (914) of November 3, 2004) at the request of the Studium Biblicum Franciscanum of Jerusalem and in accordance with the three monumental complex proprietary communities (Greek Orthodox Patriarchate), the Franciscan custody of the Holy Land and Armenian Patriarchate, carried out the analysis of the seismic vulnerability of the Basilica of the Holy Sepulchre. The investigation was begun in March 2007 and completed in 2009 (for metric survey see Bonora et al 2009, II, in CABeC-UNIFI 2009, I-III). In 2010 the writer undertook research to define the morphology of the place before the construction of the Constantinian Basilica; Collaborated in the research S. Fiamminghi (with a contract of collaboration - Decr. DiCR 43/2010, Contr. 28/10/2010, Head of Research Roberto Sabelli) and O. Garbarinio (see. Sabelli et al. 2014).

⁹ See: Corbo 1981/1982, I, 33-37; Bahat 1986, 26-45; Biddle 2000, 28-37.

¹⁰ Its consistency, and the fact that it is easy to work, made it a popular choice for large buildings and fortifications, particularly in Herodian times, hence its name the stone of kings. When exposed to the air Meleke may, in time, take on a golden yellow colour.

¹¹ The level measured in (CABeC 2009) one of three wells of the cistern, the Invention of the Cross cave, is +2.40m, just below the level of the mouth of the well on the surface.

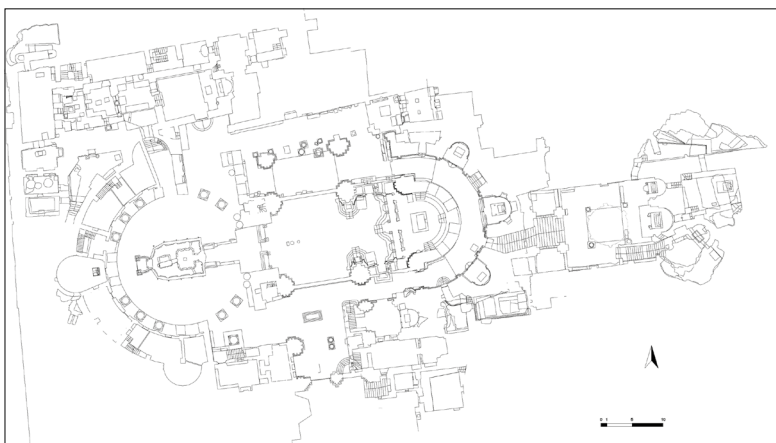
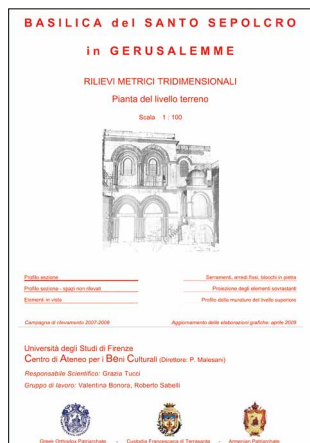
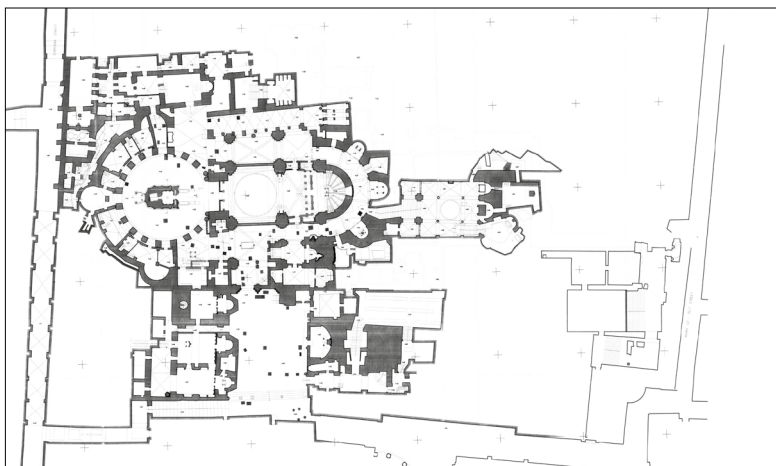
cent studies⁸, which helps us in the reconstruction of the morphology of the site before Roman urbanization (Fig. 5-7a).

After intensive quarry activities and some agricultural work, Hadrian (76-138 AD) significantly modified the area with the transformations of the new Aelia Capitolina⁹.

The quarry was a layered compound of limestone and dolomite characterised by twin strata: below, the Meleke stratum (white and karstified with natural fissures)¹⁰, above the Mizzi Hilu stratum (compact and hard fine-grain limestone, of an even creamy white colour) (Fig. 8).

Within the current complex of the shrine of the Holy Sepulchre, the Chap-

ΕΛΛΗΝΟΡΘΟΔΟΞΟΝ ΠΑΤΡΙΑΡΧΕΙΟΝ ΙΕΡΟΣΟΛΥΜΩΝ	
ΠΑΝΙΕΡΟΣ ΝΑΟΣ ΑΝΑΣΤΑΣΕΩΣ	
ΤΟΠΟΓΡΑΦΙΚΗ - ΦΩΤΟΓΡΑΜΜΕΤΡΙΚΗ ΤΕΚΜΗΡΙΩΣΗ	
ΦΑΣΕΙΣ: Α, Β, Γ, Δ, Ε και ΣΤ	Αντικ. Σελίδα
ΚΑΤΟΨΗ ΝΑΟΥ	A1
ΙΟΥΝΙΟΣ 2003	ΚΥΜΑΚΑ 1:200
ΥΠΕΥΘΥΝΟΣ ΕΡΓΟΥ	
ΛΑΒΑΣ Γ. ΜΠΑΛΑΚΙΩΣ Δ-Δ.	Αρχιτεκτονική: Αρχιτεκτονική/Καθολική/Παραδοσιακή Αθηνών Αρχι & Τοπογράφος Μηχανικός/Καθολικός Ε.Μ.Τ.
ΣΥΝΕΡΓΑΤΕΣ	
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ΚΑΡΑΔΕΔΟΣ Γ.	Αρχιτεκτονική/Καθολική, Επιστ. ΚΑΘ. Α.Τ.Π.
ΔΟΤΟΓΛΗΣ Σ.	Αρχι & Τοπογράφος Μηχ. Επιστ. Σελίδα Ε.Μ.Τ.
ΜΑΚΡΙΝΙ Γ.	Αρχι & Τοπογράφος Μηχ. Επιστ. Σελίδα Ε.Μ.Τ.
ΤΑΜΠΑΚΗ Σ.	Αρχιτεκτονική, Κλίμα, Βιοκλιματική Επιστήμη Α.Τ.Π.
ΒΟΖΙΚΗΣ Ε.	Αρχι & Τοπογράφος Μηχ. Δι. Φωτογραφίας (ΒΑΔΕΕ Γ.Δ.Ε.)
ΠΑΠΑΔΗΣ Γ.	Αρχι & Τοπογράφος Ε.Μ.Τ. Τίτλος: Διπλωμάτης Ε.Μ.Τ. (ΒΑΔΕΕ Β.Γ.Δ.Ε.)
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ΚΕΒΑΚΤΣΗΣ Μ.	Αρχιτεκτονική Μηχανικός Α.Τ.Π. (ΒΑΔΕΕ Δ.)
ΖΗΒΑ Δ.	Αρχι & Τοπογράφος Μηχ. Ε.Μ.Τ. (ΒΑΔΕΕ Δ.)
ΛΑΜΠΡΟΥ Ε.	Αρχι & Τοπογράφος Ε.Μ.Τ. Τίτλος: Διπλωμάτης Ε.Μ.Τ. (ΒΑΔΕΕ Δ.)
ΜΗΤΡΟΠΟΛΙΤΗΣ Θ.	Αρχιτεκτονική Μηχ. Τίτλος: Γενικός Τοπογράφος - Ιεροκήρυκας
ΤΕΧΝΙΚΗ ΥΠΟΣΤΗΡΙΞΗ	Εργ. Γεν. Γραφείο Ε.Μ.Τ. - ΓΕΩΜΕΤ. ΛΟΓ. (ΒΑΔΕΕ Α.Β.Γ.)



el of St. Helena with the cave/chapel of the Invention of the Cross¹¹, the Chapel of St. Vartan¹² and the quarry north of the latter, were part of a tunnel quarry (Figg. 9-11).

Even under Golgotha, towards the east, there was a vast tunnel quarry in exploitation since 1000 BC¹³. Within the chapel of St. Vartan and the chapel of the Invention of the Cross, both layers of rock are visible¹⁴ (Fig. 12).

The ancient quarry was extended to the south – including the area of the Holy Sepulchre, the areas of Muristan, the Church of the Redeemer and the courtyard of the Martin Luther School – with the western boundary at a level of 10.40m (0.00 = 754.18m asl, outside the entrance to the Basilica of the Holy Sepulchre) in what is now Christian Quarter Street (Figg. 13-14). Taking into account the characteristics of the parts of the Hadrianic Temple found in the Russian orthodox Alexander Hospice, (Fig. 15) it is possible to hypothesize that the starting height within the east side of the quarry was at +3.50m, around three metres beneath the present surface of Khan Az-Zait Street (Figg. 16-17).

The rocky roof to the north of St. Vartan at around the height of 0.00, during the

¹² The chapel of St. Vartan, reopened thanks to the earthworks conducted by the Armenian community in 1978, was part of the tunnel quarry connected to the space in the North, where continuity was interrupted during both the transformation of the site, by Hadrian (two Roman structures were found, related to the temple, with a north-south axis) and by Constantine with the foundation of Martyrium (See: Corbo 1981/1982, I, 108; Broshi and Barkay 1985, 108-128).

¹³ See Corbo 1981/1982, I, 29. With particular reference to the area of Calvary, see also Bagatti 1984.

¹⁴ Inside the chapel of St. Vartan were found iron age II ceramics, which Corbo interprets as traces of working, between the sixth century BC and first century AD (see Corbo 1981/1982, I, 110-113). According to Barkay and Broshi, instead, this area was inhabited from the late eighth century BC, with the exploitation of the quarry from the ninth-eighth centuries BC, before the city spread in this area at the end of the eighth century (Broshi and Barkay 1985, 108-128; Bahat 1986, 26-45; Broshi 1993; Broshi and Gibson 1994, 147-155).

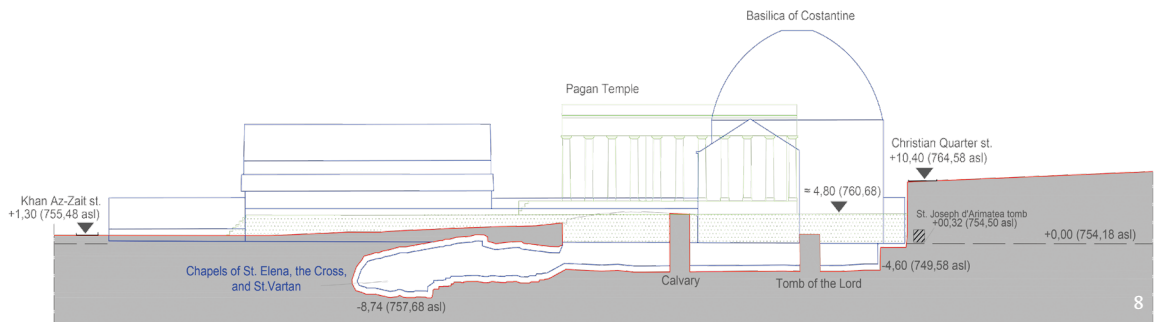
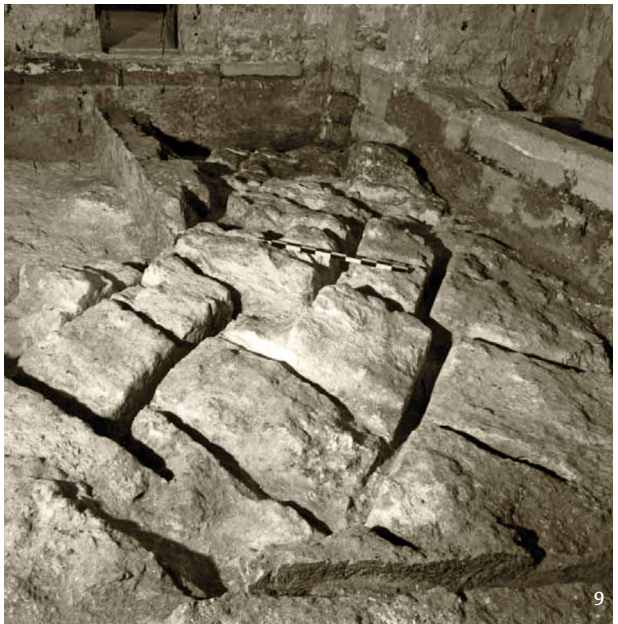




Fig.13
Schematic east-west section
with current levels on geo-
logical layers (M. Distefano)

Fig. 14
Christian Quarter street (R.
Sabelli 2013)

Fig. 15
View of part of the *temenos*
wall in the nearby Russian
orthodox Alexander
Hospice (R. Sabelli 2015)



opposite page

Fig. 8
Schematic drawing of
quarrying and of buildings on
the site of the Holy Sepulchre
in the three main phases
of Roman changes (second
century BC, second century
AD, fourth century AD)
(I. Celiento)

Fig. 9
Quarry signs in the Chapel of
the Finding of the Cross. (CTS,
Holy Sepulchre, from quarry
to garden, ph. 4) <[http://
www.holysepulchre.custodia.
org/default.asp?id=4075](http://www.holysepulchre.custodia.org/default.asp?id=4075)>
(24.09.2015)

Fig. 10
The three wells of the cistern
in the Invention of the Cross
cave (R. Sabelli 2013)

Fig. 11
Section in the Invention of the
Cross cave with level meas-
ured just below the mouth of
the well on the surface
(drawing on the Corbo section
G-H, in Corbo, V. 1981/1982, II,
Tab. 58)

Fig. 12
View of the cave of Invention
of the Cross with both
layers of rock visible (R.
Sabelli 2013)

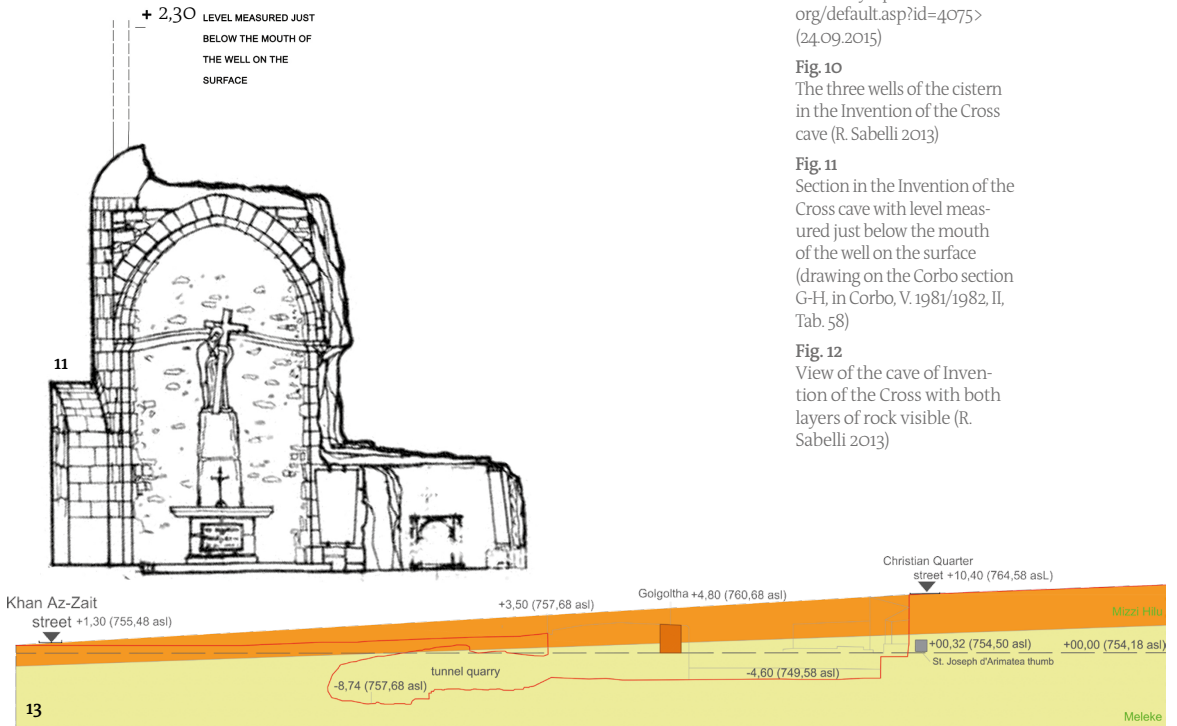


Fig. 16
Khan Az-Zait street (R.
Sabelli 2013)

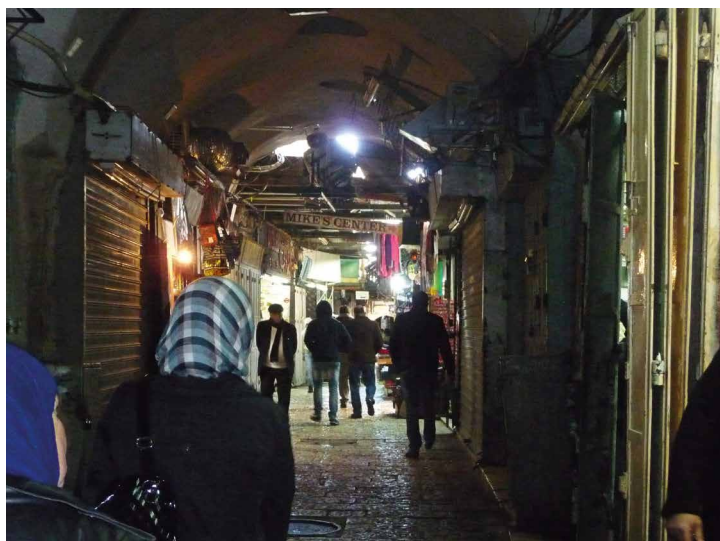
Fig. 17
View of Khan Az-Zait
street today (R. Sabelli
2013)



opposite page

Fig. 18
View of the sections of
rock in the north-west (R.
Sabelli 2013)

Fig. 19
View of the work traces
on bedrock found in the
Church of the Redeemer
(R. Sabelli 2013)



exploitation of the quarry, and until the early Hadrianic building work, would have been between three and four metres below the original ground level.

In the western area of the Holy Sepulchre the contact line between Meleke and Mizzi Hilu is some metres higher including, inside the current Edicule, the remains of Jesus's tomb (Fig. 18).

Although the hill levels were higher to the north and northwest, the sections of rock in the west in the first century BC were between 11 and 14 metres high, with levels between -4m and -5 m; to the east the quarry descended to approximately -6.60m, and in the south to -7.9m¹⁵ (see Fig. 13). Up until the Roman urban transformation, with the building of Agrippa's Third Wall (41-44 AD), this area was outside the walls of the Ancient City, in a scarcely built area, as confirmed by the archaeological data of excavations in Muristan and in the church of the Redeemer¹⁶.

The bedrock itself..., which at this point is 13 metres below the current floor level, shows clear signs of quarrying... Originally, this was an open rocky val-

¹⁵ See Sabelli et al. 2014, 57.

¹⁶ See Wagner-Lux 1972; Vriezen 1978; Wagner-Lux and Vriezen 1998.

ley used mainly as a quarry. From the First century B.C. onwards, the bedrock was covered by horizontal layers of rubble and hearth, suggesting that it may have been used as an area of gardens fenced with walls of fieldstones. (Wagner-Lux and Vriezen 1998, 26-27) (Fig. 19).

Without knowing how far the quarry extended to the north, we can hypothesize that only a part of it was transformed into a garden (Fig. 20).

The Mizzi Hilu limestone from the Hadrianic period *in situ*, and those reused in subsequent transformations of the Holy Sepulchre sanctuary, show that this area of the Gareb quarry was used to provide the material for the expansion of the Roman city and for the construction of the Hadrianic temple.

While it is not extensive, archaeological evidence allows us to assert that the morphology of the quarry certainly influenced first the layout and orientation of the Hadrianic temple structures and, later, of the Constantinian basilica.

“From the seventh century B.C. onwards, an extensive area around Calvary was used as a quarry, following two main directions, namely from S to N and from W to E” (Corbo 1981/1982, II, pl 67) (Fig. 21).

The work traces allow us to hypothesize that transformation work went on in the area in the period preceding the Constantinian basilica¹⁷ (the mausoleum of Anastasis was inaugurated in 336 AD) with prior levelling work to the west and to the east above the quarries of St. Vartan and St. Helena.

However, the weak and fragmented nature of the findings does not make it easy to reconstruct the morphology of the site during the Hadrianic phase.

To build the temple, the western hill from the western *cardus* was quarried to approximately 5m, obtaining a wide plane at the level of the eastern side of the hill, which sloped down to the *cardus maximus*.

The whole area was levelled but Golgotha, consisting of an uneven and very flaky stone, so poorly suited to processing and for use in construction, was spared and incorporated within the *temenos*. According to some researchers, the embankment to level the large quarry area might have been made for the 10th Legion¹⁸.

Doron Bar’s hypothesis¹⁹, according to which the tenth Legion field would be found on the Hill to the north within Aelia, in the area between the western city wall and the third wall, finds no confirmation in recent archaeological excavations by the *Israel Antiquities Authority*²⁰.

If we observe the main directions of the quarry excavations, it becomes immediately apparent that the foundations of the Hadrianic temple were adapted to these, thus determining its slight rotation towards the north-east with respect to the *temenos* (Fig. 22).

The podium of the temple must have been built on the remaining rocky spur to the west, and on a levelling embankment, which was about 10m high²¹ (Fig. 23).



¹⁷ V. Corbo attributes some structures found to the Hadrianian phase, relying essentially on typological comparison (see Corbo 1981/1982, I, 34-37): ‘Corbo stresses the fact that this building technique was also found in the Magdala excavations as well as that of the Herodian fort of Macheronte. Nevertheless, it should not be forgotten that in other structures like Bethlehem, Bethany and Eleona, it characterizes the Constantine period’ (Garbarino 2005, 286, note 207).

¹⁸ Biddle 2006, 63. Legio X Fretensis was formed by Octavian Caesar Augustus in 36 BC. In 70 AD, at the end of the first Jewish-Roman war; the X Fretensis, under the command of the future Emperor Vespasian, participated in the siege of Jerusalem.

¹⁹ Bar 1998, 11.

²⁰ The excavations of the *Israel Antiquities Authority* (2000-2010) brought to light, in the Jewish quarter bordering on the Armenian one, a II-III century AD bath complex used by the tenth Legion with hundreds of terracotta tiles stamped with LEG X FR (Legio Decima Fretensis). This would therefore confirm the hypothesis that the Roman legion was lodged in the Armenian quarter, within the confines of the first wall (see *Israel Antiquities Authority* website: *A 1,800 Year Old Bathing Pool was Discovered beneath a Miqve* - November 2010).

The abandoned quarries partially used as a garden (Corbo 1981/1982, III, Pl. 67)

The two main directions of quarrying according to Corbo's indications (drawing by A. Pastorelli on the general ground plan of the Holy Sepulchre, courtesy of D.-D. Balodimos, A. Georgopoulos and G. Lavvas†); evolution of an initial graphic idea of S. Fiamminghi and R. Sabelli, see Sabelli et al. 2014).

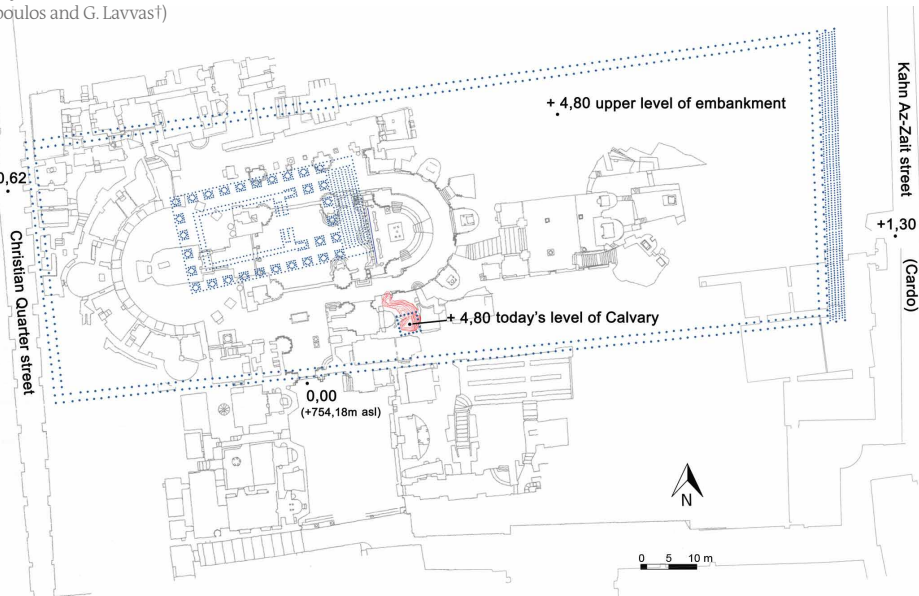
Hypothetical reconstruction of the perimeter of the *temenos* and temple based on archaeological data (drawing by A. Pastorelli) on the general ground plan of the Holy Sepulchre (courtesy of D.-D. Balodimos, A. Georgopoulos and G. Lavvas)



Image of the ancient stone quarry (above) exposed on Shmuel HaNavi St. in Jerusalem <http://www.antiquities.org.il/article_eng.aspx?sec_id=25&subj_id=240&id=1586&module_id> used as example for 3D modelling (below) of the cave and the embankment for the construction of the pagan temple (J.G. Vitale see Sabelli et al. 2014)

Model of the cave on the site of Holy Sepulchre by T. Bull (Coüasnon 1973, Fig. 5, 13)

Hadrianic wall under the *Martyrium*: likely portion of the crepidoma of the pagan temple (section courtesy of D.-D. Balodimos, Georgopoulos and G. Lavvas†)



Therefore the climb from the *cardus maximus* was in a westerly direction, on a horizontal plane large enough for the *temenos*.

At the present stage of research, we do not have reliable data to establish the boundaries of excavation during the Hadrianic period or whether Golgotha was already cut, as we see it today. During the work for the edification of the Constantinian basilica the Hadrianian embankment was removed from the Holy places, but some remained *in situ*²².

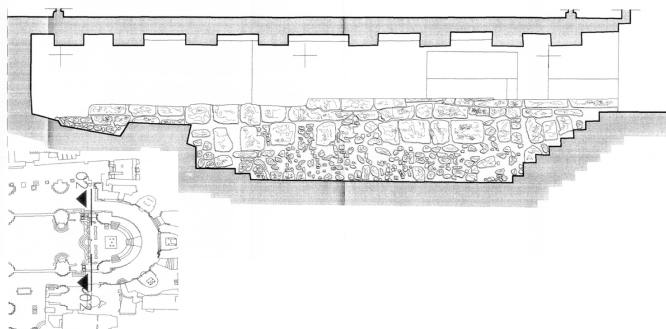
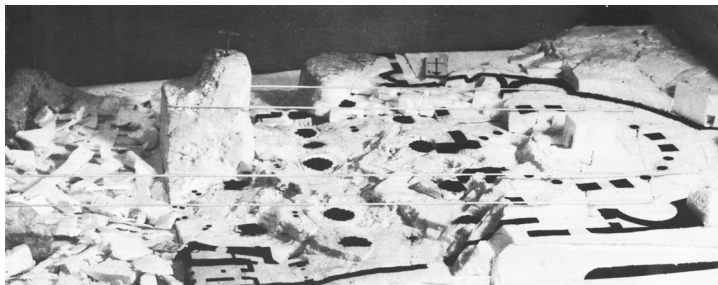
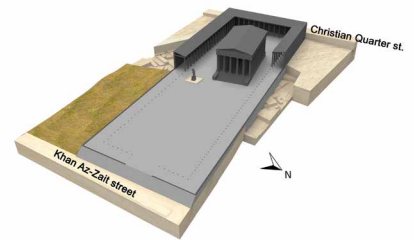
Thus, to build the basilica, Costantine cut further into the hill to the west and, with respect to the Hadrianic building, descended to a level of -0.50 m, around five metres lower than the elevation of the Hadrianian temple and ten metres below the level of the western *cardus*.

Even then, Golgotha, offering unsuitable material for building and reduced to pillar/spur, would have been left isolated among the places of worship²³ (Fig. 24).

Comparing the data (archaeological and documentary) available today with the Gareb Hill morphology in this area, it seems likely that there was a continuity of quarry activities to the east of Golgotha as early as the eighth century BC, not excluding the extension of tunnel quarries to the north/northeast. Moreover, the Hadrianian remains and the foundations of the Constantinian *Martyrium* validate the hypothesis of their use after the first century AD.

Quarrying cuts still visible today show how this quarry extended towards the east/south-east for some metres beyond the foundation wall of the *Martyrium* facade, around 5-6 metres beyond the inside surface of the Constantinian foundation wall (Fig. 25).

The underground space to the east of the spur of Golgotha, instead, seems to have been used exclusively in the Constantinian phase²⁴.



²¹ The structures found during the excavations relating to the Hadrianian complex are foundation structures, set on bedrock at levels between -3.15 m and -2 m in the south and among -0.40 m and -1 m in the north; the only structure found at a lower level, -7.90 m, is the portion of foundation of *temenos* inside the Constantinian cistern under the south square.

²² Eus. de vita Constantini 3, 26, 27. The Hadrianic embankment was moved inside the working site of Constantine; it was reused to build the horizontal walking level of Constantinian Anastasis, about -0.25 m below the current floor. The distribution of the Hadrianic embankment explains the differences in materials and finds, noted several times by Corbo, in the excavations of the embankments made during the construction of the basilica of Constantine.

²³ Garbarino 2005, 245, note 22.

²⁴ This quarry is likely to be related to the excavation made around Golgotha for the worst quality of calcareous material Mizzi Hilu, above 1.5-2 m, requiring underground exploitation to the east of the Hill, thus isolating the spur of Golgotha. In the description of the rock of Calvary, Corbo himself notes that above the 'small cave cut' 3e, at around 0.00 level, the rock looks less compact (see Corbo 1981/1982, I, 97; II, 41).

Hadrianian changes and the pagan temple

Few material elements help us to advance a hypothesis about the concrete constructions on the site at the time of Hadrian. The only certainty, thanks to the concordance between several historical sources, is that a temple was built on the instructions of the emperor Hadrian on the site of Calvary and the tomb of Christ, so as to hide the places venerated by Christians.

This sacred cave, then, certain impious and godless persons had thought to remove entirely from the eyes of men, supposing in their folly that thus they should be able effectually to obscure the truth. Accordingly they brought a quantity of earth from a distance with much labour, and covered the entire spot; then, having raised this to a moderate height, they paved it with stone, concealing the holy cave beneath this massive mound. Then, as though their purpose had been effectually accomplished, they prepared on this foundation a truly dreadful sepulchre of souls, by building a gloomy shrine of lifeless idols to the impure spirit whom they call Venus, and offering detestable oblations therein on profane and accursed altars. For they supposed that their object could not otherwise be fully attained, than by thus burying the sacred cave beneath these foul pollutions (Eusebius, *De vita Constantini* 3, 26).



Remains of Neapolis Gate (under Damascus Gate) dating to the time of the Roman rule of Hadrian in the 2nd century AD (Sabelli 2011)

Various hypotheses have been advanced with regard to the reconstruction of Hadrian's Temple and related areas, including that of V. Corbo repeatedly picked up by various researchers²⁵. Certainly, Hadrian covered the site of Golgotha-Calvary and the grave with an embankment, above which the Romans erected a building for pagan worship, probably dedicated to Jupiter. The marble statue of Venus would have been erected on the rock of Calvary.

From the time of Hadrian to the Empire of Constantine, for about 180 years, the statue of Jupiter was venerated at the Resurrection, while on the rock of the cross had been erected a marble statue of Venus. The intent of the perpetrators of persecution would be that our faith in the resurrection and the cross would fall following their desecration with idols in these holy places (Girolamo, *Hier. epist.* 58, 3).

S. Gibson and J.E. Taylor²⁶, in their reconstruction of the morphology of the quarry area, (Fig. 26) cast doubt on the 'traditional' site of the crucifixion (Calvary spur) and give indications about the localization of what for them must have been the Temple of Venus with its *temenos*; E. Alliata²⁷ disagrees with Gibson and Taylor on their localization of the crucifixion. In agreement with historical sources that recall the statue of Venus on Golgotha, Dan Bahat²⁸ shows the top of the spur with a statue of Venus visible from the courtyard of the temple.

It is obvious that, on the basis of the current state of research, unsupported by sufficient material data and essentially based only on descriptions by historians, we can only advance very fragile reconstructive hypotheses of the site. The Gospel perspective in research and studies is so strong that it is difficult to distinguish their interpretations from the archaeological evidence.

²⁵ See Corbo 1981/1982, II, tab. 68. In any case, the hypothesis of a temple with three rooms does not seem to be supported (see Corbo 1981/1982, I, 37) based only on the word in the *Chronicon Trikamaron Pascale* (PG 92, 613).

²⁶ See Gibson 1994.

²⁷ See Alliata 1994.

²⁸ See Bahat 2011.

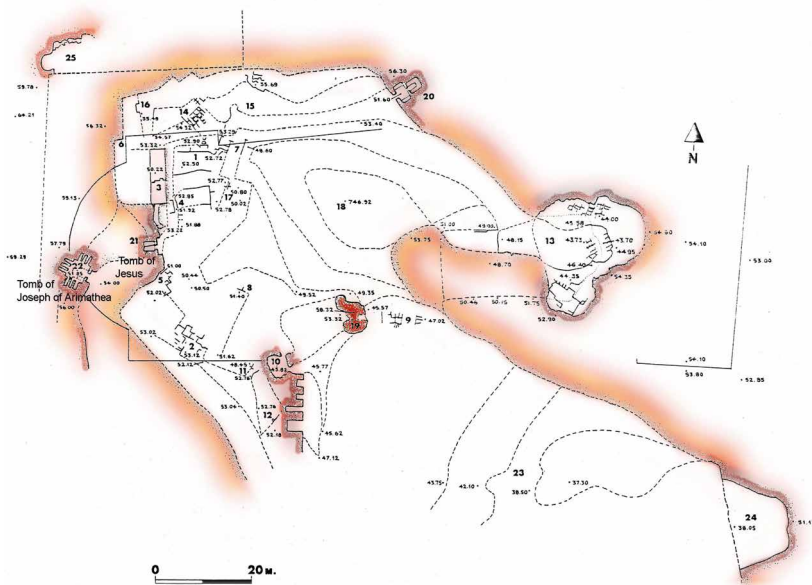


Fig. 26
Reconstructive hypothesis of the quarry in the 1st century AD (Gibson & Taylor 1994, Fig. 37, 54)

Therefore, on the basis of scanty material evidence, historical testimonies, some information on the architecture of temples in the Hadrianic period, and according to the only iconographic element known to us today, i.e. the coin of Antoninus Pius showing a hexastyle temple with, in exergue, the reference to Colonia Aelia Capitolina [COAECAP]²⁹, we have attempted to provide a reconstruction of the pagan temple.

Publius Aelius Traianus Hadrianus, having quashed the third Jewish revolt (135-136 AD), transformed Jerusalem into the colony of *Aelia Capitolina*³⁰. Hadrian's political intention was to restore the imperial cult of Rome.

In Rome in these same years he devoted himself to the building of the Temple of Venus and Rome, which was consecrated, although still unfinished, in 136-137 AD on his return from Judea.

The Romans always sought to refer to the construction of temples in coded schemes, and Hadrian too does not seem to have ventured far from the classical canons for temples.

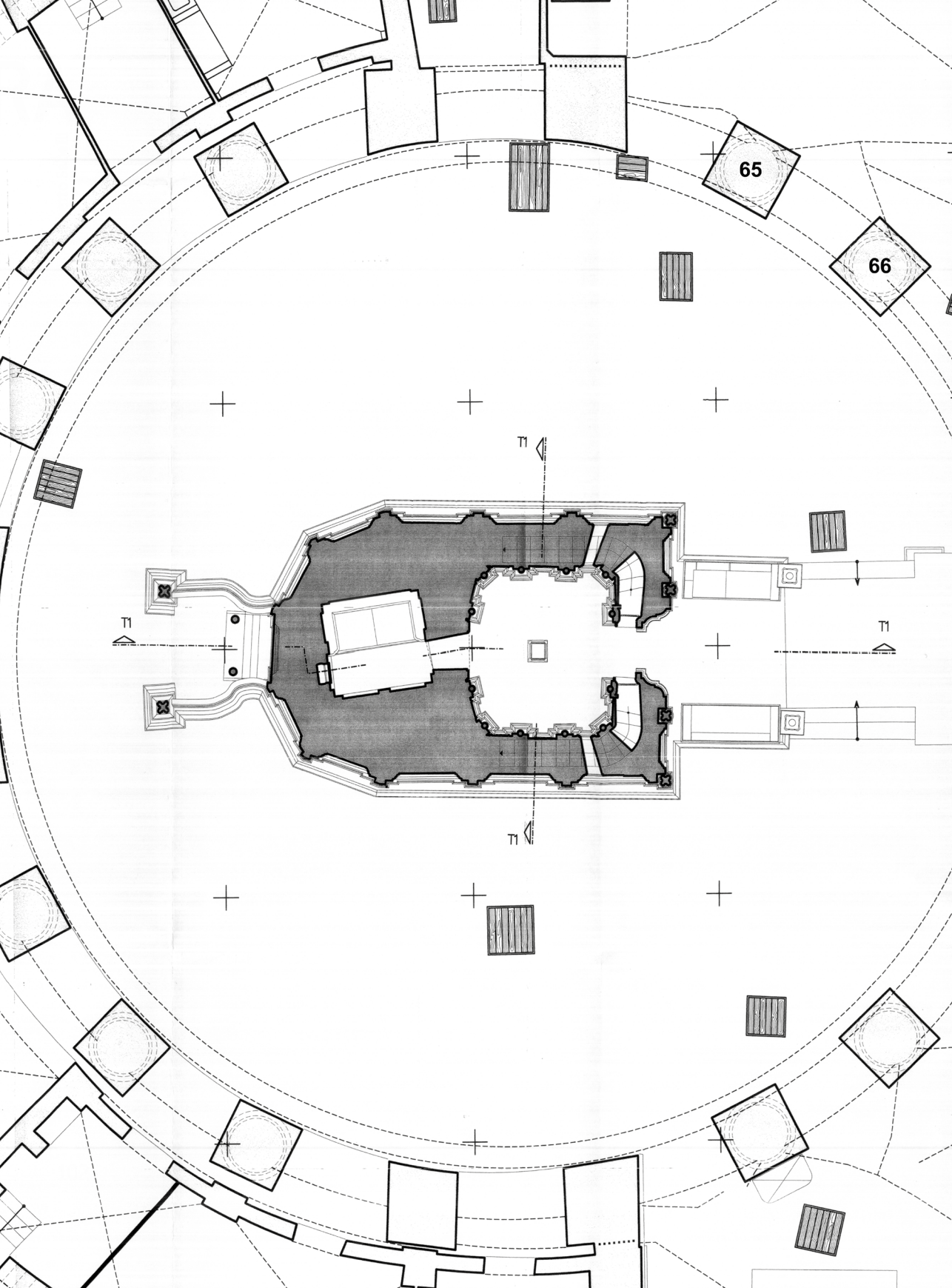
Therefore if Nature has planned the human body so that the members correspond in their proportions to its complete configuration, the ancients seem to have had reason in determining that in the execution of their works they should observe an exact adjustment of the several members to the general pattern of the plan. Therefore, since in all their works they handed down orders, they did so especially in building temples, the excellences and the faults of which usually endure for ages (Vitruvius, *de arch.* III, 1, 4).

In this period Roman building reached its zenith, and the importance of the recapture of Palestine and Jerusalem leads us to think that also here Hadrian imposed the adoption of architectural proportions similar to those used in other temples, in Rome and all over the Mediterranean area³¹. In his list of the remains from the Hadrianic period, Corbo draws in detail

²⁹ See Corbo 1981/1982, I, 36; III, ph. 208.

³⁰ "Today we tend to think of the Jewish uprising not preceding, but following the Foundation of the new town" (Alliata 2001, 6).

³¹ See: Stierlin 1984, 79, 174; Jones 2000, 152.



the reconstruction of a column reassembling two present columns, the 65 and 66 of the Constantinian *Anastasis* between the Rotunda and the northern part of the transept: respectively the lower part and the upper part of an original Hadrianic column³² (Figg. 27-28).

The fact that the former has the initial protective collar of the lower scape and the latter that of the top end, indicates that the two portions are certainly in the correct order: the sum of the heights of the two parts is 7.15m, around 24 Roman feet, with a foot equal to 0.2964m.

M.W. Jones³³, through a wide range of ancient manufactured products, many of which are geographically and chronologically close to ours, gives us the possibility to compare the dimensions of the main parts of a Roman temple with those obtained from Corbo's indications³⁴.

The temple on the Gareb hill would have used the Corinthian order, with the following ratios: diameter/height 1:8; diameter/base 1:0.5 and diameter/capital 1:1. Therefore, the ratio diameter/total height of the column would have been 1:10 and total height of the column/height of the shaft 6:5.

Since the diameter of the column was not less than 1.11m (around 4 feet) and the height of the column must have been between 9 and 10m (approximately 30 and 34 feet), the column drawn by Corbo is around 1.80-2m shorter.

Thus, given that the two column drums are only very slightly tapered, we can hypothesize that the original ones were cut, or else that there was a third central drum.

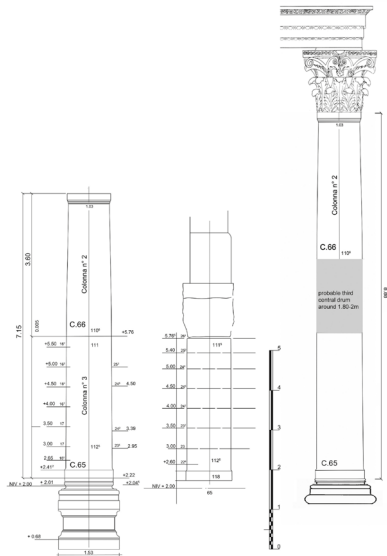


Fig. 27
The two portions of column in the Anastasis that according to Corbo were part of the Hadrianic temple (plan courtesy of D.-D. Balodimos, Georgopoulos and G. Lavvas†)

Fig. 28
Graphic reconstruction of the reassembly of the two columns of the Constantinian Anastasis, between Rotonda and the north sector of the transept (Corbo 1981/82, II, table 21). On the right, the reconstruction of the column considering the missing piece (R.Sabelli)

CORBO's hypothesis	metres	feet
Column diameter	0.89	3.02
h shaft	7.15	24.12
h base	0.45	1.51
h capital	0.98	3.32
h total column	8.58	28.95
h crepidoma	3.22	10.86
h trabeation	2.15	7.24
h drum	2.36	7.96
total h temple	16.30	55.00

³² See: Couâsnon 1974; Corbo 1981/1982, II, tab. 21.

³³ Jones 2000, 147, tab. 7.1; scheme C, 148, Fig. 7.25.

³⁴ Corbo 1981/1982: I, 35-37; II, tab. 21.

Current hypothesis	metres	feet
Column diameter	1.11	3.74
h shaft	8.88	29.96
h base	0.56	1.87
h capital	1.22	4.12
h total column	10.66	35.95
h crepidoma	4.00	13.48
h trabeation	2.66	8.99
h drum	2.93	9.89
total h temple	20.25	68.31

Now, on the basis of dimensions given by Vitruvio and Jones, it is possible to design a planimetric scheme and an elevation of the temple according to the following ratios.

	Building ratio	metres	feet (0.2964m)
Column diameter		1.11	3.74
Base diagonal	2 * column diameter	2.22	7.49
Base side	$\sqrt{(2.22*2.22/2)}$	1.57	5.30
Intercol. width	2* base side	3.14	10.59
Int. Peristyle width	5* intercolumnial	15.70	52.96
Ext. Peristyle width.	5.5* intercolumnial	17.27	58.26
Int. Peristyle length.	width perist. Int*2	31.40	105.92
Ext. Peristyle length	Width perist. Int*2+1/2 intercolumn.	32.97	111.22
Hypothesis cella 1			
a) width cella interior	width ext perist.- 6*base side	7.85	26.48
a) length cella interior	Width int. cella*1,5	11.77	39.72
Hypothesis cella 2			
b) width cella interior	width ext perist.- 2*base side	14.13	47.67
b) length cella interior	Width int. cella*1.5	21.19	71.50

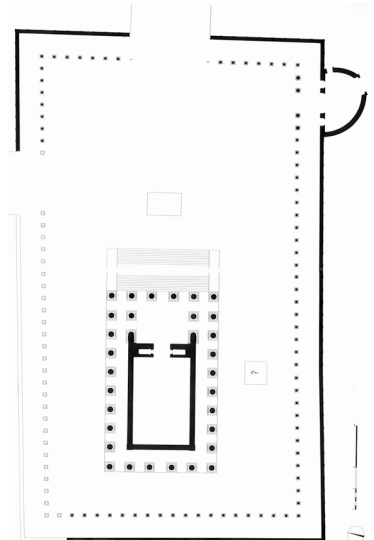


Fig. 29
Amman temple: the model (Kanellopoulos 1994, Fig. 130, 78)

Fig. 30
Amman temple: the ground plan of the sanctuary (Kanellopoulos 1994, Pl. XII)

Fig. 31
Amman temple: elevation of the temple (Kanellopoulos 1994, Pl. XI)

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Fig. 32
Baalbek, temple of Bacchus: side and rear view (Sabelli 2012)

These proportional relationships are confirmed by some examples near Jerusalem, such as the temple of Hercule at Amman (161-166 AD), the temple of Artemide at Jerash (150-170 AD) and the temple of Bacchus at Baalbek (138-161 AD)³⁵ (Figg. 29-34).

Since the *temenos* must have begun from a level which safeguarded the tunnel quarries, the walls of the temple and the *v* were set on an embankment of levelling³⁶.

³⁵ See: Parapetti 1980; Kanellopoulos 1994; Esse and Weber 1999. The great Temple of Amman (Hercules' temple) built under Hadrian, approximately one and a half times greater than the Temple of Aelia Capitolina, has the same direction and rotation of the east side of *temenos*.

³⁶ Corbo identifies some traces of the *favissae* (see: Corbo 1981/1982, I, pp. 35, 67; II tab. 10, 18). Today we believe the votive pits were made in the large embankment built to level the area and then removed during the construction of the basilica of Constantine.









Fig. 33
Baalbek, temple of Bacchus: frontal view
(Sabelli 2012)

Fig. 34
Baalbek, temple of Bacchus: internal view (Sabelli 2012)

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Fig. 35
Restored plan of the fourth century basilica
(Coüasnon 1973, Fig. 1, 16)

Fig. 36
Axonometric reconstruction of the basilica of Constantine: "Église du Golgotha jointe au chevet du Martyrium. Au premier plan on voit l'Anastasis et le baptistère" (Coüasnon 1973, Fig. 3, 18)

Fig. 37
3D model of the of the basilica of Constantine (I. Celiento, on 3D model of the cave by J.G. Vitale, see Fig. 23).

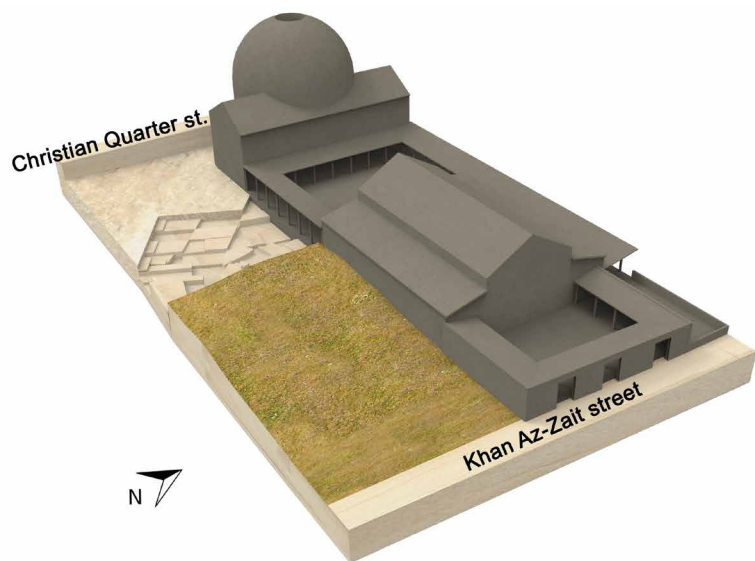
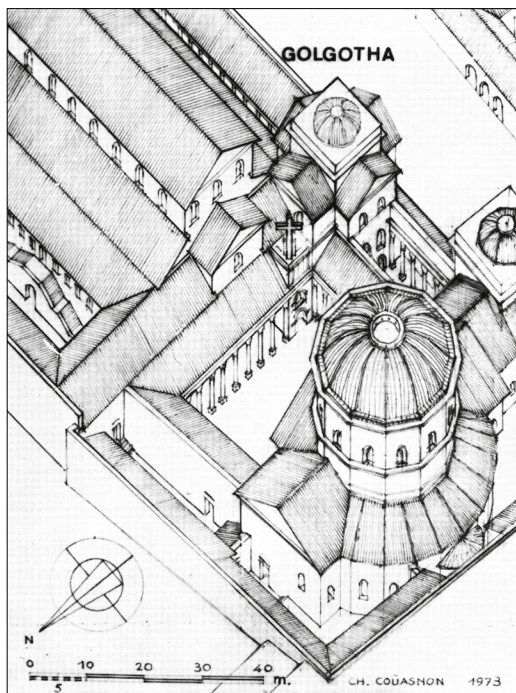
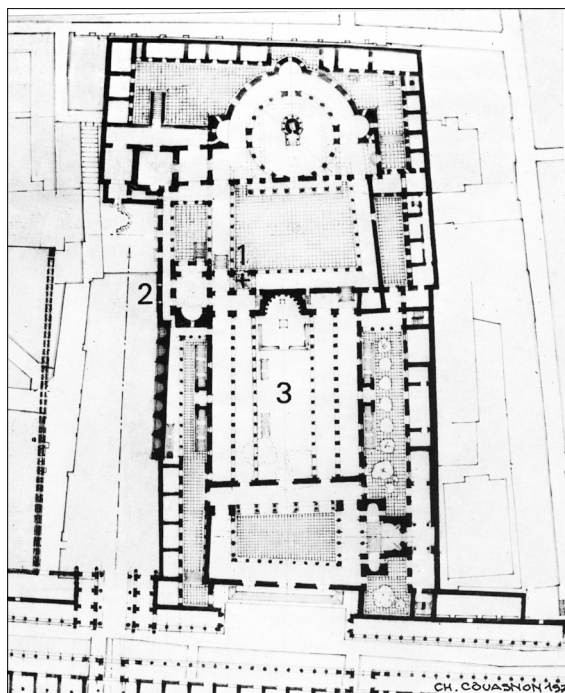
On the basis of the structures pertaining to the north and south external walls of the *temenos*³⁷, together with the eastern and western boundaries formed by the *cardo maximus* and the western *cardo*, we can estimate the dimensions of the *temenos* to be around 140x50m on a longitudinal east-west axis, and with the east side on the *cardo* maximum non-orthogonal to the north and south sides. (see Fig. 22).

The irregularity of the eastern slope must have been caused by the pre-existing *cardo maximus*.

The quarter toward which temples of the immortal gods ought to face is to be determined on the principle that, if there is no reason to hinder and the choice is free, the temple and the statue placed in the *cella* should face the western quarter of the sky... But if the nature of the site is such as to forbid this, then the principle of determining the quarter should be changed so that the widest possible view of the city may be had from the sanctuaries of the gods (Vit. de arch. IV, 5).

In the fourth century, then, on the *cardo maximus*, and on the same longitudinal axis of the pagan temple was set the basilica of Costantine. (Figg. 35-37)

³⁷ See Corbo 1981/1982, II, tab. 54, 62.



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