A New Perspective on the Research of the Underground Complexes in Light of the Excavations at Nesher-Ramla Quarry

Alexander Melamed

University of Haifa, Israel, alex.melamed@mail.huji.ac.il

Abstract

The Nesher-Ramla Quarry (el-Khirbe), located in the northwestern part of the Judean Foothills (Shefela), has been the site of one of the most extensive and long-lasting salvage excavations in Israel, conducted over almost two decades. During this time, dozens of hiding complexes were uncovered. The author has recently published a detailed review of these findings in a separate monograph. The present article summarizes the typology of the Nesher-Ramla hiding complexes and discusses their dating and function. Although similar to hundreds of other hiding complexes in Judea and the Galilee, the subterranean complexes at Nesher-Ramla Quarry and elsewhere clearly predate the Bar Kokhba Revolt. Nesher-Ramla Quarry's outstanding contribution derives from the scale of its excavations and recovered finds, indicating that these underground complexes may have had a history and a function somewhat different than previously believed.

Keywords: typology; dating; function; Bar Kokhba

1. Geographical and Geological Background of the Site

The site of Nesher-Ramla Quarry (henceforth NRQ; also known as el-Khirbe) is located in the northwest of the Judean Foothills (Shefela), ca. 5 km east of Ramla, 6 km southeast of Lod, and 6 km north of Tel Gezer, inside the quarry of the

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Nesher-Ramla Cement Factory (map reference 193222/646760), hence its name. The Ayalon Stream delimits the site in the west, Road 1 in the east-north-east, and Road 431 in the south (Fig. 1). In the Roman period, a road passed nearby, leading from Lod-Diospolis, through Emmaus, to Jerusalem (Fischer, Isaac, and Roll 1996: 83–85).

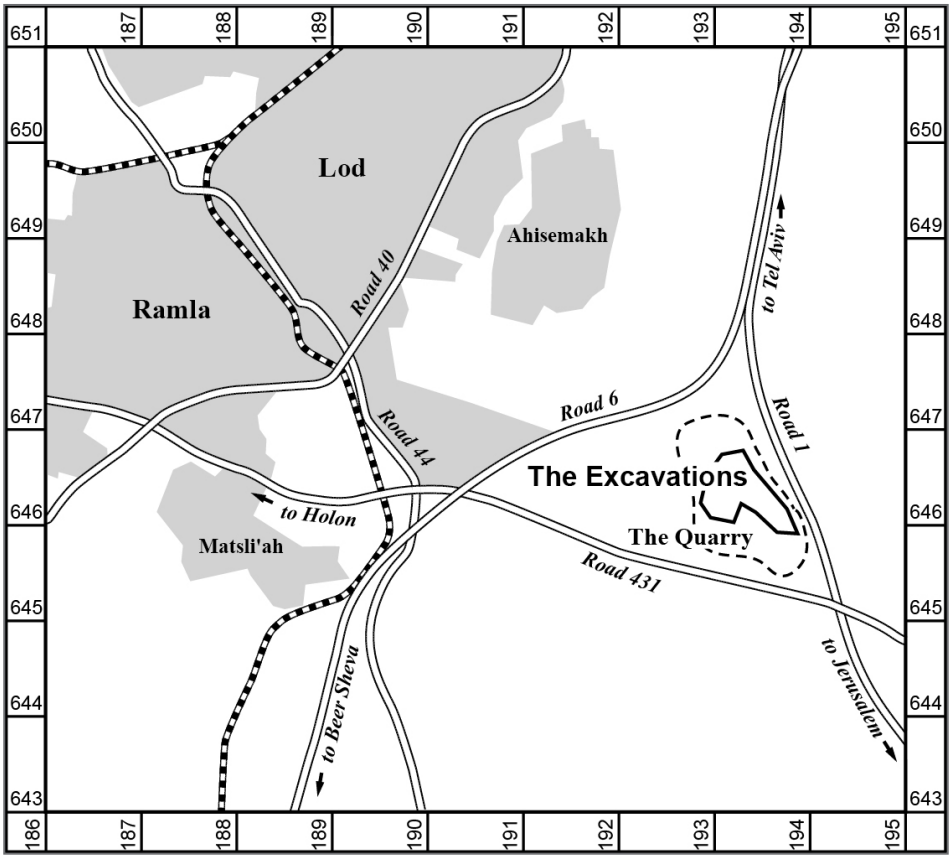

Fig. 1. Nesher-Ramla Quarry, location map.

The site extends over two hills, 110–125 m above sea level, overlooking the coastal plain in the west, Tel Gimzo in the northeast, and Tel Gezer and the Judean Foothills in the south. Its geological composition includes a 2–5 m thick hard Nari crust (calcrete) above an up to 40 m thick layer of soft limestone of the Menuha Formation. The hills are partially covered by alluvial soil (*ḥarsit*) of varying depths. On the northern and especially the western slopes (bordering the Ayalon Stream), the soil cover reaches 2–6 m (for a detailed discussion of the region's geology, see Mor 2012).

2. History of the Site

Salvage excavations at NRQ had begun in the mid-1990s due to rapid quarrying. Initially, various bodies were responsible for the excavations (Avrutis 2012: 4, Table 1.1), but since 2006, all major excavations have been conducted under the direction of Shlomo Kol-Ya'akov and the academic auspices of the Zinman Institute of Archeology, University of Haifa.[1]

The large-scale excavations at the site uncovered traces of human activity from the Middle Paleolithic period (Zaidner et al. 2014), the early Pre-Pottery Neolithic B period (Ullman 2021), the Chalcolithic period, and the EB I (Avrutis 2012; 2018a). After a long hiatus, human occupation resumed in the Persian and Early Hellenistic periods, reaching its peak in the Late Hellenistic and Early Roman periods. While later Byzantine-period operations almost entirely razed this settlement, numerous rock-cut features attest to its scale: water cisterns, olive presses, winepresses (Avrutis 2015), quarries, ritual baths (Melamed 2010a; 2018a; forthcoming), *kokhim* tombs (Kol-Ya'akov 2010: 99–119; 2018: 79–114), and hiding complexes (Melamed 2010b; 2018b; 2020). Significantly, the large number of ritual baths (*miqva'ot*), the distinctiveness of the *kokhim* tombs, and finds such as stone "measuring cups" indicate that the site's population was Jewish, constituting a part of the rural-agricultural hinterland of the city of Lod-Diospolis (Zelinger 2009).

The Great Revolt must have harmed the settlement. While persisting, it also seems to have significantly contracted, as indicated by the reduced amount of ceramic and numismatic finds. Furthermore, the absence of Bar Kokhba coins suggests that it was abandoned before or shortly after the Bar Kokhba Revolt broke out.

After a hiatus spanning the second and third centuries CE, the settlement at the site resumed in the fourth century, reaching a new height in the sixth and seventh centuries (Late Byzantine and Early Islamic periods). Among the features attributed to this settlement are agricultural installations, water cisterns, kilns, residential quarters, two churches (Kol-Ya'akov forthcoming.; Zelinger and Di Segni 2006), a bathhouse (Avrutis 2018b), and many burial installations of various types (Kol-Ya'akov 2010; 2018). This settlement was Christian and was probably destroyed in the 749 CE earthquake. This is implied by signs of destruction in various locations throughout the site and the drastic reduction in the amount of pottery and coins attributed to the late 8th century CE.[2]

1 Concomitantly, two additional excavation projects were carried out at the site: large excavations on behalf of the Israel Antiquities Authority, directed by H. Torga (2008–2009), and prehistoric excavations of an open-air Middle Paleolithic site, directed by Y. Zaidner, on behalf of the Zinman Institute of Archaeology, University of Haifa (2010–2011).

2 This issue will be discussed in later publications dedicated to the Byzantine period at the site.

3. Identification of the Site

Notwithstanding years of excavations and a wealth of finds, no clues for the historical name of the settlement at NRQ were found. The modern official name *el-Khirbe*, as it appears on the Archaeological Survey of Israel map (Shavit 2014: Site 208), simply means "the ruin" in Arabic and indicates that the site was familiar to the region's residents during the British Mandate era. El-Khirbe is located ca. 1–1.5 km west of the Arab village of ʻInnaba (ʻAnaba, ʻAnnabah, ʻAnnabeh, ʻInnaba), abandoned in 1948 and located east and north of present-day ʻAnaba Interchange and north of Road 1 (Fig. 2).

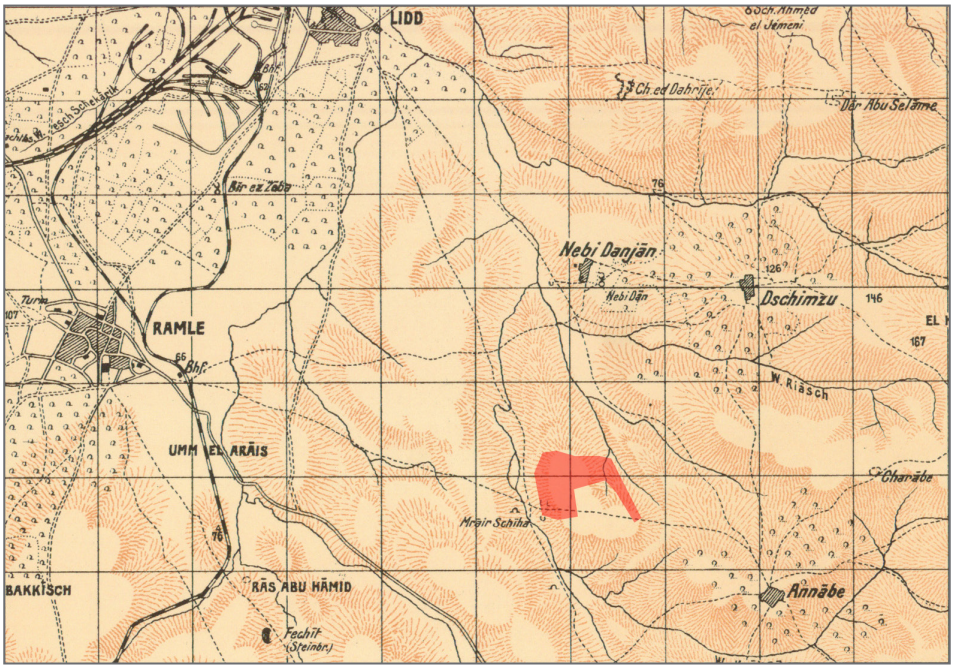

Fig. 2. Nesher-Ramla Quarry on Schumacher's (1918) Ramle map (superposition by Viatcheslav Pirsky).

Several western surveyors visited the site and its surroundings during the late 19th and early 20th centuries. On maps of this period (Schumacher 1918: sheet 68; Conder and Kitchener 1880: sheets XVI–XVII), the site's location is labeled *M'gharet Shiha*, *Mughair Shihah*, or *Mrair Schiha*, meaning "Cave of the Wind."

According to Clermont-Ganneau (1896: 472, 479–480),

> Between El Berriyeh (Barriyeh) and Neby Danian, to the west of ʻAnnabeh, is *Shîhâ*, which is a *khŭrbeh*, with numerous rock-hewn tombs and an immense cavern called *M'gharet Shiha*..

Shiha is situated on a flat hill with gentle undulations, from the top of which there is a view of Ramleh, Lydda, Jimzu, 'Annabeh, and el Berriyeh. I took the bearings of the ruins as well as I could by aid of my little pocket-compass. They are not very prominent, being very grown with tall vegetation, and comprise cisterns and rock-hewn cavities.... To the south-south-west, about a quarter of an hour away, on the other side of the considerable Wady Shiha, are some rock-hewn tombs and some caverns ... I had heard there was in the cavern, "stone urns with serpents carved on them," "seven urns with their lids, arranged in a circle, and the stone serpent all round."

Conder and Kitchener also visited the site of *Mughair Shihah*. They describe the site as "a large cave, apparently natural. It was twice visited, but no remains of the paintings said to exist here by the natives were found. Near this spot, there are a number of rock-cut chambers, to which steps lead down" (Conder and Kitchener 1882: 428). The nearby village of 'Annabeh, they describe as "a village of moderate size, on high ground, surrounded with olives, with a well to the south" (Conder and Kitchener 1883: 14).

Mukaddasi (1886: 33) mentions that one of the gates of the city of Ramla was called "the Gate of the 'Annabah Mosque." This name obviously designated the settlement to which the road, exiting the gate, led—i.e., the village of 'Innaba.

In all likelihood, the village's Arab name preserves the settlement's original name—Bet 'Annaba. It appears on the Byzantine-period Madaba Mosaic Map, where it is located southeast of the city of Lod-Diospolis and is labeled "Anob now Betoannaba." According to Avi-Yonah (1954: 64), "The identification is taken from the *On*. 20, 15 [Eusebius's Onomasticon]; the position of this village on the map corresponds to 'Innaba four miles east of Lod, and not with the Bethannaba of St. Jerome (*ib*.) eight miles east of Lod (Beit Nuba)."

The appearance of Bet 'Annaba on the Madaba map indicates that it was a large settlement and an important point on the pilgrims' route to Jerusalem. However, several surveys and small salvage excavations at Ḥorbat Bet 'Anava and its vicinity (i.e., the location of the Arab village) failed to produce compatible Byzantine-period finds (Kanias 2007; Rauchberger 2008; Elisha 2010; Haiman 2014). Conversely, at NRQ, the Byzantine settlement was definitely substantial: It had two churches and several industrial winepresses. Thus, considering the site's position relative to Lod-Diospolis, its size, its finds, and the name preserved in the nearby Arab village of 'Innaba, I would suggest identifying it with the village of Bet 'Annaba indicated on the Madaba Map.

4. Underground Complexes at Nesher-Ramla Quarry: Typology and Dating

Excavations at NRQ uncovered a sizeable and diverse body of evidence for activity underground, including hundreds of underground installations of various periods and dozens of hiding complexes (Fig. 3; Table 1).[3] A hiding complex is a concealed underground installation hewn into the rock, designed to withhold and shelter goods (e.g., agricultural produce), people, or both. These installations are usually accessed through vertical shafts and often consist of chambers and tunnels. Occasionally, locking devices, like rolling stones, were installed to block given tunnels. Some hiding complexes are connected to water cisterns or other underground facilities. The occurrence of dozens of hiding complexes in one rural settlement might seem suspiciously large. However, this peculiarity can be explained by the fact that, unlike most sites in Israel and due to ongoing industrial-scale quarrying, the entirety of NRQ is being excavated. Consequently, it presents an occasion for discovering many more hiding complexes than would otherwise be possible.

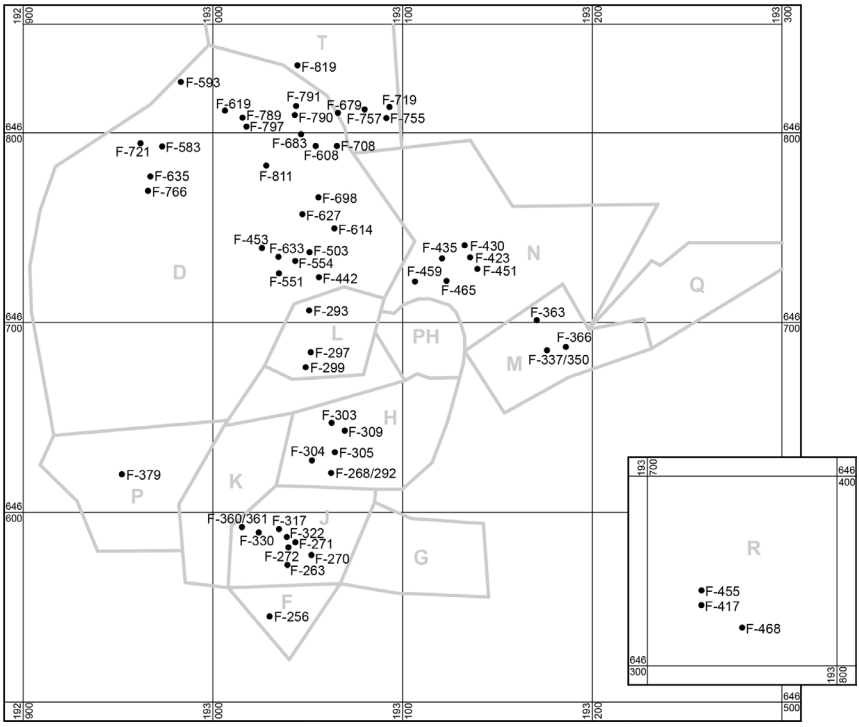

Fig. 3. Nesher-Ramla Quarry, excavation areas and distribution of the hiding complexes.

3 Most complexes are published (Melamed 2010b; 2018b; 2020). Five complexes were published preliminarily without finds (Avrutis, Melamed, and Kol-Ya'akov 2021). They will be fully published together with others in future publications.

Table 1. Hiding complexes excavated in 2006–2019.

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-256	IV	Initially, two *miqva'ot*, converted into a simple hiding complex	**Early Roman:** fragments of a cooking pot and a jug	———	———	Melamed 2010a; 2010b
F-263	III (variant)	Adjoins F-271, F-272, F-317, and F-322 into an elaborate hiding complex	———	———	———	Melamed 2018b
F-268/292	II	Adjoins two water cisterns. A Late Roman burial cave was hewn into the hiding complex's eastern part	**Early Roman:** fragments of storage jars, jugs, juglets, unguentaria, and an imported amphora from Kos. A complete Eastern Sigillata jug dating from the second half of the 1st century BCE to the first half of the 1st century CE	A hoard of four corroded Antigonus Mattathias coins fused into one chunk	A few fragments of chalk vessels	Melamed 2010b; Farhi and Melamed 2014
F-270	III	Adjoins water installation F-261	———	———	———	Melamed 2018b
F-271	II	One plastered chamber; adjoins F-263, F-272, F-317, and F-322 into an elaborate hiding complex	———	2 Late Roman 1 Early Islamic	———	Melamed 2018b
F-272	IV	Apparently used as a silo or an underground storage space; probably provided ventilation for the hiding complex; combines with F-263, F-271, F-317, and F-322 into an elaborate hiding complex	———	2 Alexander Jannaeus	———	Melamed 2018b

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-293	II	The central part of a hiding complex; apparently reused during the Byzantine/Early Islamic period as an underground agricultural installation	**Early Roman:** fragments of a bowl, a cooking pot, jugs, and storage jars; **Byzantine:** fragments of several vessel types	2 Alexander Jannaeus 1 Late Roman	A few fragments of glass vessels	Melamed 2010b
F-297		Probably used as a sewage pit during the Late Byzantine/Early Islamic periods	**Early Roman:** fragments of cooking pots and jars; a fragment of a lamp dated to the end of the 1st century CE or the beginning of the 2nd century CE; **Late Byzantine/Early Islamic:** fragments of several types of vessels	1 Alexander Jannaeus	———	Melamed 2010b
F-299	I	———	**Early Roman:** fragments of bowls, cooking pots, storage jars, and juglets; **Byzantine:** a few fragments of a bowl and a cooking pot	2 Alexander Jannaeus 1 Herod the Great	A bronze nail, a fragment of an iron knife, a small bronze hook, a few fragments of glass vessels	
F-303	III	———	———	———	———	Melamed 2010b
F-304	III	———	**Early Roman:** fragments of bowls, storage jars, a juglet, and a unguentarium	———	A fragment of a chalk vessel	Melamed 2010b
F-305	II	Adjoins water cistern F-320	**Early Roman:** fragments of a cooking pot, storage jars, fragmentary 1st-century CE jug, fragmentary 3rd–2nd-century BCE lamp, and a complete "Judean Radial" lamp of the Hasmonean period	1 Roman governor under Tiberius	———	Melamed 2010b

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-309	II	Adjoins water cistern F-291	**Early Roman:** fragments of cooking vessels, storage jars, a jug, and a unguentarium; an almost complete late 1st–early 2nd-century CE juglet; **Byzantine:** fragments of bowls, basins, cooking vessels, and jars; **Mamluk:** fragments of bowls, cooking vessels, jars, and a jug	———	Half a large bronze ring, an iron tool, an iron horseshoe	Melamed 2010b
F-317	II	Adjoins F-263, F-271, F-272, F-322, and water cistern F-336 into an elaborate hiding complex	**Early Roman:** fragments of a bowl, a cooking pot, a jug, a jar, and a discus lamp; **Byzantine:** a few fragments of several vessel types	———	Fragment of a chalk vessel	Melamed 2018b
F-322	II	Adjoins F-263, F-271, F-272, F-317, and water cistern F-336 into an elaborate hiding complex	**Early Roman:** fragments of bowls, fragments of cooking vessels, two almost complete 1st-century CE cooking pots, a painted bodysherd of a 1st-century CE jug, fragments of a flask and juglets, four almost complete storage jars dating from the 2nd century BCE to the Herodian period, fragments of jars, an imported amphora, and a "Judean Radial" lamp	3 Alexander Jannaeus; 1 The First Jewish Revolt (Second Year); 1 Late Roman; 1 Early Islamic	Bronze belt buckles, An iron nail	Melamed 2018b

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-330	III	———	**Early Roman:** fragments of bowls and kraters, an almost complete 1st-century CE cooking pot, fragments of cooking pots, storage jars, jugs, lids, and three Herodian lamps; **Byzantine:** several fragments of different types of vessels	1 Seleucid; 1 Alexander Jannaeus; 1 Roman governor under Tiberius; 6 Late Roman	Chalk vessel fragments, a silver-decorated brooch, a bronze belt buckle, a lead weight, an iron knife fragment, an iron sickle-blade fragment, an iron rod	Melamed 2018b
F-337/350	II	One of its chambers is square and features benches along its walls; its northern part is cut by a Late Byzantine/ Early Islamic sewage pit	**Early Roman:** fragments of a bowl, cooking pots, jars, jugs, and a juglet	3 Alexander Jannaeus; 1 Herod the Great; 1 Agrippa I; 1 Unidentified Mamluk	Fragment of a chalk bowl, fragment of bronze box	Melamed 2018b
F-360/361	III	———	**Early Roman:** a cooking pot fragment, a complete 1st-century BCE–1st-century CE collared rim jar, fragments of 1st-century CE jars (one restored); **Byzantine:** several sherds of several types of vessels	———	Iron implement	Melamed 2018b
F-363	II	Adjoins water cistern F-364; one rolling stone, one chamber features a bench along its walls; cut by *miqve* F-367	**Early Roman:** fragments of bowls, cooking vessels, and a stopper, a complete 1st-century CE jug	———	———	Melamed 2018b
F-366	I	———	**Early Roman:** fragments of cooking pots, jars, jugs, juglets, and a unguentarium	1 Early Islamic	———	Melamed 2018b

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-379	III (variant)	———	**Early Roman:** fragments of bowls, storage jars, juglets, a unguentarium, and a nozzle fragment (possibly of a "Judean Radial" lamp)	3 Alexander Jannaeus; 1 Late Roman; 1 Mamluk	———	Melamed 2018b
F-417	III	———	**Hellenistic and Early Roman:** fragments of bowls, cooking pots, storage jars, jugs, flasks, and Hellenistic imports, including a fragmented lamp	2 Ptolemaic; 1 Alexander Jannaeus; 1 Mattathias Antigonus; 1 Roman governor under Augustus	———	Melamed 2020
F-423	I	One of the chambers is plastered	**Early Roman:** fragments of storage jars, jugs, and a flask. An almost complete cooking pot (related to the coin hoard and dated from the 1st century CE to the early 2nd century CE)	A 65-coin hoard dating from Ptolemies to Hadrian	Fragmented bronze belt buckle, a bronze arrowhead or a tool	Melamed 2018b; Farhi and Melamed 2014
F-430	I	———	**Early Roman:** a fragmented bowl (1st century BCE–1st century CE), fragments of cooking pots and storage jars	3 Alexander Jannaeus; 1 Roman governor under Tiberius; 1 Trajan; 1 Early Islamic	———	Melamed 2020
F-435	II	Adjoins water cistern F-436; the central part cut by a Byzantine burial cave	———	1 Seleucid; 2 Mamluk	Two bronze implements, a bronze nail, a lead applique	Melamed 2020

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-442	II	Adjoins water cisterns F-501 and F-553; an elaborate hiding complex that apparently developed from at least two smaller hiding complexes	———	2 Ptolemaic; 6 Seleucid; 7 Alexander Jannaeus; 2 Unidentified Hasmonean; 1 Herod the Great; 1 Late Roman; 3 Byzantine; 3 Early Islamic; 3 Mamluk	———	Melamed 2020
F-451	II	Adjoins water cistern F-462; two rolling stones, one of them was found in situ in its rail	———	1 John Hyrcanus I; 3 Alexander Jannaeus; 1 Unidentified Hasmonaean Ruler; 1 Herod the Great; 2 Late Roman	———	Melamed 2020
F-453	II	Two rolling stones	**Early Roman:** a complete jar (first century BCE – first century CE)	1 Alexander Jannaeus	———	Melamed 2020
F-455	I	———	———	1 Seleucid	———	Melamed 2020
F-459	II	———	**Byzantine:** fragments of LRC and CRS bowls, fragments of a cooking pot, storage jars, jugs, and a lamp	1 Seleucid; 5 Alexander Jannaeus; 1 Roman governor under Tiberius; 1 Early Islamic	Bronze needle and ring	Melamed 2020
F-465	II	The central part of the hiding complex cut by Byzantine burial cave F-464	**Early Roman:** fragments of a bowl, cooking pots, and a jug	2 Alexander Jannaeus	Bronze implement, lead ring	Melamed 2020

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-468	III	Part of hiding complex cut by *miqve* F-466	**Early Roman:** complete and fragmented storage jars, cooking pots, and jugs	2 Herod Archelaus	———	Melamed 2020
F-503	II	Adjoins water cistern F-505; one of the chambers is cut by *miqve* F-548	———	1 Seleucid; 1 John Hyrcanus I; 2 Unidentified Hasmonean or Herodian; 1 Late Roman	———	Melamed 2020
F-551	I (variant)	———	———	———	———	Melamed 2020
F-554	III (variant)	Adjoins water cistern F-505	———	1 Late Roman	———	Melamed 2020
F-583	III	Penetrates water installation F-620 and apparently connects through it with hiding complex F-721	**Early Roman:** fragments of bowls, a cooking pot, a jar, juglets, and a unguentarium; **Late Byzantine and Mamluk:** fragments of several vessel types	2 Early Islamic	———	Melamed 2020
F-593	II	Cut by *miqva'ot* F-596 and F-651; adjoins water cistern F-597 that later became part of the hiding complex	**Early Roman:** numerous fragments of bowls, a basin, cooking vessels, storage jars, jugs, juglets, flasks, and Herodian lamps. A few fragments of imported amphorae, a nearly complete 1st-century CE jar, and an almost complete Herodian lamp; **Late Byzantine/Early Islamic:** fragments of bowls (mostly imported), basins, cooking vessels, lids, jugs, and imported amphorae; **Mamluk:** fragments of several vessel types	3 Seleucid; 1 John Hyrcanus I; 2 Alexander Jannaeus; 1 Unidentified Hasmonaean Ruler; 2 Herod the Great; 1 The First Jewish Revolt; 6 Late Roman; 2 Early Islamic; 2 Mamluk	An assemblage of chalk vessels probably related to *miqva'ot* that postdate the hiding complex; iron nails, bronze pin	Melamed 2020

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-608/708	II	———	**Early Roman:** fragments of bowls, cooking vessels, jars, a jug, and a juglet; **Late Byzantine/Early Islamic:** fragments of bowls, jars, jugs, and a fragmentary juglet	1 Seleucid; 1 Late Roman	———	Melamed 2020
F-614	I (variant)	———	———	———	———	Melamed 2020
F-619	IV	Apparently, an incomplete hiding complex	———	———	———	Melamed 2020
F-627	II	Adjoins water cistern F-605; two rolling stones and several other stones to block passages	———	1 Alexander Jannaeus	———	Melamed 2020
F-633	I	Four hewn depressions in the floor of one of the chambers, apparently for storage jars	———	———	———	Melamed 2020
F-635	II	Adjoins water cistern F-579	**Early Roman:** fragments of a bowl, storage jars, and a unguentarium; **Late Byzantine/Early Islamic and Mamluk:** fragments of several vessel types	2 Alexander Jannaeus; 2 Unidentified Hasmonaean Ruler; 4 Late Roman; 3 Byzantine	———	Melamed 2020
F-679	II	Adjoins water cisterns F-679a and F-688 and F-757 into an elaborate hiding complex; apparently related to F-683	**Early Roman:** fragments of cooking vessels, jars, jugs, and juglets; **Byzantine and Late Byzantine/ Early Islamic:** numerous fragments of bowls, basins, cooking vessels, jars, an amphora, and a mortarium	———	———	Melamed 2020

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-683	I	Apparently related to F-679	———	———	———	Melamed 2020
F-698	I (variant)	———	**Early Roman:** fragments of bowls, cooking vessels, jugs, ETS imported and local vessels, an imported amphora, Herodian lamps, a complete 1st-century BCE miniature lamp, and an almost complete early 1st-century discus lamp	1 Seleucid; 1 John Hyrcanus I; 4 Alexander Jannaeus; 1 Roman governor under Nero; 1 Roman Imperial under Nero; 1 The First Jewish Revolt; 1 Late Roman; 1 Early Islamic	———	Melamed 2020
F-719/755	II	Adjoins *miqve* F-578 that columbarium F-720, and, possibly, hiding complex F-757	**Early Roman:** fragments of bowls, cooking vessels, storage jars, a unguentarium, and a lid	1 Seleucid; 1 Hadrian	Several fragments of chalk vessels, probably related to *miqve* F-578	Melamed 2020
F-721	II	Cuts water installation F-620 and apparently adjoins, through it, hiding complex F-583	———	1 Alexander Jannaeus; 1 Agrippa I; 3 Late Roman; 3 Early Islamic; 3 Mamluk	———	Melamed 2020
F-757	II	The complex's central part was cut by a Byzantine burial cave; adjoins water cistern F-688 and hiding complex F-679 into an elaborate hiding complex; adjoins columbarium F-720 and through it, possibly, hiding complex F-719/755	———	———	———	Melamed 2020

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-766	I	———	**Early Roman:** fragments of bowls and storage jars; **Late Byzantine/Early Islamic:** numerous sherds of several vessel types	1 Early Islamic	———	Melamed 2020
F-789	IV	Mostly cut by *miqve* F-622	———	1 Trajan; 2 Late Roman	———	Melamed 2020
F-790/791	III (variant)	———	———	1 John Hyrcanus I; 1 Alexander Jannaeus; 3 Late Roman	———	Melamed 2020
F-797	IV	Apparently, incomplete	———	———	———	Melamed 2020
F-811	I	———	———	———	———	Melamed 2020
F-819	II	Adjoins water cistern F-776; the tunnel entering the cistern was blocked, probably when the cistern reused	**Early Roman:** fragments of a casserole, a cooking pot, a storage jar, and a jug	1 Seleucid; 1 John Hyrcanus I; 2 Alexander Jannaeus; 2 Byzantine	———	Melamed 2020
F-939	III					Avrutis, Melamed, and Kol-Ya'akov 2021
F-946	III	One of the chambers is plastered				Avrutis, Melamed, and Kol-Ya'akov 2021

Feature No.	Type	Comments	Pottery	Coins	Other Finds	Publication
F-949	III	One rolling stone				Avrutis, Melamed and Kol-Ya'akov 2021
F-955	II?	Adjoins water cistern F-956?				Unpublished
F-958	III					Unpublished
F-960	I (variant)					Avrutis, Melamed, and Kol-Ya'akov 2021
F-967	III	A long (ca. 15 m) dead-end tunnel				Avrutis, Melamed, and Kol-Ya'akov 2021
F-975	II					Unpublished
F-982	II					Unpublished
F-984	III					Unpublished
F-985/986	II	Adjoins water cistern F-971				Unpublished

It should be emphasized that not all underground installations at the site defined as "hiding complexes" were initially hewn for the purpose of hiding humans. About a quarter of the underground complexes were simple and small and must have been used as underground storage facilities. In some cases, these facilities were interconnected by short tunnels and passages and developed into elaborate hiding complexes over time.

4.1. Typology

Establishing a typology of hiding complexes is by no means straightforward. After all, no two systems are identical. In the past, attempts have been made to create a typology for the Judean Foothills' hiding complexes. Kloner and Zissu's (2003b) ten types is a case in point. They defined some types by their shape and others by their purpose, ultimately supporting a distinction between two main groups: family complexes and public complexes (ibid., 183–186).

Recently, Shivtiel and Osband (2019) suggested distinguishing two types of Galilean hiding complexes: crude complexes, which are often small and simple, and elaborate complexes, which are large, intricate, and carefully hewn. They noted that the crude complexes were probably hewn in relation to the Great Revolt, while the elaborate complexes were later, sometimes continuing in use into the second century CE (ibid., 255).

Recently, I proposed distinguishing five categories of NRQ subterranean features: four main types that vary in size, complexity, and layout (Melamed 2020: 267–285) and a fifth category of composite systems.

4.1.1. Type I

Type I installations (Figs. 4, 5) are small. Although they share some characteristics with the more elaborate Type II and III hiding complexes (e.g., vertical entry shafts, small bell-shaped chambers, and short passages), they lack long tunnels and access to water cisterns. The chambers are usually arranged in a vertical layout, in two or three levels. A variant of this type has a more horizontal layout and is equipped with short tunnels (up to 2 m long; Figs. 6, 7).

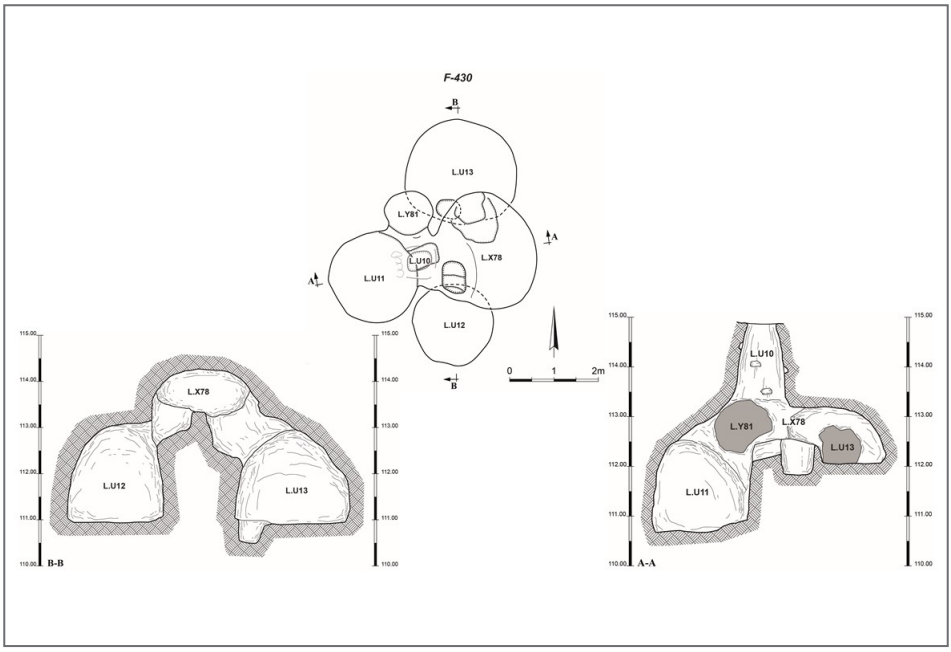

Fig. 4. Hiding complex F-430, plan and sections.

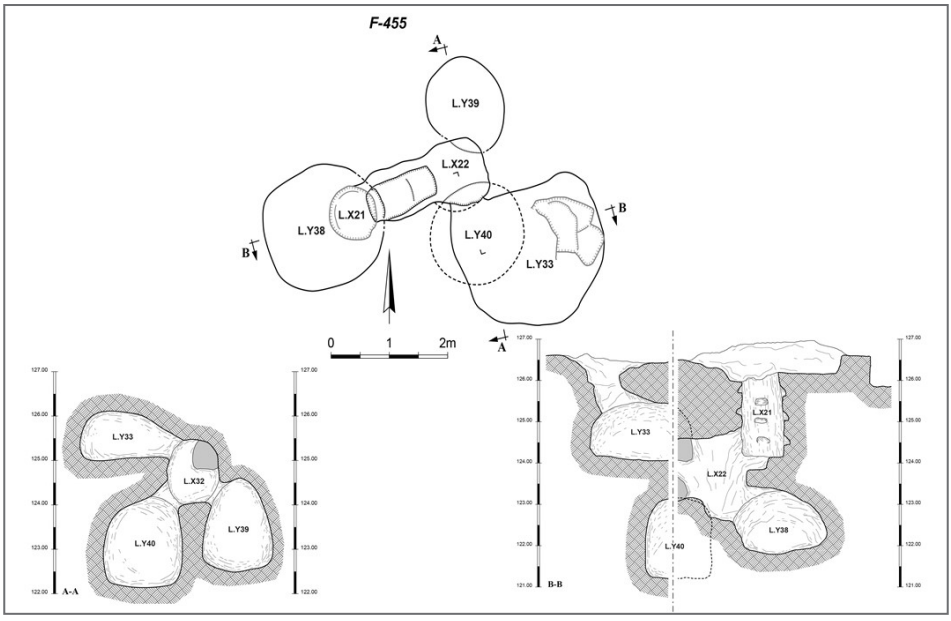

Fig. 5. Hiding complex F-455, plan and sections.

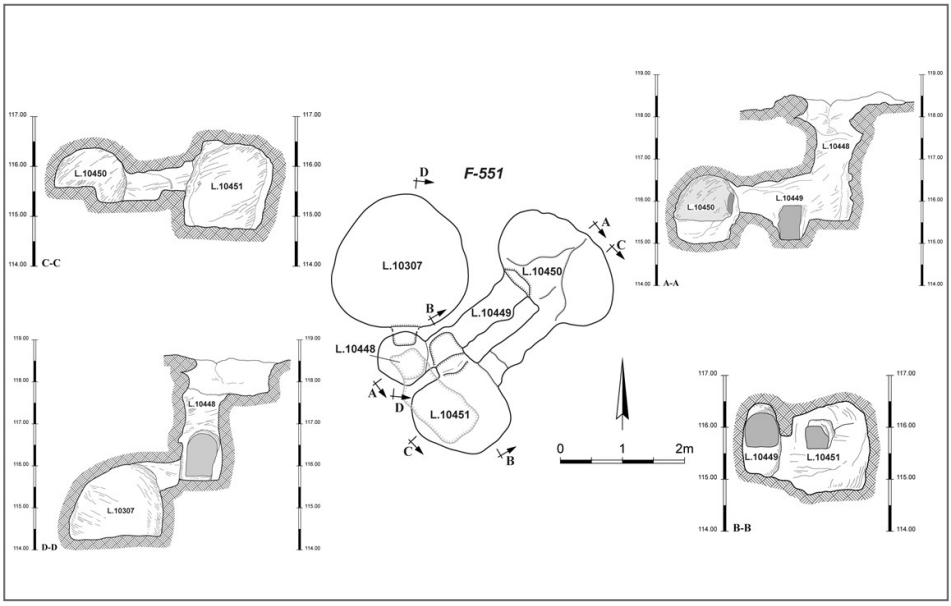

Fig. 6. Hiding complex F-551, plan and sections.

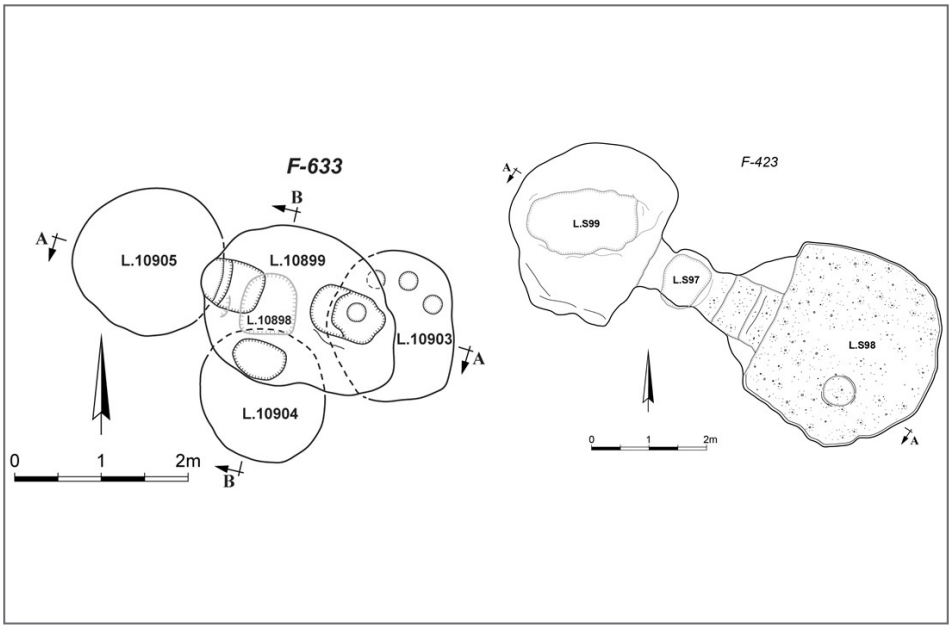

Fig. 7. Hiding complexes F-423 and F-633, plans.

People cannot hide inside Type I complexes for more than a few hours at a time. These installations are more likely to have been used to store and hide agricultural produce. At least two contexts in NRQ support this hypothesis: a plastered chamber in complex F-423, which provided improved storing conditions for agricultural produce, and four shallow circular depressions in the floor of a chamber in complex F-633, which were probably used for placing storage jars or braided baskets.

4.1.2. Type II

Type II hiding complexes (Figs. 8–11) are extensive and elaborate. They have at least two entrance shafts, long tunnels with sharp angles and turns, and two or more levels. Most of these complexes have locking mechanisms (rolling stones) designed to block the tunnels. In some of the complexes, the walls of the tunnels and the central chamber have hewn niches for oil lamps. Most complexes of this type have one distinctly large, central, usually rectangular chamber and a tunnel that provides access to a nearby water cistern. The tunnel opens onto the cistern below the ceiling and does not impair the installation's water-storage capacity. Furthermore, a person looking from the surface into the cistern would not see the tunnel's opening, thus keeping it concealed. A similar concealment method was also observed in other Judean foothill sites, including Ḥorbat Midras (Kloner and Tepper 1987), Maresha-West (Klein and Zissu 2015), Modi'in (Nahmias and Gal 2000), Ḥorbat Sokha (Zissu 2001), Ḥorbat Burgin (Zissu et al. 2013), and Tel 'Adulam (Zissu 1998); in the Galilee, it was observed at Ḥorbat Mishtaḥ (Shivtiel 2019: 140–141).

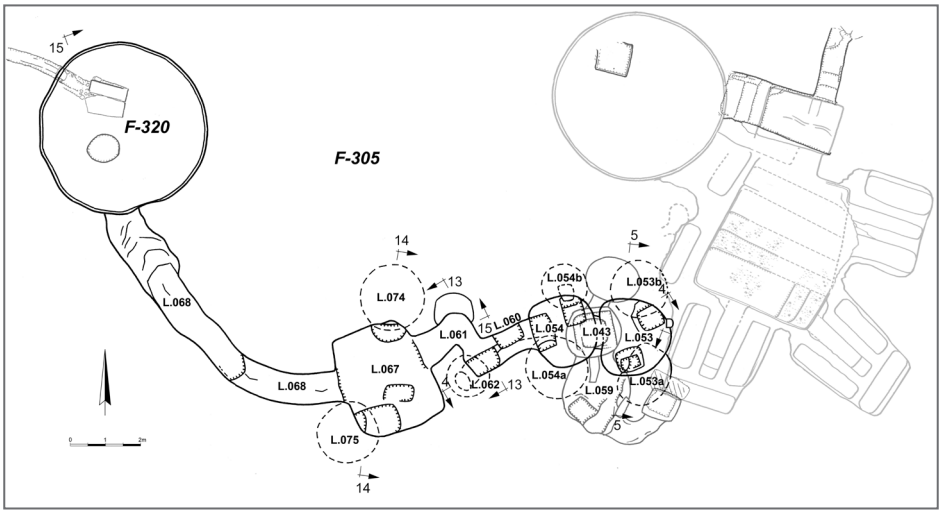

Fig. 8. Hiding complex F-305, plan.

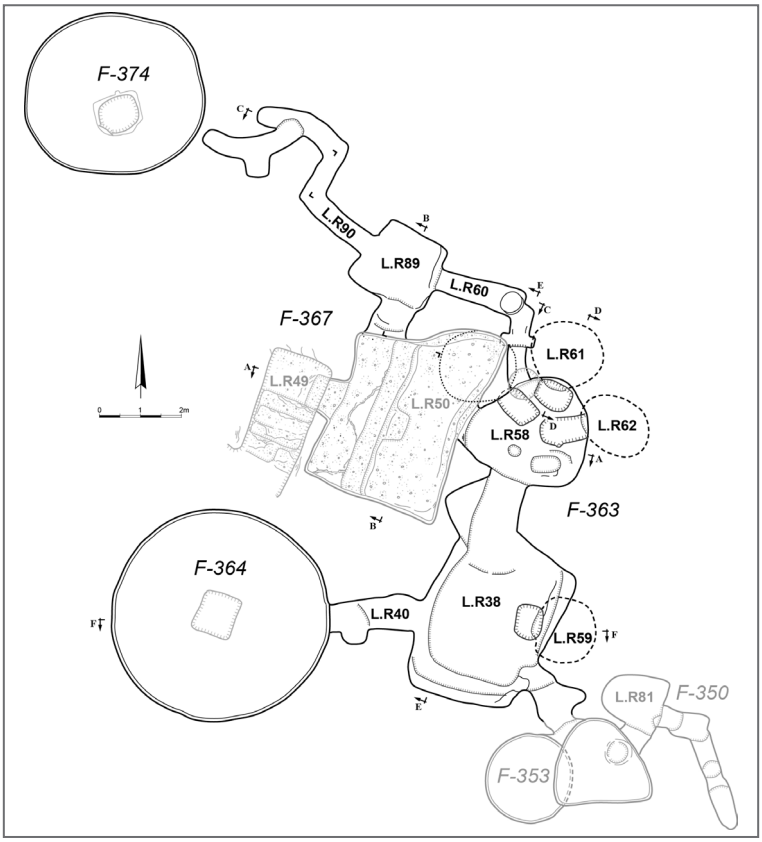

Fig. 9. Hiding complex F-363, plan.

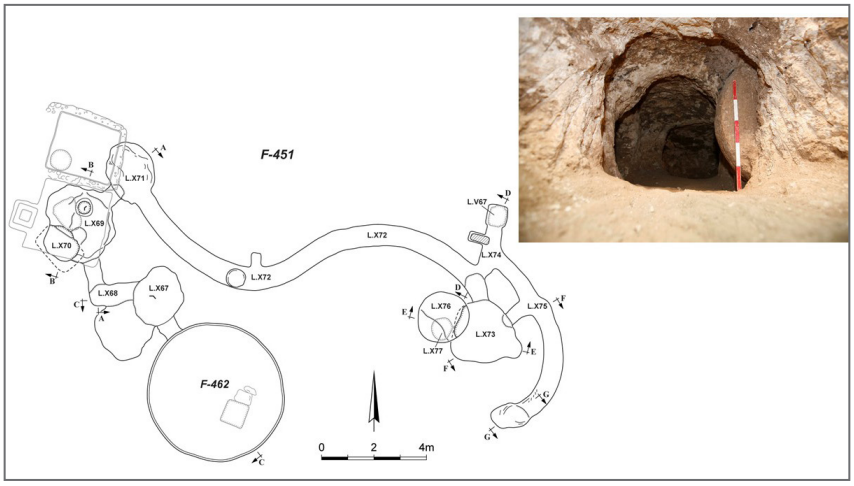

Fig. 10. Hiding complex F-451, plan and photograph of the rolling stone at the entrance to Tunnel X74, looking south.

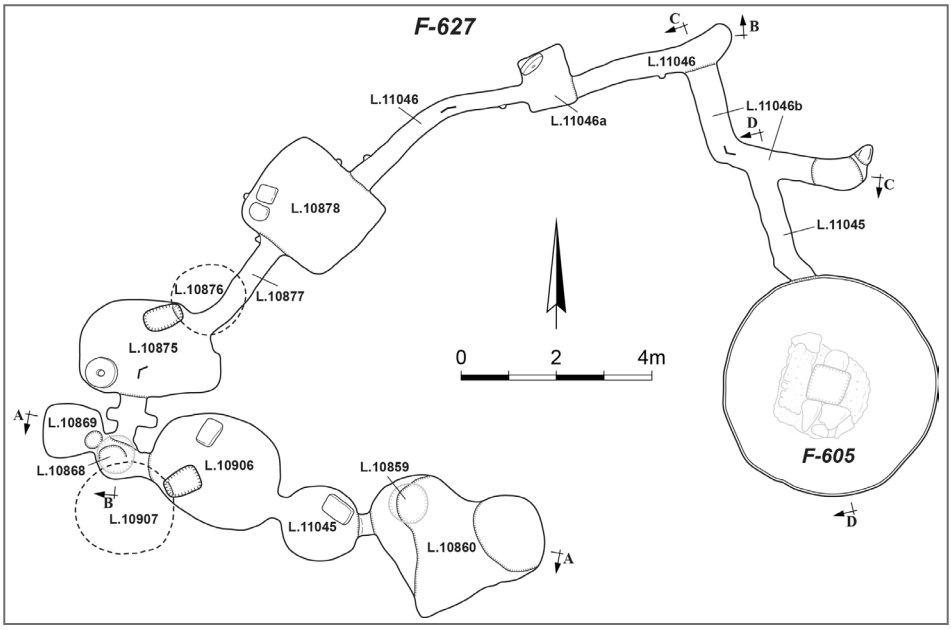

Fig. 11. Hiding complex F-627, plan.

Type II's relatively spacious chambers and access to a water cistern (in most cases) indicate that it was designed for hiding. The presence of small chambers in these complexes, usually at the lower levels, suggests that, in times of peace, they may have also been used to store and hide agricultural produce. Again, some of the chambers were plastered (e.g., in complex F-271) to provide better storage conditions (Melamed 2018b).

4.1.3. Type III

Type III hiding complexes (Figs. 12, 13) comprise a large group of small to medium-sized subterranean systems. They have an overall horizontal layout, one or two levels of circular chambers, one or two entry shafts, and 6–8 m of tunnels with many, sometimes sharp, twists and turns. Sometimes, they have access to a water cistern. A notable variant or a sub-type of this group does not have tunnels but consists of a series of circular chambers usually arranged in a row and connected by short passages (Fig. 14).

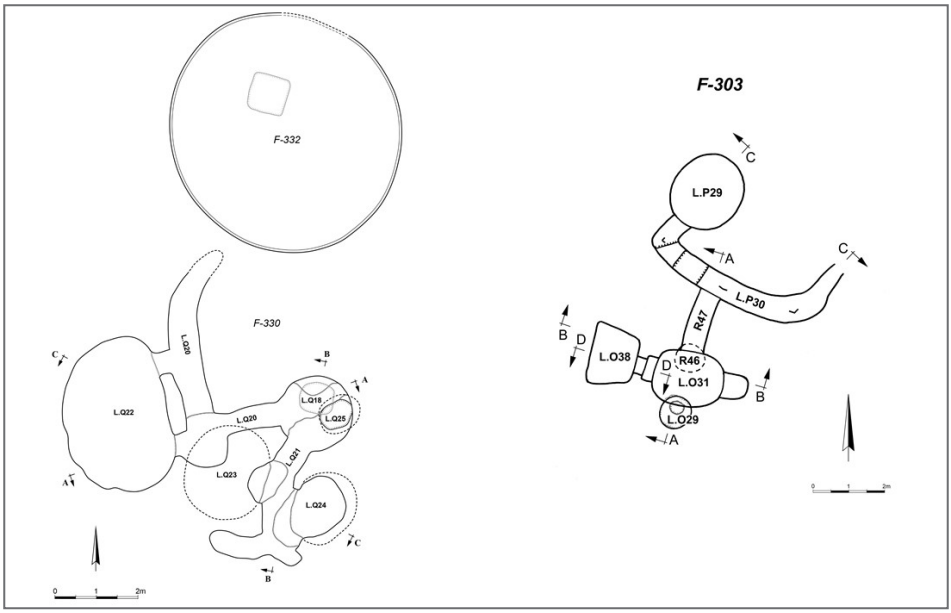

Fig. 12. Hiding complexes F-303 (right) and F-330 (left), plans.

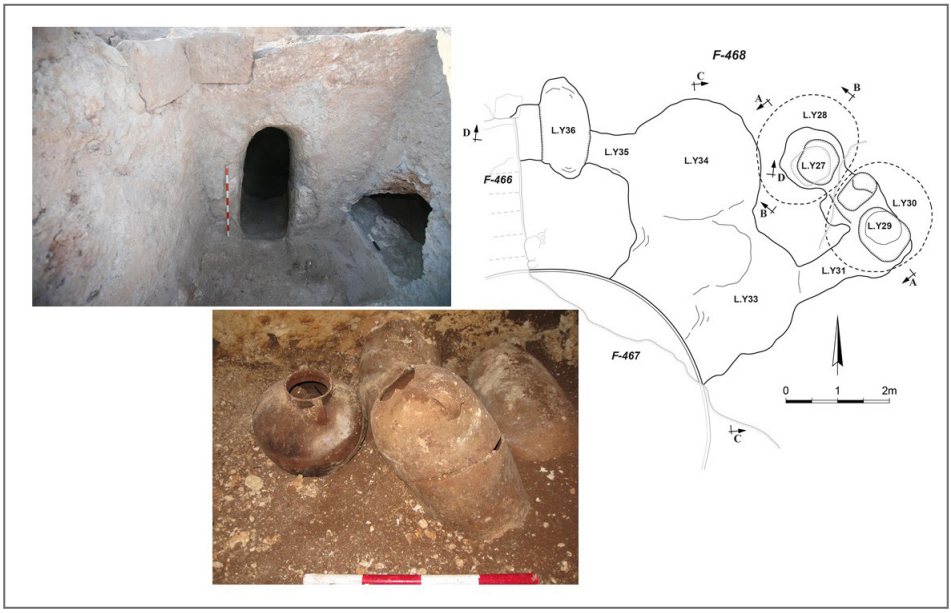

Fig. 13. Hiding complex F-468: plan (right); the entrance to *miqve* F-466's immersion chamber and the previously blocked opening into Space Y36, looking north (upper left); *in situ* cooking pot and storage jars in Room Y34, looking northeast (lower left).

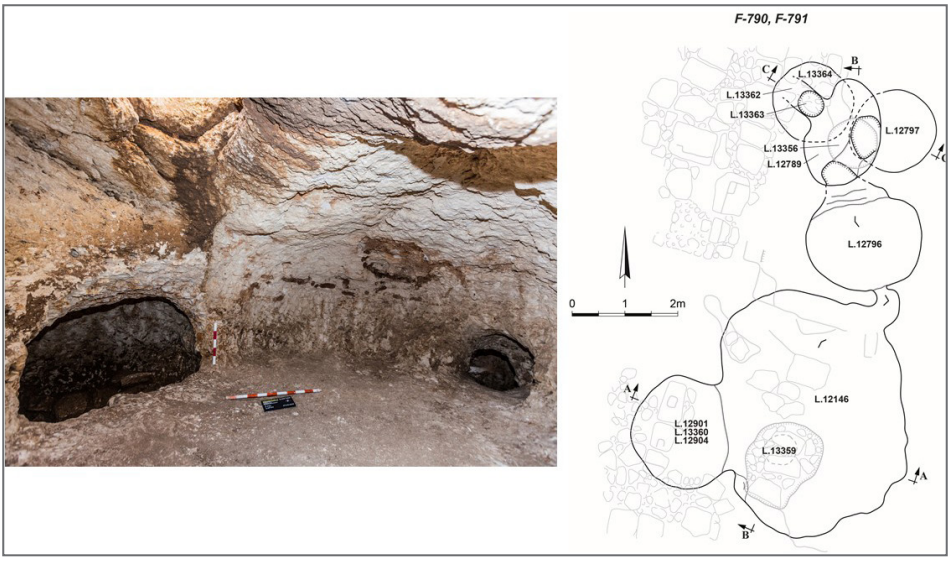

Fig. 14. Hiding complex F-790/791: plan (right) and Room 12146's northwestern wall (left), including the entrance to Room 12901 on the left and the passage to the northern part of the complex on the right.

Type III hiding complexes are smaller and simpler than those of Type II. They were probably designed to store and hide goods. However, the fact that most of them have twisting tunnels, access to a water cistern, and several quite spacious chambers suggests that they could have also been used to hide people.

4.1.4. Type IV

Type IV hiding complexes comprise five instances that do not conform to the other types and may be defined as "miscellanea." They primarily comprise complexes that were heavily damaged by later activity or were not completed and, therefore, could not be attributed to any of the above three types.

4.1.5. Composite Systems

In some cases, several small underground complexes became interconnected, creating one extensive system. The existence of numerous entry shafts (five to seven)—points of weakness for a defense system—is a telltale sign that such a process took place, probably over generations, and that these systems did not follow a predetermined design. This seems to have been the case with complexes F-263, F-271, F-272, F-317, and F-322 that interconnect to produce one extensive complex (Melamed 2018b). Complex F-442 is another case in point; it formed through the fusion of several Type I and III complexes (Fig. 15). Similarly, complex F-593 incorporated

two earlier Type II and III complexes (Fig. 16). However, the best example of this process is provided by hiding complex F-608/708 (Fig. 17), which incorporated via passages and tunnels at least three originally independent underground installations. One consisted of Shaft 11732 and Chambers 11730, 11731, 11733, and 11734; another comprised Shaft 11630 and Chambers 11705, 11737, and 11738; and the third included Shaft 11747 and Chambers 11741, 11740, 11745, and 11746.

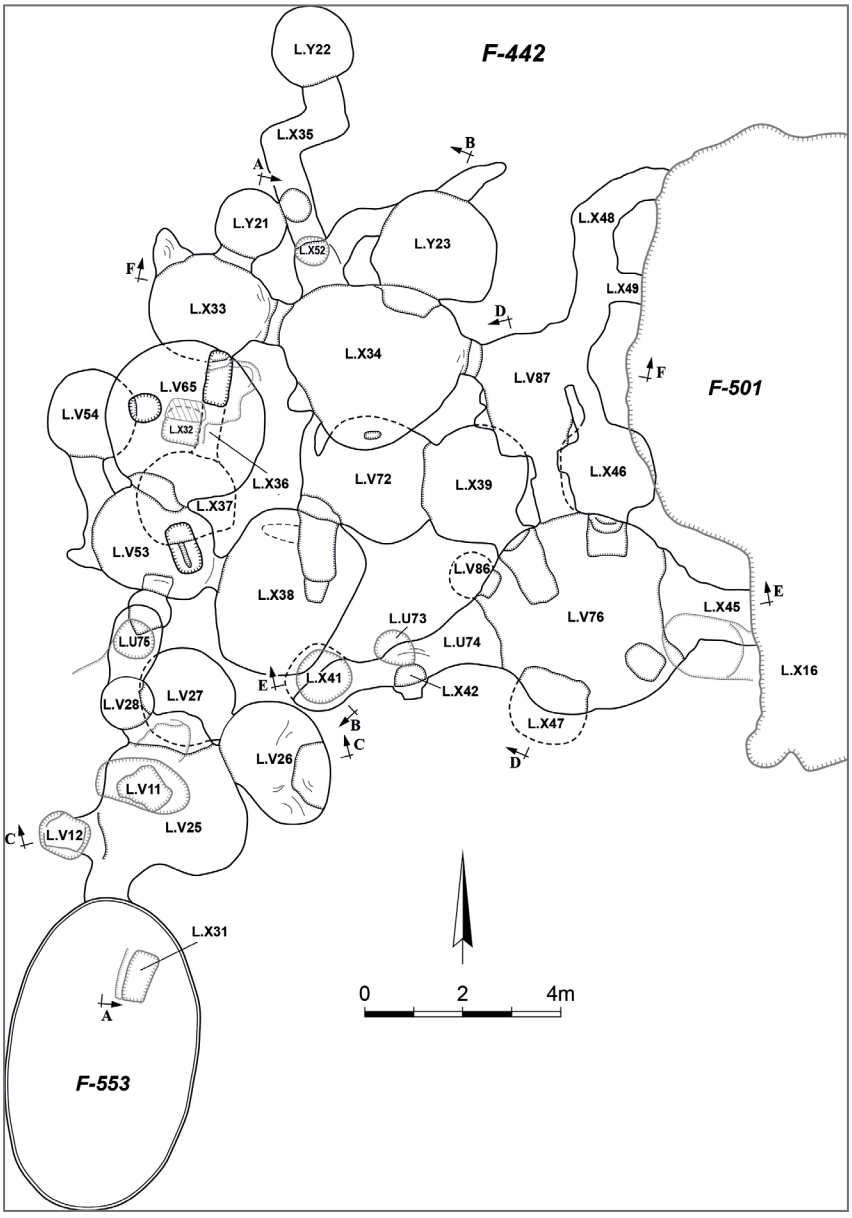

Fig. 15. Hiding complex F-442, plan.

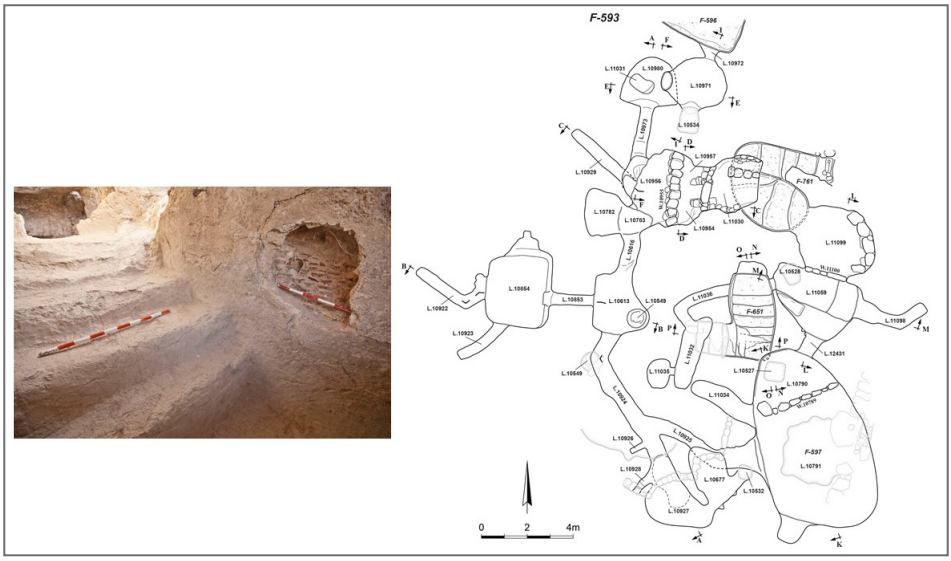

Fig. 16. Hiding complex F-593: plan (right) and blocked Tunnel 11036 behind the plaster of *miqve* F-651's western wall, looking southwest (left).

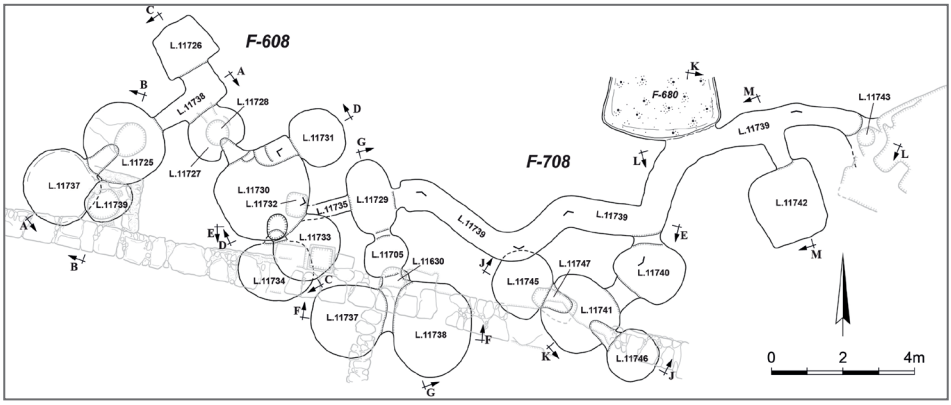

Fig. 17. Hiding complex F-608/708, plan.

The abovementioned examples clearly demonstrate that many of the most elaborate hiding complexes were not planned but developed from simple, originally independent, underground units: storage facilities (Type I) and simple hiding complexes (Type III). Another line of evidence supporting this hypothesis is the many incomplete tunnels and chambers, which are especially noticeable in Type II and III complexes (e.g., F-303, F-304, F-417, F-442, F-451, F-453, F-503,

F-593). Notably, in complexes F-330 and F-363, the unfinished tunnels were clearly meant to connect to a nearby water cistern.

This somewhat spontaneous pattern of development was not restricted to hiding complexes. For example, it was also noted for Second Temple-period burial caves at NRQ. Thus, in F-257, two *kokhim* of the eastern wall were only marked out and cut 0.1–0.2 m deep (Kol-Ya'akov 2010: 100–101, 247, Pl. 7.3). Incidentally, completing these features was not a labor-intensive endeavor; the cutting of the *kokhim* could be finished in hours and the hiding complexes' tunnels and chambers in days.

4.2. Dating

Excavations of the hiding complexes produced pottery and coins of the Hellenistic, Hasmonean, and Early Roman periods, which were the basis for dating the hiding complexes. While pottery and coins provide grounds for absolute dating, relative dating methods are also employed. Such considerations of relative chronology are applicable for complexes that incorporated preexisting features, such as *miqva'ot* or columbaria, or were partially destroyed or cut by later features. Additionally, some complexes were filled with alluvium that carried pottery and coins of the Late Roman, Byzantine, and Early Islamic periods, and some were also reused or robbed in the later periods.

4.2.1. The Pottery

The pottery assemblage primarily consists of bowls, cooking pots, storage jars, jugs, juglets, and lamps. Often, the vessels were found complete. While sherds might have entered the complexes through cracks and with the alluvial fill, the complete vessels are indicative of the complex's use. Accordingly, complexes with complete vessels are given priority.

Thus, complex F-268/292 produced an intact Eastern Sigillata jug, which dates from between the second half of the 1st century BCE and the first half of the 1st century CE; in F-305, a complete 2nd–1st century BCE Judean radial lamp was found; Complex F-309 contained an almost complete juglet of the late 1st century BCE and early 1st century CE (de Vincenz 2010); two 1st-century CE cooking pots and two jars of the 2nd century BCE–1st century CE were retrieved from Complex F-322; another mid-1st-century CE cooking pot was recovered from F-330; an intact jar of the 1st century BCE–1st century CE retrieved from F-360/361; a complete 1st-century CE jug was found in F-363 (de Vincenz 2018).

Complex F-423 produced a cache of coins beside a nearly complete late 1st–early 2nd century CE cooking pot (Farhi and Melamed 2014; de Vincenz 2018).

Complex F-417 produced an almost complete Hellenistic oil lamp; F-430 included an almost complete bowl of the 1st century BCE–1st century CE; in F-453, a complete jar of the 1st century BCE–1st century CE was recovered; F-468 produced a notably large corpus of complete vessels, including five storage jars, three cooking pots, and a jug dated to the 1st century BCE–1st century CE; F-593 produced an almost complete 1st-century CE jar and an almost complete Herodian oil lamp; lastly, two oil lamps of the 1st century BCE–early 1st century CE were found in F-698 (de Vincenz 2020).

Most pottery assemblages date from between the mid-1st century BCE and the 1st century CE. Occasionally, certain pottery types push the date as far as the early 2nd century CE. This is the case, for instance, in complexes F-297, F-309, F-317, F-423, F-679, F-719/755, and F-819. However, in most of them, the late pottery types constitute only a small part of the assemblage, and complete specimens were found only in two complexes: F-309 and F-423.

4.2.2. The Coins

The numismatic assemblage produces a similar picture (Table 2): Most of the coins are of the Hellenistic, Hasmonean, and Herodian periods. The earliest coins are Ptolemaic, and the latest are from the reign of Hadrian. No coins of Bar Kokhba were found in the hiding complexes nor elsewhere in NRQ.

Table 2. Breakdown coins recovered from the hiding complexes as of 2015 (after Melamed 2020).[4]

Period/Ruler	No. of Coins
Ptolemaic	4
Seleucid	18
John Hyrcanus I	7
Alexander Jannaeus	52
Mattathias Antigonus	5
Unidentified Hasmonean or Herodian	8
Herod the Great	6
Herod Archelaus	2

4 The table excludes the 65-coin hoard from F-423 (Farhi and Melamed 2014). Unlike the situation elsewhere in NRQ, nearly half of this assemblage is from the time of Trajan and Hadrian (early 2nd century CE).

Period/Ruler	No. of Coins
Agrippa I	2
Roman Governors in Judaea (under Augustus, Tiberius, and Nero)	6
Roman Imperial (under Nero)	1
The First Jewish Revolt	3
Trajan	2
Hadrian	1
Total	**117**

It should be noted that notwithstanding the two exceptions of the hoards from F-268/292 and F-423, all coins constituted isolated finds, which might have equally derived from the time of the complexes' use, as they could have fallen into the complexes at a later date. Therefore, coins found with complete ceramic vessels dating to the same period were considered to be of greater significance.

Thus, four corroded and fused coins of Mattathias Antigonus were found in a chamber deep inside complex F-268/292 (Farhi and Melamed 2014); a coin of Pontius Pilate was found in the fill at the bottom of Complex F-305's entry shaft (Farhi 2010); in F-322, coins of Alexander Jannaeus and a coin of year 2 of the Great Revolt were recovered; F-330 produced a Seleucid coin, a coin of Alexander Jannaeus, and a Roman coin of a governor under Tiberius (Farhi 2018); from F-417, two Ptolemaic coins, a coin of Alexander Jannaeus, a coin of Mattathias Antigonus, and a Roman coin of a governor under Augustus were recovered; F-430 produced three coins of Alexander Jannaeus, a Roman coin of a governor under Tiberius, and a coin of Trajan; in F-453, we found a coin of Alexander Jannaeus; two coins of Herod Archelaus were recovered from F-468; finds from F-698 included a Seleucid coin, a coin of John Hyrcanus, four coins of Alexander Jannaeus, an Imperial coin of Nero, a Roman coin of a governor under Nero, and a coin of year 2 of the Great Revolt (Farhi 2020).

Of the 117 coins, only three postdate the Great Revolt: two of Trajan from F-430 and F-789 and one of Hadrian from F-719/755. Notably, in the latter case, pottery sherds dating from the end of the 1st century and the beginning of the 2nd century CE were also found. The scarcity of finds from the period between the revolts is significant. It indicates that the Jewish settlement at NRQ suffered greatly in the aftermath of the Great Revolt. A decade and a half of excavations at the site demonstrate that human activity significantly reduced after the uprising. Furthermore, the absence of finds dated solely to the Bar Kokhba Revolt suggests that, by this time, the settlement had ceased to exist.

4.2.3. Relative Dating

Elements of some of the hiding complexes allow the articulation of relative chronological relations. Thus, in several instances, the hiding complexes canceled or reused earlier features. For example, F-583, which contained 1st-century CE ceramics, and F-721, which produced two coins—one of Alexander Jannaeus and another of Agrippa I—broke into the lower part of water installation F-620, rendering it unusable.[5] Another case in point is Complex F-719/755, which penetrated into *Miqve* (ritual bath) F-578, cut through the outside stairs of *Miqve* F-716,[6] and connected to Columbarium F-720. This columbarium was cut by F-757, which, in turn, adjoined to F-679.

Another example is Complex F-256, which canceled a pair of *miqva'ot* dated to the 1st century BCE and the first half of the 1st century CE. However, these *miqva'ot* have probably been out of use for some time before they were incorporated into the hiding complex (Melamed 2010b).

Sometimes, a *miqve* cut through an earlier hiding complex, indicating that the latter is of an earlier date. This was noted in F-363, F-468, F-503, F-593, and F-789. Complexes F-363, F-468, and F-593 corroborate the relative chronology with complete pottery vessels and coins assigned to the 1st century BCE and the 1st century CE.

As for water cisterns, hiding complexes rarely canceled them. Most tunnels pierced through the cisterns' upper walls, near their ceiling, allowing these installations to remain in use and accessible both from the surface and from the hiding complex. Moreover, some cisterns continued operating after the hiding complexes' abandonment, as indicated by tunnels blocked from inside cisterns in complexes F-679, F-757, and F-819.

4.2.4. Incomplete Tunnels and Chambers

Unfinished tunnels and chambers are also useful for dating. Insofar as the NRQ hiding complexes evolved over a considerable amount of time, possibly generations, the unfinished spaces mark an unrealized intent directed towards further expansion when the need arises or the resources are obtained.

5 F-620 is unpublished. It is a deep and large, stepped and plastered installation. While it was not a *miqve* nor a water cistern, it had a water-related function. According to its pottery, this installation should be preliminarily dated to the Second Temple period.

6 *Miqva'ot* F-578 and F-716 will be published in a future monograph (Melamed forthcoming). They are preliminarily dated to the 1st–early 2nd century CE.

4.2.5. The Evolution of Hiding Complexes

Recently, Klein et al. (2021: 60–62) suggested a three-stage process for the evolution of hiding complexes in Judea: (1) from the 1st century BCE (and maybe earlier) to the 1st century CE, the complexes consisted of simple underground storage installations, occasionally connected with a tunnel (comparable with NRQ Type I); (2) during the Great Revolt, underground storage installations were adapted for human hiding (NRQ Types I and III); and (3) during the period between the Great Revolt and the Bar Kokhba Revolt, highly elaborate hiding complexes emerged (NRQ Type II).

In his recent update of the hiding complexes in Judea, Raviv (forthcoming) suggested distinguishing two groups of Judean hiding complexes: The first consists of simple complexes spanning the mid-1st century BCE and the Great Revolt (comparable with NRQ Type III), whereas the second consists of elaborated hiding complexes that were operational between the revolts (comparable with NRQ Type II).

However, in NRQ, no correlation was observed between the underground installations' size and their date. Thus, for example, Type I underground facilities (e.g., F-423, F-430) contained finds that span the late Hellenistic–Early Roman period and the period between the revolts. Simple hiding complexes of Type III (e.g., F-417, F-468) mainly produced early material dated to the late Hellenistic and Early Roman periods. Elaborate hiding complexes of Type II, including those that evolved from more elemental installations (e.g., F-442, F-608/708) and those that were predesigned as elaborate complexes (e.g., F-451, F-453), usually also produced early finds, although sometimes accompanied with artifacts dated as late as the period between the revolts (e.g., F-593, F-819). The recent publication of the large and elaborate hiding complex at Ḥorbat Mazruq, dated to the Great Revolt (Ein-Mor 2022), is another demonstration that size and date are not necessarily correlated.

4.3. Typology and Dating: A Discussion

The typology and chronology of the NRQ hiding complexes have recently been the subject of criticism, primarily by Raviv (forthcoming).[7] He argues that NRQ is exceptional and, therefore, does not testify to the rule. However, the only truly exceptional feature of NRQ is that it was almost entirely excavated, revealing dozens

7 I would like to thank Dvir Raviv for his critique and the opportunity to elucidate points that were hitherto insufficiently clarified. I hope that such discussions will improve our understanding of the hiding phenomenon.

of hiding complexes of various sizes and shapes. The resulting scale and diversity of hiding complexes also holds for the dozens of ritual baths (Melamed, forthcoming), *Kokhim* tombs, and other underground installations. NRQ is a unique opportunity to examine the intricacies and variations of a Jewish village's life.

The second critique is typological. According to common opinion, also held by Raviv, the Type I features in NRQ (15 in total) should not be considered hiding complexes but storage installations because they lack tunnels and are not designed for hiding humans. I have no argument with the definition of the term *hiding complex*. Type I installations clearly constitute a separate category. Nevertheless, they also share some significant characteristics with the more typical hiding complexes: They were designed to conceal and were roughly contemporary. Thus, in my opinion, although not designated for refuge, Type I installations are still integral to the hiding complex phenomenon.

Another point raised by Raviv relates to dating. He draws attention to the fact that finds dated to the 1st century BCE and the 1st century CE were often discovered in the complexes' entrance shafts or storage wings and, therefore, do not necessarily reflect the complex's use for refuge. He also suggests that the hiding stage in complexes with finds from the period between the revolts should be dated solely to this period. However, artifacts' precise location becomes a lesser issue when dozens of installations are involved. Under these circumstances, the sheer quantity of finds becomes the determining factor. Moreover, as I stressed above, the chronological analysis focused on complexes with complete ceramic vessels and corroborating numismatic finds. Raviv also tends to disregard the relative chronological relations, which are sometimes significant for dating. This is best demonstrated by the case of hiding complex F-363 and ritual bath F-367, where the *miqve*'s irregular shape was due to the incorporation of a room of an earlier hiding complex (Fig. 9; Melamed 2018b: 63–69).

To conclude, underground hiding complexes seem to have appeared at NRQ during the first half of the 1st century BCE. However, considering the occurrence of early finds (pottery and coins from the Ptolemaic and Seleucid periods), some may have been established during the Hasmonaean wars. They were continuously used, expanded, and modified during the 1st century CE and the Great Revolt, some even continuing into the early 2nd century CE until around the time of the Bar Kokhba Revolt. Some underground complexes were used mainly as storage facilities, while others developed into or were predesigned for hiding purposes. Ultimately, it seems that the NRQ underground complexes were not specifically intended for rebellious purposes but were part of everyday life over generations, expanding and modifying according to their owners' wishes, needs, and capabilities.

5. Discussion

In Judea, some 350 hiding complexes have been recorded in close to 140 sites (Kloner and Zissu 2015: 61).[8] However, most complexes were surveyed and mapped but not excavated, rendering their dates contentious. The northwestern part of the Judean Foothills, in particular, is densely populated with these features, encompassing sites like Ḥorbat Titora, Ḥorbat Kefar Rut, Ḥorbat Ḥermeshit, Ḥorbat Kurikur, Ben Shemen, Modiʿin, and Shoham (Kloner and Zissu 2003a, and further bibliography therein). Many hiding complexes were also discovered in the Galilee, where recent years have seen a surge in research. Shivtiel (2011; 2015a; 2019) documented 74 hiding complexes in this region, describing them as similar to the Judean ones.

Systematic exploration of hiding complexes began in the late 1970s and early 1980s. In 1987, Kloner and Tepper published the comprehensive monograph *Hiding Complexes in the Judean Shefela*. The book defined hiding complexes, extensively reviewed the history of research, described dozens of instances from dozens of sites, and drew conclusions on the complexes' date and function. According to Kloner and Tepper (1987: 7), hiding complexes are "a local phenomenon, planned and organized by one hand and at one time," predominantly dated to the Bar Kokhba Revolt.

Notwithstanding the continuous addition of new complexes to the corpus, these conclusions held for more than 30 years and only recently began to change.[9] While there is no doubt that many complexes were used during the Bar Kokhba Revolt, and some were set up for this uprising, very few artifacts from this time were found inside them. Until now, only 25 Bar Kokhba coins have been recovered from hundreds of hiding complexes, for instance, Khirbat er-Ras and Ḥorbat Titora (Zissu and Eshel 2002, and further bibliography therein). However, the research of the 1980s connected the hiding complexes to the Bar Kokhba Revolt, and this conception persists.

Consequently, hiding complexes were sometimes dated to the Bar Kokhba Revolt primarily on the grounds of architectural similarities and references to previous research (e.g., Kloner and Tepper 1987) with no further supporting finds. This line of reasoning was put forward by Klein and Raviv (2013: 229) for the hiding complexes surveyed in the north of the Judean Foothills, emphasizing that "their complexity implies that they were part of the preparations of the local

8 Notably, Raviv (forthcoming) cites many more, speaking of ca. 440 hiding complexes in ca. 250 sites.

9 Notably, in his recent book, Shivtiel (2019: 213) claims, regarding the Galilean hiding complexes, that "a minority of the hideouts were hewn in the Late Hellenistic period (possibly in the Hasmonean period); more than half were made prior to the Great Revolt, some before the Bar Kokhba Revolt (even if Galilee did not actively participate in it), and a minority are of a later date."

Jewish population for the Bar Kokhba Revolt." Similarly, Zissu (1998: 72) dated the hiding complex of Tel 'Adulam to the Bar Kokhba Revolt based on 1st–2nd century CE sherds of cooking pots, and he stated that "according to the plan and the ceramic finds, it is possible to assign the use of the complex to the period of the Bar Kokhba Revolt." At Ḥorbat Katsra, the researchers stated that "there is no basis for assigning the complex to the Bar Kokhba Revolt because there are no *in situ* archaeological finds. Nevertheless, [they argued that] the complex is fully compliant with what is known from the research of the underground hidings in Judea. Consequently, its dating to the Bar Kokhba Revolt is based on typological parallels to many other complexes that were certainly used during the Second Revolt" (Kloner, Zissu, and Graitzer 2016: 162).

However, the suggestion that hiding complexes already existed in the Second Temple period has been voiced from the very beginning of the research on the phenomenon. Thus, for instance, Yadin (1982: 43) indicated that "some of them may have already been hewn during the Hasmonean uprising or the First Revolt." Foerster (1982: 155–157) endorsed this argument, declaring that Josephus's accounts support an early date. Kloner (1983: 218–219) also assumed that some simpler complexes had their beginning in the Second Temple period.

Indeed, the accumulating archaeological evidence reinforces the hypothesis that the hiding complexes' incipience preceded the Bar Kokhba Revolt. Many of those that had been excavated were dated to the Second Temple period in general and, at most, were said to have been used until the Bar Kokhba Revolt: Ḥorbat Midras and Ḥorbat Ḥazzan (Kloner and Tepper 1987), Modi'in (Nahmias and Gal 2000), Ḥorbat Mazruq (Ein-Mor 2022), Khirbat ed-Duweir (Batz and Sharukh 2012), Ẓur Natan (Ayalon, Neidinger, and Mattews 1991), Ḥorbat Burgin (Zissu et al. 2013), and Ḥorbat 'Etri (Zissu and Ganor 2002). The case of Ḥorabt 'Etri is particularly notable. Many complexes excavated at this site, some of which were sealed, were dated to the first half of the first century CE, prompting the excavators to suggest that "this find moves the emergence of the hiding complexes in the Judean Foothills back to the Second Temple period" (Zissu and Ganor 2002: 21). Moreover, the site's recently published Hiding Complex XXXIV produced even earlier finds suggesting a date in the Hasmonean period (Klein et al. 2021: 57–60). Shivtiel (2011: 26) also argued that "dating all of the hiding complexes discovered in Judea to the Bar Kokhba revolt is incorrect, and the number of hiding complexes in Judea, which turn out to have been hewn at the end of the Second Temple period, is increasing."

The finds from NRQ support this conclusion. Here, the hiding complexes seem to have appeared as early as the Hasmonean period, during the first half of the 1st century BCE or even earlier. By the 1st century CE, the complexes were quite

elaborate, and some evolved into extensive, interconnected, multi-feature systems. They formed and transformed across generations; they were not produced for any specific revolt.

Thus, a contradiction is noted between the hiding complexes' "traditional" dating and finds recovered in NRQ and other sites. To understand this gap, we ought to reconsider two of Kloner and Tepper's (1987) criteria for dating: relative chronology and Cassius Dio's and Josephus's written accounts.

5.1. The Relative Chronology

Already at the beginning of the 1980s, Kloner (1983: 216) concluded that some hiding complexes destroyed or incorporated preexisting subterranean features, be they *miqva'ot*, storage facilities, agricultural installations, or columbaria. A little later, Kloner and Tepper (1987: 329–332) reported that sites like Maresha possessed elaborate underground systems as early as the Hellenistic period. However, in Maresha, which was destroyed in 40 BCE, these systems did not comprise hiding complexes, prompting the two scholars to conclude that such complexes had to be of a later date. According to Kloner (1982: 22), "most complexes are characterized by uniformity in plan and construction techniques. What we are dealing with is a well-defined and unique hiding phenomenon.… From these conclusions, it can be inferred that the complexes were quarried at one point in time." This "one point in time," Kloner argued, had to be the Bar Kokhba Revolt.

According to Kloner and Tepper (1987: 329), the common hiding complex type is the one that appropriates preexisting installations, connecting them with tunnels and passages. At least in NRQ, this conclusion does not always work. The vast majority of the site's hiding complexes consist of independent features that did not affect other parts of the settlement. Only in three cases can one justifiably speak of a hiding complex that is later than the features it connects: (1) complexes F-583 and F-721 incorporated water installation F-620; (2) complex F-719/755 that subsumed *miqva'ot* F-578 and F-716; and (3) complex F-256 that also encompassed a pair of preexisting *miqva'ot*, although they may have gone out of use much earlier. In five cases, *miqva'ot* cut the hiding complexes (F-363, F-468, F-503, F-593, and F-789). As for water cisterns, their connection to a hiding complex rarely implicated their cancelation. The tunnel of the hiding complex usually breached the cistern wall's upper part, near the ceiling, thus allowing it to be used from the surface and from inside the hiding complex. Consequently, the hiding complexes often predate the other underground features or are contemporary with them.

5.2. The Written Accounts of Cassius Dio and Josephus

Kloner and Tepper largely disregard Josephus's account, claiming that his use of the Greek term ὑπόνομος is not necessarily consistent with the concept of *hiding complex* in the modern sense (Kloner and Tepper 1987: 362–363). This, however, does not discourage them from drawing on Cassius Dio, who employed the same term, and arguing that since his account relates to the Bar Kokhba Revolt, the hiding complexes should also be dated to this time (ibid., 361–365). However, gathering all ancient sources that relate to the underground, Shivtiel found no reason to doubt the equivalence of Josephus's term *ὑπόνομος* with the modern *hiding complex* (Shivtiel 2017: 180–188). Crucially, Shivtiel demonstrates that when Josephus speaks of natural caves, he uses the term σπηλαίοις, and when talking of artificial underground spaces, he employs the term ὑπόνομος (Shivtiel 2011: 24–25; 2017: 180–181).

Furthermore, unlike Cassius Dio, who never visited the country and relied on the accounts of others, Josephus was familiar with the land and the events he described. After all, he himself was taken captive after spending some time in the hiding complex at Yodfat. As he relates, after Yodfat fell, "he withdrew himself from the enemy when he was in the midst of them, and leaped into a certain deep pit, whereto there adjoined a large den at one side of it, which den could not be seen by those that were above ground; and there he met with forty persons of eminency that had concealed themselves, and with provisions enough to satisfy them for not a few days" (*W.J.* 3.8.1).

Many hiding complexes also existed in Jerusalem. Josephus recounts that when the rebels set the archive building on fire, "… some of the men of power, and of the high priests, went into the vaults under ground, and concealed themselves, while others fled with the king's soldiers to the upper palace, and shut the gates immediately" (*W.J.* 2.17.6). This testimony suggests that hiding complexes existed in Jerusalem before the rebellion's outbreak and before the siege. Further on, Josephus makes many mentions of hiding complexes in the context of the city's fall (e.g., *W.J.* 6.7.3, 6.8.5). Apparently, the existence of installations of this sort in Jerusalem has been corroborated by archaeological excavations (e.g., Gibson and Lewis 2019: *48–*54 and references therein).

Particularly interesting for the present concerns is the observation that Josephus does not seem to perceive hiding complexes as something novel or unique. He mentions them only in passing and feels no need to explain or describe them. This implies that hiding complexes were a common feature of 1st-century CE Jewish settlements in Judea and Galilee, well before the Great Revolt.

5.3. The Use of the Hiding Complexes

According to Kloner (1983: 220), most hiding complexes in Judea were created under the directive of political-military leadership in preparation for the Bar Kokhba Revolt. Gichon (1982: 42) argued that these complexes constituted the rebels' "secret offence bases" because "it is difficult to shake the impression that all these facilities were made in a similar format, according to one master plan, and under the authorities' direction."

These views, which are still prevalent today, are based, for the most part, on interpretations of Cassius Dio's remarks on hiding complexes: "To be sure, they did not dare try conclusions with the Romans in the open field, but they occupied the advantageous positions in the country and strengthened them with mines and walls, in order that they might have places of refuge whenever they should be hard pressed, and might meet together unobserved underground; and they pierced these subterranean passages from above at intervals to let in air and light" (*Historia Romana* 69.12). However, these brief remarks do not indicate that the hiding complexes were used for underground warfare or served as bases from which raids could be launched; they only suggest that these complexes were used as "places of refuge."

Josephus also offers no evidence for hiding complexes as "secret offence bases" or sites of guerrilla warfare. Apparently, Roman soldiers avoided fighting inside the hiding complexes. Thus, in Yodfat, "… as Josephus began to hesitate with himself about Nicanor's proposal, the soldiery were so angry, that they ran hastily to set fire to the den; but the tribune would not permit them so to do, as being very desirous to take the man alive" (*W.J.* 3.8.3). The goal was probably to force people out of the hiding complexes by inducing suffocation with smoke.[10]

Samet (1986: 9–15) examined the evidence in Mishna, Tosefta, and Talmud and concluded that the words מחבוא, מחבואה, and מחבויין all refer to hiding complexes. Although these sources are not concerned with the complexes' historical role, they discuss the issues of purity and impurity, especially pertaining to the presence of women and children, thus indicating that these underground installations were used first and foremost to protect the non-combatant part of the population.

Archaeological finds from a hiding complex at Shoham Bypass Road corroborate this observation. They included more than 20 skeletons primarily belonging to women and children under 15 years of age (Dahari and Ad 1998:81). Aviam (1983:58) made a claim in a similar vein; he argued that the Galilean hiding

10 Such a method of "cleansing" underground hiding complexes is also known from the Babylonian Talmud (see Shivtiel 2017: 191).

complexes "were used mostly by the non-combatant populace during the times of war and by the whole populace during the times of destruction."

According to the available evidence, it is doubtful that the underground complexes were used for guerrilla warfare or as rebel bases. Rather, they were mainly designed to hide the civilian population at moments of considerable distress. NRQ's numerous and diverse hiding complexes imply that every family quarried an underground complex under its home in a manner that was neither centralized nor coordinated. Some installations were merely simple basements that primarily served as storage facilities (Type I) for agricultural produce and perhaps also for tax evasion.[11] The others (Types II and III) mainly served for hiding. In times of peace, parts of these complexes could have been used for storage, and in times of war, they may have constituted the last resort, providing refuge for up to a few days.

Apparently, the hiding complex phenomenon had begun as early as the Hasmonean period, during the continuous wars against the Seleucids and john Hyrcanus's and Alexander Jannaeus's campaigns. The Jewish population in hundreds of unfortified villages and towns faced the perpetual dangers of war and were subject to plunder by foreign and local military forces and gangs. Under such conditions, hiding people and property underground was the only way to protect them. Thus, every household had an underground hiding complex hewn and designed according to its owner's needs and abilities. As such, the hiding complexes emerged and developed organically; they were not planned and organized by one central hand.

To conclude, the hiding complexes developed in response to the harsh security and economic conditions of Jewish life in the Second Temple period: restricted living space, persistent danger of war, hostility from the surrounding people, and lack of safe location to escape to until hostilities pass. This hypothesis is supported by the fact that the hiding complexes are most common in the areas accessible to the enemy forces, such as the Judean Foothills and the Lower Galilee. In less accessible areas, like the Judean Desert (especially in the area of the Dead Sea) and the Eastern and Upper Galilee, the number of hiding complexes is significantly lower, although the widespread phenomenon of cliff shelters and refuge caves is of note (Porat et al. 2010; Shivtiel 2015b; 2019). The soft and easy-to-quarry limestone in the Judean Foothills also contributed to the development of the hiding phenomenon.

11 I have already mentioned this possibility, albeit without further discussion, in the first publication of NRQ hiding complexes (Melamed 2010b). In their recent publication, Klein et al. (2021: 57–60) review the tax policy in Judea during the Hellenistic and Early Roman periods and conclude that heavy taxation could have provided the impetus for the early developing of the hiding complexes.

The hiding complexes were integral to everyday life in Second Temple-period Jewish settlements. The use of hiding complexes in Judea peaked during the rebellions against Rome, and it ceased after the suppression of the Bar Kokhba Revolt that almost annihilated the Jewish population in the region. Unlike the Judean Foothills, the Galilee, where the Jewish occupation continued after the Bar Kokhba Revolt, featured hiding complexes that apparently persisted into the Late Roman period (Shivtiel 2019: 212–213).

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