**The Water Systems of Samaria-Sebaste:**

**The Eastern Water Sources**

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**Abstract**

The site of Samaria-Sebaste has been presumed by archaeologists to not have had its own, local, water source. This paper explores the existence of such a local water source, that existed and supplied Samaria-Sebaste from the Iron Age, to Hellenistic, Roman, Early Islamic, to Crusader and Late Islamic Sabastiya up until the present day. By reviewing the archaeological data, the first-hand accounts of the excavators, maps and early photographs, it is made clear that the site had an on-site water supply throughout all periods of occupation up to the present day.

Too often the archaeology of water is studied as a footnote to other areas of the ancient cultural record, or, simply presented as an interesting diversion from the “real” archaeology of buildings, burials or artifacts. (Wilkinson et al. 2012, 155–76).

**Samaria and Sabastiya: A Brief History**

The ancient city of Samaria is located on the summit of a rocky hill, in the central mountain area of the land of Israel. It was founded by Omri, in the 9th century BCE and served as the capital of the northern Kingdom of Israel (*I Kings* 16, 24) until the final defeat of the northern Kingdom circa 720–722 BCE by Sargon II of Assyria. However, despite many vicissitudes, the city was continuously inhabited. In the Hellenistic period, the citywas replaced by a Roman city during the rule of the provincial governor Gabinius.[[1]](#footnote-1) In 30 BCE, the Roman emperor Augustus presented the city to Herod the Great, who changed the city’s name to Sebaste in the emperor’s honor.[[2]](#footnote-2) The city grew, becoming a military colony with the settlement of 6,000 loyal followers (Isaac 2000, 328). In 201–211 CE, following a period of decline, the city was restored by Septimius Severus,[[3]](#footnote-3) who awarded the city colonial status (Isaac 2000, 359).

In the early Christian period, and possibly earlier, the village moved east and slightly downslope, nearer, as it will be shown in this article, the local water source. [[4]](#footnote-4)

Christianity came to Sabastiya following the death of St. Stephen (Bagatti 2001, 75), and the first church dedicated to John the Baptist was built probably following the earthquake of 363 CE[[5]](#footnote-5) but no later than 384 CE.[[6]](#footnote-6) It was apparently one of the many memorial churches built to focus Christian pilgrimage on a previously pagan holy site[[7]](#footnote-7) (Di Segni 2006–2007, 383, 391). By 808 CE, the early church lay in ruins, possibly destroyed as early as 631/632 CE by an earthquake, leaving the underground tomb, purported to be of John the Baptist, intact (Pringle 1998, 285; Benelli 2011).[[8]](#footnote-8) The tomb continued to be revered, and the site was occupied by a religious Latin community in 1106–1108 CE (Pringle 1998, 285).[[9]](#footnote-9)

In ca. 1170 CE, the Crusader Cathedral of St. John was built (Kenaan-Kedar 1992, 105–11), but it was short-lived. In September 1184, Saladin swept into the area, sparing the cathedral and the village only after negotiations with the bishop (Pringle 1998, 286). The pact did not last long, and in July 1187 Saladin’s nephew Ḥusām as-Dῑn Muhammad sacked the cathedral (Pringle 1998, 286) and rededicated it to the Prophet Yahia, the Arabic name of John the Baptist (Hamdan & Benelli 2012, 50–52). By 1333, the cathedral building—once the second largest church in the Holy Land after the Church of the Holy Sepulchre—lay in ruins (Kenaan-Kedar 1992, 99).[[10]](#footnote-10)

The site was first excavated in the early 20th century by two successive teams, the Harvard Expedition from 1908 to 1910[[11]](#footnote-11) and the Joint Expedition from 1931 to 1935.[[12]](#footnote-12) Both expeditions concentrated on the excavation of the ancient tel of Samaria, and they had little interest in the village or features from the post-Byzantine period. These two major expeditions were followed by a few salvage excavations and small-scale exploratory probing in the latter half of the 20th century and the early years of the 21st century.[[13]](#footnote-13)

**A Water Source in Samaria-Sebaste?**

Despite a glorious history spanning some 1,000 years, John W. Crowfoot, the director of the Joint Expedition, surprisingly declared that:

“Samaria… though it had a long history, never grew into a very big city.… A serious drawback was the want of a good water supply; the nearest good springs are a mile away on the far side of a deep valley and they would have been cut off whenever the city was closely beleaguered; the cisterns inside the walls could not have been sufficient for many thousand inhabitants plus their horses and donkeys” (Crowfoot et al. 1942, 1).

He continued to write that “the fountain near the mosque is a new institution. It dates from 1925 when the then District Officer, Major Lewis Herbert William Nott [governor of North Palestine from 1922 to 1928] arranged for pipes to be laid to the village from some springs in the Wadi Amir near the village of Nakura” (Crowfoot et al. 1942, 74), at a distance of ca. 1.7 km (Crowfoot et al. 1942, 79).

Fig. 1. The location of the modern water supply piped into the village in 1925 during the period of the British Mandate. The water fountain shown here is from the period of Jordanian rule circa 1950-1970 taken by an

unknown photographer. Photo Courtesy of the Gibson Picture Archive.

Unfortunately, Crowfoot’s statement was not based on any archaeological or geological data, it was based on the situation that he saw in 1931 when the only potable source of water in the village was the modern supply piped in from Nakura since 1925. Apparently, Crowfoot had little contact with the villagers, and so failed to realise that the spring had been closed by the British Authorities, presumably due to contamination, and replaced by the piped water.[[14]](#footnote-14) Therefore, Crowfoot’s inaccurate statement gave rise to the idea that the local population had never had access to an on-site water supply. Nahman Avigad one of the architects working with the Joint Expedition at Samaria, adopted Crowfoot’s false assumption and wrote that “Samaria… was chosen as the capital of the Kingdom of Israel, even though it lacked an adequate supply of water” (Avigad 1978, 1032; 1993, 1300). He compounded this inaccuracy by writing that “the water supply of the Israelite city… was limited to rainwater which was collected in cisterns”[[15]](#footnote-15) (Avigad 1978, 1049; 1993, 1308). Adam Zertal, in his comprehensive survey of the Manasseh region, described Samaria as the largest and most important city in the country for over 400 years, but he too erroneously presumed that it had no on-site water source (2004, 460–62).

**The Eastern Water Sources**

**The Water Conduit in the Forum of Samaria-Sebaste**

Crowfoot, a classical scholar, was fully aware that a Roman city must have a plentiful water supply (Crowfoot et al. 1942, 4), and the 1931 discovery of an underground water conduit, attributed to the Roman-period city, provided him with a partial answer (Crowfoot 1933, 35). The conduit is a 53-cm-wide rock-hewn trench, roofed with stone slabs, that runs east–west between a long well-paved street to its south and the southern colonnade of the Roman forum to its north. It was discovered via an accidental breach located 16 m from the southwest corner of the forum. There, the bottom of the rock-hewn trench was at an elevation 406.64 m above sea level; its rock-cut walls are 1.25 m high, and a pent roof[[16]](#footnote-16) increase the height to 1.6 m. East of the breach, the bedrock steadily slopes down, so that ca. 40 m farther east only the very bottom of the conduit is rock hewn to preserve the gradient. The side walls are masonry built, formed by finely fitted slabs resting upon them. To the west of the breach, the bedrock is higher. A flight of nine rock-cut steps descends deeper into the bedrock 20 m farther west, making the rock-hewn trench into a wholly rock-cut aqueduct tunnel. Another 30 m west of the steps the aqueduct tunnel reached a circular domed chamber, and then continued westward below the ancient city of Samaria. Unfortunately, the tunnel going forward was blocked with debris, and subsequent exploration was abandoned. Crowfoot noted that the excavated portion of the aqueduct tunnel (ca. 100 m) sloped down at a gentle gradient from east to west (1932, 69–70, pls. I–IV; Crowfoot et al. 1942, 74–81, fig. 39). The discovery of the aqueduct tunnel prompted the Joint Expedition to examine the possibility that it was fed by one or more of the many springs that rose on the other side of the valley, east of the city, and further confirmed their incorrect assumption that there was no local water source.

**The Springs East of Samaria-Sebaste**

In the 1920s, the local geographer and historian Yosef Braslavi (Braslavski) investigated some of the eastern springs, documenting the remains of any reservoirs, tunnels, and conduits. He recorded that the water provided by the British Mandate authorities to the village of Sabastiya was delivered via a metal pipeline that came from the large rock-cut water reservoir in the village of Naqura.[[17]](#footnote-17) He noted that this reservoir, in turn, was fed from the ‘Ein Harun spring and the spring in the village of Ijnisinya, and that both were also connected via a 80 m–long rock-cut tunnel (Braslavi 1924–1925; Braslavski 1954, 287, n. 4; Crowfoot et al. 1942. 76-78, figs. 38 & 39; Frumkin 2002, 267).[[18]](#footnote-18)

While Crowfoot was aware of Braslavi’s work, written in Hebrew, he could not read it (Crowfoot et al. 1942, 76). Presumably, two local members of the excavation team, Jacob Pinkerfeld and Nahum Avigad, were able to make use of Braslavi’s work. Together with team members Archibald Buchanan, Sinclair Hood and Charles Inge, they were sent to investigate the matter (Crowfoot et al. 1942, 75). At ‘Ein Harun, they identified the rock-cut tunnel described by Braslavi (Crowfoot et al. 1942, 71, fig. 38, pl. LXXXIX/1, 2), and they also found remnants of a specus at six different points between ‘Ein Harun and Ijnisinya, just above the 410 m above sea level contour line. The team also noted a second separate aqueduct led from Ijnisinya at a slightly higher level.[[19]](#footnote-19) It too was traced to a point east of Samaria-Sebaste (Crowfoot et al. 1942, 78–81, fig. 39). Thus, they believed there were two aqueducts following the 410 m contour line and ending at a point on the other side of the deep valley that separated them from Samaria-Sebaste at an elevation of 408.70 m above sea level. The Joint Expedition searched for evidence of a high-level aqueduct bridge that once spanned the valley, discovering some poor remains thought to be part of such a structure (Crowfoot et al. 1942, 79–80, fig. 40).[[20]](#footnote-20) They concluded that they had discovered part of a 4.4 km–long aqueduct system that brought water to Samaria-Sebaste during the Roman period (Crowfoot et al. 1942, 75–79).[[21]](#footnote-21)

Studies conducted by Amos Frumkin (2002), however, have corrected and clarified the information reported by the Joint Expedition (Frumkin 2002, 1 n. 4). In fact, there are four different systems that brought water to Samaria-Sebaste from the springs across the valley, the earliest of which was constructed during the Hellenistic period and the latest in the Roman period.

The earliest system is a low-level–channel terracotta pipe system, probably fed by the spring of ‘Ein Mafsala.[[22]](#footnote-22) Located 1.6 km east of Samaria-Sebaste, it has a low output that today runs dry in summer. The terracotta segments were cemented together and then placed in a partly rock-hewn, partly built channel, 1–2 m below ground surface. This sealed system, in which the water flowed under atmospheric pressure, is now dated to the Hellenistic period (Frumkin 2002, 267–69, figs. 1, 2).

The second system is also a terracotta pipe system, only a short section of which was exposed. It is situated 69 cm above the channel of the earlier pipe system and differs from it in that the terracotta segments are slightly smaller in diameter. Frumkin proposed that it is part of a siphon system that may have started in ‘Ein Harun (2002, 269).

The third system is the Naqura aqueduct: a partly rock-hewn, partly built 4.4 m–long tunnel fed by a large reservoir at Naqura,[[23]](#footnote-23) which holds water from the adjacent spring of ‘Ein Harun. Interestingly, the elevation of this system is the same as that of the aqueduct tunnel below the Samaria-Sebaste forum, which it also resembles architecturally. The typology of the hydraulic plaster suggests a 3rd-century CE date (Frumkin 2002, 269–70).

The fourth system is the Shechem-Sebaste aqueduct: a 15 km–long, partly rock-hewn, partly built tunnel that brought water from the more distant springs of Nablus (שכם), particularly ‘Ein Beit el-Ma and possibly also from ‘Ein Subyon and ‘Ein Batsa.[[24]](#footnote-24) A section of this tunnel runs 9 m above ‘Ein Harun and Naqura. It appears to be the newest of the systems; the plaster furnishes a date for its inception during the 3rd–4th centuries CE. It continued in use, however, throughout the Byzantine period until the early Islamic period (Frumkin 2002, 270–75, figs. 3–7).

**Summary: The Eastern Springs and the Forum Aqueduct Tunnel**

The earliest pipe system that brought water to Samaria-Sebaste from the springs in the east was built during the Hellenistic period[[25]](#footnote-25) and supplemented by the later pipe system (Frumkin 2002, 277; Patrich & Amit 2002). The aqueduct tunnel discovered along the south side of the city’s Roman-period forum, was cut through bedrock, and therefore could have existed prior to the construction of the Roman forum in the Hellenistic period or earlier.[[26]](#footnote-26) The demand for water, however, would have increased when Samaria-Sebaste became a military colony and would have reached its zenith during the rule of Septimius Severus, when the city was awarded colonial status at the beginning of the third century CE (Isaac 2000, 359). Indeed, it would have been unheard of for a Roman city not to have been provided with additional water, especially if a Roman military unit was stationed there (Di Segni 2002, 52). Therefore, from the period of Septimius Severus or possibly as early as the time of Herod in 30 BCE, the eastern valley would have been spanned by an aqueduct bridge incorporating a siphon venter (Patrich & Amit 2002, 13), or a similar mechanical device for raising water (see Owens 1991, 53).

**The Church[[27]](#footnote-27) of St. John the Baptist in Sabastiya and Its Water Reservoirs**

The Byzantine church dedicated to John the Baptist is depicted on the mosaic floor of St. Stephen’s Church in Umm ar-Rasas, Transjordan (Piccirillo 1993, 180, pl. XII),[[28]](#footnote-28) showing that it had a series of large subterranean vaulted rooms, presumably reservoirs, and a nilometer.[[29]](#footnote-29) The depiction of a nilometer, when not incorporated into a Nilotic scene, can signify a water source, or if displayed in a church, a connection with baptism, purification, and resurrection (Michaeli 2013, 130–31). At Samaria-Sebaste, the nilometer is shown as next to the reservoirs and probably indicates that it existed to monitor the water level in the church’s reservoirs. Every church required water—particularly one dedicated to St. John the Baptist—and would have been located near a spring or an aqueduct (Di Segni 2002, 66), which may indicate that water was still provided by the last of the piped systems,[[30]](#footnote-30) perhaps the system that originated in Nablus (Frumkin 2002, 270–75, figs. 3–7), but equally it could signify that the church was built near the local spring.

The Joint Expedition reconstructed the point of entry for the aqueduct bridge into the city based on a projected east–west line that connected the forum tunnel aqueduct with the aqueduct fragments across the valley to the east. The projected line runs parallel to the north wall of Sebastiya’s cathedral/mosque, signifying that the actual point where the water is disgorged must be in its immediate vicinity. Large pools or underground reservoirs were a necessity at the point where an aqueduct entered a city, as the incoming water had to be controlled by being directed into one reservoir or more before it could be distributed around the city (Haut & Viviers 2019, 330).

It is there, below the cathedral/mosque compound and, possibly in its immediate vicinity, that large reservoirs still exist.

Fig.2. Photograph of one of the large reservoirs located below the Cathedral/mosque compound.

Photograph courtesy of Osama Hamdan.

They were documented by architect Osama Hamdan during restoration and conservation work he undertook in and around the cathedral/mosque for the Pro Terra Sancta Association (personal communication). The original construction date is unknown, but the reservoirs clearly served the later Crusader Cathedral of St. John and may have originally been built at the same time as the earlier church.

Fig. 3. The ruined Cathedral of St. John. circa 1857. From a stereo photograph possibly by Frances Frith. Courtesy of the Gibson Picture Archive.

At some point, a small mosque was established in the ruins of the former cathedral’s southern transept; however, in the late 1890s the remnants of the cathedral’s central apse were demolished, and a new mosque was established there. The oldest above-ground section of the cathedral/mosque is its north wall, which incorporates the remains of the original Byzantine church (Hamilton 1961, 35), and is approximately parallel to the projected route of the aqueduct bridge where it entered the city~~.~~

Sabastiya and the ruins of the cathedral dedicated to St. John became a popular stop for pilgrims in the 19th century.[[31]](#footnote-31) Three provided descriptions of particular interest: In 1873, Samuel Manning related that “climbing the rather steep ascent that leads up into the city, we come to a large pool or reservoir” (1874, 161). He described the location as being “near the remains of a large and handsome Christian Church where John the Baptist was buried” (Manning 1874, 161). Henry A. Harper visited Samaria in the 1890s and wrote that “that great reservoir by the ruins of the Church of St. John is probably the very pool where the harlots were wont to wash themselves [*I Kings* 22, 38]” (1895, 314).[[32]](#footnote-32) The large pool or reservoir mentioned by both Manning and Harper is obviously in the village of Sabastiya and close to the cathedral/mosque compound.

A third pilgrim, the photographer Robert E. M. Bain, published a collection of Holy Land photographs in 1894, three of which were of Samaria (Sabastiya) with one showing a large pool in the village.

Fig. 4. Photograph of women collecting water from a sunken pool in Sebastiya in 1894. Photograph by R.E.M. Bain. In the author’s collection.

 The photograph is described as “a picture of the well in Samaria…. People collecting water at a well; there are several large jugs on the ground; stone walls are in the background and surround the well” (Vincent et al. 1894).

 The photograph clearly shows village women filling water jugs at the bottom of a deep rectangular open pool enclosed by masonry walls. One of the shadowy buildings visible in the background appears to be the northeast corner of the ruined Cathedral of St. John.[[33]](#footnote-33) The pool is not visible today; however, the area close to the north wall of the cathedral/mosque compound has not been developed, remaining a green open space despite the growth of the village in the last hundred years.

The pertinent question is what was the source of the water that filled the pool in the 19th century CE.There is no mention of an aqueduct[[34]](#footnote-34) by the many pilgrims who visited the ancient site of Samaria-Sebaste or the adjacent village of Sabastiya. The aqueduct bridge had long disappeared, probably destroyed by one of the many earthquakes that had ravaged the area (see Russell 1980, 55; 1985, 42 and Amiran et al. 1994, 265). The terracotta-pipe system could have lasted longer, but it too is unlikely to have survived for such a significant period. The important question has never been asked: How were the reservoirs filled, not only during the lifetime of the Crusader Cathedral, but later when the 19th-century pilgrims saw the large pool in the village?

In 1908, David Lyons noted that there were tomato plants and melon vines growing vigorously between the flagstones in the courtyard of the cathedral/mosque compound (Lyons 1908–1911, diary I [1908], 56), proving the reservoirs located below held water and supplied both plants with the abundant water they needed to thrive. That same year, the Harvard Expedition team lived in the Baptist Mission House, a plan of which shows a well located in the interior courtyard and a deep baptismal font in the adjacent room (Fisher 1908–1910, notebook I [1908], 2–3). The Harvard Expedition remarked on the poor quality of the local water, but it was only after May 20, 1908, when Schumacher fell ill, that the team decided to drink only bottled water (Lyon 1908–1911, diary I [1908], 10–14). In 1925, according to the Sabastiya municipality, it was to safely supply potable drinking water to the villagers that the British Mandate authorities piped in water (Hamdan & Benelli 2012, 29). The 20th-century pipeline brought water to the fountain[[35]](#footnote-35) near the northwest corner of the mosque/cathedral compound, shown on a photograph by Betty Murray, a member of the Joint Expedition in 1936. A water source in this location is referred to by Ze’ev Vilnay as a “sealed pool” and on an adjacent plan as a “reservoir” (1941, 243–44).

In a traditional village such as Sabastiya, it would have been logical for the engineers of the British Mandate’s water authority to place the new fountain near to the long-established water source. Robert Hamilton noted that if a straight line was drawn from the presumed entry point of the aqueduct bridge to the forum’s aqueduct tunnel, it would bisect the village fountain (1961, 41). This same projected line would also pass through the large open pool photographed by Bain.

Although these traditional ancient water supply systems often continued to function up to and during the period of the British Mandate (Gvirtzman 2012, 2), they were rarely mentioned—and definitely not understood—by early researchers, such as the Palestine Exploration Fund (Ron 1985, 151). Thus, the myth that the city never had its own, local, water source was founded by John Crowfoot when he wrote that the piped water supplied in 1925 was the first and only water supply available to the village of Sabastiya (Crowfoot et al. 1942, 1, 74).

**Evidence for a Local Water Source in Sabastiya**

Fig. 5. The 2000 Geological Map, a section showing the location of the Sabastiya spring, a blue dot.

A spring in Sabastiya is clearly marked at elevation 410 m above sea level on Sheet 5-IV of the 2000 Geological Map of Israel 1:50,000 (Cook 2000) and on other maps[[36]](#footnote-36) such as Sheet 165–185 of the land parcellation map produced for the 1930 Survey of Palestine and on the 1950 topographic survey map.

 Villages are invariably located upslope from their water source (Ron 1985, 166), and this is also the situation in Sabastiya. The original village houses were all higher on the east-facing slope that separated the village from the cathedral/mosque compound. Today, there is no visible spring, but a modern concrete pumping station and water reservoir, located slightly upslope from the former British Mandate period fountain, and located on the same line that bisects the open pool, the fountain, and the aqueduct tunnel previously mentioned.

Fig. 6. Four men standing on the hill at the location of the spring of Sabastiya. From the Matson Collection of the American Colony, Library of Congress Archives.

Recent studies on the water supply in the area of the Nablus Governorate provide further evidence for a spring or well in Sabastiya. One study of 12 springs in the area of the Nablus Governorate deals specifically with the spring in Sabastiya (Sabri et al. 2015, 48).[[37]](#footnote-37) The Sabastiya water source, described as a well, is listed as one of the four ground aquifer wells (Deir Sharaf, al-Badhan, al-Far‘a, and Sabastiya) that form part of the network supplying the Nablus region (Omar 2010, 24). It is also listed as one of the two main wells in the northwest region of the Nablus Governorate (Al Zabadi et al. 2012, 8).

**Conclusion: The Local Eastern Water Source**

Contrary to the long-held belief by archaeologists that there was no on-site water source for Samaria-Sebaste, there is evidence for a local spring or well, located northwest of the cathedral/mosque compound at ca. 410 m above sea level. The water output of the spring may have not been constant, and it became contaminated at some time prior to the beginning of the 20th century. During the British Mandate period, the contaminated local spring water was replaced by potable water piped in from Naqura.

This local water source was supplemented with water brought in via an aqueduct during the Hellenistic and Roman periods due to an increased demand for water. Water brought in by aqueduct had to have been disgorged into a reservoir before it could be distributed. Therefore, the local spring water and the aqueduct water would have been pooled together in this reservoir, which had to be located downslope from the local spring so that its water could easily flow into it. When the Crusader Cathedral of St. John was built the aqueduct with its supplementary water supply was no longer existent. The cathedral/mosque is downslope from the local spring and its large reservoirs would have been filled by the local spring. The large open pool near the cathedral/mosque’s north wall is also downslope from the local spring, it may have been constructed as early as the Roman period as a reservoir to receive water from the aqueduct and from the local spring water.

Figure 7a. The Cathedral/mosque of Sabastia. A view from the north-east. From the Matson Collection of the American Colony, Library of Congress Archives; Fig. 7b.A section of Figure 6a. The pool of Samaria surrounded by a stone wall is visible near the north wall of the Cathedral-mosque. To women can be discerned filling jars with water. In the top right-hand corner of the photograph a tent is pitched in front of a shadowy

structure that is probably the spring house.

In the 1890s, as seen in Bain’s photograph and remarked on by pilgrims Manning and Harper, the pool, fed by the spring located upslope from it, still provided water to the villagers of Sabastiya.

In short, Samaria-Sebaste always had a natural, local source of water that would have been available to the earlier Iron Age residents of Samaria[[38]](#footnote-38) as well as the later residents of Sabastiya.

Fig. 8. Looking south, a view of Samaria and Sabastiya from east to west. In the extreme left (east) of the photograph is the green area of the former pool, north-west of the Cathedral/Mosque a circular concrete pumping station over the spring/well at 410 m above sea level. The Roman Forum where the rock-cut aqueduct was traced is in the centre of the photograph. In the right (west) the Temple to Augustus and the underlying Palace of Omri can be seen. Courtesy of the Richard Cleave Rohr Productions. A section of the original

photograph.

Fig. 9. Plan showing the location of all the elements cited in this article. The route of the aqueduct, the location of the village houses, the pool shown in the circa1890 photograph, the fountain established in 1925, the location of the spring at 410m asl, the church/mosque, the Roman forum, and the monuments on the Tel of Samaria.

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1. Gabinius, the provincial governor from 57 to 55 BCE, was thought to be responsible for the earliest Roman-period buildings, which belonged to a well–laid-out city, Hellenistic in style (Crowfoot et al. 1942, 31–32). [↑](#footnote-ref-1)
2. Sebaste comes from the Greek *σεβαστός*, meaning “venerable,” which is equivalent in Latin to *augustus*. [↑](#footnote-ref-2)
3. The main monuments visible today are those that date to the Severan period, i.e., the colonnades around the forum, the basilica, the columned street, and the stadium (Crowfoot et al. 1942, 35–37). [↑](#footnote-ref-3)
4. The village has not been excavated except for a few monumental late Roman tombs were excavated by the Harvard Expedition and the Joint Expedition. They all lie east of the presumed route of the Roman city wall, which is thought to be the, western, entrance wall of the cathedral/mosque, including the presumed tomb of John the Baptist that lies below the courtyard of the cathedral/mosque. [↑](#footnote-ref-4)
5. For a list of earthquakes in the Sabastiya and Nablus area, see Amiran et al. 1994 and Zohar et al. 2017. [↑](#footnote-ref-5)
6. The earliest evidence for its existence was provided by Egeria, who visited in ca. 384 CE (*Itinerarium Egeriae*), and according to St. Jerome, Paula of Rome also visited the church in ca. 404 CE (Pringle 1998, 285). [↑](#footnote-ref-6)
7. There is evidence that the cult of Sarapis was established in Samaria during the Hellenistic period (Magness 2001, 157) and was apparently revived by Augustus (Laughlin 2016, 19). Water played an important role in that cult (see Wild 1981). [↑](#footnote-ref-7)
8. Various architectural elements from the Byzantine period were reused in the cathedral and immediate area (Tarkhanova 2019). [↑](#footnote-ref-8)
9. The Russian abbot Daniel reported that a new church stood there by 1106 (Bagatti 2001, 80); however, this may have been simply a small shrine. Usama ibn Munqidh described a small church just in front of the tomb of John the Baptist (Hamdan & Benelli 2012, 39). It is mentioned again in 1128 CE, when a bishop was appointed (Kenaan-Kedar 1992, 100). [↑](#footnote-ref-9)
10. The cathedral building may have been partially damaged or even destroyed by an extensive earthquake reported in Samaria and elsewhere in May 1202 CE (Zohar et al. 2017, 4). [↑](#footnote-ref-10)
11. The Harvard Expedition was the first team to excavate Samaria and was initially led by Gottlieb Schumacher as field director in 1908, who was replaced in 1909 by George Reisner. The results were published in two volumes, *HE I* and *HE II*. [↑](#footnote-ref-11)
12. The second team was the Joint Expedition, which excavated between 1931 and 1935. The team was composed of five institutions: Harvard University, The Hebrew University in Jerusalem, the Palestine Exploration Fund, the British Academy, and the British School of Archaeology in Jerusalem. They were led by John Crowfoot, director of the British School of Archaeology in Jerusalem. The team surveyed and excavated several areas, not only on the site of Samaria-Sebaste but also in the adjacent village of Sabastiya, publishing their results in three volumes in the Samaria-Sebaste series: Crowfoot et al. 1942,Crowfoot & Crowfoot 1938, andCrowfoot et al. 1957. [↑](#footnote-ref-12)
13. For a comprehensive list of excavations conducted up until 2007, see Greenberg & Keinan 2009, 39. Since 2005, excavation and conservation activities have been conducted jointly by the Mosaic Centre in Jericho, the ATS Pro Terra Sancta, Al-Quds University, and the Sabastiya Municipality (Hamdan & Benelli 2012, 9). [↑](#footnote-ref-13)
14. Unfortunately, there are no villagers alive today to confirm this, however a resident of Sabastiya, archaeologist Subeib Huwari confirmed that the villagers always knew about the spring. [↑](#footnote-ref-14)
15. See Franklin 2018:76-82\* for an alternative view of many of these so-called cisterns. [↑](#footnote-ref-15)
16. Another built tunnel with a pent roof was excavated by the Harvard Expedition on the lower terrace (*HE I* 189, figs. 108, 109) (see below). [↑](#footnote-ref-16)
17. Identified with en-Naqureh, Site 243 (Zertal 2004, 478). [↑](#footnote-ref-17)
18. The tunnel varies in width; documented sections range between 75 cm and 2 m wide (Frumkin 2018, 136, fig. 11). [↑](#footnote-ref-18)
19. This was, in fact, a different aqueduct, part of the fourth system identified by Frumkin (2002, 270–74) (see below). [↑](#footnote-ref-19)
20. Although, there is scant evidence for the existence of such an aqueduct bridge at the site, the disappearance of an aqueduct bridge is not unique. At Kremna in southern Turkey, a few foundation stones are the only indication for the existence of an aqueduct bridge there (Owens 1991, 48). [↑](#footnote-ref-20)
21. Crowfoot may have based this attribution on certain architectural similarities that implied a chronological connection. Unfortunately, he proved no physical connection between the features (Sabri et al. 2015, 47). [↑](#footnote-ref-21)
22. ‘Ein Mafsala appears to be an alternative name for ‘Ein Kafr Rummah (Israel grid ref. 1697/1877) at 389 m above sea level (Zertal 2004, 581). [↑](#footnote-ref-22)
23. The village of an-Naqura (en-Naqureh, Site 243) is located on an isolated ridge at 430 m above sea level, ca. 1 km south of Sabastiya (Zertal 2004, 478). [↑](#footnote-ref-23)
24. Interestingly, a recent analysis of the strontium isotope ratios has proved that neither the prolific Ras el-‘Ein nor the ‘Ein Qaryun spring was connected to the Samaria-Sebaste aqueduct system (Sabri et al. 2015, 46). Haim Gvirtzman mentions that ‘Ein Asal supplied Samaria-Sebaste with water (2012, 2). [↑](#footnote-ref-24)
25. During which time, Samaria had at least one large bathhouse (Reisner 1910, 256) and numerous stepped baths (Crowfoot et al. 1942, 134, pl. lxxiii/1). [↑](#footnote-ref-25)
26. A large podium was built in order to extend the area to the north, creating a large flat area for the Roman forum. The aqueduct tunnel was cut into the bedrock that existed below the southern part of the forum. [↑](#footnote-ref-26)
27. The early church, the Crusader cathedral, and the mosque are also referred to as cathedral/mosque as they are substantially the same building. [↑](#footnote-ref-27)
28. St. Stephen’s Church was constructed ca. 785 CE. [↑](#footnote-ref-28)
29. A nilometer is normally an underground structure, e.g., at the bottom of a well, and not actually visible (Sandri 2017, 209). [↑](#footnote-ref-29)
30. The aqueduct bridge was presumably destroyed by an earthquake. Earthquakes with a strength of XI to XII (7.6–8.1 to over 8.1 magnitude) destroy bridges and underground pipelines (Amiran et al. 1994, 293). Underground terracotta-pipe aqueducts are, however, more resistant to earthquake damage (Mays et al. 2019, 26). [↑](#footnote-ref-30)
31. Despite the many description of the cathedral/mosque by travellers no attention was paid to the existence of a local water source, and these three descriptions are seemingly unique. [↑](#footnote-ref-31)
32. This is not to be confused with the other supposed “Pool of Samaria” excavated 20 years later by the Harvard Expedition on the summit of the tell of Samaria. [↑](#footnote-ref-32)
33. Bain’s photograph predates repairs to the compound and the building of the new mosque along with its minaret. [↑](#footnote-ref-33)
34. An occasional pilgrim would refer to a ruined Ottoman watermill located in the valley south of the hillside village as an aqueduct (Gibson 2014, 71). [↑](#footnote-ref-34)
35. The use of the word “fountain” may mean any public water supply. [↑](#footnote-ref-35)
36. The spring marked on the post 1925 maps may show the British Mandate period fountain located just a short distance from the actual spring. The geological map shows the accurate location. [↑](#footnote-ref-36)
37. The *Atlas of Palestine 1917–1966* mentions 191 springs and 48 wells used during the British Mandate period in the district of Nablus (presumably the area currently known as the Nablus Governate) (Abu-Sitta 2010: 56, table 2.27). The Nablus Municipality provides the daily pumping rate for six springs and five wells, including the Sabastiya well (Applied Research Institute—Jerusalem 2014: 18, table 12). [↑](#footnote-ref-37)
38. A forthcoming article will focus on Iron Age Samaria. The archaeological data regarding bell-shaped pits, cisterns, and cave systems as well the diaries of the excavators will be reviewed, revealing that, in the west, the site had a stepped-cave system capable of providing access to the water table. [↑](#footnote-ref-38)