

Chang-Ho C. Ji  
Center for Near Eastern Archaeology  
La Sierra University  
4500 Riverwalk Parkway  
Riverside, CA 92505  
U. S. A.

**Chang-Ho C. Ji**

## **The Ancient Road in Wādī Zarqā'–Mā'īn, North of Khirbat 'Atarūz**

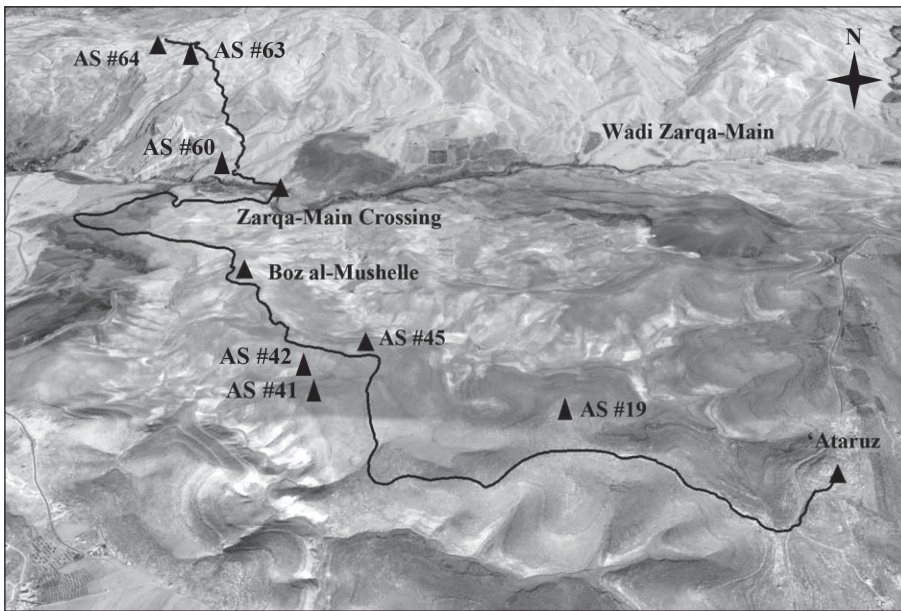
Khirbat 'Atarūz is a prominent ancient ruin in the region of Jabal Ḥamidah, central Jordan. It was a thriving cultic, urban center in the 9<sup>th</sup> - 7<sup>th</sup> centuries BC that was built and maintained by national political entities (Ji 2011, Ji 2012; Ji and Bates 2014). It was resettled during the late Hellenistic period following a long settlement hiatus from late Iron II through the early Hellenistic era. Further, 'Atarūz lay at an important crossroads in antiquity. A north-south road from the land of ancient Moab and Edom passed through the site by way of Dhībān in route to the Jordan Valley (Strobel 1981, 1997). Another pivotal road from the east arrived at 'Atarūz by way of the military fort at Rujum 'Atarūz (Ji 2016). At Khirbat Libb, this eastern road joined the King's Highway, a major trade route of vital importance to the ancient kingdoms of Transjordan. In addition, a branch road led to the west from 'Atarūz to ad-Dayr and Machaerus. In short, roads from all points in Jabal Ḥamidah came together at 'Atarūz.

A description of the eastern route has already been published along with a detailed study of Rujum 'Atarūz (Ji 2016). The southern part of the 'Atarūz road system still warrants more

fieldwork and study for a systematic publication. The purpose of this paper is to describe and date the northern road as its survey and analysis have recently come to closure. On the basis of the results, the author now can reconstruct a complete series of the ancient sites of the region north to 'Atarūz, corresponding to the Wādī Zarqā'–Mā'īn valley area (FIG. 1). Part of this series is rather well known from Strobel's earlier archaeological survey (1981, 1982, 1990). The 'Atarūz Regional Project team not only revisited all the sites in Strobel's report but also covered the southern section that was missing in his survey, documenting all the ancient remains including even small to medium round structures along the stretch between 'Atarūz and Wādī Ḥimara. The present paper also intends to discuss the historical importance of this road for the study of Iron Age and Hellenistic-early Roman history in the 'Atarūz region.

### **Upper Southern Section**

When 'Atarūz was at the peak of its settlement, as stated above, multiple regional and local roads appear to have developed in the region (Ji 2016). Probably the most salient of



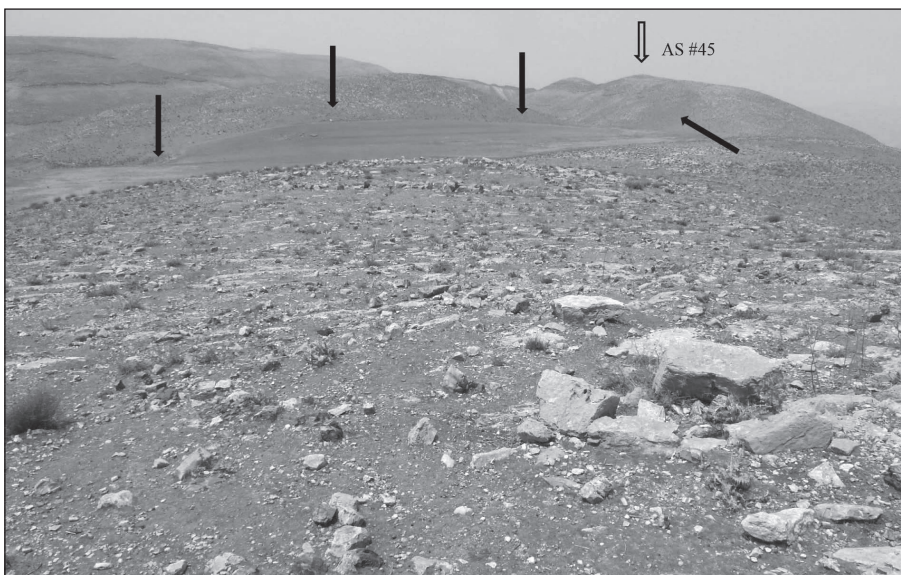
1. The Wādī Zarqā’-Mā’īn Road on Google Earth.

these was the north-south thoroughfare that passed through Sayl Haydān, Wādī Zarqā’-Mā’īn, and the Wilderness of Minya, connecting such prominent cities as ‘Atarūz, Dhībān, and Jericho (Strobel 1997). This northern road was actually the only highway that people could travel directly between the ‘Atarūz region and the Jordan Valley without going through the Madaba Plains and Transjordan Plateau. For this reason, in antiquity, it may have been frequently used by people who wished to move from ‘Atarūz to Jericho and the Jordan Valley by the shortest and most convenient route available. In this paper, I simply refer to this road as the Wādī Zarqā’-Mā’īn Road because it

crosses over a major gorge called Wādī Zarqā’-Mā’īn in connecting the ‘Atarūz region with the Jordan Valley.

The upper southern section of the Wādī Zarqā’-Mā’īn Road runs about 4 km from ‘Atarūz to Boz al-Mushelle (‘Atarūz Survey Site (AS) #31) through one fortified villa site and several watchtower sites. In detail, after the road departs from the western end of ‘Atarūz, it first runs mostly downhill about 2 km northwest along the modern dirt truck road. This dirt road ends at a medium-sized basin that is currently under cultivation for grain and seasonal farming (FIG. 2).

About halfway between ‘Atarūz and this



2. Course of the ancient road near the cultivated basin area, looking northwest.

farming basin area is a rocky hill on which a building ruin (AS #19; *ca.* 10m in diameter), possibly a watchtower, is situated. This site is clearly visible from 'Atarūz and commands an excellent view over the basin northwest of the hill. To the northwest of the basin is another prominent hill that contains a round watchtower-like structure (AS #41; *ca.* 13m in diameter) with an attached enclosure, possibly an animal-pen, measuring roughly 30 m in diameter. Approximately 100 m northwest of AS #41 is a small circular building remain (AS #42) that measures 3 m in diameter. These three sites are situated on high points of the hills along the Wādī Zarqā'-Mā'īn Road, so their visibility is quite fair over the road that makes the circuit of the basin along its western boundary. Their presence at these points is unlikely to be entirely fortuitous; they were plausibly set up there with intent in relation to the Wādī Zarqā'-Mā'īn Road.

The modern dirt road ends at the northwestern edge of the basin, but the ancient road continues to the north, soon ascending a rocky mound northwest of the basin. Located at the top of this mound is a massive rectangular structure (AS #45) that covers an area some 20 by 150 m (FIG. 3). There are many visible solid wall lines inside the structure, some of which measure 1.3 m thick. The outer walls of this rectangular structure currently stands only one to two courses high. As for inner walls, its thickness is measured 1.3m on the average, indicating the building was probably defensive in



3. 'Atarūz Survey Site #45, looking east.

nature, most likely a fortress or fortified villa. At the center of this building is a potential circular water cistern dug into bedrock.

On the western side of this site is a large oval-shaped building (13.5×15.5m) incorporated into the western wall of the rectangular structure. The outer wall was again built in a solid and impressive manner (1-1.3 m thick). It presently stands up to 40 cm. Attached to this building from outside is an elliptical-shaped structure measuring 2.0×3.5m. It appears to be a tower from which there is an especially good view to the northwest and of the ancient site of Boz al-Mushelle (AS #31), located on a lower hill west of this site. At AS #45, the Wādī Zarqā'-Mā'īn Road runs straight about 200 m westward right along the southern wall of the site before it starts to descend rather steeply at the northwestern edge of the mound. Here, 108 sherds were collected, which include two Iron II and two late Hellenistic-early Roman diagnostic specimens.

### Boz al-Mushelle (Farsh al-Mesala)

West of AS #45, the road descends about 0.8 km toward the Wādī Zarqā'-Mā'īn, leading to the ancient ruin of Boz al-Mushelle (AS #31) (Strobel 1990; Wimmer 2000). Currently, this site is better known to local villagers as Farsh al-Mesala (FIG. 4). This is the most important site among the ancient ruins found along the Wādī Zarqā'-Mā'īn Road. Boz al-Mushelle is situated on a narrow rocky spur with strategic value in that it provides superb visibility in most



4. Boz al-Mushelle, view from AS #45, looking northwest.

directions including Wādī Zarqā’–Mā‘īn to the north and ‘Atarūz and AS #45 to the south. At this site, the survey team collected 127 pottery fragments of which seven Iron II and one late Hellenistic-early Roman sherds were distinguishable.

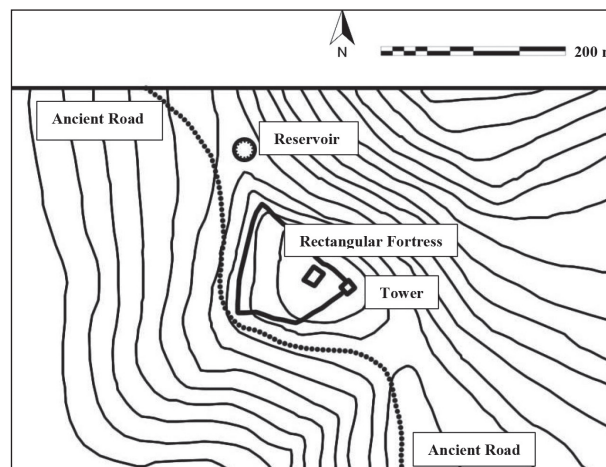
In 1988, Boz al-Mushelle was investigated by Strobel and his German team who conducted a two-week excavation at the summit (Wimmer 2000). Strobel (1990) identified this site as a Moabite town of Zereth Schahar in the Hebrew Bible (Joshua 13:18), which is as yet far from confirmatory. In their report, Boz al-Mushelle is presented as a military fort with casemate wall that circumscribes a ridge top in a roughly triangular outline. At the acropolis was a rectangular building measuring 11×22m, one made up of heavy and rather large stone blocks. Their excavation took place at the northeastern corner of this building where an entrance (1.5 m wide) into the building was located. Near the entrance was a circular stone-lined silo dug down to the ground. It was 2.5 m deep and 2.3-2.6 m in diameter. Three natural terraces were observed inside the fort. Strobel (1990; Wimmer 2000) connected them with the location of an upper, middle, and lower city. The excavation produced a very limited number of pottery sherds, based on which the German team dated Boz al-Mushelle to Iron Age II.

In 2011-2012, Boz al-Mushelle was revisited by the author for survey as part of the ‘Atarūz Regional Project. In light of this new survey, the site measures *ca.* 110m (east-west)×120m (north-south) and is surrounded by one-meter-thick defense walls, possibly casemate, which constitutes a trapezoid or triangular enclosure as observed by Strobel (1990) (FIG. 5). It is still possible to trace most of this fortification wall since large parts of the system remain visible above ground. The southern and western parts of the walls have suffered greatly from erosion.

A square-type tower (*ca.* 12×12m) stands at the eastern corner of the site with its entrance at the southeastern corner. It was constructed

on the defensive wall. This corner tower must have been an imposing structure in antiquity that provided its users with an advantage in surveying defensive positions during wars and obtaining a good view of the surrounding areas, including the Wādī Zarqā’–Mā‘īn Road. The residents would have fortified this area with the tower because it was the most vulnerable section of the settlement in terms of topography. The ravine on the north is so deep and vertical that it is impregnable; the slopes on the other three sides, though less extensive than the north one, are still rather impracticable for purposes of attack. In contrast, Boz al-Mushelle is easily accessible from the southeast via a narrow ridge connected to a low saddle between the site and a small round-structure site (AS #32). The corner tower was erected at this vulnerable point. Outside of the tower and the southeastern section of the defense wall are artificial trenches that appear to be ancient ditches that prevented invaders from getting close to the wall from the saddle.

As noted above, the highest point of the site is occupied by a rectangular building (FIG. 6). Its exterior dimensions are 12.2×22.6m with its wall being measured about 80cm thick. This size is in accord with the 11×22m of the German team that probably reported the interior dimensions of the building (Wimmer 2000: fig. 3). The aforementioned circular silo still remains in decent condition, about 4m northeast



5. Map of Boz al-Mushelle and the ancient road, adapted from Strobel 1990 and 1997.



6. The acropolis of Boz al-Mushelle, looking east.

of the building entrance. This rectilinear building is well and solidly built at the commanding location from large and heavy limestone blocks, giving the impression of belonging to a public or military headquarter structure. Multiple wall lines are visible inside the building. Although no definite outline of interior structures is discernable due to several piles of rubble blocks inside the building, the surface observation and Strobel's earlier report suggest the existence of four rectangular long rooms, three in a vertical row with a fourth running the opposite horizontal direction, each separated by a solid wall. The two side vertical rooms seemingly consist of three to five small rooms, while the central one appears to have been an aisle that allowed access to the side and back rooms.

There is no natural water spring around Boz al-Mushelle. The primary water source would have been a manmade reservoir (AS #40) in the saddle of the northern ridge, about 50 m north of the city (FIG. 7). It appears to be oval- or rectilinear-shaped, measuring 20×25m. The reservoir was dug into soil ground and then bedrock. A retaining wall was erected around the reservoir to hold back the lateral pressure of soil, the wall constructed from stones without any mortar binding them together (FIG. 8). Part of the northern side wall is currently preserved up to seven courses high with a height of about 1.5 m, where visitors can see the presence of load-bearing facade of carefully selected interlocking unhewn stone blocks. Water would have been lifted by human and animal power to

Boz al-Mushelle at the hill top via a faint trail that is still traceable. Near the upper end of this trail are a couple of parallel wall lines and small stone piles, positing the potential existence of a staircase and/or retaining walls in antiquity.

The Wādī Zarqā'-Mā'īn Road, which descends from AZ #45, winds around the southern, southwestern, and western sides of Boz al-Mushelle (FIGS. 5 and 9). The ancient road is astonishingly well preserved in this sector. Here, the road is 10-15 m wide, depending on the location. A long stretch of wall constructed of unhewn stone blocks runs along the western side of the road rising to a height of 1 m to retain soil on the road (FIG. 10). The road passes by the water reservoir after it turns past the southwestern corner of Boz al-Mushelle's city wall. Next, it turns to the northwest, descends following a gentle downhill, and then passes through a basalt stone field in which part of the ancient retaining walls are still discernable.



7. Ancient reservoir at Boz al-Mushelle, looking northwest.



8. Retaining wall of the reservoir at Boz al-Mushelle, looking north.



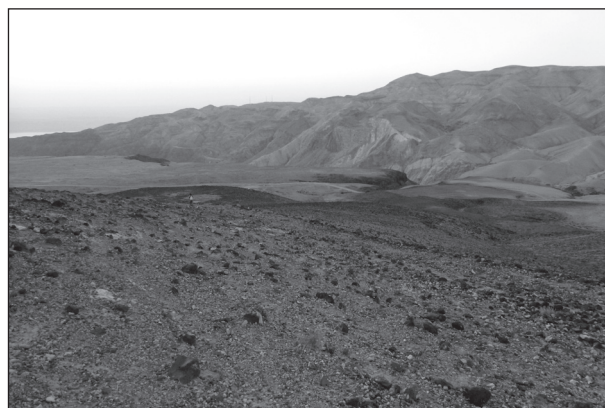
9. The ancient road in the Boz al-Mushelle area, looking northeast.



10. Retaining wall of the ancient road, west of Boz al-Mushelle, looking east.

### Lower Southern Section and Zarqā’-Mā’īn Crossing

The course of the Wādī Zarqā’-Mā’īn Road from Boz al-Mushelle to the bottom of this basalt stone field is clear or at least relatively easy to reconstruct because it remains remarkably unimpaired over thousands of years (FIG. 11). Yet, the section from the basalt stone field down to the Wādī Zarqā’-Mā’īn Crossing (AS #58) is far more difficult to determine due to frequent ploughing out, development, and bulldozing for road construction in the area. This area is locally called the valley of al-Buqe’a. It represents sparsely populated desert plains with some gentle hills and several dry streams that flow into Wādī Zarqā’-Mā’īn. But it seems quite probable that the ancient road here makes a turn to the northeast at the bottom of the basalt stone field and follows a modern dirt road on a rather flat area about 2 km to the east, a road heading to the agricultural area at the up-



11. The basalt stone area, looking northwest.

per stream of Wādī Zarqā’-Mā’īn.

Soon after two small stream-crossings, this modern dirt road reaches the top of the ancient stone stairway that leads down to the bottom of Wādī Zarqā’-Mā’īn (FIG. 12). This area has been badly disturbed by bulldozers working on road construction. The destruction is not total, however. A careful survey of the bulldozed area discloses the remnants of retaining walls and more than two dozen stone steps *in situ* that once comprised an ancient staircase system that helped people walk down to and cross Wādī Zarqā’-Mā’īn. In this part of the region, Wādī Zarqā’-Mā’īn forms a deep and steep-sided gorge that is difficult and dangerous to cross with high risk of accident. Ancient people who had to travel across this part of the gorge needed an “easy and safe” access to the bottom of the valley, so they installed two stone staircases, one each on the southern and northern sides of the gorge, most likely following earlier



12. Course of the ancient road, east of the al-Buqe’a valley, looking south.

dirt trails that existed there prior to the staircase construction (FIG. 13).

The stairway on the northern portion of Wādī Zarqā'-Mā'īn is the better preserved due to the lack of modern development activities on that side of the valley (FIG. 14). To think this stairway was built no later than the Roman era (see below for dating), the author is amazed by its rather pristine condition. The total number of steps is difficult to count because of rock tumbles from the cliff north of the staircase. Also part of the staircase has fallen into disrepair because of erosion. But it is estimated roughly 50 steps were originally laid out here to complete the staircase using medium to large unhewn basalt and limestone blocks.

For reference, in the valley of al-Buqe'a, a local road appears to have branched off westward from the Wādī Zarqā'-Mā'īn Road to the basalt-stone-quarry site (AS #51) on the Hellenistic-



13 The Wādī Zarqā'-Mā'īn Crossing, looking southeast.



14 The northern staircase at the Wādī Zarqā'-Mā'īn Crossing, looking northeast.

Roman road that connected Machaerus and 'Ayn az Zāra (cf. Ben David 2015; Strobel 1990). This secondary road closely follows the modern paved road to 'Ayn az-Zāra from the junction south of the hot-spring resort of Hammāmāt Mā'īn. The antiquity of this road is attested by the Herodian remains at 'Ayn az-Zāra (Clamer 1997; Strobel and Wimmer 2003) and the quarry site where high-quality basalt stones were quarried in ancient times. During Iron Age II, this quarry site would have been one of the primary sources of basalt stones that were used at 'Atarūz for cultic and private purposes. In this sense, this branch road is likely to have been of great socio-economic utility and importance to the residents at 'Atarūz and its vicinity.

### Northern Section

At the northern bank of Wādī Zarqā'-Mā'īn, the road first proceeds about 0.7 km westward rather horizontally along the contour line of large gentle hills (FIG. 15), makes a sharp turn to the northwest, and then arrives at a large wadi without a name. The course from Wādī Zarqā'-Mā'īn to this nameless wadi is well marked by ancient retaining walls still evident along the road. There is a small round structure (AS #60) at the point where the road turns northwest.

The section of the road that leads from the nameless *wadi* to the modern Mā'īn-Jordan Valley Road can also be traced with equal cer-



15. The ancient road along the northern bank of the Wādī Zarqā'-Mā'īn, looking north.

tainty, except in a few areas, due to its relatively good condition of preservation. The most impressive section is found at 350 - 400 m in elevation where the road goes around natural amphitheater-type terrain disturbed by frequent erosion. Here, the retaining wall is higher and thicker than in the other sectors of the road for an obvious reason: it has to hold large amounts of soil and rock on a rather vertical slope (FIG. 16). Next, the road comes to a small saddle at the elevation of nearby 400 m, where it turns almost 90 degree to the north (FIG. 17). The Wādī Zarqā'-Mā'īn Road continues about 2.5 km and arrives at the modern paved road that connects Mā'īn and the Jordan Valley. The ancient road is no longer traceable from here to 'Ayn Ḥimāra. It is completely lost to the modern road, development, and bulldozing.

As stated above, the northern section of the Wādī Zarqā'-Mā'īn Road was previously explored by Strobel (1981) who wrote a rather thorough description of the road. The author revisited this section of the road a couple of times, searching for archaeological sites along the road and its vicinity. To the author's surprise, the northern section of the Wādī Zarqā'-Mā'īn Road has very few ancient ruins or settlements. One village settlement (AS #59) was noted on a basalt stone knoll, about 0.5 km northeast of the northern Wādī Zarqā'-Mā'īn staircase. At this site, the survey team documented several long faint wall lines and the possible remains



16. Retaining wall of the ancient road, the northern section, looking northwest.

of a couple of rectangular houses. But this site seems to have been an Early Bronze village or camp site for animal grazing, one having little to do with the Wādī Zarqā'-Mā'īn Road. The northern section of the road is also largely void of small circular structures that frequently dot the section between 'Atarūz and Wādī Zarqā'-Mā'īn, particularly the area around Boz al-Mushelle (e.g. AS #35-38 and 46-47). Only two small circular structures were noticed along the entire stretch of the northern section, one being AS #60 mentioned above and another a small structure (AS #63) on a minor spur near the upper end of the road.

One exception for this generalization is AS #64 located on a prominent rocky hill on the watershed Main ridge, a hill near the radio antennas standing by the modern Main - Jordan Valley Road (FIG. 18). The hill offers a commanding view to the Wilderness of Minya in the north and the entire southern section of the Wādī Zarqā'-Mā'īn Road. 'Atarūz is rather clearly distinguishable from this site despite the distance between the two. This site is comprised of two stone structures, one measuring 15 m in diameter and the other one 3 m in diameter. They are approximately 15 m apart. Although partially disturbed, wall lines and stone piles suggest a solid and impressive watchtower constructed from medium to large sized blocks.

AS #64 is likely a watchtower site associated with the Wādī Zarqā'-Mā'īn Road. The ancient



17. The ancient road in the northern section, looking north.





18. 'Atarūz Survey Site #64, looking west.

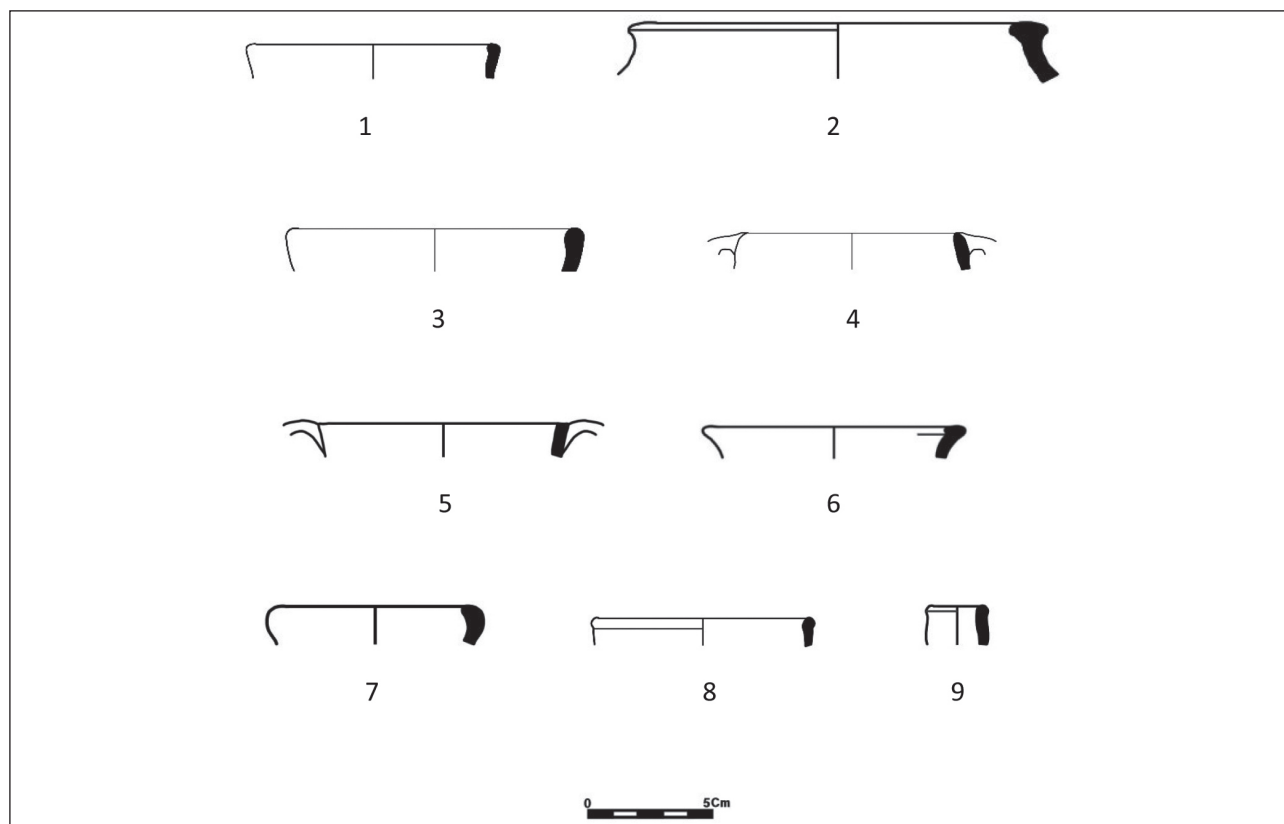
road starts to descend near AS #64 toward Wādī Ḥimara in the northwest and then continues northward through the wilderness of Minya. The ancient road would have run in the northwest-southeast direction about 50 m east of this site. Further, its location is strategic enough to overlook the long stretch of the ancient road as well as send signals to 'Atarūz and Boz al-Mushelle in case of war or emergency. Water is available at a small ancient village settlement (AS #65) in Wādī Ḥimara, roughly 2 km northwest of AS #64 (*cf.* Strobel 1974). At the wadi, water still flows year round, and springs are active in the *wadi* bed, although water is now piped into the nearby farms and industrial facilities. Possibly, watchtowers were erected at AS #64 with the intent of military defense of the 'Atarūz region and traffic surveillance on the Wādī Zarqā'-Mā'īn Road when the road was constructed or in use during ancient times.

### Dating

An ancient road is difficult to date. In this paper, the author would suggest the most probable chronology of the Wādī Zarqā'-Mā'īn Road, referring to the pottery collected from the sites along the road. Eight of the 28 sites found along the road contained diagnostic pottery sherds. Late Hellenistic-early Roman sherds were recovered from six of the eight diagnostic-sherd sites (75%), indicating the significance of these periods for the use and development of the road. The next highest frequency is pertinent to

Iron Age II with 63% ( $n = 5$ ) of the eight sites. Smaller proportions Early Bronze (one site) and mid Islamic sherds (two sites) are present at the surveyed sites, indicating some limited use of the road during these periods. Other periods, surprisingly including the Byzantine period, are not attested. Looking at this result from the survey, it is clear that the Iron II and late Hellenistic-early Roman periods stand out as the possible periods of construction, use, and renovation of the Wādī Zarqā'-Mā'īn Road. The road might have been in use during the mid Islamic period, but given its meager representation in the ceramic repertoire, traffic along the road would have been much less than that of the Iron II and late Hellenistic-early Roman periods.

For references, (FIG. 19) contains some selected pottery examples collected from the sites located along the Wādī Zarqā'-Mā'īn Road, including three sherds (FIGS. 19:1-2 and 5) from Boz al-Mushelle. To begin with Iron II, (FIG. 19:1) is a medium-sized krater with an inverted, downwardly-angled, rounded hammerhead rim. It is normally dated to Iron II A-B (Gitin 2015: pl. 2.5.5:1), even though it originally appeared in the Iron I period as demonstrated at Tall Abū Shūshah (Gezer) (Gitin 1990: fig. 6:19). A holemouth krater is depicted in (FIG. 19:2), a type that was popular in the 9<sup>th</sup>-8<sup>th</sup> centuries BC krater assemblage. The earliest appearance of holemouth kraters took place late in the 10<sup>th</sup> century BC. This rim shape was also extensively adopted for storage jars. Parallels are found at Tall Abū Shūshah (Gezer) (Gitin 1990: pls. 12:11; 18:1-2), Tall ad-Duwayr (Lachish) (Zimhoni 1997: figs. 3.54:1-6; 5.20:1-4; 2004: figs. 25.18:10, 17; 25.17:26; 25.21:9; 25.35:9; 25.46:24), Samaria (Tappy 1992: fig. 3:35), Tall al-Mutasallim (Megiddo) (Finkelstein, Zimhoni, and Kafri 2000: figs. 11.44:3; 11.46:11; 11.52:10), Lahav (Cole 2015: pls. 7:10; 9:32; 11:14; 14:1-6; 17:10), Bisan (Beth Shean) (Mazar 2006: pls. 19:16; 24: 2 and 4; 29:3), as-Sa'īdiyyah (Pritchard 1985: figs. 8:4, 6-9; 17:27, 29-32), Dhībān (Winnett and Reed



19. Selected pottery from the Wādī Zarqā'–Mā'in Road survey.

No And Type	Origin	Reg. #	Description (E: External; I: Internal)
1. Krater	AS #31	AS31-1	Reddish yellow (7.5YR7/6) ware, no slip, small gray core, few gray grits
2. Krater	AS #31	AS31-2	Reddish yellow (5YR6/8) ware, no slip, large gray core, few white grits
3 Bowl	AS #41	AS41-1	Light red (2.5YR6/8) ware, no slip, large gray core, no grits
4. Cooking Pot	AS #47	AS47-1	Reddish brown (2.5YR4/3) ware, no slip, no core, many gray grits
5. Cooking Pot	AS #31	AS31-3	Reddish yellow (5YR7/6) ware, pink (5YR5/3) slip (E), no core, no grits
6. Bowl	AS #38	AS38-2	Yellowish red (5YR6/8) ware, reddish yellow (5YR7/6) slip (E&I), no core, few white grits
7. Bowl	AS #45	AS45-2	Reddish yellow (5YR7/8) ware, no slip, no core, no grits
8. Bowl	AS #41	AS42-1	Brownish yellow (10YR6/6) ware, no slip, small gray core, no grits
9. Unguentarium	AS #47	AS47-2	Reddish yellow (5YR7/8) ware, yellow (10YR7/6) slip (E&I), no core no grits

1964 pls. 75:18; 76:10), and Bīr as-Sabi' (Beer Sheba) (Aharoni 1973: figs. 55:20; 56:18; 58:29, 33-36; 65:1-4, 7).

A simple-rim bowl in *Figure 19:3* has come from a circular-stone-structure site by the Wādī Zarqā'–Mā'in Road, about 0.7km south of Boz al-Mushelle. This style of bowl was in wide use in the late 10<sup>th</sup>-8<sup>th</sup> centuries BC. Similar bowls are noted at Tall Abū Shūshah (Gezer) (Gitin 1990: pls. 10:3-5, 14:11, 15: 9), Tall al-Mutasallim (Megiddo) (Finkelstein, Zimhoni, and Kafri 2000: figs. 11.24:2-3; 11.36:6), Tall al-Qudah (Hazor) (Yadin *et al.* 1960: pls.

LXIII:25; LXVII:4; LXXV:3), Tall ad-Duwayr (Lachish) (Zimhoni 1997: figs. 3.6:1; 3.7: 2; 3.19:1-4 and 9; 3.57:1-6; 2004: figs. 25.19:13-14, 19; 25.22:8; 25.32:14; 25.39:5), Bisan (Beth Shean) (James 1966: fig. 67:15-16, 22-23; Mazar 2006: pls. 6:8-10; 14:10; 19:1; 23: 1 and 6), Rumayth (Barako 2015: fig. 3.1:3-6, 8,12-13), Bir as-Sabi' (Beer Sheba) (Aharoni 1973: fig. 54:3), Samaria (Tappy 1992: fig. 4: 3-6), Wādī Jizrīl (Jezreel) (Zimhoni 1997: fig. 1.8:1), Mudayna ath-Thamad (Daviau and Steiner 2000: fig. 13:2), Ta'annak (Taanach) (Rast 1978: fig. 44:4; 64:1-8, 10-12), Ḥisbān

(Ray 2001: fig. 3.7:14-15; 3.8:8; Herr 2012: fig. 2.24:11-12; 2.25:1), as-Sa'īdiyyah (Pritchard 1985: figs. 2:12; 6:4), and 'Umayrī (Lawlor 2000: fig. 3.23:9-11; 2014: fig. 3.34:6, 8).

(FIG. 19:4) represents a frequent type of early Iron II cooking pot with a short, triangular rim inwardly tapered at the upper edge. This sherd is from another round-structure site, located between AS #45 and Boz al-Mushelle. Parallel vessels appear at Tall Abū Shūshah (Gezer) (Gitin 1990: pls. 7:24; 8:23-24; 9:20; Dever *et al.* 1974: pl. 34:7), Tall ad-Duwayr (Lachish) (Zimhoni 1997: fig. 3.38:6; 2004: fig. 25.44:50), Tall al-Mutasallim (Megiddo) (Finkelstein, Zimhoni, and Kafri 2000: fig. 11.13:13-14), Ta'annak (Taanach) (Rast 1978: figs. 28:1-3; 66:17), Bisan (Beth Shean) (Mazar 2006: pl. 15:9), as-Sa'īdiyyah (Pritchard 1985: fig. 3:30), and Ḥisbān (Ray 2001: fig. 3.8:14; Herr 2012: fig. 2.25:6), mostly dated to the 10<sup>th</sup>-9<sup>th</sup> centuries BC with sporadic appearance early in the 8<sup>th</sup> century BC.

Next for the late Hellenistic-early Roman periods, the cooking pot in *Figure 19:5* was collected from the surface of Boz al-Mushelle. It is typical of a high straight-neck variety with a simple rim, flattened on top. This was the dominant type of the late Hellenistic era, especially the time frame from the 2<sup>nd</sup> century through the first half of the 1<sup>st</sup> century BC. Selected parallels are found at Khirbat al-Burj (Dor) (Guz-Zilberstein 1995: fig. 6.17:2-4), Tall al-Akhḍar (Anafa) (Berlin 1988: 54-56), Bayt Zūr (Beth Zur) (Lapp and Lapp 1968: figs. 24:2; 27:1-7), Jerusalem (Geva 2003: pls. 5.:9; 5.7:19; 5.10:22; Geva and Rosenthal-Heginbottom 2003: pl. 6.2:17), Jericho (Bar-Nathan 2002: pl. III:28), 'Irāq al-Amīr (Dentzer, Villeneuve, Larche, and Zayadine 1982: fig. 7:1), and Ḥisbān (Gerber 2012: figs. 3.6:5-8, 10-14; 3.15: 3).

(FIG. 19:6) shows a bowl with an infolded rim and everted body wall. This particular bowl type is reportedly closely linked with the Hasmonean and Herodian rule; they are rarely found outside of their territory (Gerber 2012:

207). Parallels in the literature are dated from the late 2<sup>nd</sup> through the end of the 1<sup>st</sup> centuries BC: Machaerus (Loffred 1996: fig. 39:18, 21, 26-28, 31), Ḥisbān (Gerber 2012: figs. 3.7:19-24), Pella (McNicoll *et al.*, 1992: pls. 77:3; 81:9), Jerusalem (Geva 2003: pls. 5.3:23, 26; 5:39, 43; Geva and Rosenthal-Heginbottom 2003: pls. 6.1:16; 6:1-2; Geva and Hershkovitz 2006: pl. 4.5:5-6; 4.8:1; 4.9:13), Herodium (Bar-Nathan 1981: pl. 2:10), Jericho (Netzer and Meyers 1977: figs. 6:1; 9:1; Bar-Nathan 2002: pl. I:24; IV:66-68; VII:39-40), Qumrān (Magness 1998: fig. 1:10), and Mas'ada (Bar-Nathan 2006: pl. 26:57).

(FIG. 19:7) illustrates a bowl with an incurved rim and curved body. Although this form was popular throughout the entire Hellenistic period, its peak period for development and distribution corresponds to the 3<sup>rd</sup> - early 1<sup>st</sup> centuries BC (Lapp 1961: 201). It is sparse in the early Roman assemblage, even though its later variant with thin wall is frequently noted in the 1<sup>st</sup> century AD horizon. Similar bowls are reported at Tall al-Akhḍar (Anafa) (Berlin 1988: 133-135), 'Ayn az-Zāra (Clamer 1997: fig. 4:1), Khirbat al-Burj (Dor) (Guz-Zilberstein 1995: fig. 6.1: 1-30), Jerusalem (Geva 2003: pls. 5.3:18-21; 5.8:40-41), Jericho (Bar-Nathan 2002: pl. IV:46, 50-57), and Ḥisbān (Gerber 2012: fig. 3.8:1-16). Lastly, the bowl or drinking vessel in (FIG. 19:8) would also be dated to the late Hellenistic period. Parallels may not be plentiful in the literature. One potential parallel is found at the Hasmonean palace at Jericho (Bar-Nathan 2002: pl. X:54). An early-Roman unguentarium or bottle rim is illustrated in (FIG. 19:9). It may belong to the piriform unguentarium corpus that was in very frequent use during the 1<sup>st</sup> century AD (Lapp 1961: Type 92F-G).

## Discussion

The presence of an ancient road in the Wādī Zarqā'-Mā'īn region has been known for some time due to the earlier investigations of the re-

gion, particularly the northern section of the Wādī Zarqā'–Mā'īn Road. However, as a result of continued archaeological work in the region of Jabal Ḥamīdah under the auspices of the 'Atarūz Regional Project, a series of sites previously unknown have been discovered along this ancient highway. This has also made it possible to connect the dots through 'Atarūz, Boz al-Mushelle, Wādī Zarqā'–Mā'īn, and the modern Main-Jordan Valley Road, rendering a complete picture of the Wādī Zarqā'–Mā'īn Road.

With respect to historical context, the above ceramic evidence points to the 9<sup>th</sup> - 8<sup>th</sup> centuries BC as the most reasonable date for the construction of the Wādī Zarqā'–Mā'īn Road. During this period, 'Atarūz was a major cultic and urban center with national importance (Ji 2011; 2012). It was also characteristic of an impressive defense system with ditches and solid city walls that encircled the entire site. Besides this fortification, the residents of 'Atarūz built chains of fortresses and smaller civilian settlements around or near the city, especially along the major routes leading to the city. Rujum 'Atarūz, for instance, was erected as part of such a broader regional defense strategy in order to control and protect the eastern border and the major highway along the ridge of Jabal Ḥamīdah (Ji 2016). Boz al-Mushelle seems to have served this same purpose in the north. That is to say, it was a key military facility or fortified habitation site built to protect the area north of 'Atarūz and to oversee human movement along the Wādī Zarqā'–Mā'īn Road. Based on the regional survey, this defense system was expectedly further reinforced with a string of small watchtowers and defense facilities (e.g. AS #34-38, 45-47, and 63-64) along the road. In this perspective, Boz al-Mushelle, together with Rujum 'Atarūz, seems to be a notable example of the organization of a military zone and illustrates the defensive techniques and geopolitical strategy of ancient 'Atarūz during Iron Age II.

The Wādī Zarqā'–Mā'īn Road appears to have been reused from the 2<sup>nd</sup> century BC to the

1<sup>st</sup> century AD. This fact is indicated by the late Hellenistic-early Roman sites that have been discovered along it, including Boz al-Mushelle. Actually, the ancient remains currently visible on ground are most likely to be late Hellenistic and early Roman granted the building technique and architectural resemblance to the Machaerus-'Ayn az-Zāra Road certainly built during the same periods (cf. Ben David 2015). In the author's view, this reconstruction project is likely to have started under the Hasmoneans late in the 2<sup>nd</sup> century BC or early in the 1<sup>st</sup> century BC, if he takes into account the higher frequencies of late Hellenistic pottery found during the survey compared to those securely assignable only to the early Roman period. The 'Atarūz region was the most isolated part of the Hasmonean-Herodian kingdoms. The rulers would have needed an interregional highway that could aid in the everyday maintenance and socio-economic activities of the region. The earlier Iron II road is likely to have conveniently been reused to this end with proper repair and expansion. More importantly, the area corresponded to the southeastern frontier of the kingdoms (Ji 2009a; Ji and Lee 2004). The renovated road was probably aimed to ensure the Hasmoneans and Herodians to outmaneuver the Nabateans, their principal enemies from the south who controlled the Dhībān Plateau (Ji 2009b). Via the Wādī Zarqā'–Mā'īn Road, the region could expect to be swiftly supplied or reinforced in the event of an emergency, lessening the need for large and costly garrison units along the borderlines such as *Sayl Haydān* and Wādī al-Mūjib. Accordingly, as supported by the Wādī Zarqā'–Mā'īn Road, the route was presumably renovated with speed of travel in mind, following a straight trail across the desert, valley, and countryside as much as possible. It is even possible that the road was patrolled by special detachments of army troops, who might have used settlements and multiple circular-stone structures dotting the route as their temporary stop-over facilities. They could man the watchtowers to relay military messages, help

vulnerable travelers, and keep an eye on potential enemies.

### Conclusion

The Wādī Zarqā'-Mā'īn Road covers a length of roughly 12 km from the western side of 'Atarūz to the modern Main-Jordan Valley Road in the northwest. This ancient road is presently in varying states of preservation with and some part having disappeared forever. Notwithstanding, it might still represent the best preserved ancient road in central Jordan, a rare phenomenon in the region under constant pressure for development and urbanization (Ben David 2009). The Wādī Zarqā'-Mā'īn Road was part of a rather complex road system that crisscrossed the 'Atarūz region during the periods of Iron II and late Hellenistic-early Roman. It was primarily of a national character during these periods. The road was possibly in use during the mid Islamic period. But evidence of this is at best sketchy and limited when compared to the Iron II and late Hellenistic-early Roman periods. Boz al-Mushelle appears to have been central to this road system and was built for residence and military purposes during the Iron II period, probably under the auspices of 'Atarūz inhabitants. The Wādī Zarqā'-Mā'īn Road seems to have flourished once again in the late Hellenistic-early Roman periods when the Hasmoneans and Herodians came to the region and constructed a fort palace at Machaerus. These facts postulate that the history of the Wādī Zarqā'-Mā'īn Road was closely tied with the settlement vicissitude of 'Atarūz and its surrounding region. The road would have played a pivotal role in the development, prosperity, and military security of the 'Atarūz area during the Iron II and late Hellenistic-early Roman periods as it provided the shortest and most efficient means for soldiers, residents, and merchants to travel between the region and the Jordan Valley.

### Acknowledgments

The author would like to express his grati-

tude to Chaim Ben David and Yesu Dray who provided insight and expertise about the ancient roads in the Levant during the early stage of this survey research.

### Bibliography

- Aharoni, Y. 1973. *Beer-Sheba I: Excavations at Tel Beer-Sheba*. Tel Aviv: Tel Aviv University.
- Bar-Nathan, R. 1981. The Finds at Lower Herodium. Pp. 54-71 in E. Netzer (ed.), *Greater Herodium, Qedem 13*. Jerusalem: The Hebrew University of Jerusalem.
- 2002. *Hasmonean and Herodian Palaces at Jericho*, Vol. III: The Pottery. Jerusalem: Israel Exploration Society.
- Bar-Nathan, R. 2006. *Masada VII: The Yigael Yadin Excavations 1963-1965*. Final Reports: The Pottery of Masada. Jerusalem: Israel Exploration Society.
- Baroko, T. J. 2015. The Iron Age Pottery. Pp. 71-188 in T. J. Baroko and N. L. Lapp (eds.), *Tell er-Rumeith: The Excavations of Paul W. Lapp, 1962 and 1967*. Boston: American Schools of Oriental Research.
- Ben David, C. 2009. Iron-Age Roads in Moab and Edom: The Archaeological Evidence. *Studies in History and Archaeology of Jordan* 10: 723-730.
- 2015. The Ancient Road from Callirhoe on the Dead Sea to Machaerous: A Built Wide Road of the Second Temple Period. *Eretz Israel* 31: 20-29.
- Berlin, A. M. 1988. *The Hellenistic and Early Roman Common-Ware Pottery from Tel Anafa*. Ann Arbor: University of Michigan.
- Clamer, C. 1997. *Fouilles Archeologiques de 'Ain Ez-Zara/Callirrhoe*. Beirut: Institut Francais d'Archeologie du Proche-Orient.
- Cole, D. P. 2015. *Lahav V: The Iron, Persian, and Hellenistic Occupations within the Walls at Tell Halif, Excavations in Field II, 1977-1980*. Winona Lake, IN: Eisenbrauns.
- Daviau, P. M. M. and Steiner, M. 2000. A Moabite Sanctuary at Khirbat al-Mudayna. *Bulletin of American Schools of Oriental Research* 320: 1-21.
- Dentzer, J.-M., Villeneuve, F., Larche, F., and Zayadine, F. 1982. Fouille de la porte monumentale a Iraq al-Amir. La campagne de 1978. *ADAJ* 26: 301-321.
- Dever, W. G. et al. 1974. *Gezer III: Report of the 1967-70 Seasons in Fields I and II*. Jerusalem: Hebrew Union College.
- Finkelstein, I., Zimhoni, O., and Kafri, A. 2000. The Iron Age Pottery Assemblage from Areas F, K and H and their Stratigraphic and Chronological Implications. Pp. 244-324 in I. Finkelstein, D. Ussishkin, and B. Halpern (eds.), *Megiddo III: The 1992-1996 Seasons*. Tel Aviv: Tel Aviv University.
- Gerber, Y. 2012. Classical Period Pottery. Pp. 175-492 in J. A. Sauer and L. G. Herr (eds.), *Ceramic Finds: Typological and Technical Studies of the Pottery*

- Remains from Tell Hesban and Vicinity*. Berrien Springs, MI: Andrews University.
- Geva, H. 2003. Hellenistic Pottery from Areas W and X-2. Pp. 113-175 in H. Geva (ed.), *Jewish Quarter Excavations in the Old City of Jerusalem, Vol. II: The Finds from Areas A, W and X-2*. Jerusalem: Israel Exploration Society.
- Geva, H. and Hershkovitz, M. 2006. Local Pottery of the Hellenistic and Early Roman Periods. Pp. 94-143 in H. Geva (ed.), *Jewish Quarter Excavations in the Old City of Jerusalem Vol. II: The Finds from Areas A, W and X-2*. Jerusalem: Israel Exploration Society.
- Geva, H. and Rosenthal-Heginbottom, R. 2003. Pottery from Area A. Pp. 176-91 and 232-55 in H. Geva (ed.), *Jewish Quarter Excavations in the Old City of Jerusalem, Vol. II: The Finds from Areas A, W and X-2*. Jerusalem: Israel Exploration Society.
- Gitin, S. 1990. *Gezer III: A Ceramic Typology of the Late Iron II, Persian and Hellenistic Periods at Tell Gezer*. Jerusalem: Hebrew Union College.
- Gitin, S. 2015. Iron Age IIA-B: Philistia. Pp. 257-280 in S. Gitin (ed.), *The Ancient Pottery of Israel and its Neighbors from Iron Age through the Hellenistic Period*. Jerusalem: Israel Exploration Society.
- Guz-Zilberstein, B. 1995. The Typology of the Hellenistic Coarse Ware and Selected Loci of the Hellenistic and Roman Periods. Pp. 289-433 in E. Stern (ed.), *Excavations at Dor, Final Report Volume IB Areas A and C: The Finds*. Jerusalem: The Hebrew University.
- Herr, L. G. 2012. The Iron Age. Pp. 9-174 in J. A. Sauer and L. G. Herr (eds.), *Ceramic Finds: Typological and Technical Studies of the Pottery Remains from Tell Hesban and Vicinity*. Berrien Springs, MI: Andrews University.
- James, F. 1966. *The Iron Age at Beth Shan: A Study of Levels VI-IV*. Philadelphia: The University Museum.
- Ji, C. C. 2009a. Drawing the Borderline: The Nabatean, Hasmonean and Herodian Kingdoms in Central Jordan. *Studies in the History and Archaeology of Jordan* 10: 617-632.
- 2009b. The Nabatean Painted Pottery in the Dhiban Plateau, Jordan: Statistical Modeling and its Implication for the Nabatean Settlement. *Leiden Journal of Pottery Studies* 25: 119-140.
- 2011. Khirbat 'Ataruz: An Interim Overview of the 10 Years of Archaeological Architectural Findings. *ADAJ* 55: 561-579.
- 2012. The Early Iron Age II Temple at Hirbet 'Ataruz and its Architecture and Selected Cultic Objects. Pp. 203-211 in J. Kamlah (Ed.), *Temple Building and Temple Cultic: Architecture and Cultic Paraphernalia of Temples in the Levant (2- 1 Mill. B.C.E.)*. Wiesbaden: Harrassowitz Verlag.
- 2016. One Tale, Two 'Ataruz: Investigating Rujm 'Ataruz and its Association with Khirbaat 'Ataruz. *SHAJ* 12: 211-222.
- Ji, C. C. and Bates, R. D. 2014. Khirbat 'Ataruz 2011-2012: A Preliminary Report. *Andrews University Seminary Studies* 52: 47-91.
- Ji, C. C. and Lee, J. K. 2004. From the Tobiads to the Hasmoneans: The Hellenistic Pottery, Coins, and History in the Regions of 'Iraq al-Amir and the Wadi Hisban. *SHAJ* 8: 177-188.
- Lapp, P. W. 1961. *Palestine Ceramic Chronology 200 B.C. - A.D. 70*. New Haven: American Schools of Oriental Research.
- Lapp, N. and Lapp, P. W. 1968. *Iron II-Hellenistic Pottery Groups: The 1957 Excavations at Beth Zur, AA-SOR 38*. New Haven: American Schools of Oriental Research.
- Loffreda, S. 1996. *La ceramica di Macheronte e dell' Herodion (90 c.C.-135 d.C)*, *Studium Biblicum Franciscanum, Collectio Maior* 39. Jerusalem: Studium Biblicum Franciscanum.
- Lawlor, J. I. 2000. Field A: The Administrative Complex. Pp. 21-58 in L. G. Herr et al. (eds.), *'Umayri I (Madaba Plains Project 4)*. Berrien Springs, MI: Andrews University.
- Magness, J. 1998. The Chronology of Qumran, Ein Feshkha, and Ein el-Ghuweir. Pp. 55-76 in Z. J., Kapera (ed.), *Papers on the Dead Sea Scrolls Offered in Memory of Aleksy Klawek*. Krakow: Enigma.
- Mazar, A. 2006. The Iron Age II Pottery from Areas S and P. Pp. 313-466 in A. Mazar (ed.), *Excavations at Tel Beth-Shean 1989-1996, Vol 1*. Jerusalem: Israel Exploration Society.
- McNicoll, A. W. et al. 1992. *Pella in Jordan 2. The Second Interim Report of the Joint University of Sydney and College of Wooster Excavations at Pella 1982-1985. Mediterranean Archaeology Supplement 2*. Sydney: Mediterranean Archaeology.
- Netzer, E. and Meyers, E. M. 1977. Preliminary Report on the Joint Jericho Project. *Bulletin of the American Schools of Oriental Research* 228: 15-27.
- Prichard, J. B. 1985. *Tell es-Sa'idiyeh: Excavations on the Tell, 1964-1966*. Philadelphia: The University Museum.
- Rast, W. E. 1978. *Taanach I: Studies in the Iron Age Pottery*. Cambridge, MA: American Schools of Oriental Research.
- Ray, P. J. 2001. *Tell Hesban and Vicinity in the Iron Age (Hesban 6)*. Berrien Springs, MI: Andrews University.
- Strobel, A. 1974. Das romische Belagerungswerk um Macharus Topographische Untersuchungen. *Zeitschrift des Deutschen Palastina-Vereins* 90: 128-184.
- 1981. Die alte Straße am ostlichen Gebirgsrand des Teten Meeres. *Zeitschrift des Deutschen Palastina-Vereins* 97: 81-92.
- 1982. Topographische Untersuchungen bei der 'Ain el-Minya. *Zeitschrift des Deutschen Palastina-Vereins* 98: 192-203.

- 1990. Ez-Zara - Mukawer Survey. *The Near East in Antiquity*, 1: 81-85.
- 1997. Ancient Roads in the Roman District of South Paraea: Routes of Communication in the Eastern Area of the Dead Sea. *Studies in the History and Archaeology of Jordan* 6: 271-280.
- Strobel, A. and Wimmer, S. 2003. *Klilrrihoee ('En ez-Zara) Dritte Grabungskampagne des Deutschen Evangelischen Instituts fuer Alterumwissenschaft des Heiligen Landes und Exkursionen in Sued-Parae, Abhandlungen des Deutschen Palaestine-Vereins 32*. Wiesbaden: Harrassowitz.
- Tappy, R. E. 1992. *The Archaeology of Israelite Samaria*. Atlanta: Scholars Press.
- Wimmer, S. 2000. Zeret-Shahar on the Hill in the Valley - The Discovery of a New Moabite Site in Jordan. Pp. 1777-1779 in P. Matthiae, A. Enea, L. Peyronel, and F. Pinnock (eds.), *Proceedings of the First International Congress on the Archaeology of the Near East, Rome, May 18<sup>th</sup> - 23<sup>rd</sup> 1998*.
- Winnett, F. V. and Reed, W. L. 1964. *The Excavations at Dibon (Dhiban) in Moab*. New Haven: American Schools of Oriental Research.
- Zimhoni, O. 1997. *Studies in the Iron Age Pottery of Israel*. Tel Aviv: Tel Aviv University.
- Yadin, Y. et al. 1960. *Hazor II: An Account of the Second Season of Excavations, 1956*. Jerusalem: Magnes Press.
-

