## THE TOPOGRAPHICAL SURVEY

## S. DOUGLAS WATERHOUSE

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## 1. Roman Road from Livias to Esbus (Fig. 10)

To trace the Roman road from Livias (modern *Tell er-Rameh*) in the Jordan Valley to Esbus (the Greek-Latin designation for Biblical Heshbon), a survey team of four was commissioned. Long known but never completely traced, this Roman road connected Jerusalem, Jericho, Livias, and Esbus, thus linking the road system of Palestine with the famous north-south *via nova* of Trajan in the Roman province of Arabia, east of the Jordan (where Esbus/Heshbon is situated).<sup>2</sup>

Just as Trajan's north-south "new road" was built (A.D. 111-114) along the course of the much older Biblical "King's Highway" (Num 20:17; 21:22; cf. Gn 14:5, 6), 3 so the east-west road, from Jericho to Heshbon, was built near, if not always along, the Biblical "Way of Beth-Jeshimoth" (see the Hebrew text of Jos

<sup>1</sup> The survey team was to trace the Roman road from Esbus to the Jordan Valley and to obtain an archaeological picture of the occupational sites near Tell Hesbûn, with special emphasis on the large valley, the Wadi Hesbûn. Team members were S. Douglas Waterhouse, Robert Ibach, Charlene Hogsten, Eugenia Nitowski (part-time), and (as translators) the representatives of the Jordanian Department of Antiquities attached to the Heshbon Expedition.

<sup>2</sup> Peter Thomsen, "Die römischen Meilensteine der Provinzen Syria, Arabia und Palaestina," ZDPV, 40 (1917): 67-68; Michael Avi-Yonah, The Holy Land (Grand Rapids, Mich., 1966), pp. 183, 187 (map). For the most recent discussion of this road, see James Sauer, "Heshbon 1971: Area B," AUSS, 11 (1973): 54-56. The Roman province of Arabia with its highway via nova may have been established after the completion of the Livias-Esbus highway (see above in the text, and n. 3).

<sup>3</sup> Avi-Yonah, *Holy Land*, pp. 183, 187; Nelson Glueck: *AASOR*, 18-19 (1939): 143; see especially the comments of Sauer: "The north-south road, which became the *via nova*, could have been in existence before 111-114" ("Heshbon 1971," p. 56).

12:3). <sup>4</sup> It seems that the Romans did not establish new routes, but rather improved old roads.

It is not really known when the Romans laid down the Jericho-Livias-Esbus route as a highway for wheeled traffic,<sup>5</sup> possibly after the Jewish revolt of A.D. 66-73, when the Flavian emperors (A.D. 69-96) were consolidating their hold upon Palestine. If the tentative *Tell Ḥesbân* evidence—of roadway resurfacings (?) associated with a major stairway-gateway to the acropolis—proves meaningful, a Flavian date could be established.<sup>6</sup> It may have been done in preparation for the Emperor Hadrian's visit in A.D. 129, when considerable roadwork was done in this region.<sup>7</sup> Certainly the milestone inscriptions show that both the *via nova* and the Livias-Esbus road were repaired intermittently until the late fourth century.<sup>8</sup>

Since the southeastern flank of the Jordan Valley was a military zone, a survey party desiring freedom to roam the countryside could not start from that area, where three milestone stations of the road were already known. Instead, the team had to start from the mishor—the high tableland (Dt 3:10)—of ancient Moab, where Tell Ḥesbân is situated. From Tell Ḥesbân, access to the west is blocked by the deep valley of the tell, Wadi el-Majjar. Hence it was concluded that the ancient road from Esbus must first have gone southward, before turning westward, through the present-day village of el-Mushaqqar, on the westward fringe of the high mishor. This was confirmed by finding a single,

<sup>&</sup>lt;sup>4</sup> Yohanan Aharoni, The Land of the Bible: A Historical Geography (Philadelphia, 1967), pp. 57, 40 (map). Note that the Roman road, unlike the OT "way," did not pass through Beth-jeshimoth. The name is reflected in modern Khirbet Sweimeh, though Glueck, followed by others, would identify the site with Tell 'Azeimeh; see his "Some Ancient Towns in the Plains of Moab," BASOR, No. 91 (Oct., 1943): 24-25, 14 (map).

<sup>&</sup>lt;sup>5</sup> The Livias-Esbus road up the steep ascent from the Jordan Valley was evidently a well-built, graded highway intended for wheeled traffic.

<sup>6</sup> Sauer, "Heshbon, 1971," pp. 49-57.

<sup>&</sup>lt;sup>7</sup> Avi-Yonah, Holy Land, pp. 183-184.

<sup>&</sup>lt;sup>8</sup> Thomsen, Meilensteine, pp. 14, 35-57, 93. The Livias-Esbus road remained in use long after the fourth century; indeed Bedouins still use it today.

fragmented milestone—possibly the second mile from Esbus—lying on its side (at grid reference 2248.1333), more than halfway between *Tell Ḥesbân* and *el-Mushaqqar*.9

Then a villager at *el-Hawwaya*, a hamlet immediately west of *el-Mushaqqar*, reported the existence, 20 to 30 years ago, of a group of collapsed *serâbît* (the Bedouin expression for "milestone"). His report carried weight, for the eastern end of *el-Hawwaya* is exactly where the next milestone station (the third?) would have been expected.

At the western edge of *el-Hawwaya* (grid reference 2225.1337), where the westbound traveler first views the deep Jordan Valley, a stone marker (?) was discovered, much smaller than a Roman milestone but reminiscent of one. It had been cut by a professional, with a square shaft, but a base in the same rectangular style as a milestone, <sup>10</sup> and it stood exactly where the Roman road begins its dramatic descent toward the *Ghor*. <sup>11</sup>

From this vantage point the ridge, called like the village el-Mushaqqar (Pl. XIII:A), slowly descends into the Jordan Valley. Affording a breath-taking view of the northern end of the Dead Sea and the "plains of Moab" (Num 33:48), the Roman road follows the crest of this ridge down to the ruin mound of the city of Livias. The top of Mt. Nebo (Jebel en-Nebā) and the im-

<sup>9</sup> The milestone was first spotted on July 5 close to 'Ain Mūḥrā, which marks the southernmost reaches of the Wadi el-Majjar, perched on the edge of a ledge above the precipitous wadi. Five days later this unique marker was found badly splintered. The local inhabitants had broken it open, believing that the great interest shown in it by foreigners indicated treasure. A local man told us that he believed the stone pointed toward hidden gold.

This badly-weathered milestone, about 2,500 m. southwest of *Tell Hesbân* on the Roman road, is too far for the first milestone and too near for the second, since a Roman mile is about 1,500 m. (one thousand "double paces" or 1,479 m.). If the stone had been moved, it more likely represents mile two, 500 m. uphill to the west, than mile one, 1,000 m. mostly downhill to the east.

<sup>10</sup> Like the milestone at 'Ain Mūḥrā (cf. n. 9), this marker also was smashed by villagers within a few days after discovery.

<sup>11</sup> It is at this very spot that the Roman road itself first becomes visible for the modern westbound traveler. Since the marker in question was found at the very edge of the ancient roadbed, it is difficult to dissociate this interesting stone from the ancient highway.

posing promontory of Pisgah (Rās eṣ-Ṣiyāghah)<sup>12</sup> form a parallel ridge, lying to the south of the el-Mushaqqar ridge, adding to the truly magnificent scenery. Between these two ridges is the Wadi 'Ayūn Mūsā, its springs making it a green valley in the midst of a desert landscape. The OT called this oasis "the valley opposite Beth-Peor" (Dt 3:29; 4:46; 34:6), or "the valley in the land of Moab near the top of Pisgah which rises up opposite Jeshimon" (Num 21:20),<sup>13</sup> probably the "slopes of Pisgah" (Jos 13:20; Dt 3:17; 4:49).<sup>14</sup> As will be seen, this information helps identify the route of the road.

At the base of the first precipitous descent of the ridge of el-Mushaqqar (grid reference 2217.1342), was another milestone station, presumably the fourth from Esbus, 15 where 24 milestone fragments, two of them with almost illegible inscriptions, lay strewn on the ground or half buried (Pl. XI:A). Obviously the stone fragments had been tumbled about by the repeated wash

12 En-Nebā, the highest summit of the ridge, is assumed with good reason to be Biblical Mount Nebo. West-northwest of this summit there is a lower platform, Ras eṣ-Ṣiyāghah, which affords a larger and less obstructed panorama than that of the summit. The latter site, therefore, is thought to be the actual place of the Pisgah vision of Dt 34:1-3. The name Ṣiyāghah, found neither in the Bible nor in pilgrims' texts, originated from a Christian monastery built on the site (Aramaic: Ṣiyāghah, "the monastery"). See Sylvester J. Saller, The Memorial of Moses on Mount Nebo (3 vols.; Jerusalem, 1941-1950), 1: 116-117.

<sup>18</sup> "Jeshimon" (KJV), which means "a waste, a desert," is taken to designate a specific desert, the region of Beth-Jeshimoth, northeast of the Dead Sea. Jeshimon can at times be a proper name: see 1 Sa 23:24, where "Jeshimon" is distinguished from "the desert (midbār) of Maon" to the south of it. See J. Simons, The Geographical and Topographical Texts of the Old Testament (Leiden, 1959), pp. 22-23. According to Num 21:29 Jeshimon is dominated, at least in part, by Pisgah; according to Num 23:28 by the top ("head") of the neighboring promontory to the north of Pisgah, Mount Peor.

<sup>14</sup> While A. H. Van Zyl would identify the Ashdoth-pisgah, "the slopes of Pisgah," with the *Wadi 'Ayūn Mūsa (The Moabites* [Leiden, 1960], p. 53), Simons would understand the designation as referring to the western slopes of *Ras es-Ṣiyāghah* "which descends towards the Dead Sea basin and the 'fields of Moab'.." (*Texts of OT*, p. 65). Since Jos 13:20 lists "the slopes of Pisgah" as one of a number of towns and cities, we would tend to agree with the conclusions of Van Zyl. The *KJV* translates the phrase as the "springs of Pisgah" in Dt 4:49.

<sup>15</sup> Approximately 6,000 m. from Tell Hesban, or about four Roman miles from ancient Esbus.

of the severe winter rains, which can cause severe local flooding. The 15 fragments with "square" bases indicated that the road had been repaired, or reconstructed, at least 15 times, for with each repair work a new milestone was erected, bearing the current emperor's name.

Approximately 1,500 m. further to the west (grid reference 2203.1341) is a place called Serâbît el-Mushaqqar where 13 fragments of 12 milestones lay scattered over a large area (Pl. XI:B). Two of these venerable markers are still upright; four bear traces of inscriptions, two of which mention the fifth mile, probably from Esbus. These Latin inscriptions have been dated to the years 219, 307, and 364-375 (?). 17

The sixth Roman mile station from Esbus, again about 1,500 m. from the fifth, was located at a dramatic promontory called Khirbet el-Mehatta, a place of special significance. From information gathered from two fourth-century writers. Eusebius and the pilgrim Egeria (sometimes called Aetheria), it is learned that from this vantage point the traveler from Livias to Esbus could see Mt. Nebo and could, like Egeria, take a side path to 'Ayūn Mūsā and Mount Nebo. 18 They also inform us that at this promontory (Mehatta) was the infamous Beth-Peor (Dt 4:46), 19

<sup>&</sup>lt;sup>10</sup> The site looks very much as it did to Saller in 1941 (Memorial, 1: 6-7; 2: Plate 6, 1).

<sup>&</sup>lt;sup>17</sup> Thomsen, Meilensteine, p. 67.

<sup>&</sup>lt;sup>18</sup> Eusebius, Onomasticon, with Jerome's Latin translation (ed. by Erich Klostermann [Hildesheim, 1966]), p. 16, lines 25-26, p. 18, line 1 (Jerome's trans., p. 17, lines 26-28); 136, 6-8 (137, 5-7); Egeria's Travels, chap. 10, sec. 8 (trans. by John Wilkinson [London, 1971]), p. 106. See the full discussion in Saller, Memorial, 1: 334, 335, and n. 2.

<sup>&</sup>lt;sup>10</sup> Eusebius says that "Bethphogor," Biblical Bethpeor, was a city six miles from Livias near Mount Phogor, or Peor (Onom. 48, 3-5, [49, 3-4]), the mountain on which "Beelphegor" (Baal-peor) was worshiped (Onom. 44, 15-16 [45, 17-18]), and where Balak brought Balaam, overlooking Livias (Onom. 168, 25-26, [169, 19-20]), to curse Israel. Egeria records that from the church on Mount Nebo (Siyāghah) she could look north and see the city of "Fogor," or Peor (Travels 12. 8, p. 108). On Egeria (Aetheria), see Saller, Memorial, 1: 150, 151. On Beth-Peor see Oswald Henke, "Zur Lage von Beth Peor," ZDPV, 75 (1959): 155-163. Henke concludes that what Alois Musil (in Arabia Petraea [1907], 1: 344, 348) called "chirbet esch-schech dschājil" (Khirbet esh-Sheik Jāyel) is actually Khirbet el-Meḥatṭa.

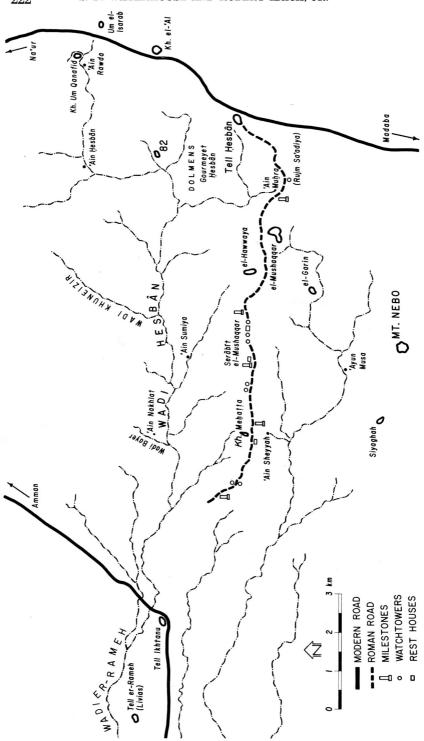


Fig. 10. Map of the area explored by the topographical survey team of the 1973 Heshbon expedition.

the high place of Baal from which Balaam saw the Israelite (Num 23:28) camp on the plains of Moab.<sup>20</sup>

This identification of the sixth milestone station with Beth-Peor (the "house of Phogor" in the LXX and classical sources) tallies with the OT information: Balaam (Num 31:16; cf. Rev 2:14) made the temple of Baal Peor a focal point for an "apostate" Israel (Num 25:1-3; Ps 106:28; Mic 6:5); thus the Hebrew encampment was near Mount Peor. Both neighboring mountain spurs, Pisgah and Beth-Peor, overlooked the same desert region of Jeshimon (Num 21:20; 23:28),<sup>21</sup> and Moses died and was buried in the region of Nebo/Pisgah (Dt 34:1, 5, 6) opposite Beth-Peor.<sup>22</sup> The ridge el-Mushaqqar with its western promontory, Khirbet el-Meḥaṭṭa, is the only ridge directly facing the burial place of Moses (the valley of 'Ayūn Mūsā) and the slopes of Rās eṣ-Ṣiyāghah.

Khirbet el-Meḥaṭṭa, with its strategic view of the Ghor, now treeless and desolate under a burning sun, must have been once an oasis restful to both the eye and the body, with its flourishing grove of shade trees and its nearby spring, 'Ain Sheyyaḥ.23 The ruined walls, gates and towers of a comparatively large Roman fortress (grid reference 2186.1341) are now all that remain of this important center (Fig. 11). Most of the sherds picked up at the site were Byzantine or Roman.

<sup>&</sup>lt;sup>20</sup> Specifically, the 'Arbôth Mô'ab was the southeastern Jordan Valley floor between the present-day Wadi Nimrîn (in the north) and the Wadi el-'Azeimeh (in the south, near the northeast end of the Dead Sea).

<sup>&</sup>lt;sup>21</sup> See above, n. 13.

<sup>&</sup>lt;sup>22</sup> In Deuteronomy, Moses apparently died in the locality of Nebo/Pisgah, but was buried in "the valley." That valley, elsewhere called the "Slopes of Pisgah" (see above, n. 14), obviously is *Wadi 'Ayūn Mūsa*. The Arabic name itself, "the springs of Moses" reflects a long-standing tradition relating this valley to Moses. See the discussion in Saller, *Memorial*, 1: 343, 344 and accompanying notes. Compare also Dt 3:29 and 4:46.

<sup>&</sup>lt;sup>25</sup> Ancient pagan high places were noted for their groves of trees (Hos 4:13). In 1941 a tree still was to be seen standing at *el-Meḥaṭṭa;* see Saller, *Memorial*, 2: Plate 11, 1. The name *Sheyyaḥ* refers to a type of desert scrub-brush which has completely overgrown the ancient spring (which used to be called 'Ain Meḥaṭṭa).

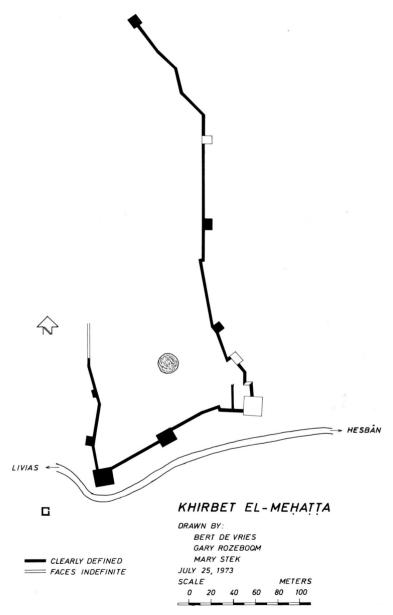


Fig. 11. Plan of the visible walls and towers of Khirbet el-Meḥaṭṭa.

As the Roman road approaches (grid reference 2188.1340) the *Meḥaṭṭa* promontory, four milestones lie strewn over the ground. Today a single, barely visible inscription remains out of the three legible ones reported 30 to 60 years ago<sup>24</sup> mentioning the sixth mile from Esbus and dated 162, 235 and 288.<sup>25</sup>

West of the *Meḥaṭṭa* promontory, the grade of the road is quite steep down to the valley floor. Consequently the five extant milestones presumably marking the seventh mile from Esbus have washed downhill and now rest 2,100 m. from the sixth mile station (grid reference 2170.1348). They could not have tumbled too great a distance, for they lie either on the ancient roadbed or immediately nearby; and they are not far from a possible rest station (grid reference 2172.1344/1345), a place usually associated with the erection of mile markers.<sup>26</sup> These milestones must have marked the seventh mile from Esbus, yet we cannot satisfactorily account for their tumbling down the winding road for the remarkable distance of some 650 m.!<sup>27</sup>

These five separate milestone stations, marking the second (?), fourth, fifth, sixth, and seventh (?) Roman miles from Esbus, of course establish definitely the route of the Roman road. Almost nowhere except on the *el-Mushaqqar* ridge is the worn bed of what once had been an intensively traveled highway still visible. Here and there, marking the edges, are rows of tightly fitted curbstones and occasionally the remains of small, worn, irregular cobblestones (Pl. XII:A).<sup>28</sup> The width of the road averaged about

<sup>&</sup>lt;sup>24</sup> Thomsen, *Meilensteine*, pp. 67-68, Nos. 229-231; Saller, *Memorial*, 1: 334, n. 2.

<sup>&</sup>lt;sup>25</sup> Thomsen, *Meilensteine*, pp. 67-68. Note the remarks of Eusebius in n. 19. <sup>26</sup> The so-called "rest station" actually consists of the ruined foundations of two circular towers. However, the plateau site would have been a natural rest area for travelers. Rest houses need not always have been situated at a given mile station. See n. 32.

<sup>&</sup>lt;sup>27</sup> Compare above, n. 9, noting that a single milestone seems to have been moved some 500 m. from its original position.

<sup>&</sup>lt;sup>28</sup> In places where the Roman road was comparably well preserved, not only were curbstones preserved on either side of the highway, but also a center string of tightly-fitted stones remains—evidence that the surface for the road had been raised in the center, sloping on both sides. This was a characteristic

six meters.<sup>29</sup> The first curb stones appeared just beyond the Roman marker (?) at *el-Hawwaya* (grid reference 2222.1339), the last at the point where the road began to level off for "long dropping runs" down into the Jordan Valley (grid reference 2167.1352).

The foundation-remains of rest/way houses and watchtowers along the way were spotted frequently, sherded, and measured. Along the entire *el-Mushaqqar* ridge were found the remains—at times almost mere rubble—of seven circular watchtowers (or guard posts?), spaced irregularly along the crest of the ridge (grid references 2214.1341, 2211.1342, 2209.1342, 2198.1342, 2197.1342, 2172.1344, 2172.1345).<sup>30</sup> Their deterioration in modern times is evidenced by a picture of one of them in a 1941 publication showing a second course of stone blocks.<sup>31</sup> Dating was difficult because of the paucity and the simple character of the ceramic fragments, and their erosion from the hilltop sites. Yet the predominance of pottery from Byzantine and Roman times, the era of the Roman road, was established (Pl. XIII:B).

A pile of rubble-stones (locally named *Rujm Sa'adiya*), west of the second (?) milestone marker may be the remains of a resthouse, though more likely of a watchtower (grid reference 2250.1332). Rectangular foundations of probable resthouses were discovered near the fourth, fifth, and sixth milestone stations.<sup>32</sup>

feature of Trajan's via nova. Compare the recent remarks of Z. Kallai, "Remains of the Roman Road Along the Mevo-Beitar Highway," IEJ, 15 (1965): 203.

<sup>&</sup>lt;sup>29</sup> The widths measured from 4.90 to 11.20 m.

<sup>&</sup>lt;sup>20</sup> The diameters of these seven towers ranged from 5.90 m. to 9.30 m. The tower foundations usually consisted of three rows of stone blocks. That these towers were actually defensive lookout stations is suggested by the fact that they were found not only in connection with the Roman road; remains of identical structures were spotted also in the ridges to the north.

<sup>&</sup>lt;sup>31</sup> Saller, Memorial, 2: Plate 11, 2.

<sup>&</sup>lt;sup>32</sup> One, at the fifth station, had been rebuilt in comparatively modern times, but only its four walls still stand. Immediately east of this rebuilt rest station (3.90 x 6.65 m.) was the foundation of an older structure, 4.35 x 5.25 m. No traces of any structure were found at the site marking the fourth mile from Esbus, but about 375 m. to the east were well-preserved foundations of what presumably was a resthouse (4.50 x 4.70 m.). The four milestones marking

The city of Livias, identified by classical sources with Bethharam (Num 32:36; Jos 13:27), is on linguistic grounds associated with the modern name Tell er-Rameh (Beth-haram became Bethramtha, Beit er Ram, and then Tell er-Rameh).33 In recent decades however, this identification with modern Tell er-Rameh has been questioned because repeated sherding on the mound failed to produce any ceramic fragments dating before the Roman era.<sup>84</sup> This season, however, the Heshbon survey team did turn up evidence of earlier occupation back to the Iron I period (12th-11th centuries B.C.).35 While this new ceramic evidence helps fix the traditional identification of Tell er-Rameh, there remains another argument in its favor: Eusebius' statement that Beth-Peor was situated by Mt. Phogor (Peor) opposite Jericho, six miles above Livias on the way to Esbus. 36 Since Khirbet el-Mehatta/Beth-Peor is indeed approximately six Roman miles from Tell er-Rameh, it is hard to escape the conclusion that this latter tell (grid reference 2111.1371) contains the remains of ancient Livias.

Livias must have been especially significant to the eastbound traveler, being both the twelfth mile station from Esbus and the

the sixth mile from Esbus were about 300 m. east of the ruins—the khirbet—of the "Roman" fortress and related structures at el-Mehatta.

<sup>88</sup> Glueck, "Ancient Towns," pp. 20-21; Simons, Texts of OT, p. 122.

<sup>&</sup>lt;sup>34</sup> Glueck, "Ancient Towns," p. 21; AASOR, 25-28 (1951): 389-391. Following the convictions of W. F. Albright (AASOR, 6 [1924-1925]: 49) and Glueck, most scholars have identified Tell Ikhtanū as the site of ancient Beth-haram/Livias. That tell has yielded pottery from the Iron Age, and it is a commanding site not too far from Tell er-Rameh. Ikhtanū, a large isolated hill, is about 23/4 km. east-southeast of Tell er-Rameh. It is situated about a half km. south of the Wadi er-Rameh (as the lower course of the Wadi Hesbân is known; see grid reference 2137.1364). A brief notice indicates that Kay Wright has excavated a Middle Bronze I settlement there (Paul W. Lapp, Biblical Archaeology and History [New York, 1969], p. 73 and Plate 13). The Heshbon survey team also sherded the mound, finding Byzantine, Roman, and Hellenistic periods represented, as well as the Iron Age; one possible Late Bronze sherd was also found. There is thus no doubt that Tell Ikhtanū presents a good candidate for Livias.

<sup>85</sup> Periods represented were: possible modern, Ottoman, Ayyūbid/Mamlūk, possible 'Abbāsid, Umayyad, Byzantine, Roman body sherds, Early Roman, Hellenistic, Iron II/Persian, Iron II, Iron I, and some unidentified sherds.

<sup>36</sup> See above, n.19.

spot where the land begins its first imperceptible rise from the center of the Jordan Valley;<sup>87</sup> and likewise another turning-point, a midway marker between Livias and Esbus—the lofty promontory of the house of Phogor/Peor. It is no wonder that classical sources, when speaking of this east-west highway, laid emphasis upon only three sites: Livias, Phogor, and Esbus.<sup>38</sup>

## 2. The Wadi Ḥesbân (Fig. 10)

Approximately 4½ km. north northeast of Tell Hesban lie the easternmost reaches of the Wadi Hesban, which slopes down to the spring, 'Ain Rawda (grid reference 2282.1385), formerly called 'Ain Umm Qanafid. This important spring marks the start of what we may term the "Upper Wadi Hesban," which extends some 3 km. west to the region of 'Ain Hesban (grid reference 2256.1384). This narrow section of the wadi-bed, where at times the flanking hills tower steeply like confining walls, lacks running water during the four summer months. Along the valley floor a number of rock-cut tombs of the single loculus type are found in the Roman style of construction.

"Middle Wadi Ḥesbân" is the designation of the sayl, or "brook" Ḥesbân. In contrast to the Upper Wadi Ḥesbân, it is a wide garden-farm valley, watered by the springs of 'Ain Ḥesbân. From these springs the sayl Ḥesbân runs southward about 2 km., then in a wide swing westward for another 4½ km. before narrowing in its dramatic plunge down toward the Jordan Valley. Here and there along the river bank are the ruins of ten ancient water wheels. Surface sherds in their vicinity may date them back to the

<sup>&</sup>lt;sup>37</sup> Compare the remarks of Glueck, "Ancient Towns," p. 22. That Livias was a twelfth mile station from Esbus is assumed from the remarks of Eusebius (above, n. 19).

<sup>&</sup>lt;sup>38</sup> See above, nn. 18, 19; also Saller, *Memorial*, 1: 334-335 (n. 2).

<sup>&</sup>lt;sup>39</sup> This description excludes the perennial spring waters of 'Ain Rawda and the two major springs in the vicinity of 'Ain Hesbân. The Upper Wadi Hesbân cannot be described in desert terms. Oleanders, vineyards on the steep hills, and fig and pomegranate trees make the valley a green oasis.

<sup>&</sup>lt;sup>40</sup>These grave shafts were not cut into the hillside, but rather were cut into large boulders that lie above the eroded channel of the *wadi*.

Ayyūbid/Mamlūk period, though this remains speculative.41

In the region of the hillside oasis of 'Ain Sumiya (grid reference 2230.1362), the wide valley changes to the narrow, sharply descending "Lower Wadi Ḥesbān," running almost directly westward in a deep gorge, then breaking out from the high tableland and flowing into the wide Jordan Valley near Tell Ikhtanū (grid reference 2137.1364). Here, some 7 km. west of 'Ain Sumiya, it becomes known as the Wadi er Rameh.

Surface sherding indicates, in much of the valley, Ottoman, Ayyūbid/Mamlūk, Byzantine, Roman, and Iron II/Persian occupation. The Umayyad period is but weakly represented, except in spots along the eastern flank of the Middle Wadi Ḥesbân; the Hellenistic period only at the headwaters of the Upper Wadi Ḥesbân and from the region of 'Ain Sumiya downward into the valley floor of the Lower Wadi Ḥesbân; Iron I nowhere except at the Upper Wadi Ḥesbân, where at times it is the dominant ware.<sup>42</sup>

Searching through the valley floor of the Middle Wadi Ḥesbān, the survey team found small areas rather thickly strewn with Early Bronze pottery: small body sherds, tentatively dated, in the Bāla gardens (grid reference 2251.1375) near 'Ain Ḥesbān, but substantial fragments in the southwest end of the valley (especially grid references 2251.1362, 2238.1367, and 2235.1367).<sup>43</sup>

On the steep sides of Gourmeyet Ḥesbân (a large mountain mass lying between Tell Ḥesbân and the Middle Wadi Ḥesbân), are the remnants of an extensive dolmen field (grid references 2258.1352, 2250.1355, and 2252.1357)—ten dolmens, half of them still standing or partially standing. Though they look like houses, these large megalithic structures are thought to have served as

<sup>&</sup>lt;sup>41</sup>One of these water wheels near 'Ain Hesban is still in operation. No pottery remains dating to Ottoman times were found near these structures, but Ayyūbid/Mamlūk ware was abundant.

<sup>&</sup>lt;sup>42</sup>The Lower Wadi Ḥesbân was not explored west of the Wadi Bayer region (grid reference 2182.1362) near 'Ain Nakhlat.

<sup>&</sup>lt;sup>43</sup> The survey team found the same type of Early Bronze ware at Na<sup>c</sup>ur, again along the valley floor and the gentle hill slopes.

tombs. As elsewhere in the country, these monuments averaged about six feet high and upwards of twelve feet long. Their stones are of such stupendous size that neither earthquake, violent weather, nor time have had any serious effect in demolishing these structures (Pl. XII:B).

Though most scholars have dated their construction to the Pre-pottery Neolithic Age,<sup>44</sup> a 1966 sounding at *Shamir*, in northern Galilee, produced evidence that these megalithic structures date from the end of the Early Bronze Age or the beginning of the Middle Bronze I period.<sup>45</sup> Thus it is striking that from the whole of the Bronze Age, it is only from this period—beginning at the end of the third millennium, when newcomers invaded the country<sup>46</sup>—that *Gourmeyet Ḥesbân* has yielded quantities of sherds, many with the envelope ledge handles typical of the end of the Early Bronze Age.<sup>47</sup> In the light of this, and of the work done at *Shamir*, the question of whether these megalithic structures on *Gourmeyet Ḥesbân* date from the time of the envelope ledge handles seems pertinent.

Evidences of this late phase of the Early Bronze Age were found also on the other high, remote elevation-points that flank the Mid-

<sup>&</sup>quot;See Emmanuel Anati, Palestine Before the Hebrews (New York, 1963), pp. 278-283; W. F. Albright, The Archaeology of Palestine (5th ed.; Baltimore, 1960), pp. 63-64; James L. Swauger, "Dolmen Studies in Palestine," BA, 24 (1966): 106-114.

<sup>45 &</sup>quot;The centre of the dolmen field apparently was occupied by a camp or temporary settlement, whose inhabitants built the dolmens." D. Bahat, "The Date of the Dolmens near Kibbutz Shamir," IEJ, 22 (1972): 44-46. See also the communication by Claire Epstein in "Notes and News," IEJ, 23 (1973): 109-110. Artifacts and a "wealth of pottery" excavated from dolmen fields in the Golan, during the summers of 1971 and 1972, indicated a construction date of ca. 2300-1950 B.C.

<sup>&</sup>lt;sup>46</sup> That these newcomers, the so-called Amorites, "originated from a Meso-potamian sphere of influence rather than . . . the Caucasus or beyond . . .," is held, on the recent evidence, by Y. Yadin, "A Note on the Scenes Depicted on the 'Ain-Samiya Cup," *IEJ*, 21 (1971): 85 and n. 12.

<sup>&</sup>lt;sup>47</sup>"... the folded jar handles are typologically intermediate between the typical pushed-up wavy ledge handles of E.B. III and the envelope handles which dominated the earlier part of the I-H complex at Tell Beit Mirsim." Albright, "The Chronology of Middle Bronze I (Early Bronze-Middle Bronze)," BASOR, No. 168 (Dec., 1962): 38.

dle Wadi Ḥesbân. The few Early Bronze body sherds collected from the valley floor of both Middle and Lower Wadi Ḥesbân probably represent sherds washed down from the heights. If so, these ceramic fragments would date to the time of the envelope ledge handles.

As for the other historical periods discovered at Wadi Ḥesbân, it is necessary to speak of three important ancient sites. The first is Umm el-Isarab ("Ummīsareb" in the local dialect), a low hill commanding the eastern approach to the wadi (grid reference 2292.1379).48 The name means "mother of trails," designating it as a center for converging paths. For here the ground begins to decline in a gradual, but steady, descent to the only major spring in the vicinity, 'Ain Rawda, the source of the Wadi Hesbân. Surface finds indicated that Umm el-Isarab thrived during Byzantine, 49 Roman, Hellenistic, and Iron I times. More significant for Transjordan's history are the sherds picked up here that are probably pre-Iron I, but not as early as the Early Bronze Age. Tentatively read as possible Middle/Late Bronze Age, they represent a rare type, seemingly endemic only to the tableland of Transjordan. This type of pottery has so far turned up only in burial caves and, unfortunately, not in controlled, stratified, archaeological contexts.50

The second site is *Khirbet Umm Qanafid* (grid reference 2284.1386), an independent hill within the *wadi*-bed itself, immediately east of the spring of 'Ain Rawda. This fortress-like ancient city<sup>51</sup> is three-quarters surrounded by the moat-like, deep *wadi*-bed; its water made sure by the spring at its base. The sherds picked up from the *khirbet* yield a history somewhat

 $<sup>^{48}\</sup> Umm\ el\mbox{-}lsarab$  is about  $11/\!\!/_2$  km. north of Khirbet el-'Al (Biblical Elealeh) on the Madeba-Na'ur highway.

<sup>&</sup>lt;sup>49</sup> Byzantine is the dominant ware to be found on the mound.

<sup>50</sup> Oral information from James A. Sauer.

<sup>&</sup>lt;sup>51</sup> Villagers pointed out the remains of what they believed to be an ancient wall that encircles the *khirbet*. They also spoke of a tunnel near 'Ain Rawda. From the top of the hill a jar handle of the Iron II/Persian period was obtained, inscribed with a large letter beth.

similar to that of *Tell Ḥesbân*: Modern,<sup>52</sup> Ottoman, Ayyūbid/Mamlūk, Byzantine, Late and Early Roman, Hellenistic, Iron II/Persian, and Iron I. One possible Middle Bronze (Hyksos period) sherd and several possible Late Bronze sherds were found in the *wadi*-bed directly below the *khirbet's* eastern flank. These, together with the possible Middle Bronze Age samples picked up by the survey team at two other places in Jordan's high tableland, should alert the student to the danger of stating that there was little or no occupation in Transjordan in the Middle and Late Bronze Ages.<sup>53</sup>

Directly to the north of Gourmeyet Ḥesbân is a third important site termed #82, the top plateau of a hill (grid reference 2258.1365) overlooking the Middle Wadi Ḥesbân at the curve toward the west. The ceramic evidence from Site #82 ranged from the Ottoman, Ayyūbid/Mamlūk, Byzantine, Roman, to the Iron II/Persian period, with a major hiatus thence to Middle Bronze I (two pieces of "caliciform" ware); then, by far the most prevalent ware represented, the various Early Bronze phases, especially III and IV.<sup>54</sup> Architectural remains attest this long

<sup>58</sup> The modern village of Rawda now encompasses the ancient site.

End ago Glueck deduced a gap in sedentary occupation of the Transjordan region from the 20th to the 13th centuries B.C. In recent years a number of scholars have raised questions concerning that thesis. See, for example, the remarks of G. Lankester Harding, The Antiquities of Jordan (London, 1960), p. 33; Kathleen M. Kenyon, Amorites and Canaanites (London, 1966), p. 64; H. J. Franken and W. J. A. Power, "Glueck's Explorations in Eastern Palestine in the Light of Recent Evidence," VT, 21 (1971): 120-123. The survey team spent seven weeks examining archaeological remains within a tenkilometer radius of Tell Hesbân, as well as three tells in the Jordan Valley. Ceramic ware possibly dating from the Middle Bronze Age (Hyksos period) was found at Tell Jalul (grid reference 2312.1254) and in the region of Na'ur (grid reference 2289.1424).

<sup>&</sup>lt;sup>54</sup> On the northern flank of the *Wadi 'Ayūn Mūsa*, at a place called *el-Garin* (grid reference 2223.1324), the survey team discovered a once heavily settled Early Bronze site. Both Site 82 and *el-Garin* represent Early Bronze Age settlements nestled in large *wadi*-valleys that run down from the high tableland to the Jordan Valley; nowhere else did the survey team find Early Bronze Age sherds in such quantities. In this connection it is of interest that in the course of this survey, Early Bronze Age sherds were found on the western slope of *Tell Hesbân* (grid reference 2263.1343).

span of human occupation.55

In conclusion, on the basis of the pottery<sup>56</sup> found in this surface examination of much of the *Wadi Ḥesbân* a varied and checkered archaeological history emerges, from the modern period to the Early Bronze Age. Future excavation of selected sites in the *Wadi Ḥesbân* could serve to check and to fill out this tentative history.

The discovery of Site 82 may be especially significant for the ongoing discussion on the late Early Bronze-Middle Bronze I cultural complex. For Site 82, with what may amount to an unbroken cultural sequence, from "Early Bronze III" to "Middle Bronze I," would thus be an exception to the majority of cities, which were devastated during the Early Bronze II-III periods and then abandoned. Soundings and a closer analysis of the materials at 82 could possibly reveal this as a site showing a clear sequence from the "Early Bronze IV" forms down to the elements of classic "Middle Bronze I." As of yet, "nowhere is there a single site which spans the entire period"; so in William G. Dever, "The EB IV-MB I Horizon in Transjordan and Southern Palestine," BASOR, No. 210 (Apr., 1973): 41, and cf. pp. 56-57; see also his "The 'Middle Bronze I' Period in Syria and Palestine," Near Eastern Archaeology in the Twentieth Century, ed. James A. Sanders (New York, 1970), p. 150 and n. 87.

<sup>508</sup> The sherds collected during the survey were washed and read in camp and a representative number were saved and registered for future reference. Those not registered were discarded on the dump of potsherds at *Tell Hesbân*.