Recovering Josephus: Mason's *History of the Jewish War* and the Siege of Masada

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In a recent book, S. Mason, a highly-regarded Josephus specialist, presents an overview of the First Jewish Revolt against Rome.[1] Mason argues that Josephus' testimony is unreliable and incomplete, and therefore cannot form a basis for reconstructing events which unfolded in Judea and Rome two thousand years ago.[2] Instead, according to Mason, any one of a number of scenarios not presented by Josephus could equally likely have occurred.[3] One episode that Mason discusses at length is Josephus' account of the siege and fall of Masada.[4] In this paper, we examine the archaeological remains at Masada, and conclude — *contra* Mason — that they support Josephus' description of the Roman assault over other possible scenarios.

Mason's book is not a critique of Josephus' testimony as such, but rather the way in which that testimony has been interpreted and understood by modern scholars, as he seeks 'to distinguish between the *interpretation* of whatever has survived… and our *imagining* of the lost past.'[5] To achieve this, Mason sets out 'to investigate crucial moments in the war and the evidence for them by looking *first* for the simplest, or most analogically complete, explanations.'[6] In other words, according to Mason, we cannot know what really happened in the past, due to the nature of our sources, because (as he says regarding the First Revolt): 'We have no one *to rely on* for this war.'[7] Instead, Mason believes we should be open to considering various possibilities, even if they conflict with surviving literary accounts.[8]

In this paper, we test Mason's post-modern literary approach to Josephus through one case study: the siege of Masada, focusing in particular on the assault ramp. We believe that an empirical analysis of the archaeological remains supports Josephus' testimony and allows considerable confidence in its essential accuracy over alternative scenarios as proposed by Mason.

Masada: The Background to the Story

Masada is an isolated mountain overlooking the southwest shore of the Dead Sea, which was fortified by King Herod the Great in the first century B.C.E. Seventy years after

1 Mason (2016).
2 See, e.g., Mason (2016), 136, where he distinguishes between narrative and real events. For a recent treatment of Josephus that differs in approach, see Atkinson (2016), 1-22.
3 See, e.g., Mason (2016), 574.
4 Mason (2016), 514-75.
5 Mason (2016), 578.
6 Mason (2016), 578.
7 Mason (2016), 58.
8 See, e.g., Mason (2016), 63, 574, 577.

Herod's death, the mountain was occupied by Jewish rebels at the time of the First Jewish Revolt against Rome. These rebels continued to hold out atop Masada even after the fall of Jerusalem and the destruction of the Second Temple in 70 C.E. Three years later, the mountain fell to the Romans after a siege.

Flavius Josephus (Joseph son of Mattathias) was a Jewish aristocrat who was put in charge of the administration of Galilee after the revolt broke out in 66 C.E. A year later he surrendered to the Roman general Vespasian and was taken into captivity. After the revolt ended, Josephus was freed and moved to Rome, where he was commissioned by his imperial patrons to write an account of the First Revolt — the *Jewish War*. Josephus' massive opus — comprising seven books — was completed by ca. 80 C.E.[9] Instead of ending *War* with the fall of Jerusalem, Josephus chose to conclude Book 7 with the siege and fall of Masada — the only ancient historian to describe this event. According to Josephus, as the mountain was about to fall to the Roman army, the 967 Jewish defenders (men, women, and children) chose to commit mass suicide. In recent years, a number of scholars have questioned the reliability of Josephus' story of the mass suicide, suggesting that he fabricated it.[10]

We are not concerned with the mass suicide story, but rather with the events leading up to it, specifically, the Roman assault on the fortress. The siege is described in considerable detail by Josephus, although he was not an eyewitness.[11] Whereas other scholars have questioned the veracity of the mass suicide story, Mason goes one step further and proposes that Josephus' account of the Roman siege at Masada is also inaccurate and unreliable.[12] Mason contends that instead we should adopt a 'realistic approach' to Josephus' works, recognizing that this author (no more than any other in the ancient world) 'did not write for us.'[13] Therefore, he says, modern scholars 'must conduct our inquiries and let Josephus rest in peace.'[14]

Josephus' Account of the Siege of Masada

Josephus describes the siege and fall of Masada as follows (see *War* 7.275-406). In winter-spring 72/73 or 73/74 C.E.,[15] the Roman army arrived at the foot of the mountain — the last fortress still in the hands of Jewish rebels. The Roman forces, commanded by the legionary legate and provincial governor Flavius Silva, consisted of the Tenth Legion supported by auxiliary units, totaling approximately 8000 soldiers.[16] Following standard Roman military procedure, the troops established camps around the mountain, connected by a circumvallation wall. Once the fortress had been isolated, Flavius Silva prepared for an attack by having his soldiers erect an assault ramp on the western side, at

9 For the date of composition, see Mason (2016), 91-93.

10 For treatments, see Mason (2016), 569-74; Ben-Tor (2009), 295-307; Atkinson (2006); Ben-Yehuda (1995).

11 See Mason (2016), 132; Atkinson (2006), 357.

12 See Mason (2016), 574, where he concludes, 'His [Josephus'] description of the siege ramp is far from *any* possible reality.'

13 Mason (2016), 136.

14 Mason (2016), 137.

15 For treatments, see Mason (2016), 561-65; Ben-Tor (2009), 253-54.

16 See Davies (2011), 81 n. 15.

a point abutted by a natural spur called the *Leuke*. The top of the ramp was capped by a stone platform to accommodate an iron-clad siege tower with battering ram, aimed at breaching the Herodian casemate wall. From the tower, the Romans fired volleys of projectiles to clear the ramparts. In the meantime, the Jewish defenders hastily constructed a second wall, made of timbers filled with earth, which was intended to absorb the blows of the battering ram. After breaching the casemate wall, the Romans set fire to the timber and earth construction.

It was at this point that the rebel leader, Eleazar ben-Yair, convened together the men and convinced them to commit suicide. According to Josephus, when the Romans broke through the defenses and entered the mountain the following morning, they found everyone dead (except for two old women and five children who had hidden in a cistern) (*War* 7.399).

The Siege Works at Masada

In 1962, I. Richmond published a seminal article in the *Journal of Roman Studies* documenting his survey of the Roman siege works at Masada.[17] The results, together with field work conducted previously and subsequently, present the following picture. The siege works consist of eight camps (A-H), surrounding the mountain. Two of the camps (B and F) are much larger than the others and undoubtedly housed the legionary troops. B is located on the eastern side of the mountain and would have served as the distribution point for supplies brought by boat on the Dead Sea. F is located on the northwest side of the mountain, at a spot where Silva could oversee the construction of the ramp. The other six camps are smaller and of varying size, and housed auxiliary troops. Thanks to the site's remote location and the use of stone for construction, the walls of the camps and the tent units within are well-preserved and clearly visible today. Excavations in Camp F have provided valuable information about the date and logistics of the siege.[18]

The circumvallation wall, also built of stone and originally standing to a height of ca. 3 meters, encircled the mountain for a distance of approximately 3.6 kilometers. Guard towers projecting slightly from the wall are still visible at points, particularly along the eastern circuit. An ancient path alongside the wall represents the original line of communication connecting the camps.

The camps and circumvallation wall conform well to Josephus' description of the form and function of the Roman siege system. The third component of the Roman siege works — the assault ramp that climbs up the western side of the mountain — is described by Josephus as follows:

17 Richmond (1962), 142-55; for recent treatments see Davies (2011); Atkinson (2006), 350-57 (who proposes that Josephus' account of the siege of Masada is patterned after his account of the Roman assault on Gamla).

18 See Magness (2009); Arubas and Goldfus (2008).

> They raised a solid bank to the height of two hundred cubits. This, however, being still considered of insufficient stability and extent as an emplacement for the engines, on top of it was constructed a platform of great stones fitted closely together, fifty cubits broad and as many high.
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> *War* 7.306-7[19]

The assault ramp is key to Mason's argument that Josephus' testimony is unreliable, as he claims that the archaeological remains indicate the ramp was never completed, and therefore the tower was never raised nor the battering ram deployed against the fortress' casemate wall.[20] We agree with Mason that Josephus exaggerates the dimensions of this feature,[21] but reject his claim that the ramp was never completed or operational. Mason's position is based on B. Arubas' and H. Goldfus' argument that (as Mason puts it), 'the existing remains at the site cannot be dramatically different from what Silva left. But this means that he never completed a usable siege ramp, much less the massive crowning cube.'[22] Following Arubas and Goldfus, Mason states that 'a siege embankment would have needed to be much wider than the current ridge to carry troops and engines.'[23] He postulates that only one-third of the ramp's original width survives, citing A. Schulten's assumption that it needed to be at least 25 meters wide.[24] Because Mason doubts that two-thirds of the ramp's width could have disappeared through erosion, he concludes it was never completed.[25]

Since Mason's book appeared in print, Goldfus et al. have published a geomorphological analysis indicating that there are no signs of significant erosion or earthquake damage to the ramp, bolstering their claim that it was never completed or operational.[26] Without questioning the validity of the geological and geomorphological data, we do not believe this evidence supports their conclusion, for the following reasons.

The ramp consists of a man-made fill deposited by the Romans over a natural ('colluvial') spur. The artificial fill represents the original core of the man-made structure, comprising packed stone, rubble and earth held in place by timber bracing, the remains of which now protrude from its surface at various points. According to Goldfus et al., 'The use of wood was neither systematic nor extensive. At any rate, it seems to have been used more intensively in the lower or bottom parts of the ramp.'[27] This statement appears to be based on casual observation of the ramp, as the authors do not provide any supporting documentation. In fact, in 1995 G. Foerster, Arubas, Goldfus, and J. Magness co-directed excavations in the Roman siege works at Masada, focusing

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19 All citations from *War* are from the Loeb edition (Thackeray 1928).

20 See, e.g., Mason (2016), 561.

21 See Mason (2016), 558-59; Davies (2011), 76-78.

22 Mason (2016), 561; see Arubas and Goldfus (2008), 1939; Arubas and Goldfus (2002), 209-10.

23 Mason (2016), 561. An article published after Mason's book appeared in print considers the geomorphology of the ramp and the surrounding environment; see Goldfus et al. (2016).

24 Mason (2016), 561.

25 Mason (2016), 561.

26 Goldfus et al. (2016).

27 Goldfus et al. (2016), 7, 13.

on Camp F and including an investigation of the ramp. The only section cut in the ramp — about midway down — revealed a large number of regularly-laid timbers with a rubble fill, which were not visible on the surface.[28] There is thus no obvious basis for concluding that timber was used more intensively at the bottom than in other parts of the ramp.

According to Goldfus et al., the base of the spur on which the ramp was raised is 46 meters wide, narrowing to a minimum of 18 meters at the top of its 225-meter length. They point out that today the surface of this artificial fill is only about one meter wide at the top of the ramp, which would be insufficient to support activity connected with a siege. At the same time, they note that at the top of the ramp, the base of the fill is 5.5 meters wide at the point where it joins the underlying spur.[29]

Whereas Josephus describes the Romans erecting a stone cap or platform at the top of the ramp as an emplacement for the siege tower, Mason states that 'no evidence remains of such a massive stone cube.'[30] Goldfus et al. make the same claim, on the grounds that there are no signs that the ramp was seriously affected by tectonic activity, and therefore 'we can conclude that the man-made Roman ramp seen today in the field is virtually the same ramp built by the Romans in the first century C.E..'[31] In their view, had the stone cap been constructed, its remains should have survived. However, as Y. Yadin noted, the platform 'must have disintegrated long ago, its stones rolling down into the wadi below.'[32] Yadin's observation is supported by the talus of large rocks covering the lower slopes of the ramp. In addition, nineteenth-century visitors record the incidence of stone blocks towards the top of the ramp, and it may be that the earthquake of 1927 was responsible for toppling these remains into the valleys on either side.[33] In support of their claim about lack of evidence for tectonic damage, Goldfus et al. point to the Herodian aqueduct bridge at the junction between the ramp and the mountain, which they say 'is intact with no signs of deformation.'[34] This observation seems to be based on the current appearance of the aqueduct bridge, without taking into account the possibility of modern repairs and reconstruction. Indeed, early photographs suggest that the bridge has not remained intact since antiquity.[35]

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28 Arubas and Goldfus (2002), 209-10; Arubas and Goldfus (2008), 1939; Magness, personal observation and documentation during the excavations.

29 Goldfus et al. (2016), 8.

30 Mason (2016), 559.

31 Goldfus et al. (2016), 13.

32 Yadin (1966), 226.

33 See Roth (1995), 106. The extensive stone talus that clothes the lower slopes of the ramp might have derived in part from this destructive event. The claim by Mason (2016), 559 n. 130, that these stones originated in the collapse of the casemate wall above makes no sense in light of their distribution across the full length of both sides of the ramp.

34 Goldfus et al. (2016), 13.

35 Netzer (2002), 356, Fig. 5a, shows the modern (post-consolidation) appearance of the aqueduct bridge, which today supports a path to the cisterns. The photo in Avi-Yonah et al. (1957), Pl. 16A, which shows the aqueduct bridge prior to consolidation, suggests that the quoin stones of the arch were subsequently relaid. Avi-Yonah et al. (1957), 56 n. 88, incorrectly cite Sandel (1907), Pl. II as showing the Masada aqueduct bridge, which is a sketch of a bridge at another site in Jordan.

As we have seen, at a minimum, an 18-meter wide surface was available to the Romans at the top of the ramp. This space, encased in its stone cap, needed to have been sufficient to accommodate the siege tower that acted as a ram housing, artillery platform and assault bridge. We have little direct evidence for the dimensions of such structures in our literary sources, but Caesar's description of the solidly-built brick-clad tower raised by Trebonius at Marseilles in 49 B.C.E. states that it measured 30 feet (ca. 9.2 meters) along each side, including walls 5 feet (ca. 1.5 meters) thick (*Bellum Civile* II.8).[36] Assuming these dimensions are roughly accurate, the width of the surface available to the Romans (as reported by Goldfus et al.) would have been more than adequate to support the stone cap with a siege tower and other equipment.

Because Mason believes the ramp was neither completed nor operational, he posits an alternative scenario to the fall of Masada: that the defenders accepted terms of surrender which were offered by Silva, although fearing the consequences, some may have committed suicide. And so, Mason states, 'This is why he [Silva] stopped work, as it seems, on the ramp.'[37]

The Final Assault on the Fortress

Archaeological evidence indicates that the assault ramp was, in fact, completed and operational. This evidence consists of a breach in the casemate wall at the top of the ramp, and arrowheads and ballista shot recovered in the vicinity. First, we consider the breach. A section of the Herodian casemate wall is conspicuously missing at the top of the ramp, the logical conclusion being that this is the breach made by the Romans. Instead, Mason associates the missing section with Byzantine activity in this area: 'a group of fifth century Christian monks removed much of the ruined casement [*sic*] structure, right about where Josephus locates the breach.'[38] In support, he cites A. Ben-Tor and E. Netzer,[39] neither of whom makes any such claim. Instead, both describe Byzantine construction on the mountain top, including a gate and church nearby, and Netzer explicitly says, 'This section of the Wall [above the ramp] *was most probably almost entirely destroyed by the Roman invaders*.'[40] Presumably Mason is relying again on Arubas and Goldfus, who have made this claim, but who he does not cite.[41] The suggestion that the section of the casemate wall at the top of the ramp is missing not because of Roman destruction but because of Byzantine reuse flies in the face of all common sense. Mason, following Arubas and Goldfus, would have us believe that the segment of the wall robbed out by the Byzantine monks happens to be at the top of the ramp — the same spot where, according to Josephus, the Romans breached the wall. This claim is contradicted by the location of the Byzantine structures atop Masada

36 Davies (2006), 98-99, who discusses multi-purpose siege towers.
37 Mason (2016), 575.
38 Mason (2016), 558.
39 Mason (2016), 558 n. 126.
40 Netzer (1991), 428; our emphasis.
41 Arubas and Goldfus (2008), 1939.

relative to the missing portion of the casemate wall, as there were ruined Herodian structures in closer proximity which could have provided building material.[42]

Josephus relates that from an iron-clad tower on the stone cap

> the Romans by volleys of missiles from numerous quick-firers and *ballistae* quickly beat off the defenders on the ramparts and prevented them from showing themselves. Simultaneously, Silva, having further provided himself with a great battering-ram, ordered it to be directed without intermission against the wall, and having, though with difficulty, succeeded in effecting a breach, brought it down in ruins.
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> *War* 7.309-10

Large numbers of ballista shot and arrowheads were recovered atop Masada, which logically are evidence of missile barrages fired during Roman assault, following the completion of the ramp and tower.[43] Mason's acknowledgement of these finds is at odds with his denial of the inoperability of the ramp and his rejection of a final Roman assault on the mountain.[44]

Andrew Holley, who published the ballista shot from Yadin's excavations at Masada, notes that they were all found in loci on the northwest side of the mountain, that is, on the side facing the assault ramp. He suggests that the Roman fired the stones from artillery they had mounted on the siege tower and ramp. The stones were either fired into the loci where they were found, or were gathered together and dumped in these loci by the Romans during clean-up operations after the fall of the fortress. Holley concludes that the majority of the *ballistae* at Masada were small-caliber engines (scorpions or light artillery) used to provide cover fire rather than make a breach in the wall, confirming Josephus' description, which Mason concedes 'makes sense.'[45]

The problem is that the use of *ballistae* makes no sense if the ramp was never completed and there was no final Roman assault. This is because the shot fired from light artillery was intended to keep the defenders away while the battering ram was being deployed against the wall. Furthermore, if the assault ramp was not operational, *ballistae* could only have been placed at its base — from which point, aimed fire directed at the defenders would have been ineffective due to the distance and trajectory.[46] Instead of addressing this evidence of Roman *ballistae* at Masada, Mason considers the use of light artillery by the Jewish rebels — a possibility that Holley has rightly rejected, as Mason concurs.[47]

Similarly, instead of discussing the hundreds of arrowheads found at Masada in connection with the Roman assault, Mason considers them only in relation to the defenders. As Magness has shown, Yadin found evidence that during the siege, the Jewish rebels at Masada manufactured iron arrowheads of typical Roman type,

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42 See Magness (2011), 358.

43 See Holley (1994); Stiebel and Magness (2007).

44 Mason (2016), 554-55.

45 Holley (1994), 360-62; Mason (2016), 553.

46 A small number of large ballista stones discovered at Masada could have been fired by large engines deployed at the base of the ramp; see Holley (1994), 359, whose chart indicates that only sixteen percent of the ballista shot exceeded six Attic *minae* in weight.

47 Mason (2016), 554.

presumably for use against their assailants.[48] The fact that the workshop was still operating at the time the fortress fell contradicts Mason's proposal that the arrows were intended for use in 'hunting' or 'local food-gathering raids.'[49] More importantly, the distribution of small groups of arrowheads (9-15 specimens per group) found by Yadin on top of Masada indicates that they had been fired by the Romans. These consist of the following locations: a room with a *miqveh* (ritual bath) dating to the time of the revolt located on the southwest side of Building 9 (L368; 15 arrowheads); just inside the casemate wall to the north of the synagogue (L189; 9 arrowheads); an open area just to the south of the synagogue which yielded other dumped materials including ballista stones (10 arrowheads; L1054); and a strip outside (east of) Tower Room 1273 in the casemate wall on the western side of the mountain (10 arrowheads; L1273).[50]

All of these loci are located on the western side of the mountain, around the area that would have been swept by cover fire from the direction of the ramp. However, aside from larger concentrations of arrowheads in the northern palace and the western palace, which were buried in collapse, the Romans seem to have retrieved most of the arrowheads. The remaining specimens (totaling 44 from four loci) seem to have been left where they were gathered, perhaps because their poor condition rendered them unusable.[51]

Arubas and Goldfus have incorrectly claimed that at Masada, there are no 'indications of a conflagration or artifacts associated with assault operations such as the arrowheads, missiles, or ballista balls found at Gamala, Yodfat, Lachish, and Apollonia-Arsuf.'[52] Not only were large numbers of arrowheads and ballista stones recovered at Masada, but as we have seen, they were concentrated in loci surrounding the area at the top of the ramp, attesting to a concentrated barrage. As Holley concludes, most of the ballista stones 'must have been fired into the fortress by Roman *ballistae* mounted on the siege-tower.'[53] This indicates that the ramp was completed and operational. More recently, Netzer and G. Stiebel documented evidence of destruction by fire in the tower (L1010) and casemate rooms (L1009, 1008, 1007, 1006) at the top of the ramp:

> The tops of the extant walls show signs of a violent conflagration. Among the finds discovered in this area are … an accumulation of sling and ballista stones, arrowheads, and an abandoned wooden beam, all found next to the rooms located south of the tower. … North of the tower very little of the wall has remained, proof of the violent destruction wrought when the wall was breached by the Roman army.[54]

Conclusion

Throughout his book in general, and in considering Josephus' account of the siege of Masada in particular, Mason says that his 'purpose has been to think through the

48 Magness (2011), 350-52; Stiebel and Magness (2007), 24-25.
49 Mason (2016), 555.
50 Magness (2011), 355.
51 Magness (2011), 355.
52 Arubas and Goldfus (2008), 1939.
53 Holley (1994), 362.
54 Netzer and Stiebel (2008), 1937.

evidence and try to explain it in plausible ways.' He concludes, 'Josephus' wonderful drama is demonstrably erroneous in its testable claims. His description of the siege ramp is far from *any* possible reality.'[55] We have attempted to demonstrate that the opposite is true: the archaeological evidence supports Josephus' account, and contradicts Mason's proposed alternative scenarios.

Because Mason rejects Josephus as a reliable source of information, he believes that we can never know what really happened, and therefore any number of scenarios is possible.[56] His treatment of the siege and fall of Masada is a good example of this approach. In fact, Mason uses evidence selectively to support his position. For example, not only does he privilege Arubas' and Goldfus' theory that the assault ramp was never completed, but he ignores published evidence that contradicts this claim. Mason's approach leads him to propose far-fetched alternative scenarios rather than the simplest explanations that he claims to seek.[57]

One example is Silva's supposed offering of terms of surrender to the 'non-resisting' Jewish rebels and the possibility that some committed suicide anyway.[58] Not only does this make no sense, but it is contradicted by the evidence of determined resistance on the part of Masada's defenders, as we have seen. Another example is Mason's claim that the Jewish families atop Masada were supported by 'periodic raids on nearby settlements,'[59] a scenario that would have been impossible after Vespasian's campaign to Peraea and Idumaea in spring 68 C.E. (*War* 4.413-39; 4.446-75).

To be clear: we are not claiming that all of the information in *War* is reliable, and we fully recognize Josephus' biases and apologetic tendencies. That said, this analysis demonstrates that Josephus' description of the Roman assault on Masada is supported by the archaeological evidence, and offers the simplest and most economical explanation of events. Therefore, we disagree with Mason that 'a narrative is an entirely different thing from real events.' Mason's approach to Josephus is *not* — as he characterizes it — 'realistic,' nor are his proposed alternative scenarios necessarily 'more interesting.'[60] To the contrary, this case study calls into question the interpretations advanced by Mason elsewhere in his book.

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55 Mason (2016), 574.
56 See Mason (2016), 574.
57 Mason (2016), 578.
58 Mason (2016), 572.
59 Mason (2016), 575.
60 Mason (2016), 136.

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