

# The “Problem” of Ai Solved After Nearly Forty Years of Excavation in the West Bank of Israel

By Scott Stripling and Mark Hassler

After conquering Jericho, Joshua and the Israelites destroyed Ai, the second stronghold of the conquest (Jos 7–8). Everyone agrees on the location of Jericho, but the location of Ai continues to puzzle researchers. The issue garners attention because of its profound implications for biblical studies.

The debate over the location of Ai intertwines with the excavation of Jericho. Kathleen Kenyon excavated Jericho from 1952 to 1956. She concluded that the archaeological evidence at Jericho contradicts the biblical account. In 1961, Joseph Callaway studied with Kenyon in London and three years later, on behalf of the Southern Baptist Theological Seminary, began excavations at et-Tell, 10 mi (16 km) north of Jerusalem (the City of David). Et-Tell had long prevailed as the leading candidate for Ai because of the endorsement by W.F. Albright, the father of biblical archaeology and one of Callaway’s mentors. When Callaway ceased excavations in 1972, he concluded that et-Tell sat unoccupied at the time of the biblical conquest. Together, the interpretations of Kenyon, Callaway, and Albright eroded the evangelical belief in the inerrancy of Scripture.

In response to this erosion, David Livingston formed the Associates for Biblical Research (ABR) in order to investigate the “problem” of Ai. In a personal letter dated February 23, 1970, Albright assured Livingston that Ai belongs at et-Tell:

You can take it from me, and from Callaway and others, that there just isn’t any other possibility for Ai than et-Tell and that Bethel can only have been modern Beitin. Since 1921 we have examined and reexamined the whole countryside, and there just isn’t any archaeologically viable identification.<sup>1</sup>

Undeterred, Livingston began excavations at Khirbet Nisya, his candidate for the Ai of Joshua 7–8. He excavated there from 1979 to 2002, during which time he completed his doctor of philosophy degree at Andrews University. The findings at Khirbet Nisya illuminated the background of the Old and New Testaments, but a positive correlation with Ai proved elusive.

In 1994, ABR colleague Bryant Wood identified Khirbet el-Maqtir as another candidate for Ai, and the following year he launched excavations at the new site, 0.6 mi (1 km) west of et-Tell, and 10 mi (16 km) north of Jerusalem. Excavations continued at Khirbet el-Maqtir through 2016, with the final three years under the direction of Scott Stripling. Thus, from Livingston to Wood to Stripling, ABR has conducted excavations in search of Ai for nearly 40 years, 37 to be precise.

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**Khirbet Nisya** excavations directed by David Livingston (top left).

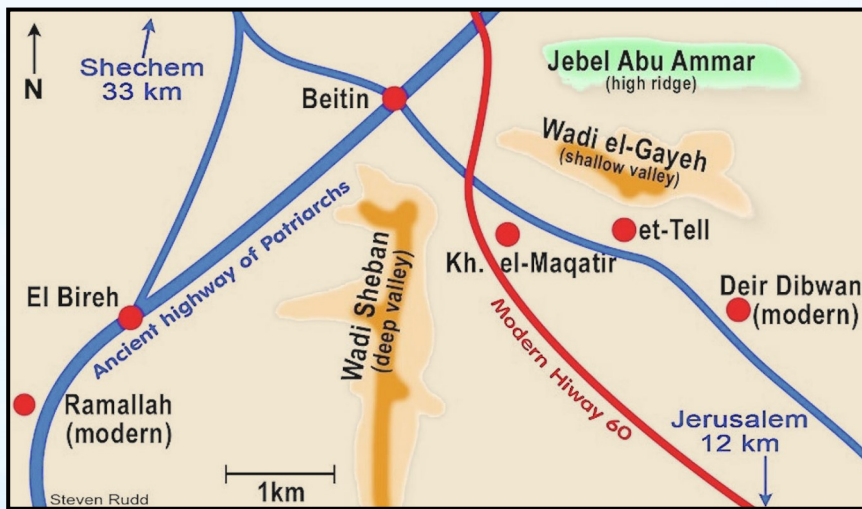
Various lines of reasoning allow for the possibility that the fortress of Ai in Joshua’s day stood at Khirbet el-Maqtir. For one, local tradition in the 1800s equated the sites.<sup>2</sup> Moreover, a monastery from the Byzantine Age once graced the locale. The placement of the monastery seems deliberate, in that monasteries often memorialized biblical events. Unfortunately, the excavation did not yield any mosaics or other clues as to what the monastery may have memorialized. Regardless, the geographical and archaeological indicators in Joshua 7–8 correspond to the evidence unearthed at Khirbet el-Maqtir. This study summarizes the correspondences and proposes a viable solution to the “problem” of Ai.

## Geographical Indicators for the Site

The book of Joshua provides specific geographical indicators for the location of Ai. The geographical indicators appear as follows.

### **Strategic Location**

When Joshua entered Cisjordan, he set into motion a brilliant military strategy: divide and conquer. The decision of where to divide the land was not arbitrary. It appears that he divided the land at a logical and strategic location—the Wadi el-Gāyeh, a west-east drainage, 10 mi (16 km) north of Jerusalem. The wadi formed a natural and political boundary



Location of Khirbet el-Maqatir.

between the southern territory governed by the city-state of Jerusalem and the central territory governed by the city-state of Shechem.<sup>3</sup> Even after the conquest, the wadi functioned as the border between Benjamin and Ephraim (Jos 18:12–13). As Wood suggests, the military outpost there, visible from Jerusalem, guarded the northern border for the league of Amorites in the south (cf. 7:7; 10:1–6). On the north side of the wadi, just 1 mi (1.5 km) away, stood a fortress at Beitin, probably the southern border fortress for the Shechem league, says Wood. Khirbet el-Maqatir and et-Tell both sit near the southern embankment of the Wadi el-Gāyeh.

**Near Beth-Aven**

Joshua locates Ai “near [‘im] Beth-Aven” (Jos 7:2). The preposition ‘im designates general proximity, whereas the synonym ‘ēi (near) signals immediate proximity. The most suitable locale for Beth-Aven is Beitin,<sup>4</sup> a site often

identified as Bethel. Khirbet el-Maqatir sits 1 mi (1.5 km) southeast of Beitin. Scholars who place Bethel at Beitin and Ai at et-Tell have yet to propose a feasible location for Beth-Aven. A feasible location must yield evidence of habitation at the time of the conquest.

**Near and East of Bethel**

The list of conquered rulers in Joshua 12 places Ai “near Bethel” (v. 9). The men of Bethel aided the men of Ai in their pursuit of the Israelites, a fact that confirms the proximity of the sites (8:17). Livingston and others situate Bethel at el-Bireh rather than the usual site of Beitin.<sup>5</sup> A distance of 2.2 mi (3.5 km) separates Khirbet el-Maqatir and el-Bireh.

The “Bethel equals Beitin” formula has its drawbacks, two of which shall receive brief mention. First, the equation of Bethel and Beitin contradicts the idea that the fortress at Bethel served the Shechem alliance. If Bethel constituted el-Bireh, no contradiction exists because el-Bireh lies south of the Wadi el-Gāyeh, positioning it with the southern alliance. Second, the equation contradicts the work of Eusebius. As Rupert Chapman points out, “Eusebius’ statement that Gibeon was four miles west of Bethel is wholly incompatible with the currently accepted identification of Bethel with Beitin.”<sup>6</sup>

The fortress of Ai stood “east of Bethel” (Jos 7:2). The leading candidates for Ai, Khirbet el-Maqatir and et-Tell, both lie east of the leading candidates for Bethel, el-Bireh and Beitin.

**Near and East of an Ambush Site**

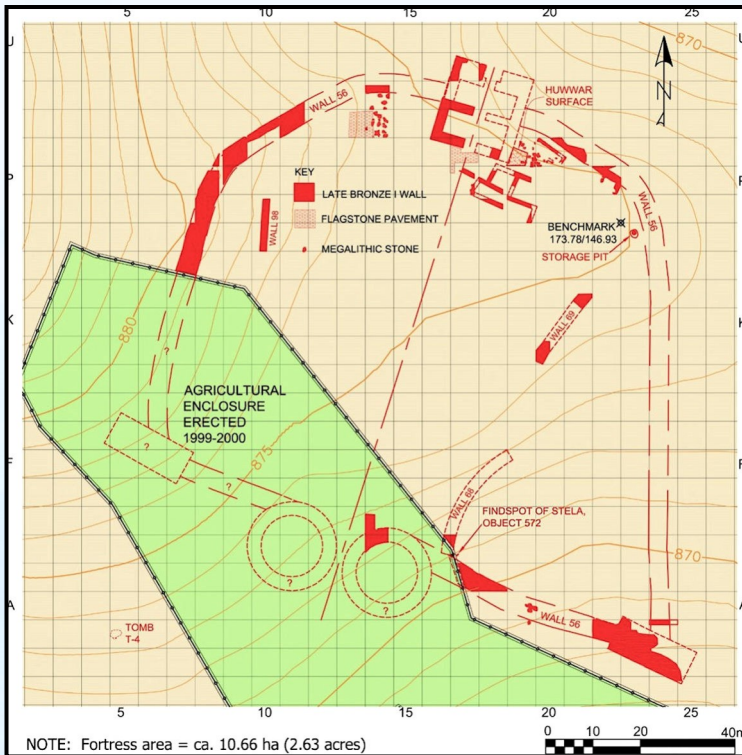
Prior to the battle, Joshua positioned his troops at an ambush site “not...very far from the fortress” (Jos 8:4). In 2015, three members of the ABR excavation team ran from the rim of the Wadi Sheban to the fortress gate at Khirbet el-Maqatir in only five minutes, while carrying backpacks.

The ambush site rested “behind” or “west” (‘ahar) of the fortress (vv. 2, 4, 14), that is, “between Bethel and Ai, west of Ai” (vv. 9, 12). The Wadi Sheban runs between el-Bireh and Khirbet el-Maqatir. This deep ravine could easily conceal numerous troops from watchers at Khirbet el-Maqatir or el-Bireh. The photo to the left shows the geographical relationship of the sites, with el-Bireh positioned to the right of the photo. Et-Tell, however, lacks an ambush site on the west. Israelite troops could have hidden behind the hill to the northwest, but the allies of Ai at Bethel (Beitin in this model) could have spotted them easily and blown their cover.



Wadi Shaban (↑), el-Bireh (→), Khirbet el-Maqatir (↓).

Todd Bolen, BiblePlaces.com



Khirbet el-Maqatir MB III-LB I Fortress, 1995–2000 and 2009–2016.  
Jerry Taylor

### South of a Valley and Ridge

Joshua stationed soldiers “north of Ai” (Jos 8:11). And the very next statement explains, “There was a valley between him and Ai.” Khirbet el-Maqatir sits near the southern slope of a west-east valley, the Wadi el-Gāyeh. If the commander of Ai could see Joshua and his men in the valley, as verse 14 might imply, then the valley lacked depth. The bottom of Wadi el-Gāyeh is readily visible from Khirbet el-Maqatir.

The presence of a valley infers the existence of a ridge. Approximately 0.9 mi (1.4 km) north of Khirbet el-Maqatir, beyond the Wadi el-Gāyeh, stands Jebel Abu Ammar, the highest elevation in the area. It provides excellent visibility and a west-east ridgeline.

The geography and topography of Khirbet el-Maqatir thus meets the criteria revealed in Joshua 7–8. The discussion now shifts to the archaeological indicators.

### Archaeological Indicators for the Site

Just as the book of Joshua reveals geographical indicators for the location of Ai, it also sets forth archaeological indicators. For a site such as Khirbet el-Maqatir to constitute Joshua’s Ai, it must have the following archaeological indicators.

#### Inhabited During the Conquest

When the Israelites ascended into the central hill country, they encountered the inhabitants of Ai (Jos 8:1). The encounter transpired in approximately 1406 BC, a date derived from the Bible itself (cf. 1 Kgs 6:1). This dating reflects the 15th -century exodus-conquest model (the “biblical” model) rather than the 13th-century model.



Egyptian scarab.

Michael C. Luddeni

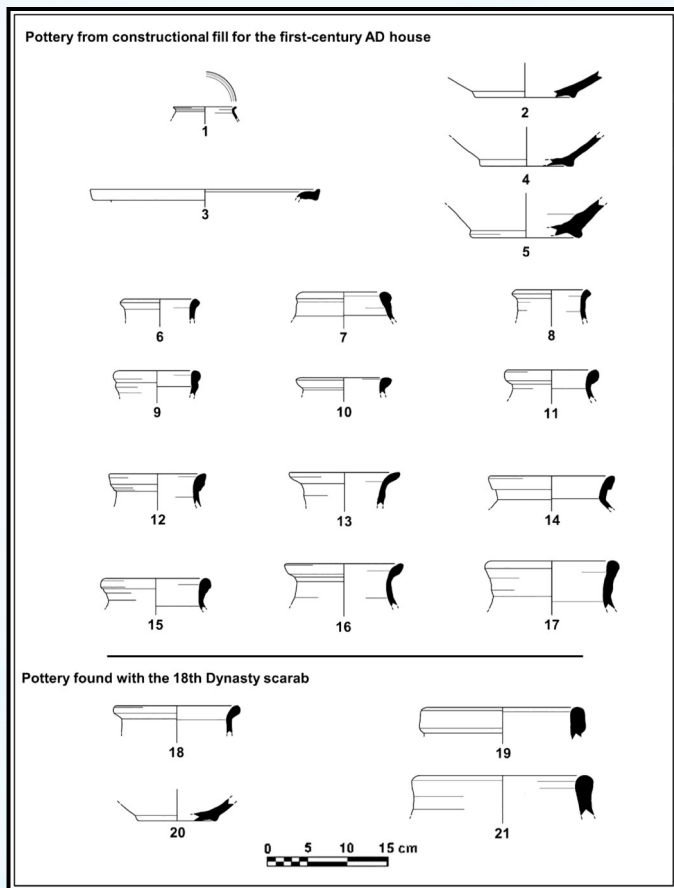
Artifacts establish the date of occupation at Khirbet el-Maqatir. The preeminent artifact, an Egyptian scarab (beetle), topped the list of discoveries in biblical archaeology for 2013 according to *Christianity Today*. Engraved on the base of the object is a falcon-headed sphinx and two heliographs: *ankh* (life) and *neter* (god). The scarab was found inside the fortress, near the gate, 0.8 in (2 cm) above bedrock, in a sealed locus, beneath a concentration of ash and an Early Roman fill, with four diagnostic and refired sherds from Late Bronze I (ca. 1485–1400 BC). Refired pottery was initially fired in a kiln, then fired again (refired), say, in a destructive conflagration. The refire turns the pottery white and rock hard. The illustration on the facing page shows the sherds discovered in association with the scarab. In light of the preliminary research, the glyptic indicators help date the scarab to the Eighteenth Egyptian Dynasty, specifically the reign of Amenhotep II (ca. 1455–1418 BC).

Another scarab came to light in 2014. Its underside features Egyptian hieroglyphs surrounded by eight sets of concentric circles. The scarab was made locally in Canaan. It is typical of the time of the Hyksos (“foreign rulers” in Egypt) and the early Eighteenth Dynasty prior to the subjugation of Canaan by Thutmose III in ca. 1485 BC. This amulet likewise surfaced from within the fortress, near the gate. It came from a contaminated locus, disturbed by looters, and dates from about 1668 BC to 1485 BC.

Pottery from LB I populates the site. The pottery includes storage jars, small jars, jugs, cooking pots, and *pithoi* (large storage containers). LB I sherds lay around and beneath a flagstone pavement by the gate. Fourteen seasons of excavation have not yielded any pottery that relates to the fortress after LB IB (ca. 1445–1400 BC). By all indications, 250 years passed before the site was resettled.

An infant burial jar emerged in 2009. With it came the bones of a neonate and some Bronze Age offering vessels. The jar rested among a few dilapidated walls. It sat on bedrock beneath 15 in (37 cm) of earth. The mortuary custom of burying infants in jars prevailed in the Middle Bronze and LB I periods (ca. 1750–1400 BC). The pottery points to a date of about 1500 BC for the burial.

In 2014, a bronze figurine—a decapitated ram’s head—arose from an LB I context, within a few meters of the scarabs



LB I pottery found near the scarab.

Bryant Wood

and at the same elevation. Decapitated figurines from the Late Bronze Age have also surfaced at Tell el-Qedah (Hazor), another site that the Israelites plundered and burned.<sup>7</sup> The possibility exists that the Israelites severed the ram's head during their conquest of Canaan.<sup>8</sup>

In addition to the artifacts, the architecture contributes to the dating of the site. Megaliths (large stones) formed structures inside the fortress, both on the east and west sides of the gate. In 2016, workers began to uncover a cluster of fallen cyclopean stones—stones so enormous, the Greeks would say, that only Cyclops could have moved them. One of the stones measures a staggering 11.5 x 3.9 x 2.6 ft (3.5 x 1.2 x 0.8 m). The cluster lies at what appears to be the intersection of the southern and eastern walls of the fortress. The use of megaliths and cyclopean stones characterizes construction practices in MB III (ca. 1650–1485 BC).

On the whole, the artifacts and architecture mark the initial, medial, and terminal phases of the fortress at Khirbet el-Maqatir. Based on the finds, one can conclude that the fortress underwent construction toward the end of the Middle Bronze Age, and it fell in LB IB, the time of the Israelite conquest.

### Protected by a Fortification System

Israel's botched attempt to sack Ai resulted in casualties "from the gate as far as the shevarim" (Jos 7:5). When the Israelites finally prevailed, they threw the king's corpse into "the fortress gate" (8:29). A gate presumes the existence of fortified walls.

Khirbet el-Maqatir possessed a fortification system. It had a gate, but only one chamber survived the ravages of time. The gate complex was robbed in antiquity; however, a flagstone pavement and *huwwar* surface remained intact next to the southwestern chamber. The chamber did not show signs of interior benches. In the gate passageway, workers found tiled vats, which are evidence of reuse for industrial purposes in the late Second Temple period. Originally, the gate probably had four chambers, based on the presence of six lower socket stones—two of which were discovered in 2016. The western wall of the fortress was an impressive 13 ft (4 m) in thickness. In the rear of the fortress, diggers began to uncover what looked like a circular tower, but in 1999, excavation in that area ceased because locals erected an agricultural enclosure which encompassed the southwestern portion of the fortress. In the southeast sector, cyclopean stones provided fortification, as mentioned.

Fortification systems protected contemporaneous towns in Canaan. Beitin had a small fortress in MB II (ca. 1750–1650 BC). The walls stood 11.4 ft (3.5 m) thick and contained multiple gates. The northwestern gate chamber used paving stones repaired with *huwwar* surface.<sup>9</sup> In MB III, Gezer possessed a southern gate, a large tower, and fortification walls 13 ft (4 m) thick.<sup>10</sup> At Shiloh, the MB III city wall covered 4.2 acres (1.7 ha) and stood 9.8–18 ft (3.0–5.5 m) thick.<sup>11</sup> In the MB III period, Jerusalem benefited from the rectangular-shaped Spring Tower (56 x 52 ft; 17 x 16 m) and city walls 6.6–8.2 ft (2.0–2.5 m) thick.<sup>12</sup>

### Accessed by a Northern Gate

In anticipation of the battle, the Israelite warriors arrived "opposite [*neged*] the fortress, and camped north of Ai" (Jos 8:11). The preposition *neged* can mean "in front of." The front side of the fortress, the side with a gate, probably faced north. The gate at Khirbet el-Maqatir faced north.



Michael C. Luddeni

One of two gate socket stones found in 2016. Left to right: Bryant Wood, Mark Hassler, Scott Stripling.

## Dwarfed by Gibeon

Joshua portrays Gibeon as larger than Ai: “Gibeon was a metropolis, like one of the royal cities...it was larger than Ai” (10:2). Gibeon epitomized the “metropolises” of Canaan that Moses had warned about (Dt 9:1). Ai, on the other hand, lacked size and notoriety. The size of Ai failed to impress Joshua’s scouts: “Do not make all the people ascend. Only two or three *elephs* of men need to ascend in order to attack Ai. Do not make all the people toil there, because they are few” (v. 3). Further, when the writer of the book of Joshua first mentions Ai, he includes multiple locators to help orient the readers (“Ai, which is near Beth-Aven, east of Bethel,” Jos 7:2).

The exact size of Gibeon in LB I remains unknown because the perimeter wall has not been traced. The later Iron Age wall enclosed an area of approximately 15 acres (6 ha). The little fortress of Khirbet el-Maqatir covered only about 2.5 acres (1 ha). By contrast, et-Tell encompassed a full 27.5 acres (11 ha) in approximately 2400 BC.<sup>13</sup> It tripled the size of Jericho, which covered only 9 acres (3.6 ha) including the embankment.

Joshua depicts Ai as small, whereas Moses styles Ai as a well-known landmark (Gn 12:8; 13:3). In light of the disparity, a short distance may have separated Abraham’s Ai (et-Tell?) and Joshua’s Ai (Khirbet el-Maqatir?). Site names could migrate short distances over time—a well-documented phenomenon.<sup>14</sup>

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*Ever since the Bronze Age fortress fell, subsequent builders have obscured its ruins by scavenging the stones for their own construction projects. On the other hand, their work protected the foundation of the fortress from additional damage.*

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## Consumed by Fire

Israel’s ambush squad “set the fortress on fire” (Jos 8:19). Indeed, “Joshua burned Ai” (v. 28). Excavation of the fortress revealed numerous ash pockets, burned stones, calcined bedrock, and refired sherds.

## Ruined for a Long Time

The Israelites demolished the fortress of Ai, and it remained demolished, at least until the narrator recorded the book of Joshua. The account reads, “Joshua burned Ai and made it a ruin for a long duration [*’lm*], a desolation, as it remains today” (Jos 8:28). In the victory, Joshua buried the ruler of Ai under “a large pile of stones, which remains there today” (v. 29).

At Khirbet el-Maqatir, no one rebuilt the fortress after its demise. In Iron Age I and into Iron Age II, a mere 50 to 70 Israelites inhabited the site, it seems. They used the tumble from the earlier structures to build residences and installations. During the Late Hellenistic and Early Roman periods, a walled town partially overlapped the footprint of the Bronze Age fortress. From the town’s northern wall protruded a massive fortification tower, the largest known tower in Israel outside of Jerusalem in the first century (90x 52 ft; 27.5 x 16 m). The town

fell in AD 69, as the pottery and coins attest. It appears that the Romans demolished it as they advanced south toward Jerusalem. In the Byzantine period, a monastery stood on the crest of the hill, approximately 656 ft (200 m) from the old fortress. As of 2018, modern development is overtaking the ancient ruins and threatens their preservation.

Ever since the Bronze Age fortress fell, subsequent builders have obscured its ruins by scavenging the stones for their own construction projects. On the other hand, their work protected the foundations of the fortress from additional damage.

Khirbet el-Maqatir satisfies the archaeological indicators listed above. The archaeological record shows that a small but stout fortress existed at the site from MB III to LB IB. Occupancy ceased because of a conflagration.

## Conclusion

The geography and archaeology of Khirbet el-Maqatir accord with the descriptions of Ai in Joshua 7–8. The identification of Khirbet el-Maqatir as the Ai of Joshua’s time resolves the problems of chronology and location that ensued from Callaway’s excavation at et-Tell. Nearly forty years of excavation in the West Bank of Israel by ABR archaeologists has resulted in a viable solution. The solution squares with the biblical data concerning the exodus and conquest.

*Endnotes for this article can be found at [www.BibleArchaeology.org](http://www.BibleArchaeology.org). Type “Endnotes” in the search box; next, click the “Bible and Spade Bibliographies and Endnotes” link; then page down to the article.*



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*in Action: Archaeology 101* and has tapped him for the leading role in their forthcoming documentary on archaeology and the Bible. Stripling’s book, *The Trowel and the Truth* (second edition), introduces readers to the fascinating and complex world of biblical archaeology.

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