The story of the Israelite conquest of Jericho (Joshua 2-6) is one of the best known and best loved in the entire Bible. The vivid description of faith and victory has been a source of inspiration for countless generations of Bible readers. But did it really happen as the Bible describes it?

The site has been excavated several times in this century. Based on the conclusion of the most recent excavator, British archaeologist Kathleen Kenyon, most historians and Bible scholars would answer with a resounding "No, certainly not! There was no city there at the time Joshua supposedly conquered it."

Some 30 years after her excavation of the site – indeed, 12 years after Kenyon's death – the detailed evidence has now become available in the final report. So it is time for a new look.

Ancient Jericho is located at Tell es-Sultan, next to a copious spring on the western edge of the Jordan Valley, just north of the Dead Sea. The site's excellent water supply and favorable climate (especially in winter) have made it a desirable place to live from the very beginning of settled habitation. A Neolithic settlement at the site goes back to about 8000 B.C.E.,* thus...
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First appeared in Canaan.

After his redating, Watzinger concluded that Jericho was unoccupied (and therefore obviously negligible) during the Late Bronze period (c. 1550-1200 B.C.E.), the time when the Israelites first appeared in Canaan.

The site is strategically located. From Jericho one has access to the heartland of Canaan. Any military force attempting to penetrate the central hill country from the east would, by necessity, first have to capture Jericho. And that is exactly what the Bible (Joshua 3:16) says the Israelites did.

Jericho in the 1950s, claimed that Jericho was destroyed in the 16th century B.C.E. and there was no walled city at Tell es-Sultan for Joshua to conquer. A comprehensive new survey of Kenyon’s evidence at Jericho, however, has led author Bryant Wood to conclude that a walled city existed at Jericho until about 1400 B.C.E. when it was destroyed in a conquest strikingly similar to the Biblical account. The 1400 B.C.E. conquest would match the chronology derived from the Bible. However, it is about 150 to 200 years earlier than the time most scholars believe the Israelites were to be found as a people living in Canaan.

After wandering in the Sinai desert for 40 years, the Israelites prepared to cross the Jordan River and enter the Promised Land from opposite Jericho. Before making the crossing, however, Joshua, the Israelite commander, dispatched two spies to reconnoiter the city. Narrowly escaping capture, the spies brought back valuable intelligence collected from Rahab, a harlot who lived within the city wall. Although the Jordan was in flood at the time the Israelites crossed, the waters were miraculously stopped and the Israelites were able to cross “on dry ground.” They then marched around the heavily fortified city daily for seven days. On the seventh day, to the blast of the ram’s horn, the walls came tumbling down. The Israelites rushed into the city and put it to the torch.

Because of its importance in Biblical history, Jericho was the second site in the Holy Land, Jerusalem being the first, to feel the excavators’ picks. The first documented excavation was undertaken in 1867 and 1868 by the famous British engineer Charles Warren. Jericho was one of nine tells, or mounds, he excavated in the Jordan Valley in an effort to determine if they were natural or artificial. He dug six vertical shafts and three trenches at Jericho. Based on his findings, Warren was able to provide an answer to what had been a serious question until that time:

As a general result on the completion of these excavations it may be said for a certainty that these mounds are artificial throughout, and that they probably are the remains of ancient castles.

He was wrong about the castles, but he was certainly right that the mounds were ancient ruins.

The first major excavation at Jericho was conducted by an Austro-German expedition under the direction of Ernst Sellin and Carl Watzinger from 1907 to 1909 and again in 1911. This was before pottery chronology was well developed, so their dating was far off the mark. Watzinger later revised the chronology, however, and their carefully drawn plans (see below) and sections can still provide valuable information. For example, they traced the Middle Bronze revetment wall around three-quarters of the base of the tell, although at the time they did not fully understand the complexities of the Middle Bronze fortification system. It was only when Kathleen Kenyon excavated the site in the 1950s that the nature of the revetment wall was clarified, as we will soon see.

After his redating, Watzinger concluded that Jericho was unoccupied (and therefore obviously unfortified) during the Late Bronze period (c. 1550-1200 B.C.E.), the time when the Israelites first appeared in Canaan.
City IV at Jericho – the city that all scholars agree was violently destroyed – was a fortified enclave, drawn at left. The city’s outer defenses consisted of a stone revetment wall at the base of the tell that held in place a high, plastered rampart. Above the rampart on top of the tell was a mudbrick wall which served as Jericho’s city wall proper. The approximate line of this wall is indicated by the dashed line. In the 1930s, British archaeologist John Garstang excavated a residential area, marked “A,” just west of the perennial spring that supplied the city’s water and which now fills the modern reservoir. (A significant portion of the tell was destroyed to make way for the modern road.) Signs of a fiery destruction and his dating of the remains led Garstang to conclude that the Israelites had indeed put the city to the torch about 1400 B.C.E., in harmony with the Biblical narrative. Kathleen Kenyon, Garstang’s successor at Jericho, excavated the area marked “B,” Her conclusions dated Jericho’s destruction to about 1550 B.C.E., 150 years earlier than Garstang’s date. This destruction, she concluded, was far too early to ascribe to the Israelites. By the time the Israelites appeared on the scene, she argued, there was no walled city at Jericho.

John Garstang, a British archaeologist, questioned these results and mounted an expedition of his own to gather further evidence regarding the date of the fortifications at Jericho.7 Garstang was the first investigator to use modern methods at the site, although his work was still crude by today’s standards. He dug from 1930 to 1936 and promptly published his findings in a series of preliminary reports.8 Although the Second World War prevented Garstang from publishing a final report on his work, after the war, in collaboration with his son, he published a popular account that summarized his final views on Jericho.9

Garstang excavated a collapsed double city wall on the summit of the tell that he dated to the late-15th to early 14th-century B.C.E. (the Late Bronze Age). He also excavated a residential area on the southeast slope of the mound which he believed was part of the city fortified by the double wall. He designated this “City IV.” It had been thoroughly destroyed in a violent conflagration.

Garstang concluded that City IV came to an end about 1400 B.C.E., based on pottery found in the destruction debris, on scarabs recovered from nearby tombs and on the absence of Mycenaean ware. He ascribed the destruction to invading Israelites. The matter seemed settled in Garstang’s mind:

*In a word, in all material details and in date the fall of Jericho took place as described in the Biblical narrative. Our demonstration is limited, however, to material observations: the walls fell, shaken apparently by earthquake, and the city was destroyed by fire, about 1400 B.C. These are the basic facts resulting from our investigations. The link with Joshua and the Israelites is only circumstantial but it seems to be solid and without a flaw.*10
But was the matter really settled? Hardly. In reality, Garstang's conclusions precipitated considerable controversy among his colleagues. After a few years, and further advances in the knowledge of Palestinian archaeology, Garstang asked an up-and-coming British archaeologist named Kathleen Kenyon to review and update his findings. Kenyon did so and came up with more or less the same conclusion Sellin and Watzinger had reached 25 years earlier: Jericho was destroyed at the end of the Middle Bronze Age in the mid-16th century B.C.E. and was unoccupied throughout the Late Bronze Age, except for a very small area occupied for a short time in the 14th century B.C.E. So much for progress in Palestinian archaeology!

A new look at an old excavation. This photo was taken at the first major excavation at ancient Jericho, conducted by Sellin and Watzinger. On a diagonal at lower right is a portion of the stone revetment wall, rising to a height of some 15 feet; its scale is evident from the man at far right. The revetment wall surrounded the city at the base of the sloping earthen rampart and provided a first line of defense for the city at the top of the slope (see plan above). Atop this revetment wall a mudbrick parapet wall is clearly visible. Behind the parapet, across the center of the photo, are the remains of houses inside the revetment wall on the top of the rampart. These same buildings can be seen on the plan opposite. These houses seem to have been on the “wrong side of the tracks” in ancient Jericho; their walls were rather flimsy – only one brick thick. Author Wood suggests that Rahab, the prostitute who assisted Joshua’s spies, might have lived in one of these houses on the sloping rampart between the revetment wall encircling the bottom of the hill and the city wall that surrounded the top of the tell.

As an outgrowth of questions raised in her critique, Kenyon headed up yet another campaign to the ruins at Tell es-Sultan. This one lasted from 1952 to 1958. Kenyon’s excavation ushered in a new era in Palestinian archaeology. She introduced rigorous stratigraphic excavation techniques entailing detailed analysis of soil and debris layers and careful recording of the sides of the excavation squares called balks. Kenyon concluded that her field work confirmed her earlier review of Garstang’s work. The double city wall Garstang associated with the Israelite invasion in about 1400 B.C.E. in fact dated to the Early Bronze Age some 1,000 years earlier. The destruction of Garstang’s City IV, which he had dated to about 1400 B.C.E., occurred, according to Kenyon, at the end of the Middle Bronze Age, about 1550 B.C.E.

In short, there was no strongly fortified Late Bronze Age city at Jericho for Joshua to conquer. The archaeological evidence conflicted with the Biblical account – indeed, disproved it.

Based on Kenyon’s conclusions, Jericho has become the parade example of the difficulties encountered in attempting to correlate the findings of archaeology with the Biblical account of a military conquest of Canaan. Scholars by and large have written off the Biblical record as so much folklore and religious rhetoric. And this is where the matter has stood for the past 25 years.

Kenyon died in 1978 without living to see the final publication of her excavation of the tell. Her conclusions were reported only in a popular book published the year before she completed her fieldwork, in a series of preliminary reports and in scattered articles. The detailed evidence, however, was never supplied. This became available only in 1982 and 1983 when two volumes on pottery excavated from the tell were published. This, together with the stratigraphic data from the excavation, published in 1981, makes it possible to perform an independent assessment of Kenyon’s conclusions.

I first became interested in Jericho while working on my Ph.D. dissertation on Canaanite pottery of the Late Bronze Age. I would occasionally thumb through Garstang’s preliminary
reports to see if there was anything of interest. I became intrigued by a considerable amount of what appeared to be Late Bronze I (c. 1550-1400 B.C.E.) pottery he had excavated. This was precisely the period Kenyon repeatedly said was absent at Jericho! Because of the lack of precision in Garstang's field work and the rambling nature of his preliminary reports, it was not possible to gain a clear picture of the stratigraphic sequence at Jericho from Garstang's work alone. Kenyon's conclusions, on the other hand, could not be checked because her work remained unpublished.

Life on the edge. This plan provides a bird's-eye-view of the Sellin and Watzinger excavations on the northern end of the tell. On the right, labeled "Israelitische Böschungsmauer" (Israelite Revetment Wall), is the tell's outermost fortification, shown in the photo opposite. The buildings shown here were built on the rampart that rose to Jericho's city wall proper (see plan opposite, top). The city wall is not shown here; it would have been just off the left side of this plan.

After completing my dissertation in 1985, I decided to pursue the matter further, since by this time the Jericho reports were available.

There is little doubt that Kenyon was correct in dating the double wall on top of the tell to the Early Bronze Age. In this she was right and Garstang wrong. But there is a serious question about her dating of the destruction of the residential area of the final Bronze Age city (Garstang's City IV) to the end of the Middle Bronze Age (c. 1550 B.C.E.). Here I believe Garstang was right after all!

Before explaining why Garstang's date for the destruction of City IV – about c. 1400 B.C.E., in the Late Bronze Age – is to be preferred to Kenyon's date at the end of the Middle Bronze Age, let me say a few words about Kenyon's methodology.

Jericho’s walls shatter as an earthquake rumbles across the great rift of the Jordan Valley. At bottom, the city's stone revetment wall (large boulders) and the crenelated mudbrick parapet wall on top of it (smaller bricks) start to crumble. The mudbrick city wall on top of the tell (upper left) cracks and tumbles down as well; the quake splits houses built on top of the earthen rampart between the tower and upper walls. Piles of crumbled bricks form rough ramps, allowing an invader to go directly into the fatally exposed city.

As I have already observed, during her lifetime, Kenyon never published a definitive study of the pottery from the last phases of City IV, before its destruction. The final excavation reports published after her death reflect Kenyon's meticulous field work and contain a complete and detailed presentation of her excavation results. But they merely present the raw data, with no analysis or comment. To understand how Kenyon reached her conclusion, we must piece together scattered statements in various writings. When we do this, it becomes clear that Kenyon based her opinion almost exclusively on the absence of pottery imported from Cyprus and common to the Late Bronze I period (c. 1550-1400 B.C.E.). This imported Cypriote ware had been previously found mainly in some Megiddo tomb groups, and Kenyon used this pottery to construct her ceramic typology for the Late Bronze I period.

Although she also mentions certain local pottery types used in this period, it is obvious she paid little attention to these common domestic forms since they appear regularly in the final phases of City IV. That she did not focus more on the local pottery is especially strange because considerable stratified local daily-use pottery from the Late Bronze I period had been excavated and was available for her to work with even at the beginning of her excavation at Jericho. Instead, Kenyon chose to emphasize the imported wares in reaching her chronological conclusions. As a result, Kenyon reached the following determination: When the material is analyzed in the light of our present knowledge, it becomes clear that there is a complete gap both on the tell and in the tombs [found to the northwest of the tell] between c. 1560 B.C. and c. 1400 B.C. (From the period after 1400 B.C.E., she found a residence-type structure and associated outbuildings, which she dated to about 1325 B.C.E. After that, the site remained abandoned until about the 11th century B.C.E.)
Signs of destruction from the final phase of City IV betray the calamity that befell Jericho. "The destruction was complete," wrote Kathleen Kenyon, the area's excavator. She discovered a debris layer a yard or more thick across her entire excavation area. This debris is visible in the west balk behind the meter stick in the photo above (a balk is a side of an excavation square left standing to preserve a record of the square's strata). The destruction debris has been removed elsewhere to expose the remains of the destroyed city. At the top of the north balk, upper right corner in the above photo, is an erosion layer consisting of material washed down from further up the slope. Within the destruction debris of the north balk, we can see the remains of a late-14th-century B.C.E. structure. At upper left is a cobbled, stepped street (seen in close-up below left). The line of stones that extends from the center left edge of the larger photo to the center bottom is a drain that passed under the street preserved at upper left. The drain was originally covered with stones, but the channel of the drain is exposed here in the upper part. The street led from the summit of the city's southeast slope to the spring on the east side of the city, which today fills the modern reservoir seen at right in the plan "City IV" above.

In other words, Kenyon's analysis was based on what was not found at Jericho rather than what was found. According to Kenyon, City IV must have been destroyed at the end of the Middle Bronze Age (c. 1550 B.C.E.) because no imported Cypriote ware – diagnostic for the ensuing Late Bronze I period – was found at Jericho.

Dating habitation levels at Jericho on the absence of exotic imported wares – which were found primarily in tombs in large urban centers – is methodologically unsound and, indeed, unacceptable. Kenyon drew her comparative material from large cities like Megiddo situated on major trade routes far from Jericho. Jericho, by contrast, is a small site well off the major trade routes of the day.

A careful examination of the Jericho excavation reports as a whole, moreover, makes it clear that both Garstang and Kenyon dug in a poor quarter of the city where they found only humble domestic dwellings. Kenyon writes of the final phase of City IV:

> The picture given... is that of simple villagers. There is no suggestion at all of luxury.... It was quite probable that Jericho at this time was something of a backwater, away from the contacts with richer areas provided by the coastal route.

Why then would anyone expect to find exotic imported ceramics in this type of cultural milieu!

To make matters worse, Kenyon based her conclusions on a very limited excavation area – two 26-foot by 26-foot squares. An argument from silence is always problematic, but Kenyon's argument is especially poorly founded. She based her dating on the fact that she failed to find expensive, imported pottery in a small excavation area in an impoverished part of a city located far from major trade routes!

Rather than unusual imported wares, attention should be given to the ordinary domestic pottery that Kenyon and Garstang both found in abundance.

Kenyon went on to associate the destruction of City IV with the expulsion of the Hyksos from...
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Egypt in about 1570 B.C.E. But this analysis, too, has its problems. Kenyon argued that not only City IV at Jericho, but other destroyed Middle Bronze Age cities in Palestine had met their end at the hands of the Hyksos. And, if not the Hyksos, these cities were destroyed by the Egyptians in follow-up campaigns as they pursued the fleeing Hyksos whom they expelled from Egypt, where they once ruled. It makes little sense, however, for the Hyksos to destroy the very cities to which they were fleeing and in which they were seeking refuge. As for Egyptian punitive campaigns into Canaan, there is no textual evidence in Egyptian literary sources to indicate that the Egyptians went beyond Sharuhen in southwest Canaan in their pursuit of the Hyksos. Moreover, there is no evidence to suggest that the Egyptians ever campaigned in the southern Jordan Valley in the XVIIIth Dynasty, the period in Egyptian history following Hyksos rule. The Egyptian interest at this time was in the trade routes on the Mediterranean coast and the Kishon-Jezreel Valley and in points further north, not in the Jordan Valley.

Moreover, Jericho itself has produced evidence that militates against a destruction of City IV by the Egyptians. In the burnt debris of City IV both Garstang and Kenyon found many store jars full of grain, indicating that when the city met its end there was an ample food supply. This flies in the face of what we know about Egyptian military tactics. Egyptian campaigns were customarily mounted just prior to harvest time – food supplies stored inside the cities would be at their lowest level then; the Egyptians themselves could use the produce in the fields to feed their army; and what the Egyptians did not want for their own use they could destroy, thereby placing a further hardship on the indigenous population. This was clearly not the case at Jericho.

Finally, the Egyptian strategy for capturing a strongly fortified city such as Jericho was by siege. Sharuhen was besieged by the Egyptians for three years; the siege of Megiddo lasted seven months. The ample food supply at Jericho indicates that it succumbed quickly, not after a long siege; and this occurred after harvest time, not before.

So Kenyon is on weak ground both in dating the destruction of City IV to the end of the Middle Bronze Age (c. 1550 B.C.E.) and in her historical reconstruction that attributes the destruction of Jericho to the Hyksos or to the Egyptians.

Let us look now at the evidence that supports Garstang's conclusion that City IV was destroyed in about 1400 B.C.E., at the end of what archaeologists call Late Bronze I. Four lines of evidence converge to support this conclusion: First and foremost is the ceramic data; second, stratigraphical considerations; third, scarab evidence; and fourth, a radiocarbon date.

Cypriot bichrome ware – pottery decorated in two colors. Now known as a key indicator of Late Bronze Age occupation, this pottery, excavated by Garstang at Jericho, is just what Kenyon later looked for, unsuccessfully. These sherds were found on the east side of the tell, apparently having slid there when a large structure upslope eroded. In Garstang's day, the significance of such bichrome ware was not yet appreciated, and he failed to single it out from the other pottery types he uncovered. As fate would have it, Kenyon, who well knew the link of such ware to the Late Bronze Age, conducted her dig too far north of the eroded runoff to find any bichrome ware. Had she dug further south, or had she been aware of Garstang’s finds, the debate over the date of Jericho’s fall could have taken a very different course: Kenyon might have dated Jericho’s demise to about 1400 B.C.E., (as Garstang did) and not to about 1550 B.C.E., the end of the Middle Bronze Age. Why Kenyon did not study Garstang's finds more closely remains a mystery.

Although I will spare the reader a technical discussion of the Jericho pottery, we will look at a few examples from the final phases of City IV – all excavated by Kenyon. To anyone familiar with Bronze Age pottery it will be obvious that these forms are from the Late Bronze I period and not the Middle Bronze Age. In particular, a cooking pot with an internal lip is found only in the late Bronze I period. The simple round-sided bowl with concentric circles painted on the
Late Bronze Age pottery types from Jericho excavated by Kenyon. A simple, round-sided bowl with concentric circles painted on the inside (No. 2) is particularly important for dating Jericho’s City IV because such bowls were used only for a short time in the latter half of the 15th century B.C.E. The flaring carinated (angled) bowl with a slight crimp (No. 1), a storage jar with a simple folded rim (No. 3), a cooking pot (No. 4) and a dipper juglet (No. 5) are all common to the Late Bronze Age. Inexplicably, Kenyon ignored these examples of common, locally made domestic pottery at Jericho and instead based her Middle Bronze Age date for City IV on the absence of expensive imported Cypriote ware known to date to the beginning of the Late Bronze Age. She reasoned that the absence of these Late Bronze forms indicated the city must have been destroyed at the end of the Middle Bronze Age. However, such Late Bronze Age imports are typically found in tombs in large cities on major trade routes. The Jericho of City IV, in Kenyon’s own words was “something of a backwater.” She should not have been surprised by the absence of Cypriote imports in Late Bronze Jericho. She should have paid greater attention to the locally made household pottery she did find, especially because she was dependent on a very limited excavation area in a poor section of the city – the last place to look for exotic imported materials.

Now let us look at the stratigraphy of City IV, which is related, in a very elementary way, to time. With her careful excavation techniques, Kenyon was able to identify many different occupational phases during the Bronze Age at Jericho. Middle Bronze III, the last subperiod of Middle Bronze, lasted from about 1650 to 1550 B.C.E. The beginning of the Middle Bronze III phase at Jericho can be fixed quite confidently at Kenyon’s Phase 32. From Phase 32 to the end of the life of City IV, Kenyon identified 20 different architectural phases, with evidence that some of these phases lasted for long periods of time. Over the course of the 20 phases there were three major and 12 minor destructions. A fortification tower was rebuilt four times and repaired once, followed by habitation units that were rebuilt seven times. If Kenyon were correct that City IV met its final destruction at the end of the Middle Bronze Period (c. 1550 B.C.E.), then all these 20 phases would have to be squeezed into a mere 100 years (Middle Bronze III). It is hardly likely that all of this activity could have transpired in the approximately 100 years of the Middle Bronze III period.

The next item of chronological significance is a scarab series discovered by Garstang. Scarabs are small Egyptian amulets shaped like a beetle with an inscription (sometimes the name of a pharaoh) on the bottom. In his excavation of the cemetery northwest of the city, Garstang recovered a continuous series of Egyptian scarabs extending from the 18th century B.C.E. (the XVIII Dynasty) to the early 14th century B.C.E. (the XVIIIth Dynasty). The XVIIIth Dynasty scarabs include four royal-name scarabs – one of Hatshepsut (c. 1503-1483 B.C.E.), one of Tuthmosis III (c. 1504-1450 B.C.E.) and two of Amenhotep III (c. 1386-1349 B.C.E.) – as well as a seal of Tuthmosis III. The continuous nature of the scarab series suggests that the cemetery was in active use up to the end of the Late Bronze I period.

Three scarabs and a seal recovered from a cemetery northwest of Jericho. A scarab is a small, beetle-shaped Egyptian amulet, inscribed on its underside, often with the name of a pharaoh. Shown clockwise from upper left are scarabs bearing the names of Tuthmosis III (c. 1504-1450 B.C.E.), Amenhotep III (c. 1386-1349 B.C.E.) and Hatshepsut (c. 1503-1483 B.C.E.) and the reverse side of a seal, lower left, of Tuthmosis III. The cemetery outside Jericho has yielded a continuous series of Egyptian
All this evidence converges to demonstrate that City IV was destroyed in about 1400 B.C.E., not 1550 B.C.E. as Kenyon maintained.

If the Hyksos did not destroy Jericho and the Egyptians did not destroy Jericho, then who did?

The only written record to survive concerning the history of Jericho in the Late Bronze Age is found that in the Hebrew Bible.

When we compare the archaeological evidence at Jericho with the Biblical narrative describing the Israelite destruction of Jericho, we find a quite remarkable agreement.

First, a few words about the Israelite crossing of the Jordan River. The Bible describes the crossing of the Jordan River in vivid and very explicit language:

The waters coming down from above stood and rose up in a heap far off, at Adam, the city that is beside Zarethan, and those flowing down toward the sea of the Arabah, the Salt Sea, were wholly cut off; and the people passed over opposite Jericho” (Joshua 3:16).

The Jordan was apparently blocked at Adam, modern Damiya, some 18 miles upstream from the fords opposite Jericho. How could this happen? Historians and Bible scholars have focused on the "miraculous" nature of the event, with little regard for the seismology of the southern Jordan Valley. In fact, the blocking of the Jordan has happened a number of times in recent recorded history. Jericho is located in the Rift Valley, an unstable region where earthquakes are frequent. Geophysicist Amos Nur of Stanford University has studied the well-documented earthquakes of this area in an effort to find ways to predict them. He has noted several earthquakes that caused phenomena quite similar to what is described in the Book of Joshua:

Today Adam is Damiya, the site of the 1927 mud slides that cut off the flow of the Jordan. Such cutoffs, typically lasting one to two days, have also been recorded in A.D. 1906, 1834, 1546, 1267, and 1160.40

The 1267 C.E. mudslide was recorded by the Arab historian Nowairi. He writes that a large mound on the west side of the Jordan at Damiya fell into the river damming it up. No water flowed south from Damiya for 16 hours. In the 1927 quake, a section of a cliff 150 feet high collapsed into the Jordan near the ford at Damiya, blocking the river for some 21 hours.41

So the stoppage of the Jordan's flow as described in the Bible is not so far-fetched as it might at first seem.

Jericho is most famous, of course, as the city where the walls came tumbling down. As we have seen, according to Kenyon, there was no city here during the Late Bronze Age and therefore there was no city wall at that time to come tumbling down. I believe, however, that the evidence indicates that Kenyon's Middle Bronze Age city lasted into the early part of the Late Bronze Age and was not destroyed until about 1400 B.C.E. (at the end of Late Bronze I). This is what Garstang maintained all along. If this view is correct, then there was a strongly fortified city at Jericho at the beginning of the Late Bronze Age.

Kenyon herself determined that City IV had an impressive fortification system. The type of fortification that constituted Jericho's defensive system was not really understood until Kenyon's careful stratigraphic work at Jericho. This fortification system consisted first of all of a stone revetment wall some 15 feet high at the base of the mound. At the northern end of the site, all three archaeological expeditions to Jericho found remnants of a mudbrick parapet wall on top of the revetment wall (see section drawing opposite, middle). At one point, it was preserved to a height of about 8 feet.42 It is likely that this parapet wall originally extended all the way around the city.

The revetment wall held in place a massive packed-earth embankment or rampart with a plastered face that extended to the top of the tell. Atop this earthen embankment was yet another city wall, as determined from an earlier phase of the defensive system that survived at only one point on the tell.43 Unfortunately, the upper portion of the embankment on the rest of the tell had eroded away (or had been excavated away). Accordingly, the upper wall that surrounded City IV when it was finally destroyed does not survive today. The lower revetment
wall and most of the embankment, however, still exist and can be seen at the site.

Despite the fact that the area where the upper wall once stood is gone, there is evidence, incredible as it may seem, that this wall came tumbling down and, in the words of the Biblical account in Joshua, “fell down flat” (Joshua 6:20). Again, the evidence comes from Kenyon’s own careful stratigraphic excavation and the detailed, final report that describes it.

Kenyon made three cuts through the city’s ramparts – on the north, west and south. In all three cuts, she carried her excavation to the lower revetment wall; in the west cut, however, she went even beyond the revetment wall to the area outside the wall.

What Kenyon found outside the revetment wall in the west cut was quite astounding. There, outside the revetment wall, she found bricks from the city wall above that had collapsed. I will let her describe it in her own words (you can follow this more easily while looking at the stratigraphic section):

> Above the fill associated with the kerb wall [marked “KE” at lower left], during which the final Middle Bronze [or rampart] remained in use, was a series of tip lines against the [outer] face of the revetment [wall]. The first was a heavy fill of fallen red [mud]bricks piling nearly to the top of the revetment [wall]. These [red bricks] probably came from the wall on the summit of the bank [emphasis supplied].

Over what she described as “the main collapse,” she found a gravelly wash from later erosion. In less technical language, it appears that a wall made of red mudbricks existed either on top of the tell, as Kenyon postulates, or on the top of the revetment wall itself, or both, until the final destruction of City IV. The red mudbricks came tumbling down, falling over the outer revetment wall at the base of the tell. There the red mudbricks came to rest in a heap.

Thus, in Kenyon’s opinion, the pile of bricks resting against the outer face of the revetment wall came from the collapsed city wall. Here is impressive evidence that the walls of Jericho did indeed topple, as the Bible records. (See artist’s rendition, p. 47). The amount of bricks showing in the cross-section in Kenyon’s balk (80 square feet) is sufficient for an upper wall 6.5 feet wide and 12 feet high.

The outer face of this wall is shown in the photo below.
All three excavations at Jericho found evidence – at different points around the tell – of a mudbrick parapet wall atop the stone revetment wall. In Kenyon’s drawing, as well as in these two sections below right, by Sellin and Watzinger (left) and Garstang (right), gray indicates the revetment wall and violet highlights the parapet wall on top of it.

When the wall was deposited in this fashion at the base of the tell, the collapsed mudbricks themselves formed a ready ramp for an attacker to surmount the revetment wall. According to the Biblical account, the Israelites who encircled the city "went up into the city, every man straight before him" (Joshua 6:20). Note that the Bible states that they went up into the city.

The collapse of the city wall may well have been the result of an earthquake, since there is ample evidence for earthquake activity at the end of the life of City IV. Again, geophysicist Amos Nur:

This combination, the destruction of Jericho and the stoppage of the Jordan, is so typical of earthquakes in this region that only little doubt can be left as to the reality of such events in Joshua’s time.*

Now let us turn to the remains of the city itself. One of the most intriguing questions about the story in Joshua concerns the location of Rahab’s house. We know her house had a roof exposed to the elements because she hid the spies under some flax that was drying there (Joshua 2:6). It was also built against the city wall, thus facilitating the escape of the spies: “Then she let them down by a rope through an opening, for her house was at the surface of the wall, since she lived within the wall” (Joshua 2:15).

Sellin and Watzinger found a number of domestic structures from the final phase of City IV on the north side of the tell. They were located on the lower slopes of the rampart, just inside the revetment wall. It is possible that Rahab lived in just such a house. If so, it would have been within the city wall, i.e., between the revetment wall with the mudbrick parapet and the upper city wall at the crest of the rampart. It could also have abutted the revetment wall, with a window through the parapet wall overlooking the stone revetment below. The houses built on the rampart appear to have comprised the poor quarter of the city because they were constructed of thin walls only one brick in width.

Remnants of the final phase of City IV were also found on the southeast slope, just above the spring, by both Garstang and Kenyon. What Garstang and Kenyon found here is most revealing. Garstang dug a large area, about 115 feet by 165 feet, which he called the “palace storeroom area”; Kenyon found remains from the final phase of City IV only in two excavation squares (H II and H III). The results reveal that City IV was massively destroyed in a violent conflagration that left a layer of destruction debris a yard or more thick across the entire excavation area. Again, we will let Kenyon describe the calamity:
The last observation in this quotation suggests that an earthquake preceded the conflagration. This description may be compared with the Biblical account. According to the Bible, after the Israelites gained access to the city, they “burned the city with fire and all that was therein” (Joshua 6:24). In short, after the collapse of the walls – perhaps by earthquake – the city was put to the torch.

The most abundant item found in the destruction, apart from pottery, was grain. As noted above, both Garstang and Kenyon found large quantities of grain stored in the ground-floor rooms of the houses.\(^5\) In her limited excavation area, Kenyon recovered six bushels of grain in one season\(^5\) This is unique in the annals of Palestinian archaeology. Perhaps a jar or two might be found, but to find such an extensive amount of grain is exceptional. What conclusions can we draw from this unusual circumstance?

Grain was a very valuable commodity in antiquity. The amount stored after harvest provided food until the next harvest. Grain was so valuable, in fact, that it was used as a medium of exchange. The presence of these grain stores in the destroyed city is entirely consistent with the Biblical account. The city did not fall as a result of a starvation siege, as was so common in ancient times. Instead, the Bible tells us, Jericho was destroyed after but seven days (Joshua 6:15,20). Successful attackers normally plundered valuable grain once they captured a city. This of course would be inconsistent with the grain found here. But in the case of Jericho the Israelites were told that "the city and all that is within it shall be devoted to the Lord for destruction," and they were commanded, "Keep yourselves from the things devoted to destruction" (Joshua 6:17-18). So the Israelites were forbidden to take any plunder from Jericho.\(^5\) This could explain why so much grain was left to burn when City IV met its end.

Another inference can be drawn from the grain: The city fell shortly after harvest, in the spring of the year. This is precisely when the Bible says the Israelites attacked Jericho: Rahab was drying freshly harvested flax on the roof of her house (Joshua 2:6); the Israelites crossed the Jordan while it was in flood at harvest time (Joshua 3:15); and they celebrated Passover just prior to attacking the city (Joshua 5:10).

Despite my disagreements with Kenyon’s major conclusion, I nevertheless applaud her for her careful and painstaking field work. It was she who brought order to the confused stratigraphic picture at Jericho. Her thoroughgoing excavation methods and detailed reporting of her findings, however, did not carry over into her analytical work. When the evidence is critically examined there is no basis for her contention that City IV was destroyed by the Hyksos or Egyptians in the mid-16th century B.C.E. The pottery, stratigraphic considerations, scarab data and a Carbon-14 date all point to a destruction of the city around the end of Late Bronze I, about 1400 B.C.E. Garstang’s original date for this event appears to be the correct one!

Was this destruction at the hands of the Israelites? The correlation between the archaeological evidence and the Biblical narrative is substantial:

- The city was strongly fortified (Joshua 2:5,7,15, 6:5,20).
- The attack occurred just after harvest time in the spring (Joshua 2:6, 3:15, 5:10).
- The inhabitants had no opportunity to flee with their foodstuffs (Joshua 6:1).
- The siege was short (Joshua 6:15).
- The walls were leveled, possibly by an earthquake (Joshua 6:20).
- The city was not plundered (Joshua 6:17-18).
- The city was burned (Joshua 6:20).

One major problem remains: the date, 1400 B.C.E. Most scholars will reject the possibility that the Israelites destroyed Jericho in about 1400 B.C.E. because of their belief that Israel did not
emerge in Canaan until about 150 to 200 years later, at the end of the Late Bronze II period.

A minority of scholars agrees with the Biblical chronology, which places the Israelite entry into Canaan in about 1400 B.C.E. The dispute between these two views is already well-known to BAR readers.**

But recently, new evidence has come to light suggesting that Israel was resident in Canaan throughout the Late Bronze II period. As new data emerge and as old data are reevaluated, it will undoubtedly require a reappraisal of current theories regarding the date and the nature of the emergence of Israel in Canaan.

See Dr. Wood discuss the evidence in this cutting edge video, Jericho Unearthed. Jericho Unearthed can be purchased in the ABR bookstore.

See Dr. Wood present his research on Jericho in this video from 2009.

Time Magazine published an article in 1990 about Dr. Wood's research here: http://www.time.com/time/magazine/article/0,9171,969538,00.html..
considerable portion of the tell was removed in the construction of the reservoir and the modern road. 


Kenyon, Digging Up Jericho. 


Kenyon and Thomas A. Holland, Excavations at Jericho Volume 4: The Pottery Type Series and Other Finds (Jericho 4 (London: British School of Archaeology in Jerusalem [BSAJ], 1982); and Excavations at Jericho Volume 5: The Pottery Phases of the Tell and Other Finds (Jericho 5) (London: BSAJ, 1983). 


Kenyon, Archaeology in the Holy Land, p. 182. 

The area inside the city wall was originally about 5-6 acres (John Garstang, "The Walls of Jericho. The Marston-Melchett Expedition of 1931," PEQFS 1931, p. 186; "Jericho: City and Necropolis," LAAA 19, p. 3), while the total area, including the fortification system, was approximately twice that, or 10-12 acres (John Garstang, "The City and Necropolis," LAAA 19, p. 3; Kenyon, "Jericho," EAEHL, p. 550 [4 hectares = 9.9 acres]). Magen Broshi and Ram Gophna list the size of the site as 1.5 ha (3.7 acres; Broshi and Gophna, "Middle Bronze Age II Palestine: Its Settlements and Population," BASOR 261 [1986], Table 4), but this is no doubt the estimated size of the site as it is today. A considerable portion of the tell was removed in the construction of the reservoir and the modern road. 


28 See below, notes 54 and 55.


30 Wilson, "Egyptian Historical Texts," p. 238.


34 The majority of Garstang's tell pottery remains unpublished. It was distributed to supporting museums and institutions in Britain and Europe. The largest collection is at Garstang's home institution, the University of Liverpool. I have examined the known collections and found additional examples of LB I forms. I wish to extend my sincere appreciation to Annie Caubet, conservator in chief, Marielle Pic and Patrick Pouys-segur, of the Dépt. des Antiquités Orientales, Musée du Louvre, for their kind assistance in making the necessary arrangements for me to examine the Jericho material in their collection. Travel funds for this examination were provided by a National Endowment for the Humanities grant and the generosity of members and friends of the Associates for Biblical Research, Akron, PA.


36 Kenyon, Jericho 3, pp. 354-370.

37 Based on the ceramic evidence, I would suggest reassigning Phases 44 to 52 to the LB I period.


39 Kenyon, Jericho 5, p. 763, sample BM-1790.


42 Sellin and Watzinger, Jericho, p. 58.

43 Kenyon found the foundations for this wall from phase one of the three phases of the defensive system. It was about 7 feet wide and she was able to trace it for about 16 feet (Digging Up Jericho, p. 216; Jericho 3, pp. 374-375).

44 Kenyon, Jericho 3, p. 110. It is also possible that the bricks could have come from a parapet wall atop the stone revetment wall, if one existed at this point.

45 Kenyon, Jericho 3, p. 110.

46 The Austro-German team and Garstang also found evidence of collapsed bricks at the base of the revetment wall (Sellin and Watzinger, Jericho, Abb. [Figure] 35:6; John Garstang, "Jericho: Sir Charles Marston's Expedition," p. 128).

47 I am grateful to William H. Shea for this observation.


50 Sellin and Watzinger, Jericho, Taf. (Plan) III.


52 It is clear that the destruction continued beyond the excavation area, since erosion debris from upslope was colored brown, black and red by the burnt material it contained (Kenyon, Archaeology In the Holy Land, p. 182).

53 Kenyon, Jericho 3, p. 370.


56 I am indebted to David Dorsey for calling this prohibition to my attention.
Did the Israelites Conquer Jericho? A New Look at the Archaeological Evidence

Outstanding article Dr. Bryant! I do have a couple of questions however.

- You note Dr. Kenyon's apparent reliance on the absence of expensive imported pottery in her conclusion of an EB dating of Jericho. As best you can tell, did she attempt to date the domestic pottery found? Assuming she did, what critique might you offer against the presumed early dating of that domestic pottery? Additionally, might one or more of these pottery artifacts be subjected to the new dating technique that measures the amount of water in the object in order to gauge the age of the object?

Corey Linquist - 19/8/2010 18:05:47

The article above sheds some new light on the story of the Israelite conquest of Jericho. However, there should be some more evidence in order to establish the whole truth.

Nizoral - 29/8/2010 14:46:30

Dr. Wood provides a brief response below regarding your question:

Answer: Kathleen Kenyon did not attempt to date the local Canaanite pottery found at Jericho. She merely published the pottery she excavated, with no analysis. In several statements in articles published prior to the publication of her excavation reports, Kenyon mentioned four local Late Bronze I (15th century BC) pottery types that were absent at Jericho: truncated dipper juglets, cylindrical juglets (continuing from MB), flaring carinated bowls (continuing from MB) and dipper juglets with pointed base. There are, of course, many more LB I types which Kenyon either ignored, or was ignorant of. In reality, many examples of the four types she listed have been found at Jericho.

With regard to the rehydroxylation technique for dating pottery, developed at the University of Manchester in England, it is too early to know if this will be a useful method of dating pottery. A major problem with the method is that it is temperature dependent and it is extremely difficult to accurately determine the average ambient temperature at a specimen site over time. The scientists at Manchester have yet to publish data on the amount of error that would be introduced by inaccurate temperature estimates. Much more testing needs to be done to establish the accuracy of the method.

Hope this Helps!
Dr. Bryant Wood

21/9/2010 4:51 #
What's the date on the grain that was found? This would seal the deal, wouldn't it?

phil_style - 21/9/2010 4:51:30

23/9/2010 11:01 #
Dear "Phil_Style",

Pertaining to C-14 tests at Jericho, see:

www.biblearchaeology.org/.../...ng-at-Jericho.aspx

Blessings,
ABR

23/2/2011 22:05 #
This article, without doubt, is one of the finest and most important sources we have for the relationship between Jericho and biblical history. Dr. Wood's expertise in Syro-Palestinian pottery is unmatched among believers, and probably much beyond. His lines of evidence converge to form a cord of more than 3 strands. There is one minor correction, however, which needs to be made. In the photo and caption of the 3 scarabs and 1 plaque, he attributes the reign of Amenhotep III to 1386-1349 BC. This presents a huge problem when observing that the destruction of Jericho transpired in 1406 BC, the year agreed upon by all of us early-exodus adherents. How could his scarabs be burial goods when the city was unoccupied both during and long-after the reign of Amenhotep III? I have spent 10 years studying in Egyptology, with a heavy emphasis on chronology, and I have a scheme for Dynasties 12, 18, 19, and 20 that solves all known problems and gives a beautiful synchronism with biblical history involving Egypt. According to my scheme, Amenhotep III's reign is from 1408-1369 BC, which was set long before I came across the scarab-evidence from Jericho. Amazingly enough, this provides a tight, 2-year window between the time he took the throne and Jericho's City IV fell at the hands of the Captain of the Army in 1406 BC. The precision between the Bible and ancient history is spectacular to see!


28/3/2012 13:03 #
I have been fortunate enough to tour the ruins of Jericho as a layperson. This website, Dr. Wood's presentation, and the associated comments are incredibly exciting to me and prove, once again, that the Bible is indeed true! Thanks so much for your diligence, your expertise, and for presenting this documentation in a way that I could understand. God bless.

Wayne Parker - 28/3/2012 13:03:29

15/4/2012 19:17 #
I never know whether to laugh or cry when I read discussions of Kenyon and Jericho. The commonly accepted early date of c. 1400 BC is based on peer group mentality. The biblical date for the destruction of Jericho is 1558 BC. Kenyon and others were confused in their conclusions but correct in their dating. The confusion originated with the conservative defenders of the biblical record!

Harry Kaufmann - 15/4/2012 19:17:31

19/5/2012 18:51 #
In regards to Harry Kaufmann's comments, it should be noted that laughing or crying does not make a scientific rebuttal to a scientific document. And further, it should be noted that "peer group mentality" has been very busy shutting down any discussion that would include a verification of any biblical content. Perhaps Mr. Kaufmann should check his "peer group mentality"!

James Duncan - 19/5/2012 18:51:31

3/8/2012 11:31 #
Hi there,

I'm curious as to how reconcile the scarab of Amenhotep III with the Joshua's date because Amenhotep is supposed to have been around after the time of Joshua no? Thanks for your time and this work. God bless you.

-James

James - 3/8/2012 11:31:39

3/8/2012 20:38 #

James,

The very question you asked is answered precisely for you in my reply (just above) from 2/23/2011 10:05 PM. What my suggested correction requires is a fine-tuning of the dating that Dr. Wood used when he first prepared this article. It will resolve any apparent “problem” with scarabs dating to the reign of Amenhotep III. Please let me know by e-mail if you would like a detailed Egyptian chronology as detailed in that commentary.

Yours for the King,

Doug Petrovich, PhD Candidate
University of Toronto
dp@exegesisinternational.org

Douglas Petrovich - 3/8/2012 20:38:56

3/8/2012 20:54 #

Harry,

Unfortunately, you are wrong about dating the destruction of Jericho to 1558 BC. Not only does the archaeological record for Jericho, as articulated by Dr. Wood, prohibit such a date, but the archaeological record for Hazor also prohibits such a date. For this, you can consult my article on Hazor, which was published both in JETS and on ABR’s website. Moreover, you cannot overcome the problem presented to your view by 1) the dating for the building of Solomon’s Temple (universally understood as dating to 967 BC; cf. Rodger Young’s article and my exodus-pharaoh article), 2) the requirement of the exodus dating to 1446 BC, and 3) the synchronizations between Israelite and Egyptian history that CANNOT be achieved if 1558 BC is accepted (see my exodus-pharaoh article again). Only 1446 BC works for the exodus, and only 1406 BC works for Jericho’s destruction. You can believe what you choose, but you will allow yourself to be misled if you choose any other option. If you study these things that I have outlined for you, your tears of sorrow will turn to tears of joy!

Yours for the King,

Doug Petrovich

Douglas Petrovich - 3/8/2012 20:54:16

18/5/2013 3:52 #

Greetings,

An atheist friend of mine, and I, have been discussing the evidence that this article outlines.

We found ourselves in agreement that this article should be amended to explain, up front, that the carbon dating has since been redacted as evidence.

Of course he understands that this link:
www.biblearchaeology.org/.../...ng-at-Jericho.aspx

explains that the carbon dating evidence has been redacted. And he also understands the broader controversy of how carbon dating for the Mediterranean region conflicts with astronomical dating methods for all areas affected by the radius of the Thera eruption.

But we both agreed that academic integrity demands that redacted evidence be cited up front. And that doing this will add to this articles overall credibility.

Is it possible to have the webmaster put a link to the C-14 dating controversy right at the top of the article? I know Christians get put under a major microscope-- and I think it important to try and emulate the utmost academic integrity as possible.

Putting a note at the beginning of the article that some of the information inside the article itself has been updated is a basic staple of good scholarship.

God Bless,
12/6/2013 12:34 #

Editorial note on C-14 samples from Jericho from Dr. Bryant Wood:

"Initially, a C14 date of 1410 +/- 40 B.C. (done by the British Museum) was published for charcoal from the destruction level of Jericho (Jericho V [1983], p. 763). This was later found to be in error and corrected from 3080 +/- 40 BP to 3300 +/- 110 BP (Radiocarbon 32 [1990]: 74; BP = before present), which calibrates to 1590 or 1527 +/- 110 B.C., depending on how one reads the calibration curve (Radiocarbon 35 [1993]: 30). Additional tests were done on six grain samples from the destruction level resulting in dates between 1640 and 1520 B.C. and 12 charcoal samples from the destruction level resulting in dates between 1690 and 1610 B.C. (Radiocarbon 37 [1995]: 217). More recently, the Italians obtained two samples from a structure at the base of the tell that yielded dates of 1347 +/-85 and 1597 +/-91 B.C. (Quaderni di Gerico 2 [2000]: 206–207, 330, 332). The locus the samples were taken from appears to contain debris from the final Bronze Age destruction of the city.

My dating of the destruction of Jericho to ca. 1400 B.C. is based on pottery, which, in turn, is based on Egyptian chronology. Jericho is just one example of the discrepancy between historical and C14 dates for the second millennium B.C. C14 dates are consistently 100–150 years earlier than historical dates. There is a heated debate going on among scholars concerning this, especially with regard to the date of the eruption of Thera (Santorini). The literature on the subject is enormous, so I will not attempt to give you references. A recent overview can be found in Manfred Bietak and Felix Höflmayer, "Introduction: High and Low Chronology, pp. 13–23 in The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C. III", eds. Manfred Bietak and Ernst Czerny, Vienna: Österreichischen Akademie der Wissenschaften, 2007. Because of the inconsistencies and uncertainties of C14 dating, most archaeologists prefer historical dates over C14 dates." --Dr. Bryant Wood

Editorial note: Thanks to Mr. Steve Bennett for suggesting ABR add this notation to the original article.

12/6/2013 13:21 #

Steve,

I would like to add a footnote to Dr. Wood's answer to you, specifically his statement that, "C14 dates are consistently 100–150 years earlier than historical dates." This is true only in the 15th century BC and before (reference below), and increases incrementally, as one goes back in time.

Beginning in ca. 1400 BC (and going forward in time), the historical evidence and the 14C evidence are in sync. There is a reason for this, and it will be discussed more fully in my upcoming book, Illuminating Biblical History from the Worldwide Flood to the Patriarchal Age.

To see the dynamic for yourself, in both explanatory and illustrative fashion (Fig. 5, p. 19), read especially page 20 of the volume that Dr. Wood has cited above.

Yours for the King,

Doug Petrovich
University of Toronto

Douglas Petrovich - 12/6/2013 13:21:26

20/9/2013 23:02 #

Doug,

I am very ignorant when it comes to understanding carbon dating, however I was wondering exactly what you are stating based on your comment to what Dr. Wood said. You said that the minus 100 - 150 years is true for anything dating after 1400 b.c. (going forward in time), but not so for anything before the 15th Century. Does that mean that if the destruction did occur in 1400 b.c. then the reading should have been around 1400 b.c.? Therefore Woods claim that the date for 1590 should be considered 100-150 years later is invalid?

Ian - 20/9/2013 23:02:50