ANDREW STEWART

It's not every day that you dig up a dead woman. And in archaeology, the most dramatic discoveries always seem to come at the most awkward times; this one, true to form, appeared less than 36 hours before we were due to leave the excavation at Tel Dor. It was 7 a.m. on Thursday, August 13, 1992, and we were cleaning up for our final photographs. In area G, the town center (see plan, p. 23), we had spent the summer just

EATELAT

as in the previous two seasons: digging through the remains of collapsed early Iron Age houses, removing masses of fallen mudbrick and the occasional pile of rubble. One by one, the rooms had revealed their rich contents of smashed pottery, metalwork, bone and flint implements and the occasional scarab seal. Yet despite some clues that we were dealing with a real destruction, not simply the piecemeal sequence of ruin

A gruesome discovery may explain a mysterious destruction at Dor in 1000 B.C.E.

and repair that one finds on any tell at any time, we still could not be sure. For a third year, we would be going home with a question mark in our minds.

As usual, there were last-minute jobs to do. While the other squares were being swept and cleaned, one unit, supervised by anthropology graduate Ranbir Sidhu (University of California at Berkeley), was still removing the last remains of a carpet of rubble beside a high limestone wall, frantically trying to finish before breakfast. Unable to be of much help, I had gone over to our other active area, F2, to begin photographing our discoveries in and around the Roman temple. I had just begun when Ranbir walked up to me and said, "Andy, about that rubble we were lifting, there's a foot sticking out of it, and it's human." I won't relate my reply!

The foot was indeed human, and for the next 24 hours, as the rest of the skeleton gradually emerged, we thought of little else. That day we dug for 11 hours nonstop. Fortunately, we had four staff members and scholarship students who had been trained in Berkeley's rigorous paleoosteology courses, and three of them had had extensive experience in excavating California burials.

31



Yet I was determined that the volunteers from that square who had put in so much hard work over the past five weeks should not be left out. So we dug in shifts, staff members, scholarship students and volunteers together. Our Israeli support staff and friends particularly Shlomo Dahan, our factotum and troubleshooter, and Isra Hirshberg, our photographer helped when they could by running errands for such items as trays, boxes, envelopes and sand, and they kindly brought us *schwarma* (a lamb sandwich), cokes, oranges and even fresh lychees as the day wore on and the sun got hotter. By midday we had reached the pelvis, and it told us that we were digging up a woman; someone soon started calling her "Doreen."

PAGE 30: Contorted in death, "Doreen," as she came to be called, fell victim to a disaster at Dor, on the coast of northern Israel, in about 1000 B.C.E. Author Andrew Stewart believes the disaster was an earthquake, which caused a limestone wall to collapse, crushing this slender woman about 30 years old. Her crossed arms indicate that she raised them to protect herself. She fell against a low stone partition (a bench or some other kind of installation), seen across the top, and the finger of the well-preserved hand was driven into her nose. Found in excavation area G (see plan, p. 23), Doreen is an archaeological rarity, one of only eight skeletons recovered from ancient earthquake remains in Israel and adjacent areas. She was slim, fairly tall for her time and probably in her thirties; heavy pitting around the pubic symphysis showed that she had had more than one child.

This was by no means easy archaeology. The room was small, and made smaller by the low stone screen against which she lay. Broken bits of fine painted pottery on the floor, a large, half-buried storage jar next to her head and even a stag antler a couple of feet away further restricted our access. She was both badly contorted and cruelly smashed up. A limestone wall had fallen on her and had crushed her into the earthen floor below. Numerous rocks had penetrated the skeleton itself. A scatter of potsherds, stone tools, a bone needle and several small animal bones lay right beneath her, some of them also poking into her body.

This, we soon realized, was neither a burial nor a murder. People do not usually bury other people in this kind of tortured position on a bed of garbage, and when sacking a city the victors do not usually push walls over on top of the things they came to loot (pots, metalwork and so on). The vanquished, too, do not usually hang around waiting for the walls to fall on them. Nor do we think that Doreen was stoned to death in the middle of town! A purely local, accidental collapse remains a possibility, but what about the debris-laden floors in the other rooms? Although

- 3

UNSUSPECTING, the shirtless volunteer at right stands virtually on top of the spot where Doreen will be found. The bucket sitting on the rock to his left marks the wall that fell on Doreen. Ranbir Sidhu, who eventually found the skeleton, stands on a long Roman foundation at upper center. A sunshade covers the excavation area.

the stratigraphy is complicated and not altogether clear, three or four catastrophes in the space of a generation or two are difficult to accept—unless Dor was a particularly unlucky town! And during the previous week, we had already found a neat line of smashed pots in the room next door, right alongside a soil change, just as if they had fallen off a nowvanished bench. All of us who actually dug up Doreen were in agreement: This looked very much like an earthquake. (In "The Many Masters of Dor—Part II," beginning on p. 18, Ephraim Stern offers a different interpretation of Doreen's death.)

Earthquakes are common in Israel, as the shattered remains of Beth-Shean, less than 40 miles from Dor, eloquently testify. Indeed, one even occurred around the time Doreen was born, when the Israelites were fighting the Philistines at Michmash (1 Samuel 14:15). For archaeologists to find earthquake victims, however, is extremely rare.1 To my knowledge, the numerous historically documented earthquake destructions in Israel and adjacent areas in ancient times have so far yielded only seven skeletons: two in the earthquake debris of 363 C.E.* at Beth Shearim, two more at Petra and three in the debris of 365 C.E. at Kourion in Cyprus.² Strange though this may seem at first, one must remember that at most sites only a small proportion of the total area has been excavated, and in the ancient world, as today, earthquake survivors made every effort to find their relatives and friends, or at least to recover their bodies.

Although we were certainly excited by our find, we talked very little that afternoon. Doreen had clearly I a horrible death, and we all instinctively felt that the usual excavation banter was now very much out

of place. All of us were familiar with the great San Francisco earthquake of 1906 and had experienced the 1989 Bay Area quake, so we could certainly empathize with her fate.

At 6 p.m. we had to go home. We had uncovered Doreen completely, had photographed her and had begun to remove, bag and catalogue her leg bones. Time was short, but there was work to do back at our headquarters in the Pardes Hanna Agricultural School—pottery reading, daybooks (the square supervisors' logs), writing up Doreen's locuscard (a situation report and description) and entering our information in the computer. And we did have one day

*C.E. (Common Era) and B.C.E. (Before the Common Era), used by this author, are the alternate designations corresponding to A.D. and B.C. often used in scholarly literature. left. So we covered her up with paper and sterile earth as best we could and departed with some trepidation. There were still two hours of daylight remaining, and many people now knew of our discovery. Would she still be there in the morning?

She was. Now the problem was how to get the rest of her out, clean up, take our final photographs. pack and go before the Sabbath began. The pelvis was too damaged to come out in one piece, but we reckoned that with a bit of luck we might get her upper body out intact. Three people could-just barely-work on it at one time, pedestaling" her torso and head, though the rocks that had pulverized her ribs and skull and the sherds and food debris sticking into her from below were definitely complicating factors. Another difficulty was the very hard earth, so compacted by the collapse of the wall that it was almost impervious to trowels and dental picks. In the end, however, this proved to be a blessing in disguise, for it meant that the matrix would hold together long enough for the skeleton to survive the transfer.

By 11 a.m., all was ready. Using all the gloved hands that we could muster in that small space, we fractured what was left of each pedestal and divided what remained into three parts: the left rib cage and lower spine, the right rib cage and right shoulder blade, and the head. We then quickly but carefully moved each section in turn to three large, stout fruitboxes, each filled with a layer of fine, sterile beach sand, and transported them to our site museum, the Rothschilds' old glass factory in Kibbutz Nachsholim, just below the tell.

** Using this technique, one digs around a feature until it is raised on a mesalike pedestal, which is then undereut so that the feature can be removed intact, supported by part of the pedestal matrix.

AN ORDERLY WRECK. Volunteer Alex Krummenacher cleans a row of pots that fell in unison from a bench or shelf. The destruction layer in the associated soil indicates that these pots fell during the same event that killed Doreen, found in an adjacent room on the left.





INCH BY INCH, Doreen emerges from her unexpected grave. Excavation began with the lower limbs (left)—being exposed here by, from left, David Brittin, Ranbir Sidhu and Sarah Kowalski—because it was the foot bones that Sidhu first spotted beneath a pile of limestone rubble that he was clearing. The limestone rubble turned out to be the remains of a wall that had fallen on Doreen; the restored wall can be seen in the background.

The cramped conditions (below) made the excavation difficult. The low stone partition against which Doreen lay, which crosses the room from lower center, further complicated the dig. Seen here working on the upper body are, clockwise from left, Sidhu, Stephanie Rose, Alexis Gratt and Brittin. (This and other changes in excavation personnel reflect different work shifts during the long dig.) The top of the wall that fell on Doreen appears in the lower right corner.

The fully exposed skeleton (opposite, above) is photographed *in situ* before the work of removing it begins. One of Doreen's legs lies over the other, at left, and her head and arms are jammed against the partition, identified by a sign (W9841). The meter stick in the foreground marks off a meter (3 feet, 3 inches). The wall fell on Doreen from the left side of this photo.

Excavation of human remains is not for the sqeamish, as the next photo testifies (opposite, below). Julie Rappaport, Sidhu and Rose, left to right, finish digging out the skeleton for removal. They employ sharpened chopsticks for this delicate work, so as not to scratch the bones.







That evening, relaxing over a drink back at Pardes Hanna, while the memory was still fresh in our minds, we-put together a tentative scenario of how Doreen died. It went something like this:

The woman was standing in her pantry when the earth began to shake. Utensils began to fall; pots tipped off their shelves and shattered on the floor. Instinctively, she raised her hands to shield her face and turned to run, but it was too late. Rocks pounded into her. One hit her pelvis, dislocating her right leg and cracking her ankle. Her right foot twisted back and under her as she fell. More rocks hit her in the ribs, and two smashed into her head, dashing it into a large storage jar partially sunk into the floor. Razorsharp sherds and bones sliced into her body when she hit the ground. The impact broke her neck, shattered her skull and pushed her hands into her face; her right middle finger stabbed into her nose, but by now she could feel nothing. She was dead.

Who was Doreen, and when did she die? From the

evidence of both archaeology and texts, we think that she was perhaps a Phoenician, and that the disaster that killed her probably occurred around or just after 1000 B.C.E.

First, archaeology. At Dor we have not one but two early Iron Age destructions. The first seems to have affected the whole site: We have found evidence of it to the east (by the main gate, area B1), in the center of the mound (area G) and in a deep sounding that we sank in 1988 by the threshold to the Roman sanctuary (area F1), right above the beach. The destruction was fiery and extremely violent. It is characterized by a layer of burned debris up to and sometimes over 3 feet thick, including collapsed floors and installations. The colors are spectacular: Mudbrick is burned orange and red, wood is completely carbonized, limestone is reduced to white lime powder, ceramics are scorched grey and black. There is little or no metalwork but much broken pottery on the floors. Almost all of it is indistinguishable from the Canaanite pottery found at nearby sites; Philistine and other intrusive wares are extremely rare. Our analysis of this pottery indicates that the conflagration occurred early in the Iron Age I period, around 1050 B.C.E.

Was man responsible for this event? Could it have been accidental, or was it caused by yet another earthquake? As yet we don't know for sure, but there are some clues to suggest human agency. Of course, archaeologists anxious to win a place for their sites in history all too often underrate the possibility that a fire can be accidental, and earthquakes frequently cause catastrophic firestorms.³ In our case the evidence suggests both a break in occupation and a change of material culture as well.[•]

The town was eventually reoccupied, but in some locations the inhabitants did not know of the ruins or

* See Ephraim Stern, "The Many Masters of Dor-Part I: When Canaanites Became Phoenician Sailors," BAR, January/February 1993. did not wish to reuse them as foundations for their own houses—an anomaly at Dor. This new settlement—the one in which Doreen lived and died continued to use local pottery in the Canaanite tradition, but also imported quantities of Phoenician bichrome ware and made its own versions of it. Thanks to the catastrophe, preserved metalwork (both bronze and iron) is quite plentiful.

This settlement seems to have been relatively shortlived. Though in one room south of Doreen's we found three refloorings between the lower (earlier) destruction and the upper (later) destruction, Doreen herself lay on a floor that was immediately above the remains of the earlier conflagration: Whenever we scraped the floor away, there was our spectacular kaleidoscope of colors again. The upper destruction is datable only by the associated pottery, which belongs to the transition between Iron I and Iron II A, that is, around 1000 B.C.E. or maybe just a few years later in Biblical terms, during the reign of King David, or the United Monarchy.

This brings us to history. We know that in the 13th and early 12th centuries B.C.E. the Egyptian sphere of influence in Canaan included Dor. Around the mid-12th century, however, the Sea Peoples settled along the Canaanite coast after the Egyptians had routed them at the Battle of the Delta: The Philistines took the southern portion, and other tribes took the northern. "The Tale of Wen-Amon," if not wholly fictitious, confirms that Dor indeed fell under the Sea Peoples' control, because it depicts the skl, or Sikilsa Sea Peoples tribe-as rulers of Dor when this Egyptian emissary supposedly passed through looking for wood for the sacred bark of Amon-Re.4 At the same time, Joshua 17:11 and Judges 1:27-28 both include Dor with Ta'anach and Megiddo among the cities that the Israelites could not take under Joshua's leadership, but simply calls the inhabitants of all these cities Canaanites.

Yet when we next hear of Dor and these other northern centers, in Solomon's time (from 965 B.C.E.), they are Israelite. In 1 Kings 4:11, Dor appears fourth in an administrative list of Solomon's provincial governors and their districts. The document that the historian used must have been damaged along its right side, for he pointedly omits the names of the first four governors, giving only their patronymics. The governor of Dor, "the son of Abinadab" (a Phoenician name), is the last of these, and the writer notes that Solomon gave him his daughter Taphath's hand in marriage, presumably to cement the alliance.

Here, Israelite control over Dor is presented as an accomplished fact, yet the Iron II A period at Dor (c. 1000-925 B.C.E.) exhibits no distinctively Israelite features. Indeed, the town is considered essentially Phoenician throughout its history, even during the Roman empire.⁵ Even its construction techniques remain Phoenician well into the Hellenistic period. So if we have identified her correctly, Doreen was by no means one of the last Phoenician inhabitants of Dor.

The Biblical texts, then, only compound our problems. Did the Sea Peoples (specifically, the Sikils) ever occupy Dor? Who (or what) was responsible for the conflagration in about 1050? Who resettled the town soon after this event—in other words, to which ethnic group did Doreen belong? And how and when did the Israelites take control, both of Dor and of the great fortresses in the Jezreel Valley? (Ephraim Stern offers his own answers to some of these questions in the first two parts of his article, "The Many Masters of Dor.")

Though we must stress that our conclusions-earthquake and all-are still only tentative, our excavations suggest the following scenario. Whether or not the Sikils occupied or controlled Dor in the 12th century, someone came along and destroyed it around 1050. The material culture of the new settlers who appeared soon after-Doreen included-is clearly linked with Phoenicia; the appearance of a Phoenician governor in Solomon's list and the Phoenician character of the town for the next thousand years points the same way. One cannot, however, rule out the possibility that Doreen was descended from a Sikil survivor of the destruction of 1050. In this latter case she may even-just possibly-have been a slave. As for the Israelites, if an earthquake did indeed cause the massive damage that we have discovered, a catastrophe of this magnitude must have made the town extremely vulnerable to attack, perhaps for a generation or more. Recovery from such natural disasters can be a very slow process, even today.6 Like the walls of Jericho, did those of Dor come tumbling down, and the Israelites march right in?

Can the wider archaeological context along the Carmel coast and the Jezreel Valley be of any help? The Bible's silence about the Israelite conquest of Beth-Shean and Megiddo is well known and is often contrasted with its lengthy description of David's successes in the south, east and northeast. Yet destructions contemporary with Doreen's in about 1000 B.C.E. have been observed at both sites, as well as at Afula, and are regularly attributed to David's armies.7 The best evidence comes from Yigael Yadin's probes at Megiddo in the 1960s, though renewed excavation at Beth-Shean by Amihai Mazar may soon clarify the situation there too. Yadin confirmed that Megiddo VI A, probably a Philistine city, was indeed destroyed by a massive conflagration. He dated this to about 1000 B.C.E. and concluded (like others before him) that the Israelites were responsible.8 A rich array of artifacts-including metalwork, jewelry and abundant painted pottery-all of which would normally have been highly valued as loot, was found in the destruction debris. Most important for our purposes, however, though neither Yadin nor the original publication deigned to mention them, was the discovery of numerous bodies that had been crushed under the collapsed mudbrick walls.9 Earthquake was not considered as a factor; perhaps it should be.10

endnotes appear on page 84

QUERIES & COMMENTS

CONTINUED FROM PAGE 80

For those to whom it is important, our accommodations, transportation and meals were all "first-class," the best available. I can't say enough for your BAS tours. Please reserve a place for me on your trip to Greece next fall.

Barbara Quade, Ed. D. Staunton, Illinois

Praise for Dead Sea Scroll Book

Having recently acquired your excellent book, *Understanding the Dead Sea Scrolls* (Random House, 1992), and having thoroughly enjoyed reading it during my convalescence from spinal injury, I felt that I owed you this brief "thank you" note for a job well done.

While most of the chapters are available to subscribers to BAR, it is very handy to have them all together in a single volume. Moreover, editor Shanks' introductory "Overview" is the best and clearest summary on the subject that I have seen.

I also appreciated your chapter entitled, "Is the Vatican Suppressing the Dead Sea Scrolls?"—which demolished the theories of Michael Baigent and Richard Leigh to that effect. Thank you for the kind things you had to say about my co-religionists!

Rev. Vincent Fecher St. James Catholic Church Gonzales, Texas

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A Death at Dor

continued from page 36

¹See David H. Kallner-Amiran, "A Revised Earthquake-Catalogue of Palestine," *Israel Exploration Journal (IEJ)* 1 (1950-1951), pp. 223-246, and *IEJ* 2 (1952), pp. 48-62; see especially the revisions and remarks of Kenneth W. Russell, "The Earthquake Chronology of Palestine and Northwest Arabia from the 2nd through the Mid-8th Century, A.D.," *Bulletin of the American Schools of Oriental Research* 260 (1985), pp. 37-59.

²Though as we shall see, this number may need to be revised. For details, see Russell, "Earthquake Chronology," p. 52.

³On the tendency to ignore accidental fires in archaeology, see Anthony M. Snodgrass, An Archaeology of Greece (Berkeley: Univ. of California Press, 1987), pp. 46-47. As to earthquake-caused fires in antiquity, Nicomedia burned for five days and nights after the earthquake of 358 (Ammianus Marcellinus, Histories 17.7.8), and in Antioch, fire destroyed most of what the earthquake of 526 did not (John Malalas, Chronicle 17.4 [B. 419.21]); for comments, see Russell, "Earthquake Chronology," p. 51.

*See Ancient Near Eastern Texts Relating to the Old Testament, 3rd ed., ed. James B. Pritchard (Princeton: Princeton Univ. Press, 1969), p. 26. The transcription of the Egyptian skl is controversial; Pritchard uses the old reading of "Tjekker."

For a discussion of this text in relation to Dor, see Ephraim Stern, "The Many Masters of Dor— Part I: When Canaanites Became Phoenician Sailors," BAR, January/February 1993.

⁵See the early fifth-century sarcophagus of Eshmunezer (Pritchard, Ancient Near Eastern Texts, p. 662) and the account of the Roman historian Claudius Iolaus as excerpted in Stephanus Byzantinus under the heading "Doros," in C. Müller, Fragmenta Historicorum Graecorum (1841-1870) 4.363; cf. also Josephus, Life 31 and Against Apion 2.116.

⁶See Russell, "Earthquake Chronology," p. 50. ⁷For convenient summaries of the evidence, see Trude Dothan, *The Philistines and Their Material Culture* (New Haven, CT: Yale Univ. Press; Jerusalem: Israel Exploration Society, 1982), pp. 80-82; Amihai Mazar, *Archaeology of the Land of the Bible* (New York: Doubleday, 1990), pp. 380-382.

*Gordon Loud, Megiddo (Chicago: Univ. of Chicago Press, 1948), vol. 2, p. 37; Yigael Yadin, "Megiddo of the Kings of Israel," Biblical Archaeologist 33 (1970), pp. 66-96 (discussion of the destruction on pp. 76-78); Graham I. Davies, "Megiddo in the Period of the Judges," Oudtestamentische Studien 24 (1986), pp. 34-53.

"Noted by Douglas L. Esse, "The Collared Pithos at Megiddo: Ceramic Distribution and Ethnicity," *Journal of Near Eastern Studies* 51 (1992), p. 88.

¹⁰ I am grateful to my assistant director, Jeff Zorn, for helping me to research this article, and to Ilan Sharon, assistant director of the Hebrew University team and site stratigrapher, for sharing his thoughts on Doreen's stratigraphy—although he is more cautious than I am in accepting that all our debris pertains to the same event. I must also acknowledge the splendid efforts of the Doreen excavation team: Ranbir Sidhu and Stephanie Rose, square supervisors; David Britton, supervisor, area F2; Sarah Kowalski and Graciela Cabana, University of California at Berkeley scholarship students; Alexis Gratt and Julie Rappaport, volunteer excavators; Mindi Goldin, volunteer excavator and recorder.

Cabul

continued from page 44

percent of the Iron Age sites surveyed.* Shalmaneser finally erected his royal stela at Mt. Ba'al Rasi⁵, identified by scholars as Mt. Carmel or Rosh ha-Niqrah, both of which are near Hurvat Rosh Zayit.

The fortress was then completely abandoned, but after a short period of time the site was reoccupied. The new settlers ignored the ruined fortress and established a village with buildings scattered over the summit. We excavated two buildings of this village, which present typical architecture associated with the Israelites: a four-room house and a two-room house with a row of stone pillars, similar to those at Hazor. The Israelite nature of the village is also evident in the cooking pots found in these buildings, which are identical to those from eighth-century B.C. Israelite sites like Hazor, but absent in contemporary Phoenician sites.6

These settlers based their economy largely on the production of olive oil. A large complex of oil presses is now being excavated on the west side of the site. Within a wellbuilt structure, we have found at least three presses, and another press outside the structure has been excavated and reconstructed. These presses, together with the many rockcut installations found on the surface around this area, make this the largest known oil-press complex in Biblical Galilee.

Like the entire Galilee, this village was destroyed, and its inhabitants probably deported, by the Assyrian king Tiglath-pileser III, who conquered the northern kingdom of Israel in 733/732 B.C. Since then the site has been forgotten and ignored.

On completion of the present project, the site will be restored and opened to the public.

¹The survey was carried out in 1974-1983, on behalf of the Archaeological Survey of Israel, with the participation of G. Landaw, Y. Yotvat, A. Tavori, the late V. Kulmann and students of the Department of the Land of Israel Studies, University of Haifa. See Zvi Gal. *Lower Galilee During the Iron Age*. ASOR Dissertation Series 8 (Winona Lake, IN: Eisenbrauns, 1992).

²Gal, "Cabul, Jiphtahel and the Boundary between Asher and Zebulun in the Light of Archaeological Evidence," *Zeitschrift des deutschen Palastina-Vereins* 101 (1985), pp. 114-127.

³The excavations are carried out on behalf of the Israel Antiquities Authority and the Institute of Archaeology, University of Haifa and with collaboration of the Nelson Glueck School of Biblical Archaeology, Hebrew Union College, Jerusalem.

⁴Gal, "The Lower Galilee in Iron Age II, Analyzing Survey Material and Its Historical Interpretation." *Tel Avir* 15-16 (1988-1989), pp. 56-64.

⁶ James B. Pritchard, ed., Ancient Near Eastern Texts Relating To The Old Testament, 3rd ed. (Prince ton, N.J.: Princeton Univ. Press, 1969), p. 280.

⁶Yigael Yadin et al., *Hazor* I (1959). Jerusalem Pl. LXXXV; *Hazor* III-IV (1960). Jerusalem Pl. CCV.