A Sudden Archaeological Breakthrough

The early identifications and wider sociological theories about the early Israelites were based on the decipherment of scattered, fragmentary inscriptions and on the subjective interpretation of the biblical narrative—not primarily on archaeology. The sad fact was that for decades, archaeologists had been looking in all the wrong places for clues to the origins of the Israelites. Because many of them took the Joshua narrative at face value, they concentrated nearly all their efforts digging the major tells of Canaanite cities—such as Jericho, Bethel, Lachish, and Hazor. Today we know that this strategy was mistaken, for while these major tells revealed a great deal about Late Bronze Age urban culture, they told us next to nothing about the Israelites.

These major Canaanite cities were located along the coastal plain and in the valleys—far from the wooded hill country regions where early Israel emerged. Before the late 1960s, only one comprehensive archaeological survey was ever undertaken to search for evidence of purely Israelite sites. It was conducted by the Israeli archaeologist Yohanan Aharoni in a marginal region—at the very northern edge of the later area of Israelite control in the rugged and wooded mountains of upper Galilee. Aharoni discovered that the area was empty of Late Bronze sites and that it was settled on a score of small, poor Iron Age I (c. twelfth—eleventh centuries BCE) sites, which he identified with the early settlers of the tribes of Naphtali and Asher. Aharoni's fieldwork in upper Galilee seemed therefore to provide support for the peaceful-infiltration theory. The only problem was that his survey was far to the north of the heartland of Israelite settlement.

Surprising as it may seem, that Israelite heartland in the highlands of western Palestine between the Jezreel and the Beersheba valleys was virtually an archaeological terra incognita. The lack of archaeological exploration in the central hill country was not due to scholarly preferences alone. From the 1920s to 1967, war and political unrest in the Middle East discouraged thorough archaeological investigation in the heart of the hill country. But later, after the 1967 war, the archaeological landscape changed completely. A young generation of Israeli archaeologists, influenced by new trends in world archaeology, took to the field with a new method of investigation: their goal was to explore, map, and analyze the ancient landscape of the hill country—rather than only dig.

Beginning in the 1940s, archaeologists had recognized the importance of regional studies that examined settlement patterns over time. Excavations at single sites produce highly localized pictures of the material culture of ancient populations—uncovering the sequence of styles of pottery, jewelry, weapons, houses, and tombs of a particular community. But regional surveys, in which the ancient sites of a large area are mapped and dated by the characteristic pottery sherds collected on the surface, exchange depth for breadth. These surveys reveal where ancient people settled and the size of their settlements. The choice of certain topographic niches (such as hilltops rather than valleys) and certain economic niches (such as grain growing rather than horticulture), and ease of access to main roads and water sources, reveals a great deal about the lifestyle and, ultimately, social identity of populations of large areas rather than individual communities. No less important, surveys in which sites from many different periods are mapped allow archaeologists to track changes in the demographic history of a given region over long periods of time.

In the years since 1967, the heartland of the Israelite settlement—the traditional territories of the tribes of Judah, Benjamin, Ephraim, and Manasseh—have been covered by intensive surveys. Teams of archaeologists and students have combed virtually every valley, ridge, and slope, looking for traces of walls and scatters of pottery sherds. The work in the field was slow, with a day's work covering, on the average, about one square mile. Information on any signs of occupation from the Stone Age to the Ottoman period was recorded, in order to study the highlands' long-term settlement history. Statistical methods were used to estimate the size of each settlement in each of its periods of occupation. Environmental information on each site was collected and analyzed to reconstruct the natural landscape in various eras. In a few promising cases, excavations were undertaken as well.

These surveys revolutionized the study of early Israel. The discovery of the remains of a dense network of highland villages—all apparently established within the span of a few generations—indicated that a dramatic social transformation had taken place in the central hill country of Canaan around 1200 BCE. There was no sign of violent invasion or even the infiltration of a clearly defined ethnic group. Instead, it seemed to be a revolution in lifestyle. In the formerly sparsely populated highlands from the Judean hills in the south to the hills of Samaria in the north, far from the Canaanite cities that were in the process of collapse and disintegration, about two-hundred fifty hilltop communities suddenly sprang up. Here were the first Israelites.*

Life on the Highland Frontier

Excavations of some of the small Iron Age I sites discovered in the course of the surveys showed how surprisingly uniform the sudden wave of highland settlement was. The typical village was usually located on a hilltop or on a steep ridge, with a commanding view of the surrounding landscape. It was set in an open area surrounded by natural forests comprised mainly of oak and terebinth trees. In some cases, villages were founded on the edge of nar-

^{*} Although there is no way to know if ethnic identities had been fully formed at this time, we identify these distinctive highland villages as "Israelite" since many of them were continuously occupied well into the period of the monarchies—an era from which we have abundant sources, both biblical and extrabiblical, testifying that their inhabitants consciously identified themselves as Israelites.

row valleys between the mountains—presumably for easier access to agricultural fields. In many cases they were built on the easternmost possible fertile land overlooking the desert, close to good pastureland. In every case, the villages seemed to be self-sufficient. Their inhabitants drew water from nearby springs or stored winter rainwater in rock-cut, plastered cisterns for use all year round. Most surprising of all was the tiny scale of these settlements. In most cases they were no more than a single acre in size and contained, according to estimates, about fifty adults and fifty children. Even

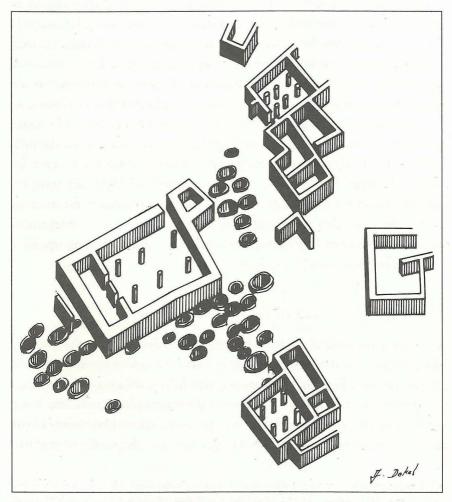


Figure 12: An excavated sector of Izbet Sartah, a Late Iron Age I village in the western foothills featuring pillared houses and grain silos.

the largest settlements in the highlands reached only three or four acres in size, with a population of a few hundred people. The entire population of these hill country villages at the peak of the settlement process, around 1000 BCE, could not have been much more than forty-five thousand.

In contrast to the culture of the Canaanite cities and villages in the lowlands, the highland villages contained no public buildings, palaces, storehouses, or temples. Signs of any sophisticated kind of record keeping, such as writing, seals, and seal impressions, are almost completely absent. There are almost no luxury items: no imported pottery and almost no jewelry. Indeed, the village houses were all quite similar in size, suggesting that wealth was distributed quite evenly among the families. The houses were built of unworked fieldstones, with rough stone pillars propped up to provide support for the roof or upper story. The average building, around six hundred square feet in size, presumably housed four to five people—the size of a nuclear family. In many cases, stone-lined pits for storage of grain were dug between the houses (Figure 12). These silos, and a large number of sickle blades and grinding stones found in every house, indicate that grain growing was one of the villagers' main concerns. Yet herding was still important; fenced courtyards near the houses were apparently used for keeping animals secure at night.

The amenities of life were simple. Pottery was rough and basic, with no fancy or highly decorated vessels. Houseware included mainly storage jars and cooking pots—the basic utensils for everyday life. The jars were apparently used to store water, oil, and wine. We know almost nothing about burial customs, apparently because graves were simple and the dead were interred without offerings. Likewise, there is almost no indication for cult. No shrines were found in the villages, so their specific religious beliefs are unknown. In one case, at a tiny hilltop site in the northern hill country excavated by Amihai Mazar of the Hebrew University, a bronze bull figurine was discovered, suggesting the worship of traditional Canaanite deities. At another site, on Mount Ebal, Adam Zertal, of Haifa University, discovered an unusual stone structure that he identified as an early Israelite altar, but the precise function of that site and its surrounding walled enclosures is disputed.

It is also noteworthy—in contrast to the Bible's accounts of almost continual warfare between the Israelites and their neighbors—that the villages

were not fortified. Either the inhabitants felt secure in their remote settlements and did not need to invest in defenses or they did not have the means or proper organization to undertake such work. No weapons, such as swords or lances, were uncovered—although such finds are typical of the cities in the lowlands. Nor were there signs of burning or sudden destruction that might indicate a violent attack.

One Iron Age I village—Izbet Sartah—located on the western margins of the highlands overlooking the coastal plain, was almost fully excavated and therefore provided enough information for a reliable reconstruction of its subsistence economy. A detailed analysis of the excavated data by Baruch Rosen, an Israeli specialist in ancient agricultural production and nutrition, suggested that the village (with an estimated population of about one hundred) was probably supported by about eight hundred acres of surrounding land, four-hundred fifty of which were cultivated and the rest used for pasture. Under the conditions of the Early Iron Age, those fields could have produced up to fifty-three tons of wheat and twenty-one tons of barley per year, with the help of about forty oxen for plowing. In addition, the inhabitants apparently maintained a herd of about three hundred sheep and goats. (It should be noted, though, that this village was located in a fertile area of the foothills. Most villages in the highlands were not as "rich.")

All this shows that the main struggles of the early Israelites were not with other peoples but with the stony terrain, the dense forests of the highlands, and the harsh and sometimes unpredictable environment. Yet they seem to have lived relatively peacefully and were able to maintain a self-sufficient economy. They were quite isolated from regional trade routes and also seem to have been quite remote from one another; there is no indication that any trade goods were exchanged between the highland villages. It comes as no surprise therefore that there is no evidence of significant social stratification in these villages, no sign of administrative buildings for officials, large residences of dignitaries, or the specialized products of highly skilled artisans.

The early Israelites appeared around 1200 BCE, as herders and farmers in the hills. Their culture was a simple one of subsistence. This much we know. But where did they come from?

New Clues to Israelite Origins

As it turned out, the answer to the question of Israelite origins lay in the remains of their earliest settlements. Most of the villages excavated in the highlands offered evidence about Israelite life several decades or even a century after they were founded. Houses and courtyards had been expanded and remodeled over those years. In only a very few cases were the remains of the initial settlement preserved intact beneath the later buildings. One such case was at the site of Izbet Sartah, already mentioned.

The earliest phase at the site had a highly unusual plan, very different from the later cluster of rectangular, pillared houses that later arose on the site. The first settlement was built in the shape of an oval, with a row of rooms surrounding a large open courtyard (Figure 13). Those outer rooms were connected to one another in a way that formed a kind of continuous belt protecting the inner courtyard. The large, enclosed courtyard hints that the inhabitants had herds, probably flocks of sheep and goats. The discovery of a few silos, sickle blades, and grinding stones indicates that they practiced a bit of grain farming as well.

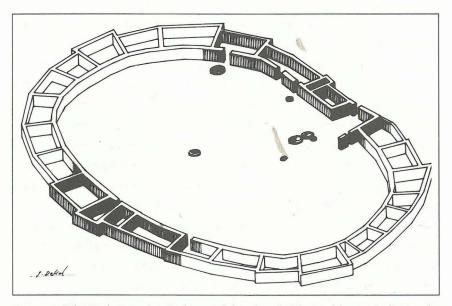


Figure 13: The Early Iron Age I phase at Izbet Sartah. The oval layout indicates the pastoral origins of the inhabitants.

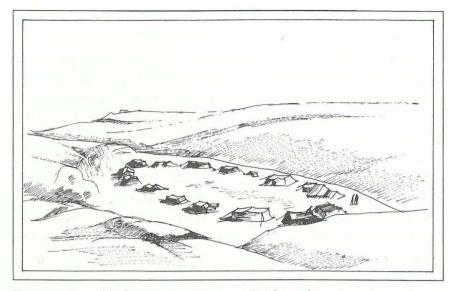


Figure 14: An oval bedouin encampment near Jericho as shown in a nineteenth century drawing.

Similar oval sites have been discovered in the central highlands and in the highlands of the Negev in the south. Comparable sites, which date to other periods, have been found in the Sinai, Jordan, and other areas of the Middle East. In general, this type of enclosure seems to be characteristic of settlements in the highlands and on desert frontiers. The plan of this very early Iron Age I village is similar not only to Bronze and Iron Age sites in the steppe lands, but also to bedouin tent encampments described and even photographed by travelers in the Judean desert, Transjordan, and the Sinai at the end of the nineteenth and beginning of the twentieth century (Figure 14). In this type of encampment, a row of tents encircled an open courtyard, where the flocks were kept at night. The Iron Age highlands and Negev sites are uncannily similar in shape, size, and number of units. Though in the ancient settlements stone walls replaced the portable tents, form clearly suggests function in both kinds of settlements. The people living in these sites—both past and present—were pastoralists primarily concerned with protecting their flocks. All this indicates that a large proportion of the first Israelites were once pastoral nomads.

But they were pastoral nomads undergoing a profound transformation. The presumed shift from the earlier tent encampments to villages of similar layout in stone construction, and, later, to more permanent, rectangular pillared houses indicates that they abandoned their migratory lifestyle, gave up most of their animals, and shifted to permanent agriculture. Transformations like this can still be seen in the Middle East. Bedouin in the process of settling down often replace their tents with similarly shaped stone or brick structures. They also tend to maintain the layout of the traditional tent encampment in the layout of their first permanent settlement. Later they gradually depart from this tradition and shift to regular sedentary villages. A very similar evolution is apparent in the remains of the Iron Age highland villages.

There is another clue that points in the same direction: the kinds of places the Iron I settlers chose for their first permanent settlements suggest a background in pastoral nomadism. Many of the settlements from the beginning of Iron Age activity in the highlands were located in the eastern part of the region, not far from the desert fringe. Establishing settlements in this area enabled the villagers to continue sheep and goat herding, while gradually shifting to farming as their main means of support. Only later did they begin to expand to the west, which is less hospitable to farming and herding and more fitted to the cultivation of olive groves and grape-vines.

Many of the early Israelites were thus apparently nomads who gradually became farmers. Still, nomads have to come from somewhere. Here too, recently uncovered archaeological evidence has something to say.

Canaan's Hidden Cycles

The extensive highland surveys of recent decades have collected data on the nature of human occupation in this region over many millennia. One of the biggest surprises was that the dramatic wave of pastoralists settling down and becoming permanent farmers in the twelfth century BCE was not a unique event. In fact, the archaeological evidence indicated that before the twelfth century BCE there were two previous waves of similar highland settlement, both of which were followed by an eventual return of the inhabitants to a dispersed, pastoral way of life.

We now know that the first occupation of the highlands took place in the Early Bronze Age, beginning over two thousand years before the rise of

			TABLE C	ONE	
WA	VES	OF	SETTLEMENT	IN THE	HIGHLANDS

PERIOD	DATES	MAIN CHARACTERISTICS	
Early Bronze Age	3500–2200 BCE	First wave of settlement; about 100 sites recorded	
Intermediate Bronze Age	2200-2000 BCE	Settlement crisis; most of the sites deserted	
Middle Bronze Age	2000–1550 BCE	Second wave of settlement; about 220 sites recorded	
Late Bronze Age	1550–1150 BCE	Settlement crisis; only about 25 sites recorded	
Iron Age I	1150-900 ВСЕ	<i>Third wave</i> of settlement; about 250 sites recorded	
Iron Age II	900–586 все	Settlement system develops and reaches over 500 sites (eighth century BCE)	

early Israel, in around 3500 BCE. At the peak of this wave of settlement, there were almost a hundred villages and larger towns scattered throughout the central ridge. More than a thousand years later, around 2200 BCE, most of the highland settlements were abandoned and the highlands became a frontier area again. Yet a second wave of settlement, stronger than the first, began to gain momentum in the Middle Bronze Age, shortly after 2000 BCE. This wave began with the establishment of small, scattered villages that gradually grew into a complex network of about 220 settlements, ranging from villages to towns to fortified regional centers. The population of this second settlement wave has been estimated at about forty thousand. Many of the major, fortified centers of this period—Hebron, Jerusalem, Bethel, Shiloh, and Shechem-would become important centers at the time of the Israelites. Yet the second wave of highland settlement came to an end sometime in the sixteenth century BCE. And this time, the highlands would remain a sparsely populated frontier zone for four centuries. Finally—as a third major wave—the early Israelite settlement began

around 1200 BCE (Figure 15). Like its predecessors, it commenced with mainly small, rural communities with an initial population of approximately 45,000 in 250 sites. It gradually developed into a mature system with large cities, medium-sized regional market centers, and small villages. By the highpoint of this settlement wave in the eighth century BCE, after the establishment of the kingdoms of Judah and Israel, it encompassed over five hundred sites, with a population of about 160,000.

This dramatic population growth was made possible by the full utilization of the region's agricultural potential. The highlands offer excellent terrain for olive and vine growing—the most profitable sectors of the traditional Middle Eastern economy. In all three periods of extensive highland settlement, surplus wine and olive oil seem to have been sent to the low-lands and even exported beyond the borders of Canaan, especially to Egypt. Early Bronze Age storage vessels found in Egypt have been analyzed and found to have been made from clay from the Canaanite highlands. In one extraordinary case, a jar from Canaan still contained remains of grape seeds.

The similarities between the settlement patterns of the three major waves are thus clear. In many cases particular sites were occupied in all three periods. No less important, the overall settlement patterns in all the waves shared certain characteristics. First, it seems that the southern part of the highlands was always less populated than the northern part, which, as we will see, was the result of their very different natural environments. Second, it appears that each wave of demographic growth started in the east and gradually expanded to the west. Finally, each of the three waves is characterized by a roughly similar material culture—pottery, architecture, and village plan—that was probably a result of similar environmental and economic conditions.

In the periods between the peaks of highland settlement, when the cities, towns, and even most of the villages were abandoned, the highlands were far from deserted. Important evidence for this comes from an unexpected source—not inscriptions or excavated buildings, but a close analysis of excavated animal bones. Bones collected at sites that flourished during periods of intense settlement in the highlands contain a relatively large proportion of cattle—which generally indicates extensive field farming and the use of the plow. Indeed, these proportions are similar to what we see in traditional village farming communities in the Middle East today.

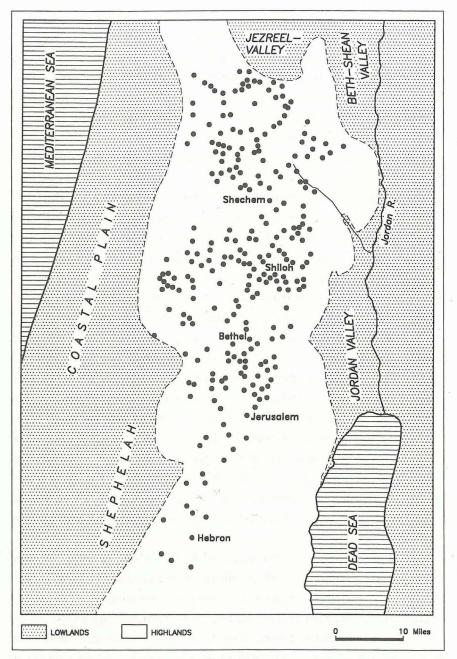


Figure 15: Iron Age I sites in the central highlands

However, a dramatic difference can be seen in the bones collected at the few sites in the highlands that continued to be occupied in the periods between the major settlement waves. The number of cattle is minimal, but there is an exceptionally large proportion of sheep and goats. This is similar to the composition of herds among bedouin groups. For pastoralists who engage in only marginal seasonal agriculture and spend much of the year seeking fresh pastureland, heavy, slow-moving cattle are a burden. They cannot move as fast and as far as sheep and goats. Thus in the periods of intense highland settlement, more people were engaged in farming; in the crisis years, people practiced sheep and goat herding.

Are such dramatic fluctuations common? In the Middle East, people have always had the know-how to rapidly change from village life to animal husbandry—or back from pastoralism to settled agriculture—according to evolving political, economic, or even climatic conditions. Many groups throughout the region have been able to shift their lifestyle according to the best interest of the moment, and the avenue connecting village life and pastoral nomadism has always been a two-way street. Anthropological studies of settlement history in Jordan, southwestern Syria, and the middle Euphrates valley in the nineteenth and early twentieth century show just that. Increasingly heavy taxation and the threat of conscription into the Ottoman army were among the factors that drove countless village families to abandon their houses in the agricultural regions and disappear into the desert. There they engaged in animal husbandry, which has always been a more resilient, if less comfortable, way of life.

An opposite process operates in times when security and economic conditions improve. Sedentary communities are founded or joined by former nomads, who take on a specialized role in a two-part, or dimorphic, society. One segment of this society specializes in agriculture while the other continues the traditional herding of sheep and goats.

This pattern has special meaning for the question, who were the first Israelites? That is because the two components of Middle Eastern society—farmers and pastoral nomads—have always maintained an interdependent economic relationship, even if there was sometimes tension between the two groups. Nomads need the marketplaces of settled villages in order to obtain grain and other agricultural products, while farmers are dependent on the nomads for a regular supply of meat, dairy products, and hides.

However, the two sides of the exchange are not entirely equal: villagers can rely on their own produce for survival, while pastoral nomads cannot exist entirely on the products of their herds. They need grain to supplement and balance their high-fat diet of meat and milk. As long as there are villagers to trade with, the nomads can continue to concentrate on animal husbandry. But when grain cannot be obtained in exchange for animal products, the pastoral nomads are forced to produce it for themselves.

And that is apparently what caused the sudden wave of highland settlement. In Late Bronze Age Canaan, in particular, the existence of large populations of pastoral nomads in the highlands and desert fringes was possible only as long as the Canaanite city-states and villages could produce an adequate grain surplus to trade. This was the situation during three centuries of Egyptian rule over Canaan. But when that political system collapsed in the twelfth century BCE, its economic networks ceased functioning. It is reasonable to assume that the villagers of Canaan were forced to concentrate on local subsistence and no longer produced a significant surplus of grain over and above what they needed for themselves. Thus the highland and desert-fringe pastoralists had to adapt to the new conditions and produce their own grain. Soon, the requirements of farming would cause a reduction in the range of seasonal migrations. Flocks would then have to be reduced as the period of migrations grew shorter, and with more and more effort invested in agriculture, a permanent shift to sedentarization occurred.

The process that we describe here is, in fact, the opposite of what we have in the Bible: the emergence of early Israel was an outcome of the collapse of the Canaanite culture, not its cause. And most of the Israelites did not come from outside Canaan—they emerged from within it. There was no mass Exodus from Egypt. There was no violent conquest of Canaan. Most of the people who formed early Israel were local people—the same people whom we see in the highlands throughout the Bronze and Iron Ages. The early Israelites were—irony of ironies—themselves originally Canaanites!

In What Sense Was Ancient Israel Unique?

In the more fertile areas of the highlands east of the Jordan, we see the same ups and downs in sedentary activity, the same crisis in the Late Bronze Age,

and exactly the same wave of settlement in the Iron Age I. Archaeological surveys carried out in Jordan have revealed that the settlement history of the territories of Ammon, Moab, and Edom was broadly similar to those of early Israel. We could take our archaeological description of a typical Iron Age I Israelite village in the highlands west of the Jordan and use it as a description of an early Moabite village with almost no change. These people lived in the same kind of villages, in similar houses, used similar pottery, and led an almost identical way of life. Yet from the Bible and other historical sources, we know that the people who lived in the villages of the Iron Age I east of the Jordan did not become Israelites; instead, they later formed the kingdoms of Ammon, Moab, and Edom. So, is there anything specific in the villages of the people who formed early Israel that distinguished them from their neighbors? Can we say how their ethnicity and nationality crystallized?

Today, as in the past, people demonstrate their ethnicity in many different ways: in language, religion, customs of dress, burial practices, and elaborate dietary taboos. The simple material culture left by the highland herders and farmers who became the first Israelites offers no clear indication of their dialect, religious rituals, costume, or burial practices. But one very interesting detail about their dietary habits has been discovered. Bones recovered from the excavations of the small early Israelite villages in the highlands differ from settlements in other parts of the country in one significant respect: there are no pigs. Bone assemblages from earlier highlands settlements did contain the remains of pigs and the same is true for later (post-Iron Age) settlements there. But throughout the Iron Age—the era of the Israelite monarchies—pigs were not cooked and eaten, or even raised in the highlands. Comparative data from the coastal Philistine settlements of the same period—the Iron Age I—show a surprisingly large number of pigs represented among the recovered animal bones. Though the early Israelites did not eat pork, the Philistines clearly did, as did (as best we can tell from the sketchier data) the Ammonites and Moabites east of the Jordan.

A ban on pork cannot be explained by environmental or economic reasons alone. It may, in fact, be the only clue that we have of a specific, shared identity among the highland villagers west of the Jordan. Perhaps the proto-Israelites stopped eating pork merely because the surrounding peo-

ples—their adversaries—did eat it, and they had begun to see themselves as different. Distinctive culinary practices and dietary customs are two of the ways in which ethnic boundaries are formed. Monotheism and the traditions of Exodus and covenant apparently came much later. Half a millennium before the composition of the biblical text, with its detailed laws and dietary regulations, the Israelites chose—for reasons that are not entirely clear—not to eat pork. When modern Jews do the same, they are continuing the oldest archaeologically attested cultural practice of the people of Israel.