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Half a Pot is Better than No Pot at All: The Role of Accident in Archaeology

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Abstract: The paper illustrates how archaeology has often advanced with discoveries made in serendipitous circumstances and how the remains themselves have regularly been the result of ancient accidents. The objects are commonly fragmentary and while they themselves may not be precious, the information they and their context may provide can be invaluable. Some of these discoveries have been at odds with accepted wisdom and they caution those who may be inclined to be conclusive about what has not been discovered.

Flinders Petrie had amazing energy and perception! In 1889 he went as usual for his season’s work in Egypt, that year at Kahun and Gurob. He spent much of next February and March ill in Egypt, then travelled to Palestine in April. The Palestine Exploration Fund had invited him to conduct an excavation there for them. After obtaining the necessary permit from the Turkish authorities, Petrie examined some sites in the south west and settled on one, Tell el-Hesi (Figure 1). The tell, the mound of débris and ruins left by the ancient town, was like many others in the Near East, but a winter stream had undercut the east side of the mound, revealing a cross-section of its contents. Petrie observed that there were successive layers of earth, with walls and floors in them, and therefore an outline of the history of the place could be obtained, from the earliest material at the bottom to the most recent at the top. By keeping the objects found separate, level by level, Petrie could sketch the cultural development, or otherwise, of the inhabitants. Although he measured the levels from a datum and did not recognize the full implications of following the strata, he was able to set up a sequence of pottery which became the basis for most archaeology in Palestine.

A stipulation in the excavation permit was the presence of a Turkish representative during the excavations. One of the man’s main tasks was to ensure that all notable finds should go to Istanbul. As is now expected at excavations in the Near East, what was found was mostly broken pottery. The representative was only interested in complete pots; he regarded broken sherds as quite useless. Thus Petrie was left, effectively, with the most significant material. He stated, ‘Once settle the pottery of the country, and the key is in our hands for all future explorations’ (Drower 1985:166).

In some circumstances knowledge of the pottery could have far-reaching effects. At the Egyptian site of Gurob Petrie unearthed some distinctive pottery, quite different from the local wares. Made of finely prepared buff clay, it is decorated with concentric bands of red-brown paint and occurs with Egyptian material that can be dated between 1,400 and 1,200 B.C. Petrie knew that similar pottery had been discovered in much greater quantities in Greece, at Mycenae and other places, where scholars placed it vaguely in the early part of the first millennium B.C. From his observations, Petrie was able to provide a firm basis for the chronology of the Mycenaean culture in Greece and his thesis was rapidly adopted (Petrie 1890:271-77; 1891:199-205).

Apart from vessels purposely placed in tombs or foundation deposits, all the pottery archaeologists dig up survives...
by accident. No ancient Greek or Canaanite, Egyptian or Babylonian deliberately buried their pots and pans intending them to be exhumed and examined millennia later. They either lost them by accident, for example, dropping them into a well, or threw them away, often when they were broken. To find a whole pot is relatively rare, finding potsherds at any site occupied after about 8,000 B.C. is normal. To-day careful excavators keep and sort all the sherds they find, whereas in the past most discarded the featureless ones.

The amount of information pottery can give is very varied, we cannot expand on it here. In a mass of homogeneous, local, often dull ware, the vessels of daily life, an occasional ‘foreigner’ may appear. Thus on first visiting Tell Nebi Mend in Syria (Figure 3), the ancient Qadesh where the Egyptians and Hittites fought each other about 1274 B.C., I pulled a piece of that typical Mycenaean pottery from the side of a cut the villagers had made in the mound. That pointed more clearly to the Late Bronze Age date of the stratum than the ordinary pottery around it could do because the local wares were virtually unknown at that time. That was a happy find; had the sherd not caught my eye, the work would have proceeded with less certainty.

Occasionally clay vessels can point to the existence of more precious ones. At the Assyrian city of Nimrud, ancient Kalah, in northern Iraq, there was found in a tomb in a private house, a pottery rhyton, a drinking vessel shaped like an animal’s head (Mallowan 1966:190-3 & n.12). Such things can be seen on Assyrian reliefs in royal court situations where they were unlikely to be made of terra-cotta and now bronze examples have been uncovered in a Phrygian tomb at Gordion in Turkey and silver ones have been found in Iran.

Sometimes ancient written texts describe or ancient pictures portray objects which are otherwise unknown until a surprising discovery is made. In 1988, as the Iraqi State Organisation for Antiquities was carrying out restoration work in the palace of Ashurnasirpal II at Nimrud, it was decided to level uneven bricks in the floor of a small room. A workman lifted one and revealed a vaulted chamber, a tomb for a queen of Assyria. In that and in others opened afterwards lay a treasure of Assyrian gold-work and many other objects such as had never been seen in modern times. There was a variety of opulent jewellery and several gold bowls (Damerji & Kamil 1998). Now the reality of the precious things listed in texts or carved on reliefs can be appreciated. Earlier explorers had walked through that room, unaware of the hoard beneath their feet! In that case, an accident of discovery gave substance to the contents of Assyrian texts, which no-one had really doubted, but no-one had tried to envisage.

The role of accident is an element which deserves to be given a place in all discussions of archaeological evidence; often it should inject an element of the tentative into conclusions. An example which seems to me to be especially instructive, I have cited it more than once, concerns the use of copper tools in Palestine about 3,000 B.C. In 1979 there was published, posthumously, the fourth edition of Kathleen Kenyon’s textbook, Archaeology in the Holy Land. In the chapter on the Chalcolithic Ghassulian culture, she described the site of Tell Abu Matar, near Beersheba,
where, in subterranean chambers, people smelted copper ore for manufacturing. She wrote, ‘...the evidence shows that the use of metal had not yet become a dominant factor. The tools and implements of the inhabitants of Tell Abu Matar were still of flint. The manufactured copper objects found were mace-heads (which probably had a ceremonial rather than a warlike significance), pins, rings, ornamental cylinders, and handles. The metal was still regarded as far too precious for rough, everyday use’.

Those words were carried unchanged from the first edition of the book, (Kenyon 1960:80) but by the time Kenyon was preparing the fourth edition she knew about the remarkable ‘treasure’ Israeli archaeologists had found in a cave in Nahal Mishmar in the Judaean desert (Figure 4). She gave a brief account of it, mentioning the ‘most exciting objects were in copper, with in addition to many maceheads, chisels, and axes, objects which most certainly can be identified as ceremonial...’ (Kenyon 1979: 61-62). The chisels and axes were almost certainly not ceremonial but utilitarian, although probably offered as gifts at a shrine where the treasure had originally been stored. Other examples of such axes have since come to light on other sites. Kathleen Kenyon’s earlier verdict that ‘the metal was still regarded as far too precious for rough, everyday use’ is seen to be mistaken, the result of the accidents of discovery. Roger Moorey observed of this hoard, ‘It spectacularly illustrates the recurrent restriction of the surviving material record as evidence for ancient metallurgy and dramatically reinforces the dangers of assuming, for any material so readily recycled, that poverty of evidence is evidence of poverty of production, even at an early stage of metalworking’ (Moorey 1988:171).

It is by accident that some significant inscriptions have become available. The now famous, fragmentary, Tel Dan stele was only recovered because a member of the expedition saw the incised strokes of the letters on a broken stone lit up momentarily by the setting sun (Figure 5). The largest recovered piece of the stele had been re-used as a stone in a wall. Had it been laid facing the other way, it would have escaped notice - so a modern controversy would have been avoided! (Biran & Naveh 1993:81-98; 1995:1-18) We may wonder how many pieces of ancient monuments are built into later structures, turned so their nature is concealed. It is worth recalling the discovery of stone stelae of Nabonidus, the last king of Babylon (555-539 B.C.), placed face down as paving stones in the great mosque at Harran (Gadd 1958: 35-92).

Ancient people frequently cleared the rubbish out of their houses as we do to-day. In describing the palace of the 9th century B.C. Assyrian king Ashurnasirpal at Nimrud, the excavator, Mallowan, commented on ‘the extraordinary paucity of business documents of the ninth century in Assyria. It seems astonishing that we possess no collection of accounts such as we might have expected during the prosperous reigns of Assur-nasir-pal and Shalmaneser III’. Having just discovered some wax-covered ivory writing boards, he continued, ‘It is therefore difficult to avoid the conclusion that this hiatus may be accounted for by an extensive use at the time of wood, wax and perhaps other equally perishable materials to record the normal business transactions of the day.’ (Mallowan 1954:102)
However, Mallowan had overlooked an interesting archaeological fact: on any site the majority of the finds made will belong to the last decades of any period of occupation. If the occupants left their homes peacefully, they will have taken everything that was useful or valuable with them. If the place has been violently destroyed, by an enemy, by an accidental fire, or, as at Pompeii and Herculaneum, by a natural disaster, many of the inhabitants’ possessions might still lie in the ruins.

In palaces and houses across the Fertile Crescent archives of cuneiform tablets provide dates for periods of occupation. The tablets rarely cover more than a century, often a shorter span. Older documents may be present, retained for their legal value, e.g. deeds certifying ownership of property. The archives from the Assyrian palaces at Nineveh and Nimrud illustrate this very well (Figure 6). Both places flourished from 900 B.C. onwards, yet the majority of the tablets were written late in the eighth and in the seventh century, before the Babylonians and the Medes destroyed the cities in 612 B.C. Although there are monumental royal inscriptions, very few cuneiform tablets have been found from earlier years (Millard 1997:207-15).

Mallowan’s suggestion about the extensive use of perishable writing materials in ninth century B.C. Assyria was wrong, but it brings the question of the survival of perishable materials to the fore. Natural fibres, leather and skin and wood decay rapidly when buried in the damp soil of many sites, leaving little or no trace. Occasionally a local water-supply will have dried up and the abandoned site become desiccated, so perishable objects may remain. A prime case is the Graeco-Roman towns of the Fairum depression in Egypt, prospering while watered from a branch of the Nile, but deserted after the irrigation system declined. They existed from about 250 B.C. to about 350 A.D. From the rubbish dumps of the towns all sorts of household goods were recovered and large quantities of waste paper. Of course, it is those written documents which have stolen the limelight; we shall return to them.

Ancient wooden furniture is rarely preserved outside Egypt. Tombs of the Middle Bronze Age, which Kathleen Kenyon opened at Jericho, yielded some examples, recognizable, although warped and broken and others of the same period were found in tombs at Baghouz on the mid-Euphrates. Those are all relatively simple pieces, for the houses of the well-to-do, not the wealthiest, the joiners’ skill being most evident in the small collapsible tables from Baghouz. One thousand years later, the contents of rich burials at Gordion in Anatolia reveal an amazing quality of carving, joining and inlaying wooden furniture for the highest levels of Phrygian society (Parr 1996:41-48; Simpson 1996:187-209). These survivors ‘may serve to indicate the magnitude of the loss of wooden furniture from the archaeological record’ (Simpson 1996: 209 n.12).

Woven fabric is just as rare. Another extraordinary discovery was made in a cave in Nahal Hemar near the south end of the Dead Sea in 1983. Almost nine thousand years ago people had left all sorts of things in the cave, perhaps seeking refuge from enemies. There were pieces of basketry and elementary forms of fabric woven from linen yarn, one ‘napkin’ had its edges bound with a ‘buttonhole’ stitch. As well as the fabrics, there were specimens of wooden tools and wooden beads, some painted (Bar-Yosef 1985; 1988; Stern 1993:1082-84). That creations of this sort should survive from so early a time was beyond anyone’s expectations. Many thousands of years later in date are the fragments of clothing found in other caves near the Dead Sea, left by Jewish refugees hiding from the Roman army during the Second Revolt, A.D. 132-35. They also had wooden bowls and their iron knives and keys had wooden handles, things which are hardly ever found in other circumstances - waterlogged sites may preserve them. Carefully placed in a basket was a prized possession, a glass plate. Roman glassware is plentiful, usually attractively decaying in opalescent tints. This plate is in such good condition that you might think it had been made recently! Those refugees took with them written documents that were important to them. An old skin bottle contained a number of legal deeds about a widow and her estates; there were letters, too, and biblical scrolls. Although the reason for these things being in the caves is clear, they were deliberately concealed there, their owners obviously hoped to recover them. The fact that they did not, they were killed by the Romans, enables us to examine them to-day.

Figure 6: An Assyrian cuneiform tablet from Nimrud recording the sale of an estate 8th century BC From the Collection of the Australian Institute of Archaeology IA5.046 (ND 204)
Legal deeds like these are not to be found anywhere else in first or second century Palestine; the papyrus would simply not last if buried in the ruins of a town or village in the hills, in Galilee or on the coast. Indeed, there are very few places in the whole of the Roman Empire which yield documents like these.

It is a surprise to some people to realize that there are no original legal or administrative records from the city of Rome itself for the whole period of the Empire, that is, some four hundred years. There are still remains of the municipal archive building, but its contents were burnt or otherwise destroyed long ago. No census returns, assessments of taxes or their payments, no lists of tributes paid by client kings, like Herod of Judaea, no accounts for building works like the Colosseum, or expenditure on military campaigns, payments to soldiers or craftsmen. And that is true across the Empire, from the Euphrates to Hadrian’s Wall.

In a few places unusual conditions have preserved documents. There are collections of several hundred wooden tablets from Herculaneum and from a site in north Africa, as well as scattered examples from other sites in Europe and Britain, surviving because they have either been dehydrated, or the reverse, left in damp but oxygen-free deposits. The most remarkable find was made at Vindolanda on the Roman Wall in northern Britain (Bowman 1994). There were found not only pieces of the well-known type of wooden tablet, the inner surface once covered with wax, but very thin slats of birch or alder wood, like strips of veneer (Figure 7). They may be up to 20 cms long and 9 cms wide, perhaps 2 mm thick. The texts of messages were written in ink across the inner surface and the two halves were folded face to face. Notches cut in the edges held cords that closed the tablets and they may have been sealed. Administrative lists were written across the width of tablets which were folded in concertina fashion. The scores of examples from Vindolanda belong to the years 95 to 110, but since they have been recognized, others have been reported from different places and a wider range of dates. Part of one lay among the papyri left by the Jewish refugees already mentioned, a letter in Aramaic. Here is evidence for a type of writing material previously unknown to modern scholars, yet evidently in wide use in Roman times, a reminder of the ways new discoveries can change the picture of aspects of antiquity.

The Vindolanda tablets are a further vivid reminder of the variety and extent of writing that was current in a remote part of the Roman Empire. It is striking that the letters concern many different correspondents, from the highest officers, through the ranks of the garrison, to slaves, and that many different hands are recognizable. The skills of reading and writing were not confined to the commandant’s office, nor used only by administrators for their business. And the situation revealed on this northern frontier would apparently be true wherever units of the army were stationed.

Tattered papyri from Masada by the Dead Sea disclose similar activities in the garrison placed there after Titus’ forces captured it in A.D. 73/74. Beside the thousands of papyrus documents from Egypt, these are paltry remains, but their value lies in the very fact of their existence, demonstrating that there was no great difference between the clerical activities in the Roman army from place to place. That permits the assumption that other aspects of writing attested in Graeco-Roman Egypt also obtained wherever Rome ruled. Letters from schoolboys, tax registers and receipts, textbooks and classic texts, the poems of Homer, the plays of Euripides and others, could be found on many bookshelves. The classical authors do give that impression to modern readers, but the human mind has difficulty in accepting a situation without visible evidence. Now there is more than is usually realized.

Figure 7: A birthday invitation sent by Claudia Severa to Sulpicia Lepidina. This is one of many documents written in ink on postcard sized pieces of wood found at Vindolanda in northern England and dating to the late First Century AD. Vindolanda Site Inventory No 85.057. (Photo, TVII Tablet 291, from http://vindolanda.csad.ox.ac.uk/)
The major surprise for anyone interested in ancient manuscripts during the last half of the 20th century was the discovery of the Dead Sea Scrolls. In 1939 a leading authority on the history of the biblical text, Sir Frederick Kenyon, thought it beyond probability that copies of books of the Hebrew from the first century or earlier would ever be found (1939:48). He lived to see his conviction overturned, dying in 1952. Again, it was the peculiarly arid atmospheric environment that helped to preserve the Scrolls, although it should be noted that the majority are fragmentary and dampness and the activities of birds and bats have harmed them. Every book of the Hebrew Bible is represented among the Scrolls, except the book of Esther. Who the owners of the Scrolls may have been is much discussed. The strongest argument favours their identification with the Essenes, a very strict Jewish movement, disagreeing with other parties over the calendar and so unable to celebrate their festivals in the Temple. The Dead Sea Scrolls are not a single library and they were not all written in the building at Qumran, near the caves where they were hidden (Figure 8). Beside the biblical books there are numerous others, books of the Apocrypha or deuto-canonical books, commentaries, so-called pseudepigraphical compositions, like the Book of Enoch, collections of hymns, prayers, rules and visions of the future. Most of the non-biblical books had not been seen for almost two thousand years. People came to join the community from within Judaea and beyond and some will have brought their books with them. The historian Josephus reports that there were groups of Essenes in towns and villages across the country, so we may assume that some among them also had copies of biblical books and perhaps other works.

The Scrolls belonged to one element in first century Judaism, maybe an unusually literate element, yet surely not the only religious group that read and copied the Scriptures. The Scrolls, therefore, are isolated witnesses to the existence and use of books in first century Palestine. Prior to their discovery no contemporary examples were known. They attest books in Hebrew, Aramaic and Greek, which other evidence indicates were the languages current at that time. They also testify to a readiness to write down religious teachings, a possibility which, on the basis of later rabbinic sources, had previously been dismissed. Building on the facts the Scrolls present, I have argued that reading and writing could be accessible to any inhabitant of first century Palestine and so that people who heard and saw the words and deeds of Jesus of Nazareth could have written down what they observed. Without the Scrolls and certain texts among them, that thesis would be very hard to sustain (Millard 2000). The Bedouin who found the first of the Scrolls, hidden in jars in a cave, when, the story says, he was hunting for a lost goat, precipitated a whole new arena of scholarship!

Flinders Petrie’s energetic explorations took him to the Sinai peninsula in 1904-05, notably to the copper and turquoise mines at Serabit el-Khadem. There he found Egyptian inscriptions and others in an unknown script...
He was not able to decipher them, but the Egyptologist, Alan Gardiner, managed to move far enough to argue that they are a forerunner of our alphabet. Those ‘Proto-Sinaitic’ inscriptions were scratched on rocks and other stone objects in the middle of the second millennium B.C. at a place far from the centres of culture and trade. That points to groups of people travelling from the towns to work at the mines, under Egyptian control. Some of the Proto-Sinaitic inscriptions stand in parallel with Egyptian inscriptions at the site and, in a few cases, can be understood as Semitic translations of Egyptian phrases, such as ‘Beloved of the Lady’, the Lady being the goddess Hathor. Regrettably, the texts have suffered a lot of damage and many of them are very short. All are scratched on stone and so the signs may be rather irregular and poorly formed. From Canaan itself comes a motley collection of similar pieces of writing, again scratched on stone or on pottery or incised on metal. These, too, are brief and often incomplete. They do exhibit the same basic script. From their provenances and other traits, they can be dated at different times from about 1,800 to 1,200 B.C. At that time, the Babylonian and Egyptian scripts were practiced by scribes in the towns of Canaan, for communication with other regions, for local administration and Egyptian for royal monuments (Millard 1999:317-26). Egyptian texts were usually written, of course, on papyrus or leather, and so will not survive.

The scribes did not always use those manufactured writing materials. For unimportant notes they picked up pieces of broken pottery and scribbled on them. The potsherds, the scribbling paper of ancient times, sometimes survive where the more important documents have perished. This is significant for assessing the extent of writing in Canaan whence no books have reached us. Far to the north stood the wealthy merchant city of Ugarit where local scribes were trained in Babylonian traditions to write on clay tablets. (If they wrote Egyptian, we do not know; some Egyptian stone vases and other objects bearing hieroglyphic inscriptions have been dug up there, but whether or not local scribes read and wrote Egyptian regularly is not clear.)

The language of Ugarit was closer to Phoenician and Hebrew than to Babylonian and the Babylonian cuneiform writing system was not well suited for recording it, so the scribes of Ugarit formed their own script suitable for writing on clay. It is a cuneiform alphabet, with a sign for each major sound of the language. There can be no doubt that it was an imitation of the Canaanite script known to us from the Proto-Sinaitic inscriptions and the few specimens from Canaan itself. That system did not have signs for vowel sounds because, I believe, its inventor based the signs on the names of simple things and no word in the West Semitic languages began with a vowel. The structure of those languages means they can be written and read intelligibly without marking the vowels, as is still the case with Arabic and Hebrew. The Ugaritic scribes found it necessary to add signs to render vowels when they came to write a quite separate language, Hurrian. At Ugarit scribes wrote every sort of text in this script. There are letters and legal deeds, accounts and tax lists, censuses, divinatory texts, treaty texts, instructions for treating sick horses, magic spells, religious rituals and myths and legends. They show the range of writing was not restricted, although it was the work of secretaries and scribes, of specialists.

Ugarit was not part of Canaan. The material culture of Ugarit was, however, very similar to the culture further south and I believe it is legitimate to make an analogy between the two regions in the matter of writing. Clearly the Canaanite alphabet was invented for writing with ink on a smooth surface, not for imprinting on clay or engraving on stone or metal. That means it was invented for writing on papyrus, or on leather, or perhaps on wax-covered wooden tablets. All three materials were in use in the second millennium B.C. All three materials decay rapidly when buried, unless the environment is unusually favourable. That was the case for the wooden writing tablets found in the Uluburun shipwreck off the south coast of Turkey. The ship sank about 1,300 B.C., taking an assortment of goods to the sea-bed, a cargo of copper, tin and glass ingots, pottery and metalwork. The writing tablets may have carried the ship’s manifest (Figure10). Alas, the sea water has destroyed the wax that bore the text!

Accordingly, we may assume that there were scribes in Canaan writing in Canaanite for the local kings in
Jerusalem, Megiddo, Shechem and other towns. Beside the run-of-the-mill deeds and documents, they could have written works of literature, hymns and prayers and magic spells, just as their counterparts in Ugarit were doing. Their work is invisible to-day because of their writing materials. The comparison is strengthened when the Ugaritic texts that are not written on clay tablets are introduced. There are not many of them. They are short, names and titles on seals, a few dedications on metal tools, two gravestones, a few inscriptions written on pottery vessels before they were baked and one painted on a pot. Although not identical in type, these are comparable with the short examples of the Canaanite alphabet found in Canaan, on stone, metal and pottery. In one respect the Canaanite alphabet had an advantage, it was easier to write on any surface than the cuneiform of Ugarit and that may have made it more readily available to anyone who wanted to learn and use it.

Half a pot is better than no pot at all. These various examples illustrate our title. Where there is no pot at all it is hard to persuade people that there once was one, without strong circumstantial evidence. The demonstration that most of the material an archaeologist excavates will date from the last decades of life at a site, or in a particular period at a site, should never be forgotten. If it is, the deduction may be made that products or actions evident only in the last levels did not exist in the earlier ones, which overlooks the human tendency to throw away anything that has lost its value or its usefulness. Half a pot is better than no pot at all, but even if there is no pot, remember, there may have been one!

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Endnotes