

The Pottery of Jordan in the Early Islamic Periods

Introduction

Recent archaeological excavations in Jordan have produced a basic ceramic sequence for the Early Islamic periods, especially the Umayyad (c. AD 661–750), Abbasid (c. AD 750–969), and Early Fatimid (c. AD 969–1071) periods. This ceramic sequence is not usually characterized by many striking complete vessels of museum quality, but rather by sherds and pots of everyday use, as found during excavations. Finer complete vessels are more common in Syria, Iraq, and Egypt, where the cultural influences originated that are reflected in the Umayyad, Abbasid, and Early Fatimid periods in Jordan. But in these countries, and in nearby Palestine and Arabia as well, it has not been possible to date Early Islamic pottery very reliably, largely because of a lack of stratigraphically excavated sites. The Early Islamic periods were also neglected and misunderstood in Jordan until about ten years ago, but now, due to several excavations, they are much better known. However, there is still much to be learned about these periods, and future refinements and additional subdivisions of the periods can certainly be expected.

Here we shall present briefly the evidence for the basic ceramic sequence in Jordan for the Umayyad (AD 661–750), Abbasid (AD 750–969), and Early Fatimid (AD 969–1071) periods. As background, we shall begin with the Late Byzantine (c. AD 491–640) period, and in conclusion we shall describe the Ayyubid-Mamluk (c. AD 1174–1516) period.

Late Byzantine (c. AD 491–640)

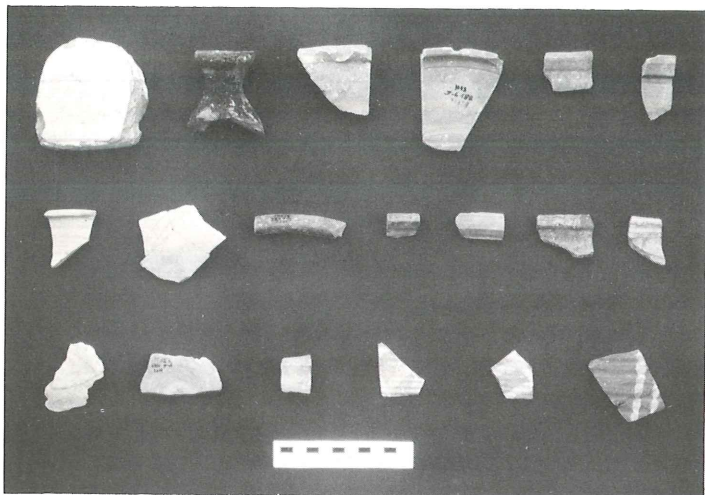
Many classical (Roman-Byzantine) sites in Jordan continued to flourish during the Late Byzantine (c. AD 491–640) period. Important sites that could be mentioned here are Jerash (Crowfoot, 1931: 1–48; Fisher, 1931: 131–69; Fisher and McCown, 1931: 1–59; Kraeling, 1938: 1–616), Umm el-Jimal (Butler, 1913: 149–213; Glueck, 1951: 3–18; De Vries, 1979: 49–55), Beit Ras (Schumacher, 1890: 154–68; Glueck, 1951: 115–17), Quweilbeh (Schumacher, 1889: 22–47; Ma'ayeh, 1960: 116), Umm Qeis (Schumacher, 1890: 46–82; Lux, 1966: 64–70; Wagner-Lux *et al.*, 1978: 135–44), Pella (Funk and Richardson, 1958: 82–96; Smith, 1973: 217–29; Sauer, 1974: 170–72), Tell Sherhabil (Ibrahim;

Sauer; Yassine, 1976: 59–61), 'Amman Citadel (Bagatti, 1973: 261–85; Zavadine 1977–78: 20–27; Bennett, 1975: 131–42; Bennett and Northedge, 1977–78: 177–8; Bennett, 1978: 1–9; Bennett, 1979a: 155–7; Bennett, 1979b: 163–6), Swafiyeh (Van Elderen, 1971: 1–2), Tell Hesban (Boraas and Horn, 1969: 97–222; Boraas and Horn, 1973: 1–125; Sauer, 1973b: 29–39; Boraas and Horn, 1975: 111–215; Boraas and Geraty, 1976: 12–140; Boraas and Geraty, 1978: 15–199; Lawlor, 1979: 1–8), Masuh (Van Elderen, 1971: 2–4), Madeba (Gold, 1958: 50–71; Lux, 1967: 165–82; Lux, 1968: 106–29; Van Elderen, 1972: 77–80; Van Elderen, 1973: 83; Donner and Cüppers, 1977: 1–169), Mt. Nebo (Saller, 1941: 1–353; Schneider, 1950: 1–135; Piccirillo, 1976: 281–318), Mekhayyat (Saller and Bagatti, 1949: 1–217), Ma'in (Vaux, 1938: 227–58; Van Elderen, 1973: 83; Piccirillo and Russan, 1976: 61–70), Dhiban (Winnett and Reed, 1964: 24–29, 56; Tushingham, 1972: 59–76; Sauer, 1975: 106–7), Umm er-Risas (Brünnow and von Domaszewski, 1905: 63–72; Glueck, 1939: 227; Glueck, 1970: 164–65), and Lisan (unpublished). Byzantine and Late Byzantine remains were very well attested during several recent regional surveys in the Jordan Valley (Ibrahim; Sauer; Yassine, 1976: 59–61, 64), in Central Moab (Miller, 1979: 79–90), and along the Wadi Hesa (MacDonald, unpublished). The Early Byzantine (c. AD 324–491) period was very well represented along the *Limes Arabicus*, while the Late Byzantine period was present but not as common (Parker, 1976: 19–31).

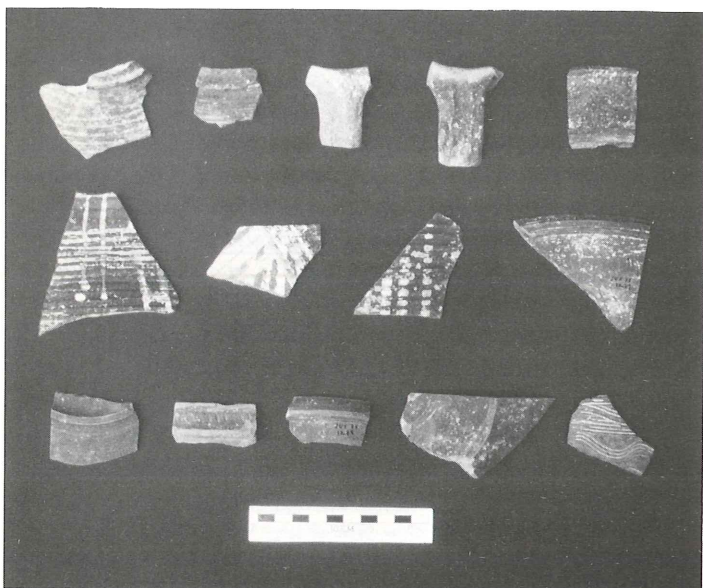
It is clear from the evidence of these excavations and surveys that the Late Byzantine period was a very strong occupational period in Jordan. All of the major classical cities continued to be occupied, and Greek remained the dominant language in these areas. Numerous churches with mosaic floors were constructed, sometimes on top of former Roman temples (e.g., Tell Hesban), evidence of the victory of Christianity over Roman 'paganism' during the Byzantine period.

From the uppermost layers at these sites, especially Pella (Smith, 1973: 217–29; Sauer, 1974: 170–72), Tell Sherhabil (Ibrahim; Sauer; Yassine, 1976: 59–61), Tell Hesban (Sauer, unpublished), Mt. Nebo (Saller, 1941: 1–353; Schneider, 1950: 1–135; Sauer, 1973b: 36–39), Dhiban (Tushingham,

1. Late Byzantine Sherds from Tell Hesban.



2. Late Byzantine Sherds from Tell Sherhabil.



1972: 59–76; Sauer, 1975: 106–7), and Lisan (unpublished), came distinctive types of pottery. This pottery is especially clear at Tell Sherhabil (Ibrahim; Sauer; Yassine, 1976: FIG. 22), and Lisan (unpublished), because these sites were abandoned at the end of the Late Byzantine period, and were never reoccupied. The AD 614–29 Persian conquest is not yet documented clearly at any of these sites. The fact that Tell Sherhabil is named after an Islamic leader who died there during the AD 630–40 Arab conquest would suggest that the Late Byzantine pottery from Tell Sherhabil continues to that time. Late Byzantine coinage, minted during and after the reign of Anastasius I (AD 491ff.), is well attested at the various Late Byzantine sites.

Late Byzantine pottery represents a continuation of the classical Hellenistic, Roman, and Early Byzantine tradition. Most of the pottery is wheelmade, although large forms such

as pithoi are made by hand, and lamps are mouldmade. Late Byzantine pottery is made of well prepared clay, but grey cores are often revealed in sherd sections, which means that the pottery was not as evenly fired as Umayyad pottery. Late Byzantine pottery is thin (c. 0.3–1.2 cm.), and after firing it is coloured red, orange, white, grey, and black, with red-orange and black predominating in most regions (although white seems to be common in the far south). In surface treatment, Late Byzantine pottery attests white paint on large ribbed jars, incised band combing, single wavy line incising on bowls, ‘nicking’ on jugs and juglets, thumb impressing, and moulded decorations on lamps. Smooth red-painted pottery is rarely found in the Late Byzantine period, and instead most of the Late Byzantine pottery is ribbed. While there is no glazing in the Late Byzantine period, there is the distinctive polished, stamped, and rouletted ‘red ware’, which does not appear in the Umayyad period. In form, Late Byzantine pottery attests plates, platters, and bowls of ‘red ware’, with distinctive thickened rims and low ring bases; cups of unribbed metallic ware which are sometimes horizontally combed, with thin flared rims and flat or omphalos bases; bowls of dark metallic ware which often have single wavy line incising, with simple rims and low ring bases; kraters and large bowls of red-orange or black ware, with rounded or angular thickened rims and sharp, angular shoulders; cooking casseroles of thin ribbed ware, with flat-cut rims, flattened bases, and horizontal loop handles; frying pans of black ware, with distinctive looped ‘wishbone’ handles; cooking pots of red-orange or grey-black ribbed ware, with sharply everted and angular rims, rounded or angular bodies with flattened bases, and long vertically ridged loop handles; pithoi of heavy unribbed ware which are sometimes wavy incised, with folded back rims, pointed or knobbed bases, and vertically ribbed loop handles; large jars of dark ribbed ware which are often white painted, with rounded or grooved rims, ridged necks, ridged shoulders, and rounded bases; small jars and jugs of dark ribbed ware, with low omphalos bases; jugs and juglets of light unribbed ware which are usually nicked; and candlestick lamps with three splayed lines on either side of the nozzles.

Pre-Umayyad, Umayyad (c. AD 630–750)

Although some Late Byzantine sites, such as Tell Sherhabil (Ibrahim; Sauer; Yassine, 1976: 59–61), and Lisan (unpublished), were abandoned at the end of the Byzantine period, most sites continued to be occupied into and through the Umayyad period. Sites which continued to be occupied include Jerash (Fisher, 1931: 131–69; Fisher and McCown, 1931: 1–59; Kraeling, 1938: 68–9, 503), Umm el-Jimal (De Vries, 1979: 49–55), Quweilbeh (Schumacher, 1889: 22–47; Ma’ayeh, 1960: 116), Umm Qeis (Wagner-Lux *et al.*, 1978: 135–44), Pella (Smith, 1973: 229–36; Sauer, 1974: 172), ‘Amman Citadel (Harding, 1951: 7–16; Bennett, 1975: 131–42; Bennett and Northedge, 1977–78: 173–77; Northedge, 1977–78: 5–13; Zayadine, 1977–78: 20; Bennett, 1978: 1–9; Bennett, 1979a: 155–57; Bennett, 1979b: 161–3; Olá-

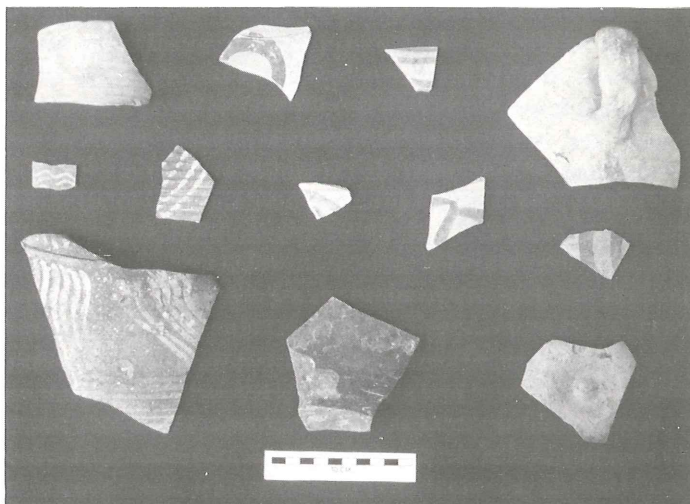
varri, unpublished), Tell Hesban (Boraas and Horn, 1973: 8–125; Sauer, 1973b: 39–49; Boraas and Horn, 1975: 113–215; Boraas and Geraty, 1976: 13–117; Boraas and Geraty, 1978: 15–199; Lawlor, 1979: 1–8), Madeba (Van Elderen, 1972: 77–80; Van Elderen, 1973: 83), Mt. Nebo (Saller, 1941: 1–353; Schneider, 1950: 1–135; Sauer, 1973b: 36–39), Ma'in (Van Elderen, 1973: 83; Piccirillo and Russan, 1976: 61–70), Dhiban (Winnett and Reed, 1964: 24–29, 56; Tushingham, 1972: 74–83; Sauer, 1975: 107), and Umm er-Risas (Glueck, 1939: 227; Glueck, 1970: 164–65). Some new sites were founded during the Umayyad period, especially in the Jordan Valley and in the eastern desert. In the Jordan Valley, 'Araq Abu ez-Zeit (Ibrahim; Sauer; Yassine, 1976: 61–2), and Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1–7, 67–105; Sauer, 1976: 93) seem to represent new agricultural settlements. In the desert, impressive Umayyad installations are to be found at such sites as Hammam es-Sarakh (Butler, 1909: 77–80; Creswell, 1932: 273–84; Ibrahim, 1974: 18), Qasr el-Hallabat Mosque (Butler, 1909: 70–77; Creswell, 1932: 284–88; Bisheh, unpublished), Qasr el-Kharaneh (Musil, 1907a: 290–97; Musil, 1907c: 97–101; Jaussen and Savignac, 1922: 51–77; Creswell, 1932: 283–84; Gaube, 1977: 52–86; Urice, unpublished), and Quseir 'Amrah (Musil, 1907c; Creswell, 1932: 253–72; Almagro *et al.*, 1975: 11–196). Umayyad pottery has also been published from several smaller sites in Jordan, such as Tell Siran (Thompson, 1973: 5–14; Hadidi, 1973: 23–38; Sauer, 1973a: 15–16), el-Bassa (Safar, 1974: 5–10), and Khirbet el-'Al (Reed, 1972: FIG. 4). Umayyad pottery was quite well represented during the East Jordan Valley Survey (Ibrahim; Sauer; Yassine, 1976: 61, 64). It was only occasionally attested during the Central Moab Survey (Miller, 1979: 79–90), and it was hardly found at all during the Wadi Hesa Survey (MacDonald, unpublished). And very little was found along the *Limes Arabicus* (Parker, 1976: 19–31).

After Jordan fell to Islam between AD 630 and AD 636, there was a brief period of Arab rule prior to the establishment of the Umayyad dynasty in Damascus in AD 661. During the Umayyad period (AD 661–750), Jordan was close to the centre of power, and was also positioned on the pilgrimage route to Arabia, so Jordan continued to prosper. Although some Late Byzantine sites were abandoned at the end of the period, most of the major city sites continued to be occupied into and through the Umayyad period. During the Umayyad period, however, most of the churches went out of use as religious buildings, and they were converted into domestic occupation areas (e.g., Tell Hesban, Dhiban, Pella). Umayyad mosques are somewhat rare (especially by comparison with the preceding Byzantine churches), but they do exist at some of the sites (e.g., Qasr el-Hallabat). The system of military forts and camps along the desert was no longer used during the Umayyad period, because the desert was now fully a part of the Umayyad world. The new Umayyad installations in the desert functioned largely as retreats, caravanserais, and agricultural stations. The coins of the period pass through a

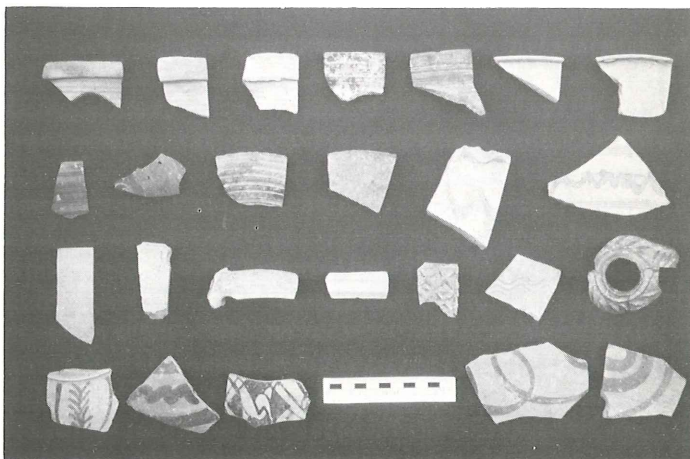
transitional stage, when they imitate Byzantine coins, to a reformed coinage, when Islamic Arabic is all that is depicted. Arabic inscriptions replace Greek inscriptions, even on the pottery. At the end of the Umayyad period, Jordan was rocked by a major earthquake in AD 747. When the Umayyad dynasty was overthrown by the Abbasids of Iraq in AD 750, and the centre of power shifted ultimately to Baghdad, Jordan rapidly declined.

Stratigraphically, the Umayyad remains were found immediately above the Late Byzantine remains at Pella (Smith, 1973: 229–36; Sauer, 1974: 172), 'Amman Citadel (Olávarri, unpublished), Tell Hesban (Sauer, 1973b: 39–49; Sauer, unpublished), Mt. Nebo (Saller, 1941: 1–353; Schneider, 1950: 1–135; Sauer, 1973b: 36–39), and Dhiban (Tushingham, 1972: 74–83; Sauer, 1975: 107). At several sites, especially Umm el-Jimal (De Vries, 1979: 49–55), Pella (Smith, 1973: 229–36; Sauer, 1974: 172), 'Amman Citadel (Olávarri, unpublished), Tell Hesban (Sauer, 1973b: 39–49; Lawlor, 1979: 1–8), and Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1–7; Sauer, 1976: 93), several phases of

3. Umayyad Sherds from 'Araq Abu ez-Zeit.



4. Umayyad Sherds from Tell Hesban.



Umayyad occupation are attested. Relatively pure Umayyad pottery came from the recent excavations at Hammam es-Sarakh (Ibrahim, 1974: 18), Qasr el-Hallabat Mosque (Bisheh, unpublished), and Qasr el-Kharaneh (Urice, unpublished). This was also true of the older excavations at Usais, in southern Syria (Brisch, 1963: 165–82; Brisch, 1965: 159–72). Many of the Umayyad sites were abandoned at the end of the period, and at several of these sites there is evidence of earthquake collapse or destruction (probably AD 747). Jerash, Umm Qeis, Pella, and Tell Abu Qa'dan attest such evidence. The Umayyad pottery that is described here belongs largely to the second half of the period, or the Late Umayyad period c. AD 696–750.

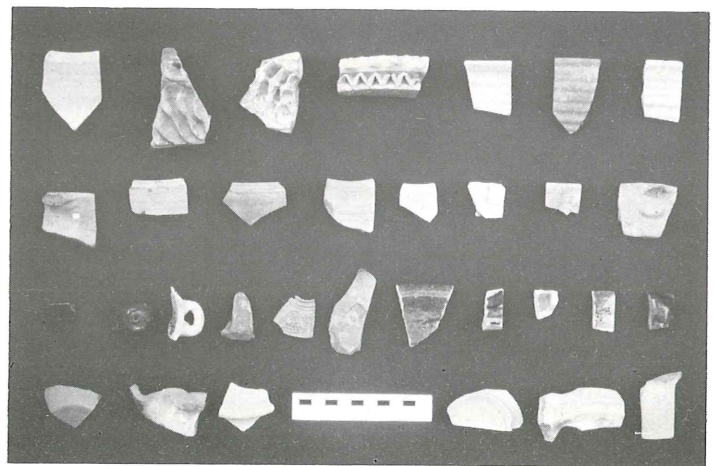
Umayyad pottery is clearly distinct both from the preceding Late Byzantine pottery, and from the succeeding Abbasid pottery, but of course there are features which carry through and develop from period to period. As in the Late Byzantine period, most Umayyad pottery is made on the wheel. Some forms are made by hand, such as the small 'cut-ware' bowls, the basins, and the pithoi; and lamps are again mouldmade. Umayyad pottery is made of well-prepared clay, and it is well fired. Cut sections of sherds reveal that in general only very small mineral inclusions are present in the clay, which accounts for why the pottery is fairly smooth to the touch. Few black or grey cores are present in the pottery, which means that it was usually fired evenly throughout. This is true despite the fact that Umayyad pottery is fairly thick (c. 0.4–1.5 cm.). After firing, many forms are light coloured (buff, pink, grey, white), while some other forms are dark coloured (black, grey-black, brown). In addition, some of the plates and cups are made of a distinctive thin, hard metallic ware, which is dark coloured (dark orange, grey-red). In surface treatment, Umayyad pottery attests some ribbing, but most of the Umayyad pottery is smooth and unribbed. The smooth buff or pink ware, which is sometimes white-slipped, is often painted in red, purple, or brown paint, in loops, spirals, wavy lines, floral, and geometrical patterns. Some white paint is also attested. Incising is a common surface treatment, especially wavy band combing on unribbed basins, pithoi, and large jars. Thumb impressing often appears with the incising on basins. A distinctive type of Umayyad decoration is the delicate 'cut-ware', which consists of knife-cut squares and crosses on the exteriors of small handmade bowls. If there is any glazed pottery in the Umayyad period, it is very rare indeed. Lamps are ornately decorated, and they sometimes attest moulded Arabic inscriptions. Arabic inscriptions can also be found painted or incised on other types of Umayyad pottery (e.g., at Pella, Tell Siran, Khirbet el-'Al, Tell Hesban, and Ma'in). In form, Umayyad pottery attests plates and cups of dark metallic ware, with thin tapering rims and flat bases that have deep swirl marks on them; cups and cup-like bowls, often painted, with thin or angular rims and rounded or slightly flattened bases; handmade 'cut-ware' bowls, with simple rims and straight vertical walls; handmade basins, often wavy incised and thumb impressed, with round-

ed and thickened rims, straight sidewalls, and simple flat bases; black cooking casseroles, with flat-cut rims, slightly up-pushed horizontal handles, and slightly flattened bases; casserole lids with single high central knob handles; closed cooking pots with rounded rims; pithoi with thickened rims, slightly pointed bases, and vertically ribbed loop handles; large jars with high necks, angular-thickened rims, and high 'omphalos' bases; and lamps of candlestick (with four splayed lines on either side of the nozzle), channel nozzle, and the 'Jerash' type.

Abbasid (c. AD 750–969)

Most of the major sites that were occupied during the Umayyad period, such as Jerash (Kraeling, 1938: 503), Umm el-Jimal (De Vries, 1979: 49–55), Quweilbeh (Schumacher, 1889: 22–47), Umm Qeis (Wagner-Lux *et al.*, 1978: 135–44), Pella (Smith, 1973: 229–43; Sauer, 1974: 172), and Umm er-Risas (Glueck, 1939: 227), were abandoned or essentially abandoned at the end of the Umayyad period. This is also true of most of the Umayyad 'castles' in the desert, such as Hammam es-Sarakh (Ibrahim, 1974: 18), Qasr el-Hallabat (Bisheh, unpublished), and Qasr el-Kharaneh (Urice, unpublished). Only a few sites in Jordan have produced evidence from the Abbasid period. These include 'Amman Citadel (Olávarri, unpublished; Zayadine, 1973: 20–22; Bennett and Northedge, 1977–78: 172–3; Northedge, 1977–78: 11–12; Bennett, 1979a: 151–7; Bennett, 1979b: 161–3), Tell Hesban (Boraas and Horn, 1975: 113–215; Boraas and Geraty, 1976: 13–117; Boraas and Geraty, 1978: 15–199; Sauer, unpublished), Mt. Nebo (Saller, 1941: 275–85), Dhiban (Winnett and Reed, 1964: 24–29, 56; Tushingham, 1972: 77–83; Sauer, 1975: 107–8), Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1–7, 107–62; Sauer, 1976: 93), and Muthelth er-Rameh (unpublished). The Abbasid period was also weakly represented in the various regional surveys (Ibrahim; Sauer; Yassine, 1976: 61, 64; Miller, 1979: 79–90; MacDonald, unpublished; Parker, 1976: 19–31).

5. Abbasid Sherds from Tell Hesban.



It is thus clear that the earthquake of AD 747, and the defeat of the Umayyads by the Abbasids in AD 750, combined to deal a severe blow to Jordan at the end of the Umayyad period. After AD 750, the political centre of Islam shifted to Iraq, and a new pilgrimage route was also established between Iraq and Arabia. Jordan became isolated, and with the exception of the 'Amman Citadel, most of the major cities were abandoned. Other smaller occupations existed elsewhere in the countryside, especially in the Jordan Valley.

Stratigraphically, the Abbasid remains were found immediately above the Umayyad remains at 'Amman Citadel (Olávarri, unpublished), Tell Hesban (Sauer, unpublished), and Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1-7; Sauer, 1976: 93). Several phases of occupation are again attested at each of these sites, and they may correspond to the Early Abbasid (c. 750-878) and the Late Abbasid (c. AD 878-969) periods. Due to the scarcity of coins (e.g., Early Abbasid coins at Dhiban), it is not possible to be sure.

Abbasid pottery is again largely wheelmade, but some forms are made by hand ('cut-ware' bowls, pithoi), and lamps are mouldmade. Abbasid pottery is made of such finely prepared clay that mineral inclusions are usually barely detectible with the naked eye. The firing is just as excellent, and there are virtually no grey cores. Abbasid pottery is thinner (c. 0.3-1.2 cm.) and smoother than Umayyad pottery, and after firing it is coloured white, yellow-white, tan, and black, with white predominating. The thin metallic ware of the Umayyad period is not attested in the Abbasid period. In surface treatment, Abbasid pottery attests incised band combing, thumb impressing, 'cut-ware', and moulded lamps, but these Abbasid treatments all differ from the Umayyad types. Incised band combing is not as common in the Abbasid period, and it tends to be shallower and finer. It is often accompanied by a new type of incising, that of small separated or interlocking incised circles. Normal thumb impressing continues, but a new type of heavy or deep impressing appears on pithoi. Abbasid 'cut-ware' on handmade bowls is much cruder and deeper than that of the Umayyad period. There is some ribbing in the Abbasid period, especially on cups. Very different from the Umayyad period, there is no painting, either in red or in white. Instead, in the Abbasid period there appears a new polychrome glazing on the interiors of plates, with the glaze colours usually being green, yellow, and purple. In form, Abbasid pottery attests plates of polychrome glazed ware, with simple rims and disk or ring bases; cups of plain ribbed ware, with indented rims and small flat bases; small cup-like bowls of unribbed and undecorated ware, with inturned and offset rims; larger 'cut-ware' bowls of crude and heavy handmade ware, with vertical sidewalls and flat bases; cooking casseroles of thin unribbed ware, the lids of which have gracefully curving sidewalls and single central 'turban' handles; pithoi of very heavy ware which are usually deeply impressed, with rounded or flattened rims; large jars of unribbed and undecorated light ware, with rounded rims, sloping necks, and indented loop handles with

deeply pinched body attachments; small jars and jugs of very distinctive yellow-white ware, with thin tapering rims, high necks, neck filters, rounded or angular bodies, disk, ring-with-disk, or flat bases, and high vertical loop handles with single knobs on top; channel-nozzle lamps with pointed nozzles, higher pointed handles, and moulded grapevine or other ornate designs around the central filling hole.

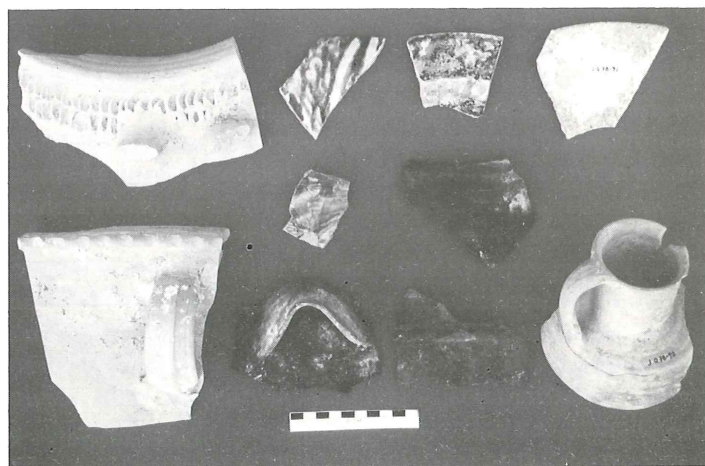
Early Fatimid (c. AD 969-1071)

Once again, very few major sites are attested in Jordan for the Early Fatimid (c. AD 969-1071) period. Early Fatimid pottery has definitely come from the 'Amman Citadel (Olávarri, unpublished; Bennett and Northedge, 1977-78: 172-3; Northedge, 1977-78: 11-12; Bennett, 1979a: 151-7; Bennett, 1979b: 161-3), and from Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1-7, 107-62; Sauer, 1976: 93). Pottery that may be Early Fatimid has also come from Tell Hesban (Sauer, unpublished), and from Dhiban (Tushingham, 1972: 77-84; Sauer, 1975: 108). Early Fatimid pottery recently came from a site in the northeastern desert of Jordan (Clark, unpublished), and it is also known from sites in the Jordan Valley (Ibrahim; Sauer; Yassine, 1976: 61, 64). Otherwise, it was rarely attested in the other regional surveys (Miller, 1979: 79-90; MacDonald, unpublished).

It is thus clear that the decline of the Abbasid period continued into the Early Fatimid period, when Egypt was the dominant political influence in Jordan. Again, with the exception of the 'Amman Citadel, the major cities in Jordan remained largely uninhabited. The Early Fatimid occupation seems to have been more rural in character, with smaller villages rather than major cities.

Stratigraphically, the Early Fatimid remains were found immediately above the Abbasid remains at the 'Amman Citadel (Olávarri, unpublished), and probably at Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1-7, 107-62; Sauer, 1976: 93). At these sites, there is no indication of a major break between the Abbasid and the Fatimid remains, and

6. Early Fatimid Sherds from 'Amman Citadel (Courtesy E. Olávarri).



continuity of occupation would seem to have been the case. A few Early Fatimid coins have come from sites in Jordan, and one Fatimid coin of al-Hakīm (AD 996–1021) came from the recent excavations on the Amman Citadel (Olávarri, unpublished). The end of the period may have been brought about by the arrival of the Seljuq-Zengids in AD 1071, or of the Crusaders in AD 1099. Pottery which is similar to the Early Fatimid pottery of Jordan has come from the immediately pre-Crusader remains at Abu Gosh in Palestine (Vaux and Steve, 1950: 119–32).

Early Fatimid pottery is again largely wheelmade, although basins and pithoi are made by hand, and lamps are mould-made. The pottery is made of well prepared clay, and inclusions are fine. Firing is also very good, and grey cores are rare. Early Fatimid pottery is fairly thin, and also quite smooth. After firing it is usually orange-buff or yellow-orange in colour, although cooking pots are made of dark red ware. In surface treatment, Early Fatimid pottery attests thumb-impressing on the rims of basins; deep pleated impressing on the rims of pithoi; clear-glazing on the dark red cooking pots, which appears purple or brown in colour; polychrome 'splashed' glazing, in yellow, brown, green, and white, on the interiors of plates; and ribbing on some jugs and small forms. In form, Early Fatimid pottery includes glazed bowls, with simple rims and splayed sidewalls, and with widely flanged rims; cooking casseroles of thin red (glazed) ware, with angular thickened rims, horizontal strap handles, and piecrust ledge handles; basins with thickened rims and flat bases; pithoi with flattened and deeply pleated rims, and flat bases; and ribbed jugs with splayed rims, oval-sectioned handles, and string-cut bases.

Ayyubid-Mamluk (c. AD 1174–1516)

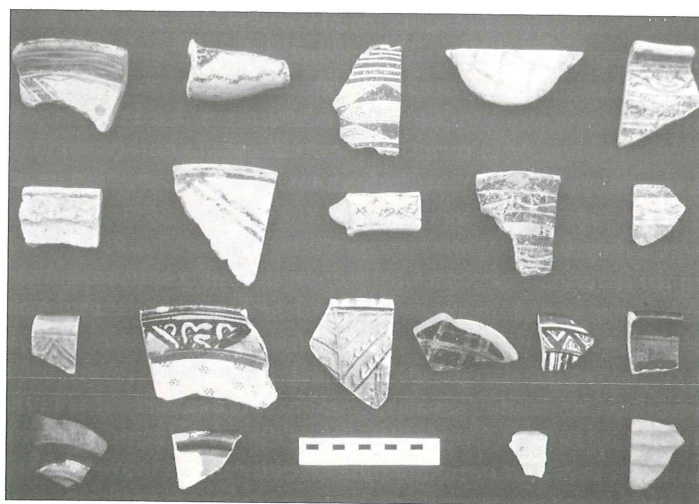
Very little is known in Jordan about the overlapping Late Fatimid (c. AD 1071–1171), Seljuq-Zengid (c. AD 1071–1174), and Early Crusader (c. AD 1099–1187) periods. During most of this century, southern Jordan was in Crusader hands, and the Crusaders constructed their two major castles, one at el-Kerak (Musil, 1907a: 45–64, 359–62; Müller-Wiener, 1966: 47–48), and the other at esh-Shobak (Brünow and von Domaszewski, 1904: 113–19; Musil, 1907b: 324–27). No systematic excavations have been carried out at either of these sites, and thus the available evidence for the period is very limited.

In the following Ayyubid-Mamluk (c. AD 1174–1516) period, however, there are again many sites in Jordan. Qal'at er-Rabad (Johns, 1931: 21–33; Augustinović and Bagatti, 1951–52: 227–314) is the Ayyubid (c. AD 1174–1260) castle near 'Ajlun, which was constructed during the time of Saladin to counter the Crusaders. At nearby Mugharet el-Wardeh (Coughenour, 1976: 71–78), Mamluk (c. AD 1260–1516) iron mining and smelting activities have been studied. In the Jordan Valley, numerous water-driven sugar mills of the Ayyubid-Mamluk period have been found (Ibrahim; Sauer; Yassine, 1976: 61–63). In the Valley, excavated Ayyubid-

Mamluk remains have come from Pella (Smith, 1973: 236–43; Sauer, 1974: 172), and from Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1–7, 131–223; Sauer, 1976: 94). A fine stratigraphic sequence of Ayyubid-Mamluk pottery came from Tell Hesban (Boraas and Horn, 1969: 99–222; Boraas and Horn, 1973: 8–125; Sauer, 1973b: 50–63; Boraas and Horn, 1975: 114–215; Boraas and Geraty, 1976: 13–117; Boraas and Geraty, 1978: 15–199). The excavations at Dhiban (Winnett and Reed, 1964: 24–29, 56; Tushingham, 1972: 83–84; Sauer, 1975: 108) also encountered very substantial Ayyubid-Mamluk remains. Only limited Ayyubid-Mamluk remains have been found on the 'Amman Citadel (Bennett and Northedge, 1977–78: 172–9; Bennett, 1978: 1–9; Bennett, 1979a: 151–9; Bennett, 1979b: 161–3). Some Ayyubid-Mamluk pottery was published from Khirbet el-'Al (Reed, 1972: FIG. 5), and recent work at 'Ayn el-Basha produced a fine collection (Tell, unpublished). Unexcavated Ayyubid-Mamluk (and earlier?) sugar mills are also present along the southeastern plain of the Dead Sea, as at es-Safi (Albright, 1924: 3–4; Frank, 1934: 202–8; Glueck, 1935: 7–9; Rast and Schaub, 1974: 9–11, 15–17). Ayyubid-Mamluk remains have also been very commonly attested on most of the regional surveys, but especially the East Jordan Valley Survey (Ibrahim; Sauer; Yassine 1976: 63–4), and the Central Moab Survey (Miller, 1979: 79–90).

In 1187, the Ayyubid leader Saladin defeated the Crusaders at the Battle of Hattin, and from that time on Jordan was again in Arab hands. The Crusaders remained in Palestine until AD 1291, when they were expelled completely by the Mamluk Baibars. The defeat of the Crusaders and the uniting of Egypt and Syria under the Ayyubids and Mamluks led to a great revival of occupation in Jordan, because Jordan was now in a vital position between Egypt and Syria. Although many of the old classical sites remained uninhabited (e.g., Jerash, Umm el-Jimal, Quweilbeh, Umm Qeis) the numerous other Ayyubid-Mamluk sites testify to the high level of activity throughout Jordan during this period.

7. Ayyubid-Mamluk Sherds from Tell Hesban.



Stratigraphically, the Ayyubid-Mamluk remains were found above the Umayyad, Abbasid, and Fatimid remains at Pella (Smith, 1973: 236–43; Sauer, 1974: 172), Tell Abu Qa'dan (Franken and Kalsbeek, 1975: 1–7; Sauer, 1976: 94), Tell Hesban (Sauer, 1973b: 50–63), Dhiban (Tushingham, 1972: 83–84; Sauer, 1975: 108), and the 'Amman Citadel (Bennett and Northedge, 1977–78: 172–9; Bennett, 1978: 1–9; Bennett, 1979a: 151–9; Bennett, 1979b: 161–3). Both the Ayyubid (c. AD 1174–1260) and the Mamluk (c. AD 1260–1516) periods are represented, and continuity of development characterizes the two periods. Numerous Ayyubid and Early Mamluk (c. AD 1260–1401) coins are attested from the various excavations, but after AD 1401 they become less common. The invasion of Tamerlane in c. AD 1401 was apparently very destructive, and Jordan declined during the Late Mamluk (c. AD 1401–1516) period. In AD 1516, the Mamluks were easily defeated by the Ottoman Turks, and Jordan became part of the Ottoman empire.

Ayyubid-Mamluk pottery is very different in character from the Fatimid pottery described above. A large percentage of Ayyubid-Mamluk pottery is handmade, sometimes using pieces of cloth in the production process. Some of the pottery is wheelmade, such as the sugar pots, water jugs, and some bowls. Mould or cast-made pottery is attested in the lamps, in some bowls, and in some flasks. The ware of the handmade pottery is very poor, containing great quantities of grog. The handmade cooking pots, however, are made with large amounts of calcite temper. Firing is medium, and cores are sometimes present, sometimes absent. The glazed wares are made of well prepared clays, and they are evenly fired. In surface treatment, the handmade wares are usually painted in a dark colour, purple, brown, or black, in geometrical designs over much of the surface of the vessel. The handmade cooking pot is often red-slipped and burnished by hand. Bowls are often monochrome glazed in green, yellow, or brown, and moulded designs are often present under the glaze. Underglaze painting and slip-trailing are also found on many glazed bowls. Water pots are frequently puncture-incised to form delicate surface patterns, and sugar pots are often widely ribbed. Typical Ayyubid-Mamluk forms are handmade bowls of all kinds, with squared rims and angled or gradually sloping sidewalls; handmade jars and jugs, with splayed and flattened rims, concave disk bases, flattened loop handles, and occasional spouts; large-eared cooking pots, with splayed rims, rounded bases, and enormous horizontal rising loop handles; glazed bowls and plates, with simple, thickened, incurved, and widely flanged rims, as well as ring bases; wheelmade water pots with bulbous necks, neck filters, double loop handles, and ring bases; sugar pots of elongated and also squat types; and moulded lamps of slipper type.

Conclusion

Ten years ago, none of the above-described pottery periods could have been separated. Umayyad pottery was thought to be Byzantine in date, and Abbasid, Fatimid, and even

Ayyubid-Mamluk pottery types were attributed to the Umayyad period, or to some vague 'Medieval' period. Yet, despite the improved situation today, much additional work remains to be done. The final reports of such excavations as Tell Hesban, the 'Amman Citadel, and Pella should produce additional subdivisions within the various periods. The regional surveys that are now underway, and those of the future, should provide important data about occupational patterns for each of the periods. They should also help to document evidence for regional variation of pottery (e.g., the Jordan Valley vs. the hill country; the north vs. the south). It should also be possible to clarify the origins of distinctive pottery types, such as the red-painted Umayyad pottery (related ultimately to Nabataean painted wares?), and the handmade, painted Ayyubid-Mamluk wares. Almost every new fieldwork project is turning up fresh evidence for these once neglected periods, and it is indeed an exciting time to be involved in this effort.

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