



CERAMICS I. THE NEOLITHIC PERIOD THROUGH THE BRONZE AGE IN NORTHEASTERN AND NORTH- CENTRAL PERSIA

CERAMICS

i. The Neolithic Period through the Bronze Age in Northeastern and North-central Persia

I. Northeastern Persia

The ceramic tradition of northeastern Persia developed in parallel but distinct sequences in the Gorgān lowlands and the Dāmḡān highlands, including the parts of the [Atrak](#) region adjacent to both. These sequences were influenced respectively by the ceramic traditions of Soviet Turkmenistan to the east and central Persia to the west. In both areas a Neolithic painted-pottery tradition was eventually displaced by monochrome burnished gray ware.

Neolithic soft ware (ca. 6200-5900 B.C.E.). In Gorgān Caspian Neolithic soft ware is lightly fired, handmade, chaff-tempered, thick, and crumbly; well-



preserved examples are highly burnished. The normal surface color is a light buff-brown, though some pieces have been washed with red ocher, in one instance with a chocolate-brown slip, or painted with lines in a fugitive red (The University Museum, Philadelphia, collection). The most common form was a deep bowl resembling a beaker, with slightly concave sides and a rounded rim (Coon, 1951, p. 78). At Belt cave (Ġār-e Kamarband) near Behšahr it occurred immediately above aceramic levels and at Hotu cave (Ġār-e Hütü) it was found in the lowest of the painted-pottery levels (Coon, 1951; idem, 1957); its position at the beginning of the Gorgān sequence is thus fixed stratigraphically. The same (probably mixed) levels at Hotu also included painted sherds of a soft ware resembling 6th-millennium finds from Anau I in Soviet Turkmenistan (see [anaw i. prehistoric period](#)), but the Hotu material has not been studied and thus can serve only as a reminder that a painted phase remains to be defined within the soft ware.

The only excavated early Neolithic pottery on the northeastern plateau comes from the west mound (levels V-I) at Sang-i Chakhmaq (Sang-a Ćakmāq) near Šāhrūd. Rare sherds of undecorated chaff-tempered soft ware were found among the remains of brick-walled houses, some with floors and walls plastered with red-colored mud; no vessel forms have been reconstructed (Masuda, 1976, p. 65, figs. 3-5).

Djeitun (Jeytūn) ware (ca. 5900 B.C.E.). Djeitun ware is a thin, handmade, and straw-tempered ware with a cream slip decorated in curvilinear or geometric patterns of red or black paint. It was fired in a reducing atmosphere in closed kilns. The fabric is thinner and denser than that of the painted soft-ware sherds resembling those of Anau IA found in the Hotu cave. Few shapes have been reconstructed; the decoration appears most often on the exterior of small bowls with simple rims, rather like cups. Djeitun ware was apparently a distinctive pottery originating in the northeastern region. Surveys (Kohl et al.) reveal a distribution throughout Gorgān, the Atrak valley, the area around Šāhrūd on the plateau, and the eastern piedmont of the Kopet-Dag. In Gorgān it was found in trench A, levels 45-32, in the Hotu cave (The University Museum collection); in Period I at Yarim Tepe, where it was identified as “Yarim Neolithic” (Crawford, pp. 272-73; Stronach, pp. 21-23); and at Tureng (Tūrang) Tepe, where similar sherds occurred as inclusions in bricks from later periods and have been assigned to period IA, presumed to lie below the water table (Deshayes, 1967, pp. 123-25, fig. 1 a-c, pl. 1a, d; see [Figure 15](#)).

At Sang-i Chakhmaq on the plateau Djeitun ware occurred in the east mound,



where it predominated in levels VI-II (Masuda, 1976, pp. 63-64). It was found in houses with walls of packed mud or long bricks of ovoid section, decorated with red and black designs (Masuda, 1974a, p. 25; idem, 1976, pp. 63-64). The sherds are generally painted with brown geometric patterns on the exterior and sometimes burnished on the interior (Masuda, 1972, fig. 6; idem, 1974a, fig. 5; 1976, p. 63). Shapes include closed bowls with rounded or carinated profiles. It may be noted that polychrome and black burnished sherds were reported from level VI, at the base of the deposit; similar black sherds have been found from the painted-ware levels at Hotu cave in Gorgān and, in north-central Persia, in the lower levels of Cheshmeh Ali (*Čašma-ye ‘Ali*) IA near Tehran (The University Museum collection), which remains unpublished, and at Sialk (Sīalk) I near Kāšān (Ghirshman, p. 16). The widespread distribution of this ware, including sparse occurrence in the earliest levels, is significant, in view of the extensive use of the reducing technique in the subsequent Bronze Age (see below).

Cheshmeh Ali ware (ca. 5500 B.C.E.). Cheshmeh Ali painted pottery, also known as “Ismailabad (Esmā‘ilābād) ware,” represents a ceramic tradition that flourished across northern Persia as far west as the area around Kāšān and Qazvīn (see below). The most readily identifiable examples have an orange-to-red surface color, often with a thin light-gray or pink core. The handmade ware is relatively thin and is tempered with very fine chaff. The thinnest and densest pieces produce a “clink” when struck. The surface is usually smoothed or lightly burnished and often shows marks of scraping. Designs are painted in black, toning to gray or brown. The motifs on the thinnest pieces are drawn in very fine lines. Others are bolder and sometimes have fuzzy edges, owing to moisture on the surface of the vessel at the time of painting. Very common are cup-shaped bowls painted on the exterior, usually with two parallel bands around the rim and other motifs below (e.g., Arne, fig. 277). Cheshmeh Ali ware appeared in quantity on the northeastern plateau, reflecting a link with the western Persian ceramic tradition, where it predominated, particularly in the upper part of Cheshmeh Ali IA. It overlapped with Djeitun ware in level II of the east mound at Sang-i Chakhmaq and predominated in level I and was also found in a survey of other sites in the area around Baštām (*Beštām*) and Šāhrūd (Masuda, 1976, p. 64). It thus clearly followed Djeitun ware. Sherds of Cheshmeh Ali ware have also been found eroded from Parthian bricks at Shahr-i Qumis (Šahr-e Qūmes) at the western end of the Dāmḡān plain, where the reddish-orange pottery is decorated with geometric or animal designs drawn in fine lines, most commonly on small hemispherical bowls (see [Figure](#)



15).

In Gorgān Cheshmeh Ali ware was found in the 5.60 and 5.80 cm levels in trench B in the Hotu cave (Coon, 1952; The University Museum collection), out of context at Shah (Šāh) Tepe (Arne, figs. 277, 165; McCown, p. 54), and at Tureng Tepe, where it was assigned to a presumed period IB below the water table (Deshayes, 1967, fig. 2d-e). The relative scarcity of sherds in this region may be owing to its position in deep levels that are often inaccessible, or the ware may have been imported from the plateau.

Chalcolithic painted ware. Caspian black-on-red ware (ca. 7400-3500 *B.C.E.*) is handmade and normally has a red slip, ranging from deep red to shades of brown or buff, depending upon firing conditions. It is painted with vertical black or dark-brown motifs, often simply straight lines but also cross-hatched and herringbone patterns arranged in vertical stripes (Arne, pls. xc-xci). The sherds, apparently from jars, are of medium thickness; the paste is dense, hard, and well washed, with few visible inclusions. None appears to have been made on the wheel, though rims may have been finished on a slow wheel. Forms include cylindrical and biconical jars with short everted rims and jars with biconical bodies and medium-length necks, also with everted rims. The inner surfaces of the rims are often painted with groups of radial lines. Very large bowls, as tall as 75 cm, with undercut bases and flaring sides, occurred in settlement contexts at Shah Tepe (Arne, p. 166). Caspian black-on-red ware has been found only in the earliest levels containing Caspian burnished gray ware (see below); these contexts include graves and settlements at the base of the Shah Tepe sequence (level III); Yarim Tepe level II, where it was “characteristic” (Crawford, p. 272); and Tureng Tepe IIA, where it occurred in relatively small quantities (Deshayes, 1967). It appears to have been an entirely local production, marking the end of painted ware in Gorgān in the mid-to-late 4th millennium (see [Figure 15](#)). Jean Deshayes (1969, p. 12) also mentioned a contemporary burnished red ware, sometimes decorated with a few brownish patterns, noting that some shapes are similar to those of gray ware but not to those of black-on-red ware.

At Tepe Hissar (Ḥeṣār) on the plateau near [Dāmḡān](#), on the other hand, a distinctive painted ware continued to be produced through the 4th millennium (ca. 3100 *B.C.E.*). It came from the lowest levels (Hissar I) reached in the excavations of 1931 and 1932 by Erich Schmidt (1933; 1937), which date to at least the late 5th millennium. The sequence was divided on combined stratigraphic and stylistic grounds into three subperiods: IA, IB, and IC. Period



IA was characterized by small handmade cups or bowls with flat bases, footed bowls, and pots painted in shades of brownish red or dark gray on a red-to-buff slip. Although this ware is generally described as red, individual vessels were fired to red, orange, yellow, or grayish-white, depending upon temperature and atmosphere. D. E. McCown (p. 7) concluded from the forms, the fabric, and the fact that the wheel was not used that this pottery was derived from the Cheshmeh Ali-ware horizon. Sherds resembling both Hissar IA pottery and Cheshmeh Ali ware were found at Shir-e Shian (Šīr-āšīān) 15 km west of Dāmḡān (Schmidt, 1937, p. 17, pl. II). Both wheel-made and handmade vessels were found in Hissar IB graves. The ground color tended toward light brown or buff, though red still occurred. Shapes included a variety of bowls and pots on hollow pedestals with flaring bases. A wide repertoire of painted geometric and naturalistic designs echoed those found in Cheshmeh Ali IB (Schmidt, 1937, p. 319 no. 1, “identical in every respect with objects of the corresponding level at Tepe Hissar”) and in Sialk III/4-5 (McCown, p. 7); they include vertical floral patterns and rows and columns of birds and snakes. In graves of Hissar IC pottery painted with ibex and leopard designs and dancing human figures appeared (Schmidt, 1937, p. 319, fig. 168), though the nature of the transition is unclear: “[O]ften the phases of conventionalization do not seem to be apart in time. We found several modifications of the same patterns at various stages of conventionalization in the same levels of Hissar I” (Schmidt, 1933, p. 353 n. 4). Limited amounts of painted ware of Hissar I type continued to be made and used in period II. The simple zigzag patterns characteristic of period IA reappeared on bowls and cups (Schmidt, 1937, p. 108), though the technique, color scheme, and forms were “identical with the corresponding feature of the Hissar IC Ware” (p. 303). In this terminal phase painted motifs included opposed “tongue” patterns and circles filled with cross hatching; sherds and vessels with long-necked gazelles “always appear in deposits with an admixture of Hissar II gray ware” (Schmidt, 1937, p. 109). All graves in which painted vessels were found associated with burnished gray ware (see below) were thus automatically classified as belonging to Hissar IIA, and the presence or absence of painted vessels was the sole criterion for differentiating Hissar IIA and IIB graves (Schmidt, 1937, p. 116). The shapes of painted ware were often duplicated in burnished gray ware, though many new shapes also appeared. New excavations in 1976, however, permitted a clearer description of the end of the Hissar I painted ceramics. Sherds of fine burnished gray ware were found in small quantities in predominantly Hissar I levels in tests on the main mound and the north flat (Dyson and Howard). Radiocarbon dates from these two



contexts indicate the presence of burnished gray ware at least as early as 3600 B.C.E. In the levels below phase D (formerly Hissar IC/IIA, now called Terminal I) in the main mound 40 percent of the pottery was burnished gray ware and 40 percent Hissar I painted ware. In phase D (or Hissar II, which includes the redated buildings 2 and 3) the proportion of Hissar I painted ware dropped to 25 percent or less. Phase D has been dated by a number of C14 determinations to 3400-3100 B.C.E. After phase D the Hissar I painted ware dropped to 10 percent or less for the remainder of the occupation, probably encompassing material displaced upward, rather than actual manufacture; such sherds were observed eroding from later brick work (Dyson and Howard). A second locus in which Hissar I painted ware and burnished gray ware were associated was the floor of building 4a on the south hill, dated 3365-3010 B.C.E. It is apparent from these new data that Hissar I painted ware continued in use well after burnished gray ware had become predominant; it ceased to be made around 3100 B.C.E., when it was replaced by Hissar Bronze Age painted ware (see below; see [Figure 16](#)).

Burnished gray ware (ca. 3600-1700 B.C.E.). The earliest documented contexts for the appearance of Hissar burnished gray ware, the dominant pottery at the site during the 3rd millennium are of the late Hissar I period, around 3600 B.C.E. The sherds are of very fine fabric, light gray, and highly burnished. Analysis indicates that Hissar I painted ware and burnished gray ware were made from the same clay and that the clay sources were in use throughout the occupation of the site. Declining percentages of Hissar I painted ware on the main mound reveal a major shift to burnished gray ware a few centuries after it appeared. This period of transition is also reflected in a number of graves in which both types of pottery occurred until about 3100 B.C.E., after which the gray ware occurred alone. This ware actually ranges from black through dark or light gray to grayish-brown. There was a tendency for vessels of Hissar III to be lighter gray, rather than dark. One specimen of “black” pottery analyzed by L. C. Riesch and D. Horton (1937, p. 353) differed from the usual gray in containing carbonaceous matter and being highly burnished. The paste of the gray pottery is usually medium to fine and of gray color. In Hissar II the vessels were wheel-made, but Schmidt believed that in Hissar III, despite the greater elegance of the shapes, the method of manufacture had regressed to hand shaping. He based his conclusion on the absence of visible striations on the vessel surfaces, but further technical study is clearly necessary. Periods II and III were differentiated primarily by the presence of what Schmidt called “guide forms.” For Hissar II they consisted of bowls on tall stems with flaring



bases. The bowls themselves vary from round cups and goblets to open forms with splayed sides and tall chalices (Schmidt, 1933, pl. XCVII; idem, 1937, pl. XXIII). Lower versions of these vessels appear to have been derived from shapes already present in Hissar I painted ware. Two unique vessels from later Hissar II may have been imports; both are decorated with applied pellets, one with additional ribs and the other with incisions (Schmidt, 1937, pl. XXVI). In Hissar III the stemmed forms disappeared (perhaps replaced by the alabaster vessels of Hissar IIIC; cf. Schmidt, 1937, pl. LIX). The early phase was characterized by the so-called bottle jar or bottle pitcher, usually a spherical or pear-shaped vessel with a cylindrical bottleneck, often offset at the base. Cross-hatched or herringbone pattern-burnished designs were common in Hissar III. Pattern burnishing had begun as early as late Hissar I, though it was relatively rare. In the later phase of Hissar III the canteen form appeared: an oval, oblong, or almost globular vessel with a short bottleneck and two perforated suspension lugs on opposite sides of the shoulder or body. Such vessels were often completely covered with pattern burnishing. Hissar III had begun at least by the middle of the 3rd millennium B.C.E., and it lasted into the first quarter of the 2nd millennium. In the final phase the beak spout appeared, a form similar to those typical of Iron Age Persia (Schmidt, 1937, p. XLI, H3511). Also in the late levels at Hissar a few burials contained for the first time “a few plain red vessels,” which may indicate the beginning of another ceramic change. In the same context two vessels with vertical loop handles attached to rim and body were excavated, the only two found at the site (Schmidt, 1937, pl. XLI, H2871, H5235). One of them, described as gray and red-brown in color, was wheel-made and found with the only horse’s skull reported from the site, which was probably abandoned around 1700 B.C.E., though the exact date remains uncertain (see [Figure 17](#)).

In Gorgān there is no evidence for the initial stages in the development of burnished gray ware. At Hotu cave the deposits from this period have been washed out, with a resulting sharp discontinuity between the earlier painted-ware levels and the burnished orange-ware levels of the late 2nd millennium (Iron Age). Similarly, at Yarim Tepe there is a gap between the Djeitun-ware levels and the overlying gray-ware levels (Yarim II). At Shah Tepe the sequence ends at the base of stratum III, characterized by fully developed gray ware. The earliest excavated level at Tureng Tepe (IIA) rested on the water table and was also characterized by a fully developed gray-ware industry. The gray ware from these last two sites was thus produced after similar ware had made its appearance on the plateau. In Tureng IIA, which corresponds to



Yarim II (“Late Chalcolithic”) and Shah Tepe III, the evolution of the sequence was defined in levels 26-20 of the A sounding (Deshayes, 1966). Caspian burnished gray ware, like that of Hissar II, was wheel-made, of a well-washed, fine, dense clay, and fired in a reducing atmosphere to various shades of gray or black. The surface was smoothed or highly burnished, which lent a shiny metallic appearance. The detailed forms from the two areas are largely distinct, however. At Tureng Tepe they included bowls on pedestal bases, hemispherical or carinated open bowls with simple rims and flat bases, and short or tall jars with short evened necks (Arne, pls. XXI/169-70, XXII/170a-73; Deshayes, 1966, pl. I/3). Many examples are decorated with horizontal ridges, incisions, and applied pellets (Arne, figs. 301 a-12). Rare pieces of this type appear to have been exported to Hissar, where Erich Schmidt assigned them to Hissar IIB (1937, pl. XXVI). In period IIB at Tureng Tepe incisions and grooves were combined with pattern burnishing. Plain red ware appeared in the same forms as gray ware and may have been a variant produced in the firing. Stemmed goblets like those found in Hissar IIB occurred together with long-necked bottles. The combination of these two types suggests connections with the burned room on the north flat at Hissar (3100-2900 B.C.E.; see above), where four pattern-burnished sherds were found (Dyson, 1976 field notes), contradicting Schmidt’s earlier statement that pattern burnishing did not occur earlier than Hissar IIIB (1937, p. 308). In 1976 Deshayes (personal communication) thought that Tureng Tepe IIB probably ended ca. 2600 B.C.E. In period IIIA at Tureng Tepe pattern burnishing was applied to sharply carinated jars with undercut bases and everted rims, a type characteristic of Gorgān but virtually absent on the plateau. Bottles become tall and pear-shaped with long necks, often offset from the body, like those from Hissar III. Pattern burnishing replaced surface manipulation (ridges, grooves, pellets, etc.) as the preferred decorative technique (Deshayes, 1965). During the following period (Tureng Tepe IIIB) pattern burnishing in bands of cross hatching over the entire vessel surface became common. Toward the end of the period vertical handles and side spouts also appeared. The color of the pottery tended toward brown or an even red (Deshayes, 1969, pp. 14, 16). The easternmost sites in Gorgān are said to have been abandoned before the end of this period (Deshayes, 1968b, p. 38); for example, at Tureng Tepe there were only fragmentary remains (IIC2) to indicate a lingering occupation until perhaps 1650 B.C.E. This terminal phase was characterized by crudely burnished coarse gray or brownish vessels. Long, narrow trough spouts (cf. one imported example in Hissar IIIC, H3511) became common, suggesting a development toward forms that became common in the Iron Age, after an



apparent hiatus of 400-500 years.

Hissar Bronze Age painted ware (ca. 3100-1700 B.C.E.). At Hissar a new painted ware appeared late in level II and continued through level III (Schmidt, 1937, pls. XXXVI, XXXIX, XLII; idem, 1933, pl. CXVII; Dyson and Renssen, 1989, figs. 30-31). The vessels are small, 4-13 cm high, and include round cups, cups with pointed bases, small pots or jars on low ring or stemmed bases, and jars with narrow everted rims. They are handmade; the generally yellow-buff-to-brown matt surface is painted in shades of red, ranging from brownish to purple. Motifs are essentially restricted to groups of vertical lines, with occasional geometric patterns (Dyson and Renssen, figs. 30-31). Analysis of the paint (Riesch and Horton, p. 357, and table 2, H3390), which was apparently applied after the vessel was fired, showed it to be different from that used in Hissar I; it lacks manganese, is argillaceous, and rubs off easily. In quality and form, then, the Bronze Age painted ware is quite different from that of Hissar I. Hissar Bronze Age painted ware (a name proposed to stress the discontinuity) is firmly documented from excavations conducted on the north flat in 1976 (Dyson and Renssen). Seven complete vessels were found on the floor of a burned room; they were associated with twenty-four vessels of classic Hissar II type, a human figurine, two miniature beds, and some miniature vessels (Dyson and Renssen, figs. 27-34). The context has been dated by radiocarbon to 3100-2900 B.C.E. This Bronze Age painted ware has also been documented from a probable early Hissar III context on the main mound: a hoard of seventeen vessels (eleven painted and unpainted cups, a painted jar, and five stemmed braziers) and thirteen human figurines of copper (Schmidt, 1937, p. 193, pottery H3292-H3312, miscellaneous objects H3271-H3310). Other individual vessels illustrated by Schmidt came from a variety of graves assigned to period III (1937, pls. XXXVI, XXXIV, XLIII; see [Figure 16](#)).

II. North-Central Persia

North-central Persia, approximately the area lying between Kāšān, Qazvīn, and Tehran, is characterized by uninterrupted agricultural plains watered by streams from the neighboring mountains. As there are no major geographic barriers, in many periods ceramic assemblages were identical throughout the area.

Zagheh archaic painted ware (ca. 6000-5500 B.C.E.). The most thoroughly described early painted ware from the region was excavated at Tepe Zagheh (Zāḡa) in the Qazvīn plain (Malek Shahmirzadeh). It is decorated with red



geometric designs applied, in sometimes fugitive paint, on a soft chaff-tempered, burnished, red-to-buff fabric. The most common forms are bowls decorated with diagonal lines and pendant loops, crosshatched bands, or nested zigzags (Malek Shahmirzadeh, pl. XII/A-D). Similar sherds were found in Tepe Sialk I/1-2, near Kāšān (Ghirshman, pl. XL). At Zagheh this painted ware is associated with a “crusted ware,” bowls made of chaff-tempered clay and coated on the exterior with a thin layer of fine sand that begins just below smoothed rim bands; the interior surfaces are highly burnished (Malek Shahmirzadeh, p. 286, pl. XIA/8-9). This ware is known at present only from Zagheh. Motifs on the painted ware, on the other hand, link it with Sarab (Sarāb) linear ware from Māhīdašt (Levine and McDonald, 1977, pl. 1a) and with painted pottery from Hajji Firuz (Hājī Firūz) in Azarbaijan (Voigt, figs. 92-94, 97). East of Zagheh painted chaff-tempered soft ware occurred in the lowest levels of Cheshmeh Ali IA, which is said to have contained painted sherds of “Anau I type” (Schmidt, 1937, p. 319 n. 1). This material is thus probably of the same period as Zagheh archaic painted ware and Sialk I pottery, 6000-5500 B.C.E.

At Tepe Sialk the lowest level of the north mound, called Sialk I, contemporary with the Zagheh Archaic, is characterized by fine red-slipped, coarse red, buff-slipped coarse, and probably black wares (Ghirshman, pp. 11f). The buff-slipped ware, which is sometimes burnished, occurs in the lower third of the sequence, primarily in bowls with simple painted patterns inside the rims. The earliest red-slipped ware is plain and finer than the buff-slipped ware, but later examples were also sometimes painted and burnished. Sialk I and Zagheh Archaic pottery in the west appears to be contemporary with the Iranian Djeitun ware in the east.

Cheshmeh Ali ware. This finely made painted ware characterizes the upper part of Cheshmeh Ali IA and has been found at Kara (Qarā) Tepe and Muselah (Māšāllāh) Tepe (Esmā’īlābād) west of Tehran, in the upper levels at Zagheh (above the archaic painted-ware strata), at Sāva, and in Sialk II (McCown, 1942, p. 3; Maleki; Navai; Tala’i; Ghirshman, e.g., pls. XLVII, B 11, 13, C 8, 13, 15; XLVIII, A 13, 15, 16, C 6-8, 10, 12, 15-17, etc.), as well as in northeastern Persia, where it apparently preceded the ceramics of Hissar I (see above). It occurs in a variety of shapes, including cup-bowls with narrow concave bases, spouted bowls, hemispherical and closed bowls, shallow and deep bowls on pedestal feet, basket-handled pots, and concave-sided cups. It is handmade of fine-grained fabric and covered with a burnished orange-to-red slip and painted in



black on red. A wide variety of designs include lozenges, hatched triangles, festoons, chevrons, braided patterns, and stylized animals (goats and stags) and fish. It is especially well known from the excavations carried out in 1958-59 at Muselah Tepe (where it is called “Ismailabad ware”; Maleki). The material from this site seems more elaborate than that of Sialk II. It appears to overlap Sialk II and may fit into the inferred gap between Sialk II and III.

Sialk III and contemporary wares. Ghabristan (Qabrestān) I plum ware, related chronologically to Sialk III/1-3, appears to be unique to this site. It is handmade of grit- or chaff-tempered fabric and coated with a brown-to-plum slip, often burnished (Majidzadeh, pp. 54-56). The painted red-and-buff pottery of Sialk III/4-5 has close parallels to Ghabristan II pottery from the Qazvīn plain (Majidzadeh, 1978) and the period-IB pottery at Cheshmeh Ali, which McCown (pp. 7, 13) has labeled the “Hissar Culture” and connected directly with Hissar IB. Schmidt, the excavator of both the last two sites, also considered it “straight Hissar IB” (1937, p. 319 n. 2). At Ghabristan this fine painted ware is grit-tempered and hard. The surface has a red-to-buff slip and is usually handmade, though some wheel-made vessels are reported. Buff-ware vessels are usually plain, whereas red-ware vessels are painted with dark-brown geometric patterns and representations of humans and animals (Majidzadeh, pls. 77-78, 81-93). Comb designs and spiral plant designs also occur. Vessel forms include deep open bowls and closed vessels with flaring necks. Bases are small and concave or more rarely pedestals. After the Sialk III/4-5-Hissar IB horizon the occupation of most north-central sites came to an end. At Sialk the painted tradition lingered on through a terminal phase (III/6-7b), as it did in Hissar IC. Probably contemporary with this period is Ghabristan III gray ware, which is also unique to the site. It is chaff tempered, handmade, and fired to gray or buff and has been described as “fairly fine” (Majidzadeh, pp. 59-60). Bell-shaped bowls, sometimes decorated with incised bands of hatched triangles or chevrons, are common; they are somewhat similar to vessels from burials in the Seh Gabi (Segābī) mound farther west, in the Kangavar valley, assigned to Godin (Gowdīn) VII (E. Henrickson, personal communication; Young and Levine, pp. 13-14, fig. 16/1a, 4a).

Late 4th-early 3rd millennium. At the end of Sialk III/7b the painted tradition ended abruptly and was succeeded by pottery of a quite different type, which characterized Sialk IV. Sialk IV ware is buff-to-gray in color and decorated with dark paint, sometimes over a red slip. Forms include tall cylindrical jars with evened rims, round-bodied jars with four unpierced vertical lugs, tall jars



with small flat bases and necks, carinated jars with trough or droopy spouts, and “goblets” or bowls on pedestal bases. Decoration is reduced to simple bands around the necks and shoulders of jars (Ghirshman, pp. 62-64, pls. XXV-XXVI1, LXXXVIII-XC). Associated with this pottery are both deep and shallow handmade beveled-rim bowls of soft chaff-tempered fabric, a type also familiar from Ghabristan IV, Godin Tepe V-VI, and Susa II (Amiet; Dyson, 1987). Following this period, at the end of the 4th millennium and the beginning of the 3rd, Sialk was abandoned until it was reoccupied in the Iron Age, in the late 2nd millennium.

Sagzabad polychrome ware. The only polychrome ware excavated in north-central Persia comes from period I at Sagzabad (Saqqezābād), a site near Zagheh and Ghabristan in the Qazvīn plain (Negahban), and probably dates to the end of the 3rd and early 2nd millennia B.C.E. The handmade pottery is grit-tempered; red, orange, or buff in color; and decorated with red, black, or red-and-black paint on red and cream, orange, or buff slips (Malek Shahmirzadeh, pls. 136, 137). The origin of this ware is problematic, though not impossible links with ceramics in Kansu in northern China have been pointed out (Egami). Three vessels of plain red ware and small quantities of fine gray burnished ware are known from this period. The latter are wheel-made of a fine grit-tempered fabric; some examples are plain, others decorated with burnishing, pattern-burnishing, incising, or ribbing (Malek Shahmirzadeh). They appear to have been imported from outside the area since they do not occur otherwise locally.

TABLE 34. Comparative chronology of sites.

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