A Note on Anatolian Iron Age Ceramic Chronology: Black Lustrous Ware\(^1\) with Diamond Faceting

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Kaman

1. THE PROBLEM OF ANATOLIAN IRON AGE CHRONOLOGY

The absolute chronology of the Iron Age in Anatolia relies entirely on the dating of the Destruction Level at Yassıhöyük, Gordion, located ca. 100 km southwest of Ankara, the capital city of Turkey (Fig. 1). Gordion was the capital of the Phrygian kingdom, and according to Greek geographer Strabo, was invaded and destroyed by the Cimmerians during the reign of King Midas; Midas killed himself by drinking bull’s blood (Strabo, Geography I.3.21). Roman historian Eusebios dated this incident to 696/5 BC (Eusebios, Chronology), while Julius Africanus dated it to 675/4 BC (cf. Bossert 2000: 158). In New Assyrian documents, King Midas appears between 717 and 709 BC (Luckenbill 1926: §221; 1927: §8-18; Saggis 1958: 182-187). Based on these data, the Destruction Level of Gordion has traditionally been dated to the beginning of the 7th century BC. Until recently, there was no reliable absolute dating for the Iron Age in Central Anatolia.

Kromer et al. (2001) have proposed a new date for the Gordion Destruction Level based on \(^{14}C\) dating. The samples dated (barley, flax and lentil) were collected from a pot that was excavated in situ on the floor of Terrace Building 2A by Voigt in 1988-1989 (deVries et al. 2003; deVries 2007: 80-81). The new date is 827–803 BC at the \(2\sigma\); this is ca. 100 years older than the traditional date, and raises some problems with other proposed chronologies.\(^2\) One of the most significant problems relates to the cause of the Destruction Level at Gordion. According to the new dating, the Cimmerians

\(^{1}\) The term “Black Lustrous Ware” is used instead of “Black Polished Ware” in this article, as study has shown that not all the pottery of this type with a black lustrous appearance was produced by polishing. Black Polished Ware has a lustrous surface produced through polishing (cf. Matsumura 2000: 122, “Fine Black Burnished Ware”), while Black Lustrous Ware has a lustrous surface, but its production technique is not defined in the name. Henrickson et al. (2002) analyzed lustrous wares found to be formed by a slip on the surface. Shiraishi also analyzed the production technique of this ware and confirmed that most examples were polished, though some were slipped (Shiraishi et al. 2005; Shiraishi and Nakai 2006). The difference between these surface finishes is invisible to the naked eye.

\(^{2}\) There is a critical problem at Kaman-Kalehöyük. Within Stratum IId at Kaman-Kalehöyük are three burned layers, one above the other: structures of the IId period were built in almost the same manner three times, and each time were burned. The new \(^{14}C\) date for the Destruction Level at Gordion is 827–803 BC at the \(2\sigma\), as mentioned above, and the new \(^{14}C\) date for the end of IId1 at Kaman-Kalehöyük is 880–810 BC (Matsumura and Omori, in press). Along with the new dating at Gordion, the dendrochronological dates in Central Anatolia were also revised, and so the dendrochronological dating of the IId burned layer of Kaman-Kalehöyük, the so-called “dark age”, was revised (Manning et al. 2001). Timber from the latest burned layer, IId1, was dated by Peter Kuniholm from Cornell University; the age the timber was cut has now been changed from ca. 949 +4/-7 BC to ca. 884 +4/-7 BC (Manning et al. 2001: 2535, fn. 38; Newton and Kuniholm 2001). This is almost the same as the cutting date of wood from the Destruction Level of Gordion, that is, ca. 883 +4/-7 BC (Manning et al. 2001: 2534). These dendrochronology results suggest that the architecture of the destruction level at Gordion and the architecture of Kaman-Kalehöyük IId1 were built at nearly the same time. However, these results do not fit with the results of ceramic research at Kaman-Kalehöyük. One of the big disagreements is the life span of the so-called “Alişar IV painted pottery”. This pottery appears in situ in the Destruction Level of Gordion, while at Kaman-Kalehöyük it appears in the IIC period, later than the IId burned layer (Sams 1994: 163-164; Matsumura 2005: 398; some Alişar IV sherds also come from post-destruction contexts at Gordion, see Sams 1994: Pl. 133). According to the ceramic sequence, Gordion’s Destruction Level is almost contemporary with the Kaman-Kalehöyük IIC2-3 period. But dendrochronological dates show Gordion’s destruction is contemporary with Kaman-Kalehöyük IId. So there is an inconsistency between the dendrochronological dating and the ceramic relative chronology.
are no longer responsible for the destruction, and King Midas did not live during the period of the Destruction Level, but must have lived after that time. Moreover, no other destruction level has been found at Gordion that can be connected to the invasion of the Cimmerians. Another problem is the dating of Tumulus MM, the largest grave mound at Gordion. Based on the grave goods, Tumulus MM is assumed to be contemporary with the Destruction Level and is therefore regarded as the tomb of King Midas (Young et al. 1981: 271). If the date of the Destruction Level is placed ca. 100 years earlier, Tumulus MM must also be dated ca. 100 years earlier and therefore cannot be the grave of King Midas (cf. deVries 2005: 43).

2. BLACK LUSTROUS WARE FROM GORDION

Recently, new archaeological studies on the dating of the Destruction Level at Gordion have been published. One is the study by deVries (2005), which deals with the materials from the South Cellar of the settlement that was built over the Destruction Level (see deVries 2005: Fig. 4-1). This settlement was rebuilt with almost the same plan as the Destruction Level, and it seems unreasonable to suppose that, after the death of King Midas, the settlement would have been rebuilt in this way. This is one of the reasons given by Voigt in support of the new dating of the Destruction Level (Voigt 2005).

The South Cellar was originally dated to the 5th century BC based on an Attic red-figure sherd (Young 1966: 269). deVries studied and reanalysed the excavation fieldnotes and determined that the upper part of this architecture was disturbed but the part near the floor was preserved undisturbed. From this undisturbed area, an imported Corinthian Late Geometric kotyle was found (deVries 2005: Fig. 4-3, P3696a, b). This pottery is dated to ca. 735–720 BC, and deVries concludes that this is the date of the settlement of the South Cellar (deVries 2005: 37), and this settlement is that of King Midas.

Moreover, deVries states that most of the ceramics found in the South Cellar are Black Lustrous Ware, many examples of which have grooved or relief surface decoration. Among these, the most striking decoration is diamond faceting (deVries 2005: 42). This indicates that diamond faceting decoration on Black Lustrous Ware is a typical pottery for the age of King Midas, according to the new (8th century) dating of the South Cellar.

However, the results of Iron Age ceramic studies at Kaman-Kalehöyük indicate a younger date for Black
Lustrous Ware with diamond faceting than this new date of the South Cellar (Matsumura 2005). In this paper, I reexamine the material from Kaman-Kalehöyük and review the date of Black Lustrous Ware with diamond faceting.

3. BLACK LUSTROUS WARE FROM KAMAN-KALEHÖYÜK

Excavations at Kaman-Kalehöyük have uncovered four main stratigraphic sequences at the site: Stratum I, Ottoman and Byzantine Periods; Stratum II, Iron Age; Stratum III, Late and Middle Bronze Ages; and Stratum IV, Early Bronze Age. Each Stratum contains several architectural subperiods. The Iron Age levels at Kaman-Kalehöyük can be divided into four architectural subperiods — IIa (youngest), IIb, IIc, and IId — through stratigraphical analysis with the use of the Harris Matrix method. Each architectural subperiod can be further subdivided into several architectural layers. Through ceramic studies, five “chronounits” have been established within the Iron Age levels. They are, from youngest to oldest, IIa1-2, IIa3-5, IIa6-IIc1, IIc2-3, and IId1-3 (Fig. 2). Each chronounit possesses a distinct ceramic form and ware assemblage (Matsumura 2005: 204-218, Abb. 4.1-10).

Two sherds of Black Lustrous Ware with diamond faceting have been found at Kaman-Kalehöyük (Fig. 3, KL91-M129; Fig. 4, KL95-2115, Table 1). Each is only ca. 5 cm in size and comes from a stratigraphical setting that is not fully clear. Therefore it is difficult, from the
stratigraphical information, to closely determine the dates of these sherds.

Black Lustrous Ware is a reduction-fired ware. Study of the production technique has shown that its black color was produced by the absorption of carbon into the ceramic (Matsumura 2000; Shiraishi et al. 2005; Shiraishi and Nakai 2006). 3) The reduction firing technique is viewed as the technique that was dominant in the Phrygian kingdom (cf. Henrickson 1993: 133). At Kaman-Kalehöyük, the proportion by number of all reduction-fired ware increases in chronounit IIa6-IIc1 and stays at a higher proportion until IIa1-2 (Fig. 5; Matsumura 2005: 224, Abb. 4.1-2). Therefore it is interpreted that Kaman-Kalehöyük began to be influenced by the Phrygians in IIa6-IIc1 (Matsumura 2005: 401-406).

Black Lustrous Ware begins to increase in proportion in IIa6-IIc1, but increases more significantly in IIa3-5 (Fig. 6; Matsumura 2005: Abb. 4.7-4), so is considered a typical ware for IIa3-5 to IIa1-2. Examination of the sherds from Kaman-Kalehöyük shows that Black Lustrous Ware was manufactured in a limited range of vessel forms (Fig. 7; Matsumura 2005: 345-346, Abb. 4.3-3). Fig. 8 shows the four typical forms found at Kaman-Kalehöyük: bowls; pots with a flaring rim; pots with a wide, short, straight neck; and spouted vessels. Of these, the pots with a wide, short, straight neck are especially important because this vessel type appears in the South Cellar at Gordion (Young 1966: Fig. 4); it does not appear in the Destruction Level or before (see Sams 1994). This vessel type has a wide, short, straight neck, and a horizontally everted and slightly ledged rim, and also sometimes has a spout (Fig. 9, Table 1).

At Kaman-Kalehöyük, this form of Black Lustrous Ware with a wide, short, straight neck and horizontally everted and slightly ledged rim appears mainly in IIa3-5 (Matsumura 2005: 345-346).

Pots with a wide, short, straight neck also appear at Boğazköy, in Büyükkale I (BK I) only (Fig. 10, 11; Bossert 2000: Nr. 415-8, 422, 424, 426, 428-9). Here, this vessel type often has a sieve spout. The combination of the sieve-spouted pot with a wide, short, straight neck and Black Lustrous Ware is distinct at Boğazköy.

Furthermore, there are some examples of spouted jars

<table>
<thead>
<tr>
<th>Find No.</th>
<th>Area Note</th>
<th>PL Arch. Layer</th>
<th>Ware Past</th>
<th>Surface finish</th>
<th>Colour Core</th>
<th>Paint. 1 Paint. 2</th>
<th>Rim Diameter</th>
<th>Hardness</th>
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<td>KL86-150</td>
<td>XXXVI-55(J): K-V</td>
<td>Ila5</td>
<td>Painted Ware no inclusion + medium</td>
<td>burnished</td>
<td>no</td>
<td>10R3/6</td>
<td>2.5YR5/6</td>
<td>10R5/8</td>
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<td>Ila4</td>
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<td>smoothed</td>
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<td>5Y3/1</td>
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<td>N4/0</td>
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<td>7.5Y6/1</td>
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<td>polished</td>
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<td>N4/0</td>
</tr>
<tr>
<td>KL91-P87</td>
<td>K-VI Vl.K.Kesittemizleme</td>
<td>Cleanin</td>
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<td>2.5YR7/6</td>
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<td>2.5Y5/1</td>
<td>7.5YR5/1</td>
<td>7.5YR5/1</td>
</tr>
</tbody>
</table>

3) Clay analysis is in progress to identify production centers (Kealhofer et al., 2008).
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Fig. 5 The proportion of Reduced Ware each Chronounit

Fig. 6 The proportion of Black Lustrous Ware each Chronounit

Fig. 7 The Graph shows the relationship between Black Lustrous Ware and forms

Fig. 8 Typical forms for Black Lustrous Ware

Fig. 9 Samples of the pot with a wide, short straight neck, and horizontally everted and slightlykedged rim
with a graved diamond motif (Fig. 12; Bossert 2000: Taf. 44, Nr. 424). There are also two examples with diamond faceting (Fig. 13; Bossert 2000: Taf. 39, Nr. 371, 372). One is a spouted jar (but not with a wide, short, straight neck) with diamond faceting from BK Ia; its rim is horizontally everted and its handle extends over the rim (Fig. 13, 372; Bossert 2000: Taf. 115, Nr. 372). At Kaman-Kalehöyük, this type of rim shape on the spouted jar appears from IIa6-IIc1 to IIa1-2 (Fig. 14, Table 1; Matsumura 2005: 302, Abb. 4.2-18). Also, some spouted jars with this rim shape bear painted decoration of the so-called “panel-technique” (three of five examples; Fig. 14, 15, Table 1). The combination of this rim shape and the so-called “panel-technique” seems to be distinctive. The “panel-technique” appears exclusively from IIa6-IIc1 to IIa3-5 at Kaman-Kalehöyük and more frequently in IIa3-5 (Matsumura 2005: 388). BK I at Boğazköy is contemporary with IIa3-5 at Kaman-Kalehöyük (Matsumura 2005: 561ff, Abb. 6.3-1). Therefore Black Lustrous Ware with diamond faceting can be regarded as a typical pottery type for BK I at Boğazköy and IIa3-5 at Kaman-Kalehöyük.

Several Black Lustrous Ware sherds with diamond faceting were also found at Kerkenes Dağ, assumed by
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The excavator to be the city Pteria (Summers et al. 2001: 11, Fig. 13). Pteria appears in Herodotus’ *Histories*, in which it says that as Media and Lydia fought each other, a solar eclipse occurred, and both made a peace treaty (I. 73). The settlement at Kerkenes Dağ is a one-period settlement and is therefore thought to be contemporary with the period under Lydian control or later that is contemporary with IIa3-5 at Kaman-Kalehöyük. So the presence of the Black Lustrous Ware with diamond faceting at Kerkenes Dağ supports the dating of the same at Kaman-Kalehöyük.

The renewed excavation at Yasshöyük, Gordion, in the 1990s by Voigt gives different results from that of deVries, who uses the data from older excavations (Fig. 16). Black Lustrous Ware appears in Yasshöyük Stratigraphical Sequence (YHSS) 5 (Henrickson 1993: Fig. 15, Fig. 16, Nr. 1-6). Also, there is a pot with a short, straight neck and a horizontal, slightly ledged rim from YHSS 5 (Henrickson 1994: Fig. 10.8-j). YHSS 5 is dated from the early 7th century BC to the middle and/or late 6th century BC based on the numerous Attic sherds from YHSS 4 that date from the early 5th century BC (Henrickson 1993: 132). Pots with a short, straight neck and a horizontal, slightly ledged rim were also found at Tumulus C at Gordion (Kohler 1995, TumC6, 11, 12). Tumulus C is dated to ca. 540 BC, much younger than the Destruction Level. No other tumulus at Gordion has Black Lustrous Ware with diamond faceting (Kohler 1995: 192, Table 4). Because Kaman-Kalehöyük IIc2-3 is considered to be contemporary with the Gordion Destruction Level (assumed to be contemporary with YHSS 6) based on the appearance of so-called “Alişar
IV painted ware” (Matsumura 2005: 457-460), IIa6-IIc1 is contemporary with part of YHSS 5. Through the evidence of imported Attic ware, Kaman-Kalehöyük IIa3-5 is comparable with YHSS 4 (Matsumura 2005: 472-473). So Kaman-Kalehöyük IIa3-5 is contemporary with BK I at Boğazköy and with the later part of YHSS 5 and YHSS 4 at Gordion (Fig. 17; Matsumura 2005: 561; Abb. 6.3-1).
straight neck and horizontally everted rim is very similar in shape to the lydion, a typical form of Lydian pottery (cf. Greenewalt 1966). It is conceivable that in Central Anatolia this form had its inspiration from Lydia.

DeVries interprets the stratigraphic position of the South Cellar at Gordion as the settlement directly over the Destruction Level, and observes that most of the sherds from the South Cellar are Black Lustrous Ware. If these points are accepted, the settlement after the destruction should be dated to ca. 540 BC according to the ceramic studies presented in this article. This would indicate that there is a hiatus at Yassıhöyük and no settlement during the time of King Midas, or that there is another settlement level (not the one with the South Cellar) that belongs to King Midas.

The new dating proposed for the Destruction Level at Gordion is amifiable through comparative studies of ceramics from Kaman-Kalehöyük (Matsumura 2005: 559-561), but evaluation of YHSS 4, the settlement after the Destruction Level, as the settlement that was ruled by King Midas still seems problematic. In this article, it is shown that for the validation of the new results at Gordion, the investigations at Kaman-Kalehöyük seem to be able to play quite an important role.

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