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A Syrian Goblet at Khirbat Iskandar, Jordan: A Study of Interconnectivity in the EB III/IV Period

Introduction

Albright first identified the delicate carinated and incised “caliciform” (cup) horizon at Tell Beit Mirsim (1932: 8-17, 1933: 62-67), calling it “Middle Bronze I,” a term still occasionally used today. There followed the publication of Hama strata (Fugmann 1958: 281-82; for Str. J1-8, see pp. 49-85) and the ‘Amuq soundings (Braidwood and Braidwood 1960, for Phase J see pp. 429-457), which produced some of the best sequences of the “caliciform” culture in Syria. Since that time, the nature of late third millennium BC contacts (Early Bronze IV/ Intermediate Bronze Age; hereafter EBIV/ IBA) between the southern and northern Levant has been a subject of continuing scholarly discussion. In essence, the ensuing debate has pivoted around the issue of the mechanisms behind the transmission of the tradition, either northern influxes of people (*e.g.* Dever 1970; Prag 1985, 2009, 2011), or diffusion and exchange, the latter focusing broadly on the theme of “borrowed” newer elements” (Dever 1973: 57) or “ancestry” and “elaboration” of the local ceramic tradition (Richard 1980:18; for a survey of the many debates on this period, see Richard 1980, 1987, 2010a; Dever 1980; Palumbo 1990; Gophna 1992). Although proposed origins for the “caliciform” tradition in the southern Levant range from the

Middle Euphrates (Prag 1974: 87) to North Mesopotamia (Amiran 1960: 219; Albright 1933: 67) to the Syrian coast (Oren 1973: 32), most scholars today cite the closeness of the parallels with collections found in urban centers in the northern Orontes valley and southward, *e.g.* ‘Amuq; Hama; Qatna. Although, in the beginning, the finely rilled ware of EB IV was compared with the Syrian “caliciform” (as Albright above, but also Tufnell [1958: 41] and Dever [1970: 145]), it is the “painted” wares of Dever’s N/NC families (now increasingly termed Black Wheelmade Ware) that was thought by virtually all to be Syrian imports (as Dever 1980: 50).

The deep background to the continuing terminological dichotomy is, arguably, the lack of consensus on the nature of the EB IV/IBA itself. Is it a period of socio-cultural continuity with Early Bronze Age III tradition (thus, EB IV terminology), as in the works of, *e.g.*, Dever 1973, Richard 1980, Schaub 1973, Oren 1973, Nigro ed. 2005, Palumbo 1990, Adams 2000 and D’Andrea 2012, 2015, or is the period one of socio-cultural change or break from antecedent tradition (hence, IBA terminology), as favored by, *e.g.*, Prag 1974, Finkelstein 1991, Gophna 1992, Bunimowitz and Greenberg 2004 and Mazar 2006, and used increasingly west of the Jordan. Since today both sides accept change

and continuity in the period, this dichotomy may be more apparent than real. Driving the former view, to a great extent, is the undeniable evidence for EB III/EBIV occupation on *tall* sites in Jordan, which adds convincing evidence for indigenous continuity. Moreover, there is a growing list of permanent settlements on both sides of the Jordan, raising questions about, if not in fact making obsolescent the terms “dark age” or “pastoral-nomadic interlude” for the period once and for all – an argument one of the present authors (Richard) has been making since 1980.

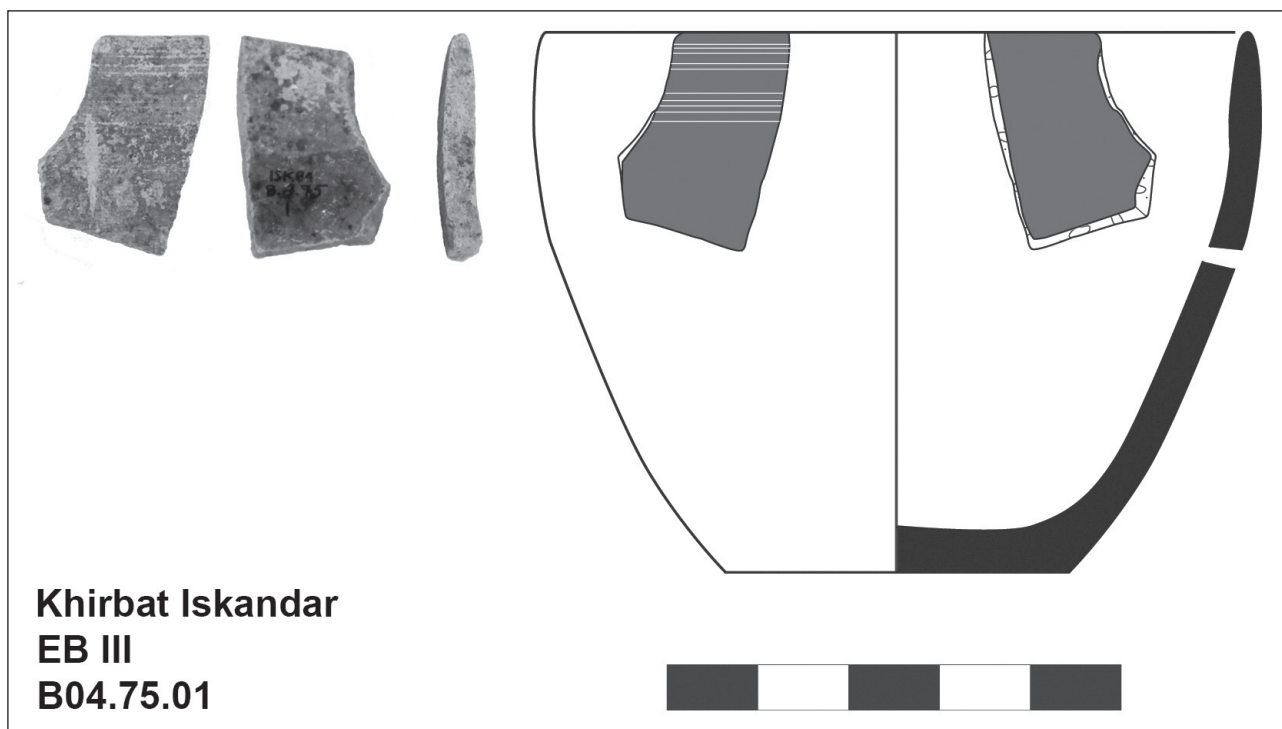
The view from west of the Jordan, primarily, sparks a different conceptualization of the period, that of an “Intermediate” period. The evidence stressed includes: socioeconomic and settlement points of view (Mazar 2006), the distinction of pottery wares (Bunimovitz and Greenberg 2004), a focus on one-period pastoral sites/settlement studies (Finkelstein 1991; Cohen 1992), and an emphasis on “peripheral” stratigraphy on a few *tall* sites, e.g. Beth Shan; Megiddo; Hazor. The devastation of Middle Bronze Age (MBA) construction projects seems not to be a consideration. Note even at the small site of Tall al-Ḥayyāt in Jordan, MBA construction of the temple area virtually eradicated any evidence of the preceding EB IV layer, except for pottery (Falconer 1994: 130).

In a recent article, “Revealed in their Cups,” Bunimowitz and Greenberg have rekindled the subject of origins by re-emphasizing a “prominent Syrian connection” for the period (their IBA). Their study utilizes anthropological theory to posit close connections between the northern and southern Levant based on the social role of drinking (Bunimowitz and Greenberg 2004: 27-28). Essentially, they see the southern Levantine “caliciform” tradition as an emulation of elite drinking habits as known at Ebla and elsewhere, probably brought in by pastoral groups on the Syrian periphery following the collapse of the EB III urban centers. The authors conclude that there is a

“significant shift in the composition and use of household and funerary ceramics between EB III and the Intermediate Bronze Age ... marked by the introduction of new types of ceramic containers, all derived from external ceramic traditions: the so-called teapot and cup from the north (Bunimowitz and Greenberg 2004: 20, 2006: 28).” Their vantage point is the Hula valley and northern Galilee, and the large (Megiddo; Beth Shan; Qadesh; ‘Ain Hilu; Tel Na‘ama) and growing corpus (e.g. Hazor; see Bechar 2013, 2015) of Black Wheelmade Ware that illustrates pastoral peoples carrying Syrian ceramic traditions with them following the collapse of urbanism.

Our regional perspective stems from Jordan, especially the compelling dataset of EB III/IV continuity on *tall* sites which, we believe, bolsters the view of indigenous development. With central Transjordan and the Dead Sea basin far from the areas of major contact with the north – such as the Hulah Valley, Upper Galilee and the Beqaa – it is still arguable that we are dealing with the basically local elaboration of some vessel types inspired from an “awareness of a tradition in vogue in Syria” (Richard 1980: 18). Nevertheless, the arguments put forth by Bunomowitz and Greenberg on drinking customs resonate, as does their singling out of the border areas that seem to have played a role in the shaping of the EB IV repertoire of the southern Levant during the mid- and late 3rd millennium BC. The present study develops the idea of transparent borders and interconnectivity in the Early Bronze Age in the Levant, keying into the ICHAJ 12 conference theme.

Based on an EB III Syrian black goblet from Khirbat Iskandar (FIG. 1), the authors will argue that strong Syrian influence in the southern Levant is already evident in the EB III period. The fact is, although the apogee of the “caliciform” tradition in the southern Levant is, indeed, the EB IV period, the diffusion of this ceramic horizon throughout Mesopotamia/Syria/border areas and southward, including



1. The Syrian black goblet from Khirbat Iskandar, photo and drawing.

cups and teapots, begins in the antecedent period (see Richard 1980: figs 2-3). As we shall see, comparative analysis affirms the diffusion of pre-EB IV increments of the Syrian cultural repertoire into our area. Within that context, the authors believe that the stratigraphic and comparative ceramic study detailed here supports the view that the Khirbat Iskandar goblet is a Syrian import in the EB III period of the southern Levant. This goblet adds a new dimension to the subject of interconnectivity between the northern and southern Levant, and offers a glimpse into the earliest stages of the dispersion/diffusion/trade of the “caliciform” culture into our area.

We believe that the goblet heralds the “caliciform” tradition of the following period as evidenced at Khirbat Iskandar by cups in a corpus of EB IV miniature vessels (see below). By situating the goblet and the “caliciform” tradition at the site against the broader canvas of the proposed new chronology for the Early Bronze Age in the southern Levant (Regev *et al.* 2012; Höflmayer 2014) this article will offer an alternative view of interconnectivity

in the Levant in the second half of the third millennium, BC.

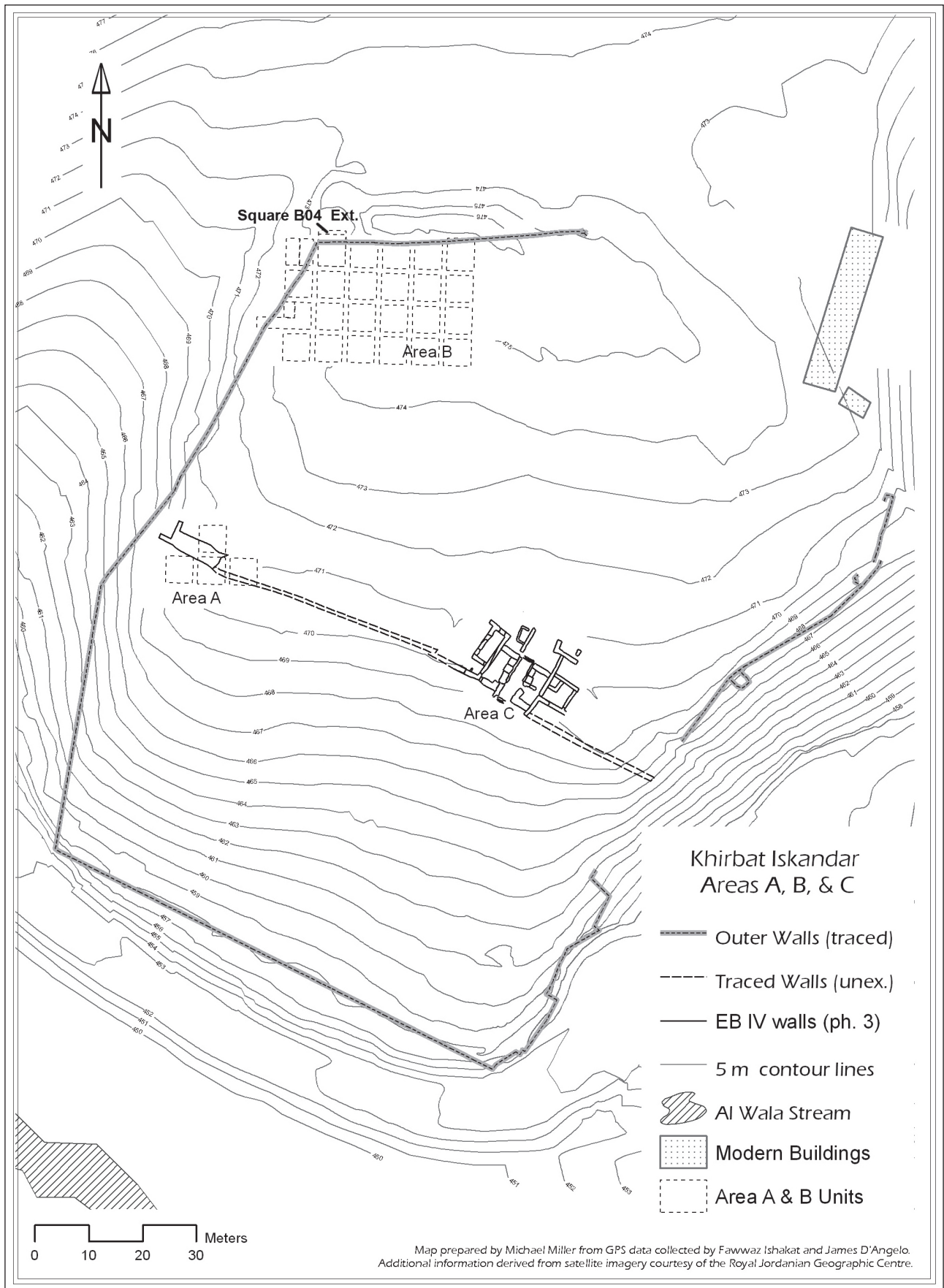
The Site of Khirbat Iskandar

Khirbat Iskandar is located along the ancient “King’s Highway” on the central plateau (FIG. 2), *ca* 10 kilometers north of Wādī al-Mūjib, and is best known for its significant remains from the EB IV period. A recent volume published the data for three stratigraphic and ceramic phases in the Area C Gateway (see topographic map, FIG. 3), the earliest termed transitional EB III/IV (Richard *et al.* 2010; Richard 2009; Long 2010). This unique entryway and a wealth of other data illuminating social complexity witness to the existence of separate neighborhoods on the site, a public function, and the transition, growth and stability of the EB IV population following the destruction of the EB III settlement. Moreover, the volume includes a statistical study conclusively connecting the inhabitants of the site with the cemeteries in the vicinity (Holdorf 2010a; Richard 2009, 2013b).

In Area B, excavation has exposed two distinct EB IV (Phases A-B) settlements over the



2. Map showing the site of Khirbat Iskandar and other major sites mentioned in the text (map prepared by Agnese Vacca).



3. Topographic map of Khirbat Iskandar, showing Areas A, B and C, and location of Square B04 ext.

entire area and at least two major EB III phases (C-D) thus far. The latest occupation is a quite prosperous settlement with pillared buildings in Phase A built atop a Phase B “public building,” including a storeroom, in which many miniature cups were found that have relevance for our present study (Richard and Long 2005: figs 5-6). The EB III Phase C settlement includes two major phases: Phase C1 is the upper settlement encapsulated in destruction debris; Phase C2 is the earlier settlement, associated with an expansion and rebuild of earlier (Phase D) fortifications. The upper phase comprises a central building, large courtyard and contiguous rooms within the strengthened defenses at the north-west corner (Richard and Long 2005: fig. 3). FIG. 4 illustrates a selection of some of the EB III whole and restorable vessels discovered in the Phase C2 destruction layer. The provenance of the Syrian black goblet is the EB III period at Khirbat Iskandar.

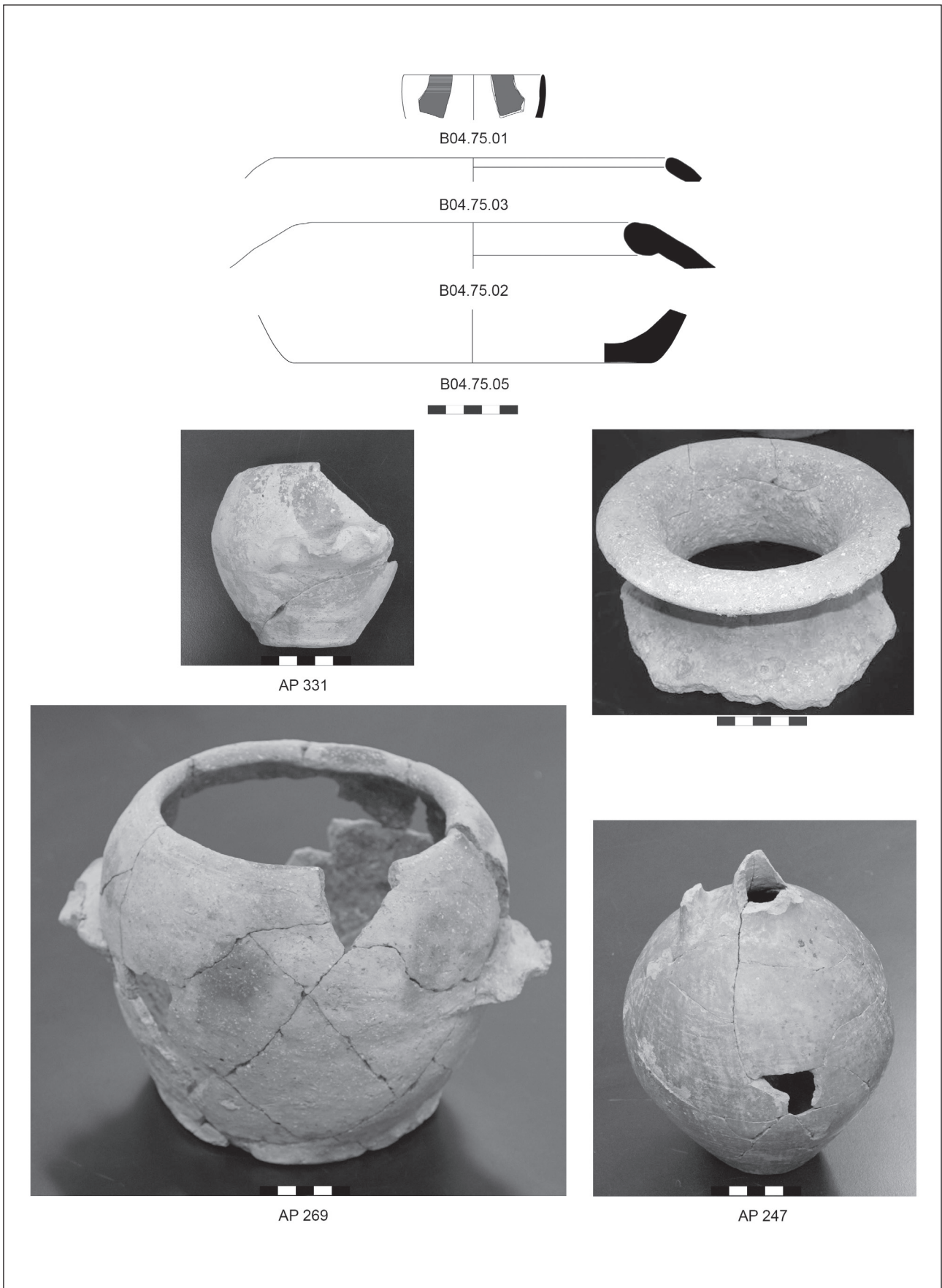
We are particularly interested in the fortifications at the north-west corner as a context for the goblet. The Phase C fortifications, the tower/bastion and outer walls on the north, were constructed against and incorporated the earlier EB III Phase D mud brick/stone defenses. The 2013 season brought to light a new defensive line (W. B04A006) on the west that abuts the bastion at its north-west corner (FIG. 5). It is now clear that this substantial wall is the original EB III Phase C western wall that was erected at the same time as the tower/bastion/platform (with stairway) and outer fortification wall on the north. The combined defenses along this stretch of the site are *ca* 7 m in width. With this background to the EB III/IV settlements, the following discussion on the provenance of the Syrian goblet focuses on Square B04.

Stratigraphic Provenance of the Syrian Black Goblet

A fragmentary rim of a black goblet was found in 1984 in association with a foundation trench north of the Phase C bastion in Square

B04. In order to investigate the northern face of the fortifications, Square B04 was extended 0.75 m to the north (called B04 ext.) to allow for excavation (Richard and Boraas 1988: 110; see FIG. 3 for location of Square B04 ext.). For ease of discussion, we have combined the 1984 and 1997 section drawings of the east balk of Square B04 ext. (FIG. 6). As the drawing shows, in 1984 there was a surface (4043A) above a noticeable trench line sloping southward toward the tower/bastion, where it dipped vertically to the founding course (FIG. 7). When excavated, L. 4043 proved to be a dark brown loose backfill-like material, only later recognized to be the fill of a foundation trench when a line became visible in the east balk. The surface covering the foundation trench, renamed L. 4043A, was the earliest external surface to go with the newly constructed northern outer fortifications. The L. 4043 soil layer was excavated in 0.1 m spits across the square from east to west. It was following one such spit when, in brush-up, the supervisor noted two sherds - a “painted” sherd near the balk and a base toward the middle - and arbitrarily changed loci, even though there was no noticeable change in soil. The records report that at the top of L. 4044, a painted sherd was found in Bucket #75 at an elevation of 480.37. As is apparent from the section drawing, L. 4044 is below the line of the foundation trench before it dips vertically to the bottom of the wall (FIG. 6).

The excavation of L. 4044, a dark brown loose type of soil about 0.15 m thick, was terminated when the top of a north-south wall (4047) running under the tower/bastion (at 480.11) began to emerge. In the final field report for Square B04/B04 ext., the supervisor concluded that all three loci (4043, 4044 and 4045) were essentially the same type of backfill material. It is the “painted” sherd (identified at the time as Syrian “caliciform” ware by W. G. Dever) in the foundation trench that factored in the decision to date the fortifications to EB IV originally (as reported in Richard and Boraas 1988: 110).



4. EB III vessels from Khirbat Iskandar: (top) Phase C2; (bottom) Phase C1.

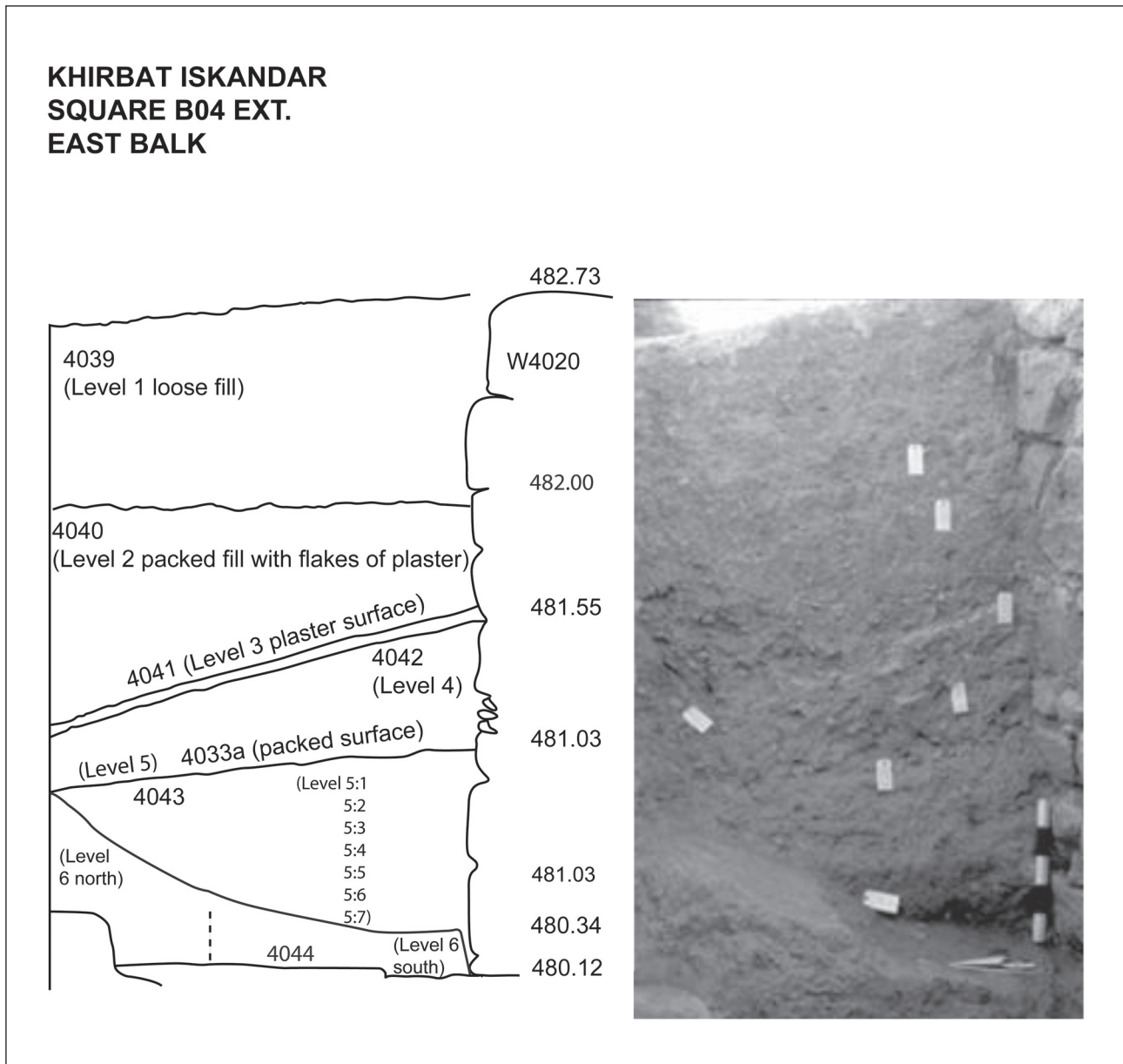


5. Khirbat Iskandar fortifications at north-west corner of site; new wall B04A006 on left.

From the combined information above, it is not possible to pinpoint the location of the goblet more precisely than to say that it was found at the top of L. 4044, near the east balk, at an elevation of 480.37 and closer to the fortification wall than to the north balk. Despite the similarity of the soil in all three loci mentioned, there is a clear foundation trench line proximate to the location of the goblet. If the sherd was close to Wall 4020, it could have been in the foundation trench, although the possibility exists that it was in the fill matrix just below. Nevertheless, on the basis of both stratigraphic and ceramic indicators (and see below), the pre-EB IV date of the sherd is certain. The four diagnostics found in L. 4044, Bucket #75 and assigned a date of EB III were the Syrian “painted” sherd, two bulbous holemouth rims and a base (FIG. 4).

Although work continued to investigate the area north of W. 4020 in 1987 (Richard 1990: 36-39), renewed excavations in 1997 - concerned

to clarify the date of the fortifications - led to a re-examination and fresh cut of the B04 ext. east balk (Richard and Long 2005: 264). The section revealed virtually the same stratigraphic profile, but revealed more clearly that Surface 4043A/Level 5 cornered with and covered the foundation trench (FIG. 6). Trimming below the foundation trench line near the wall confirmed the earlier soil layer L. 4044 (Level 6) which, however, included an ash lens, possibly the same that excavation has discovered elsewhere on site below Phase C levels. The sparse pottery fragments in Level 6 were clearly not EB IV and looked similar to the EB III (L. 4044) assemblage mentioned earlier. What the fresh cut also demonstrated more clearly was that the buildup above Surface 4043A was sealed by a plaster surface (4141). Superimposed above the latter was a mud brick destruction layer (4040) slanting down northward, at the end of which was a patch of pebbles. We have interpreted the section to illustrate the foundation trench for



6. Khirbat Iskandar Square B04 ext. east balk section, drawing and photo.

the founding Phase C2 Settlement (4043), first C2 use surface (4043A) with buildup sealed by Phase C1 plaster surface 4041, superseded by the mud brick destruction and debris layer, which covers the Phase C1 settlement. The elevations for the two exterior surfaces (4043A at 481.00 and 4041 at 481.55) approximate the two major interior occupation surfaces (2121 at 481.20 and 1063 at 481.70).

The stratigraphic evidence renders an EB IV date for the Syrian sherd out of the question, as does the associated pottery. Also out of the question is a date in the last phase of EB III at

the site (the Phase C1 settlement). We date the sherd to the Phase C2 level, given its location close to the bottom of the foundation trench for the northern outer defensive line. On the outside chance that its provenance is the matrix fill below the foundation trench, then the Syrian black goblet may belong to an earlier level of EB III at the site, Phase D.

The presence of the Syrian goblet at Khirbat Iskandar appears, therefore, to be coeval with a transitional stage in the construction history of the EB III fortifications, likely connected with the immediate Phase C2 rebuild and expansion



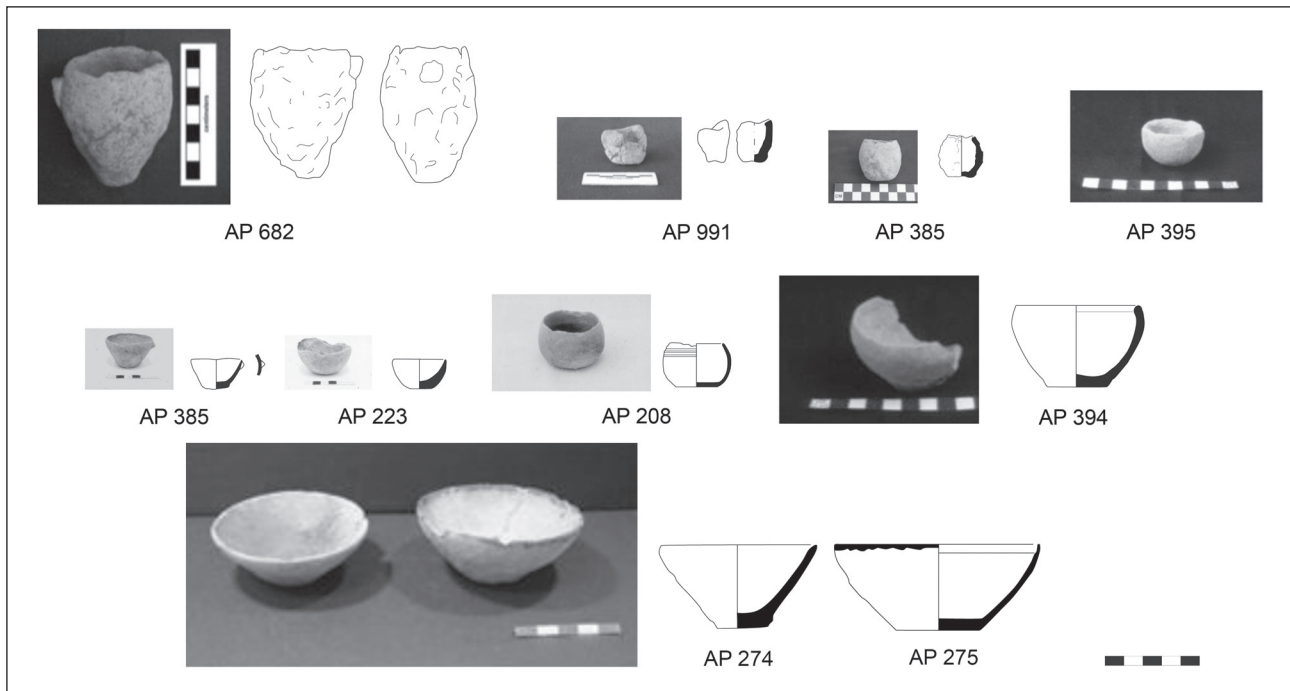
7. Khirbat Iskandar 1984 Square B04 ext. foundation trench: (left) looking east at trench line near bottom of wall; (right) close up of trench line, looking south.

of the fortifications, although possibly slightly earlier and dated to the destruction (ash layer) of the Phase D inner fortifications.

EB IV Cups at Khirbat Iskandar

Relevant to the discussion of the Syrian goblet is the assemblage of miniature and small-sized cups discovered in and near the EB IV storeroom in Phase B at the site (Richard 2013a). A preliminary study showed them to be unusual in that, besides being miniature or miniaturized cups (FIG. 8), many were coarse and rudimentary in form, not the classic lovely rilled EB IV cups known from the period and found also at Khirbat Iskandar mostly in the tombs. For this discussion, it is instructive to

note the similarity between the Syrian goblet and the very simple form of many of the cups. Moreover, the Khirbat Iskandar miniatures bear an uncanny resemblance to the simple miniatures found in what is described as a ceremonial context in Palace G at Ebla, where Mazzoni interprets them as evidencing the introduction of social drinking customs at the site (Mazzoni 1994: fig. 1; here FIG. 10: 7-11). Cogent to the context of the Ebla cups is the setting for the Khirbat Iskandar miniatures: the Phase B storeroom with its unusual constellation of features suggesting a ritualistic context as well (Richard and Long 2007; Richard 2013a, and see below; for an overview of the types of pottery found in the storeroom, see Richard 2000).



8. EB IV miniature and small cups from Khirbat Iskandar in Phase B.

Synchronisms/Chronology

Despite the fact that the chronology of the Early Bronze Age is at present somewhat in flux, TABLE 1 attempts to illustrate the synchronisms between the northern and southern Levant. Both the conventional synchronisms and the absolute dates of the EB III and EB IV of the northern and southern Levant are included. It has long been axiomatic in the field that the “caliciform” in the southern Levant lagged behind that of the more sophisticated urban northern Levant. In fact, Albright mentions that “the southward movement of pottery culture was not rapid enough to synchronize perfectly in the two countries” (Albright 1938: 13). The conventional dates for the Syrian EB IVA (2450-2300BC) and EB IVB (2300-2000BC), and for the EB IV of the southern Levant (2300/2350-2000/1950BC) evince the time lag. In cultural terms, the period of Ebla’s Palace G (EB IVA=Mardikh IIB1) was coeval with the EB III B/C period of the southern Levant. It followed, then, that the onset of EB IV in the south coincided with the post-Palace G level (EB IVB=Mardikh IIB2). Ceramic synchronisms with northern parallels have generally identified

Hama J7-1 and ‘Amuq Phase J with the south and the post-Palace G (Syrian EB IVB) phase (compare Bunimowitz and Greenberg 2004, Table 1).

The same table also illustrates the above archaeological contexts in the northern and southern Levant synchronized in light of newly proposed chronological transitions for the Early Bronze Age in the southern Levant (Regev *et al.* 2012; Höflmayer 2014). The new schema is the result of the modeling of hundreds of ¹⁴C dates, using the Bayesian method in order to arrive at more nuanced assessments of transitions in particular. It is too early for there to have been much scholarly discussion on these new proposals in the widespread scholarly community. However, those working in the southern Levant have been aware for some time of the Early Bronze Age radiometric determinations trending higher than conventional synchronisms with Egyptian chronology would indicate. The dates at Khirbat Iskandar, for example, hover around 2550BC for the beginning of the EB IV (Holdorf 2010b; Regev *et al.* 2012: fig. 11).

The singular ramification of the newly

Table 1. Conventional and newly proposed chronology for the Early Bronze Age and correlations between the northern and southern Levant.

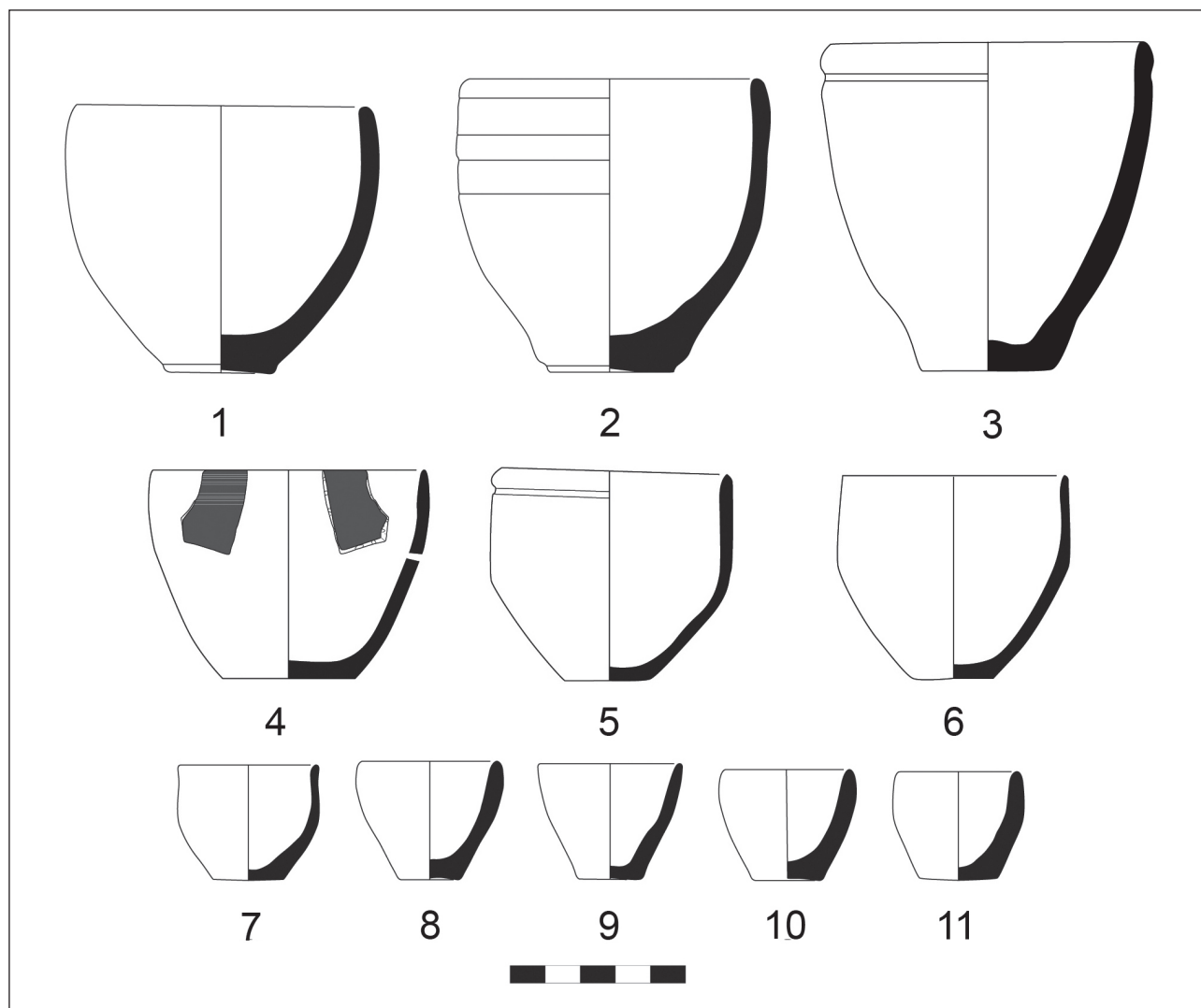
CONVENTIONAL SYNCHRONISMS	
Southern Levant	Syria
EB IIIA 2700-2500 BC	EB III 2600-2450 BC (Mardikh IIIA/'Amuq H/Hama K) EB IIIB [EBIVA1-Pre-Palace Building G2 (Mazzoni)]
EB IIIB 2500-2350 BC	EB IVA 2450-2300 BC (Mardikh IIB1/'Amuq I/Hama J8-5) [EB IVA2 (Palace G – Mardikh IIB1 (Mazzoni))]
Early EB IV 2350-2100 BC	EB IVB 2300-2000 BC (Mardikh IIB2 - Archaic Palace/'Amuq J/Hama J4-1; Black Wheelmade Ware appears in Southern Levant)
Late EB IV 2100-2000/1900 BC	
NEWLY PROPOSED CHRONOLOGICAL SEQUENCES: NEW 14C MODELING	
Southern Levant	Syria
EB III 2950/2910-2570/2520 BC	
EB IIIB 2800-2570/2520 BC	EB III 2600-2500/2450 BC (Mardikh IIIA)
EB IV 2570/2520-2000/1950 BC	EB IVA 2450-2300 BC (Mardikh IIB1) EB IVB 2300-2000 BC (Mardikh IIB2)



9. Pottery from Ebla: (top) miniature cups from Palace G, EB IVA; (bottom) Painted Simple Ware from Area HH, EB IVB (courtesy of the Italian Archaeological Expedition to Ebla).

proposed chronology is that the conventional time lag between the northern and southern Levant has all but disappeared. In other words,

the EB III and EB IV periods of the northern and southern Levant are in sync in this new schema.



10. EB IVA cups from Tomb 3 at Tell Umm el-Marra (nos 1-2), Tell Selenkahiye (no. 3), and Ebla (nos 5-11) (redrawn respectively after: Schwartz *et al.* 2012: fig. 5:4-5; Mazzoni 1994: figs 1:1, 3, 7, 2:1-2); no 4: Syrian black goblet from Khirbat Iskandar.

With regard to the present discussion, the conventional chronology correlates the Khirbat Iskandar Syrian black goblet of Phase C1/D with Palace G, the EB IVA period in Syria (Mardikh IIB1); in the proposed chronology, the Syrian goblet would be contemporaneous with pre-Palace G Syrian EBIII (Mardikh IIA). A middle of the road position would consider the late EB III in the southern Levant as being somewhere close to 2550/2500, roughly correlating with the transition from EB III to EB IVA in Syria and in particular the shift from Mardikh IIA to Mardikh IIB1 (Palace G). We will return to the topic of chronology after a more in-depth study of the Khirbat Iskandar Syrian black goblet.

The Syrian Sherd from Khirbat Iskandar: Typology, Style and Parallels

The Syrian sherd from Khirbat Iskandar (B04 ext.75.01) is a fragment of a cup with straight walls in the upper part of the body and simple, slightly pointed rim. It is covered on both surfaces with a black slip, reserved in a band just below the rim (FIG. 1). Such a surface treatment is not well-attested, and we note only one precise parallel both for the vessel type and the surface treatment from EB IVA levels at Tell Qarqur, along the Orontes river (Dornemann 2003: fig. 208: first from top left). Nevertheless, a large number of typological parallels argues for a Syrian origin and elaboration of the vessel

type; conversely, there are no parallels within the EB II-III ceramic tradition of the southern Levant. Ebla, for example, provides countless typological comparisons for the reconstructed cup from Khirbat Iskandar. As mentioned above, numerous similar small-sized cups with flat base and straight walls in the upper part have been found in the Royal Palace G assemblages (Mazzoni 1994: fig. 1: 1-10; here FIG. 10:5-11), although classified as Plain Simple Ware (unpainted and lacking any surface treatment).

With regard to the origin of the cup within the Early Bronze Age Syrian ceramic tradition, it should be noted that the Ebla goblets in the Royal Palace G phase date from the second half of the 24th century BC, that is, a late phase within the local EB IVA period. For the relative chronology of the Palace G assemblage within the archaeological periodization of northern inland Syria, see Mazzoni (1982: 180, 185, 193-197, 2013: 95-96); for the absolute chronology of the Palace G destruction, see Calcagnile, Quarta, and D'Elia (2013), and Matthiae (2013). Northern inland Syrian EB IVA as a whole, however, spans from about 2500/2450 to 2300BC. For example, the earliest EB IVA phase at Hama (Ingholt 1934: pl. VIII:1), in the Orontes valley, testifies to the presence of the cup type in northern inland

Syria prior to the Palace G horizon. Moreover, examples are attested already at Tell Umm el-Marra Tomb 3, in the Jabbul (Schwartz *et al.* 2012: fig. 5: 4-5; here FIG. 10:1-2), dated to the Syrian EB III period, and may demonstrate a Syrian ancestry of the type as early as the 27th century BC.

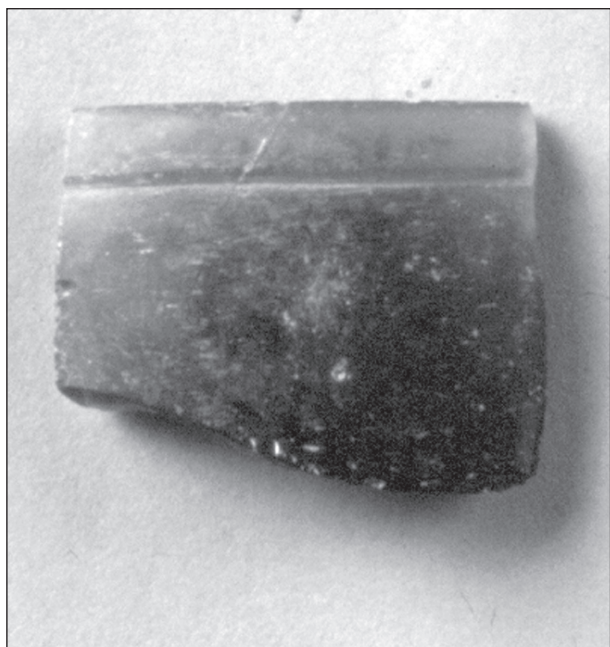
Although many of the Ebla specimens are plain and undecorated, a significant number of these vessels, proportionally, include an incised horizontal line just below the rim (FIG. 10:5). The latter feature is widespread in Syria during EB IVA, even found on the west bank of the Euphrates river at Tell Selenkahiye (Schwartz 2001: pl. 5A.10:l; here FIG. 10:3). Such an incised line is also found on some classes of stone bowls and cups in Syrian EB IVA contexts, possibly providing a prototype for the ceramic cups (F. Pinnock, personal communication). Several exemplars of these stone cups, which compare favorably to the Syrian ceramic cup from Khirbat Iskandar and its parallel from Tall Qarqur, come from the Royal Palace G of Ebla, where they are mostly produced in a gray-greenish alabaster-like translucent stone, all characterized by an incised band below the rim (Pinnock 1981; here FIG. 11). Among such precious vessels, a fragment of an obsidian cup from Ebla (Matthiae *et al.* eds 1995: fig. 40; here



11. Stone bowls from Ebla, Palace G, TM.76.G.149, TM.75.G.705, EB IVA (courtesy of the Italian Archaeological Expedition to Ebla).

FIG. 12) seems to furnish the best prototype for the type of vessels under discussion. Thus, as a working hypothesis, it is plausible to suggest that the quite unusual treatment of the Khirbat Iskandar cup was an attempt to replicate in pottery the precious stone vessels by the use of black slip reserved in a thin band below the rim; that is, the slip could recall the color of the stone, and the reserved band the incision below the rim of the stone cups.

The latter is just a suggestion, yet, the typological parallels detailed above for the Khirbat Iskandar ceramic cup strengthen the Syrian origin posited for the vessel. Note that the selection of parallels from sites in northern inland Syria, such as Tell Mardikh, stems from the large corpus of cups published from these ceramic assemblages, not from petrographic analysis. The provisional results of the latter (detailed below) indicate that it is not unlikely that the Khirbat Iskandar cup could derive from southern Syria or even the Lebanese Beqaa (more on this issue below). What is clear is that the sherd in question does not belong to any of the petrographic types for the Khirbat Iskandar ceramics identified by Goren (2010).



12. Obsidian cup from Ebla, Palace G, TM.85.G.332, EB IVA (courtesy of the Italian Archaeological Expedition to Ebla).

Further, in terms of the manufacturing techniques identified in the EB III pottery production at Khirbat Iskandar, there is no observable comparison with the manufacture of the Syrian sherd. Even fine ware vessels at the site are coarser and exhibit significantly thicker walls than the small black cup (FIG. 4). Though wheel-coiling as a manufacturing technique was already used in this period at Khirbat Iskandar, as well as at many other contemporary southern Levantine sites (see Roux 2009, 2012; Roux and de Miroschedji 2009), the differences between the Syrian sherd and the other EB III vessels from Khirbat Iskandar are striking. The logical conclusion is that they belong, respectively, to different technological *milieus*.

The “Syrian Connection” in the EB III-IV of the Southern Levant

In addition to the foregoing presentation of the stratigraphic evidence and the ceramic typology, and including the results of the petrographic study detailed below, it is necessary to contextualize the Syrian sherd within the general topic of connectivity between the northern and southern Levant during the Early Bronze Age. These factors all combine to infer that the Syrian sherd, though a single and poorly preserved find, has considerable potential to inform us on interrelations within the greater Levant during the 3rd millennium BC. The sherd may be added to a corpus of documented finds.

As recognized previously (Hennessy 1967; Esse 1991), connections between the southern Levant and the regions to the north - Anatolia and Syria - during EB III clearly existed, but are limited either to specific areas of Palestine and Transjordan, or to particular categories of archaeological evidence. With respect to the areas of major connectivity, exemplars of the archaeological evidence concentrate in the northern Levant and the northern regions of Palestine and Transjordan.

An example of this regional emphasis

is the adoption of common models in cult architecture found in the northern Levant (e.g. the in-antis temples of the so-called “*megaron* type” found in the Jezreel valley and in northern Transjordan; see Castel 2010; Sala 2010, with relevant bibliography). The similarities and connections in the ceramic repertoires of those areas likewise witness to connectivity. We may recall, among others, the decorated bone cylinders spread from the Aegean to Anatolia, Syria, the Euphrates and the whole southern Levant (Zarzecky-Peleg 1993; Rahmstorf 2006). Syrian and Lebanese influxes have been noticed also in the southern Levantine glyptic, reaching as far as south-central Transjordan during EB III (e.g. Bāb adh-Dhrā’ and Numayra), but with very few seals - if any - possibly imported into the southern Levant (Ben-Tor 1985; Lapp 1989). Pottery, except for the circulation of Khirbet Kerak Ware proper and local imitations (possibly a phenomenon different from trade and, in any case, subject to debate, see Greenberg and Goren eds. 2009), further restricts connections to the Syro-Lebanese coast and northern Palestine. In fact, these areas seem to show a broadly homogeneous ceramic horizon during EB II-III between the Syro-Lebanese coast and northern Palestine (Greenberg 2002; Échallier and Braemer 2004: 335; Badreshany and Genz 2009). This fact argues not simply for the circulation of pottery vessels, but also for the transfer of ideal models and technological information between the two regions. Syrian pottery, however, is barely attested in the EB III of the southern Levant. This dearth of Syrian vessels highlights the importance of the Khirbat Iskandar black cup: it is different from all the other Syrian or Syrian-inspired materials found in the southern Levant in EB III contexts, and it is found far from the areas of major interaction with Syria. It is, in fact, a unique find, having no parallels within the area.

During the following EB IV of the southern Levant, exchange of pottery between those

areas occurred, but was also limited regionally to southern Syria, Lebanon and the Jezreel valley on the one hand, and southern Syria and north-central Transjordan (the Wādī az-Zarqā’ area) on the other. Possibly, that exchange was connected to socio-economic interactions between open villages and mobile pastoralists (Échallier and Braemer 2004; Braemer 2011; Bunimowitz and Greenberg 2004: 28). It is at that time, as is well known, that a Syrian cultural influx, represented by incised ware, is also noticeable in the pottery repertoires of central and southern Transjordan (Dever 1971, 1980; Prag 1974, 2009, 2011; Richard 1980, 2010b). The so-called Black Wheelmade ware (“painted ware”), a phenomenon of the northern valleys in the southern Levant, is attested in the south by one single vessel found in a tomb near Madaba (Prag, personal communication and reported by Braemer 2002: 15, note 22; Braemer and Échallier 2000: 409, and personal communication to the authors). Furthermore, we must add to these data that Stefania Mazzoni reports the presence of a bowl possibly originating from Transjordan within the EB IVA assemblage of the Ebla Palace G (Mazzoni 1988: 87).

In light of the above, it is important to distinguish the Khirbat Iskandar black goblet from the later, EB IV ceramic tradition called Black Wheelmade Ware, which has been shown conclusively to be “Syrian inspired” rather than Syrian imports, as formerly thought (Bunimowitz and Greenberg 2004, 2006; Bechar 2013, 2015; D’Andrea 2014). In the EB IV period, the Black Wheelmade Ware tradition spread over northern Palestine, southern Lebanon, and southern Syria (FIG. 13). In techno-stylistic aspects, dark gray fabrics usually decorated with a whitish paint characterize this ceramic horizon, whereas, the Khirbat Iskandar goblet consists of a black slip with a reserved band near the lip. Moreover, the Khirbat Iskandar vessel shape has no parallels in the repertoire of goblets found in Black



13. Black Wheelmade Ware vessel from Tomb 989 B2 at Megiddo (accession number EXXIV.2/1; courtesy of the UCL Institute of Archaeology collections).

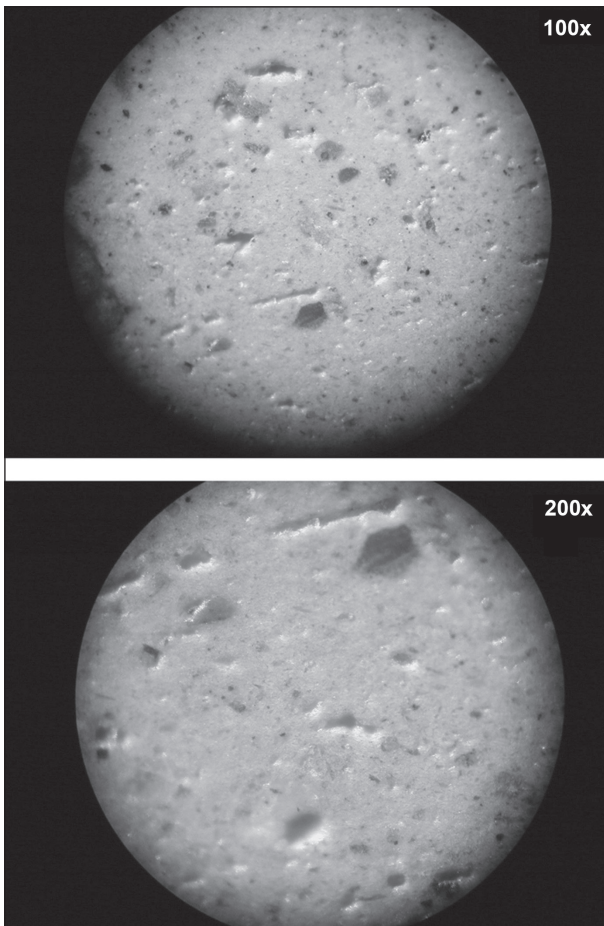
Wheelmade Ware, which, in contrast, usually features a globular body with incurved walls. Moreover, from a stylistic point of view, our cup recalls earlier vessel types among the Plain Simple Ware of the Syrian EB III/EBIVA, as elaborated above. In contradistinction, the northern prototypes re-elaborated in the EB IV Black Wheelmade Ware are generally thought to derive from the Syrian EB IVB Painted Simple Ware goblets in the last quarter of the 3rd millennium BC (FIG. 9). There are, however, strong technological links and even morphological antecedents to be found also in the so-called White-on-Black Ware that spread over northern inland Syria in the local EB IVA (Welton and Cooper 2014: 298; D'Andrea and Vacca 2015: 47-49).

Provisional Petrographic Data and Discussion

While an in-depth and inter-regional comparative study is currently in progress, a preliminary petrographic analysis of the cup

from Khirbat Iskandar has been undertaken. The latter study - microscopic observations of the sherd in thick sections and analysis through Micro-Raman spectroscopy - was carried out at the Department of Chemical Materials Environmental Engineering of Sapienza University of Rome. Led by Maria Laura Santarelli and Morena Iorio, the work concentrated on determining the clay composition of the sherd and the nature of the aggregates used for the fabric. The examination reveals the sherd to be composed of a fine carbonate-kaolin matrix, with carbonate inclusions and a diffused ochre pigmentation due to the presence of iron oxides, such as hematite (FIG. 14). The use of kaolin is a very peculiar element of the sherd from Khirbat Iskandar, indicative of the production of a very fine fabric compared to the standard EB III repertoire of the site.

A comparison with the set of data already available for Khirbat Iskandar from petrographic analyses carried out by Yuval



14. Thick section of the Syrian black goblet from Khirbat Iskandar.

Goren (2010) allowed us to exclude a local origin as the clay composition and inclusions of the Syrian sherd did not match any of the fabric groups identified at the site thus far (re. the geology of the Khirbat Iskandar area, see Cordova and Long 2010: 21-23). A search for parallels from other EBA materials analyzed in Syria, Lebanon and the southern Levant also did not yield results. We are, however, able to put forward some provisional hypotheses on the origin of the cup, based on an analysis of geological areas where kaolin clays occur.

Kaolinite rich clays, derived from the erosion of Lower and Middle Cretaceous formations, occur in several areas of the Levant (Badreshany, personal communication). In Jordan, there are outcrops of kaolinite rich clays in the south (the Aqaba district) and the central Transjordanian plateau (the Baq'a valley and the Ḥisbān area).

As for the former, its exploitation nowadays constitutes a large branch of the modern ceramic industry; with regard to the latter, the extended outcrops of kaolin clays were sources for pottery production during the late 2nd and 1st millennia BC (McGovern 1985:144; McGovern and Brown 1986: 6). Analyses of Early Bronze Age ceramics from the Madaba Plains (Klassen 2009) did not point to the use of kaolin clays in the pottery production of that area during the 3rd millennium BC (confirmed by Klassen and Gloria London, personal communication).

As for Syria, kaolin rich clays (also used in modern times for bricks) are found in several geological formations but, thus far, remain unattested in petrographic studies on Early Bronze Age ceramic assemblages. Kaolin is unrepresented both in the Ebla area (Lazzarini and Colombo 1995; Santarelli 2013) and the Orontes Valley (Maritan *et al.* 2005; Boileau 2006), where exploited clays are rich in calcite and limestone. Kaolinite, however, turned out to be largely present in the area encompassing north and north-eastern Galilee, the Anti-Lebanon and the Jabal al-Shaykh (Mount Hermon). In fact, research has shown that these Lower Cretaceous outcrops provided the clays used to produce fine and very specialized wares, such as Metallic Ware during EB II-III (Greenberg and Porath 1996: 18-19; Greenberg 2002: 48, 53-54; see also Badreshany and Genz 2009: 78; Badreshany 2013) and Black Wheelmade Ware during EB IV (Greenberg and Porath 1996: 23; Bunimowitz and Greenberg 2004: 23). Possibly, the clays ensure that hard-textured vessels are resistant to shrinkage. The southern Syrian outcrops are one possible source of kaolin clays used in the production of the Khirbat Iskandar cup.

The Lebanese Beqaa is also home to kaolinite rich clays. In fact, kaolinite is virtually present in all the soils, mixed with other clay minerals (Sayegh *et al.* 1990; Badreshany 2013: 103-110, fig. 2.9; Badreshany, personal communication). In addition, Badreshany (2013: 110), following

Sayegh *et al.* (1990), reports that kaolinite rich clays spread over an area extending from Tell Hizzin, in the Beqaa, to Labwa, in southern Syria, possibly one of the eligible sources for our EB III cup or at least the possible source of typological “inspiration” or of transmission of stylistic information to the manufacturing location.

Given the outcropping of similar clay sources belonging to Lower and Middle Cretaceous formations in several areas within a broad region, it is difficult, at this stage, to identify a precise location for the source of the kaolinite rich clay utilized to produce the Khirbat Iskandar black goblet. With further petrographic analyses on thin sections and SEM/EDS spectroscopy in progress (carried out by M. L. Santarelli and M. Iorio, Department of Chemical Materials Environmental Engineering of Sapienza University of Rome), we are hopeful that, along with an extensive bibliographical research for parallels, it will be possible to identify elements in the sample associated with the geological fingerprints of given clay sources.

Summary and Conclusions

In this article, a rare find of a fragmentary Syrian black goblet at Khirbat Iskandar offers a glimpse of the early spread of the “caliciform” culture into the southern Levant, pointing to interconnectivity of the northern and southern Levant in the EB III period. A stratigraphic analysis showed the most likely provenance to be the foundation trench for the Phase C fortifications at the north-west corner of the site. In form, the simple goblet - covered in black slip with a reserved band near the rim - heralds the cup-type for the large corpus of miniature cups found in the Phase B storeroom of the following EB IV period. The Khirbat Iskandar EB III goblet parallels well the Syrian EB IVA horizon of cups known from, for example, the Ebla Palace G levels, although the latter were of the Plain Simple Ware (FIG. 9). The closest parallels between the Khirbat Iskandar goblet

and Syrian tradition were, interestingly, simple stone cups with incised line, most from Palace G levels in date, that is, Syrian EB IVA (note that Schaub had originally connected his EB IVA cups with stone prototypes in Egypt [1973: 16]). Additional evidence brought to bear on the non-local origin of the Khirbat Iskandar goblet emerged in a petrographic study that confirmed what the typological study also indicated (*viz.* the vessel with its high kaolin content was not of indigenous manufacture or materials). A search of kaolin outcrops provisionally isolated the southern Syrian or southern Lebanese areas as the probable origin of the cup or its inspiration.

What the unique EB III Khirbat Iskandar goblet offers, along with a corpus of documented finds linking the cultural assemblages of the northern and southern Levant, is an alternative perspective on the relationship between the two regions and, in particular, on the arrival of the “caliciform” tradition in the south. Scores of parallels between the goblet, the Syrian EB III/EB IVA assemblages, and the cup-types of the “storeroom” in the Phase B EB IV settlement at the site all combine to support the view that the transitional EB III/EB IVA Syrian prototypes inspired the EB IV ceramic assemblages of the southern Levant (a phenomenon noted throughout EB II-III). In this regard, either the newly proposed chronology for the Early Bronze Age of the southern Levant or, for the moment, the middle-of-the-road position (2550-2500BC as a transition between Mardikh IIA to IIB1) accommodate the parallels and provenance of the Khirbat Iskandar Syrian goblet. We further contend that the Khirbat Iskandar goblet strengthens the argument for EB III/IV continuity at *tall* sites in Jordan. Likewise, the goblet argues for the possible existence of other routes of connectivity between the northern and southern Levant during the EB III period than those usually acknowledged.

That issue and the extent of such contacts will, hopefully, emerge once more is known

about the EB III material culture at Khirbat Iskandar. One possible explanation for the presence of the goblet and northern contacts is the site's favorable position along the King's Highway. Later known as the Via Regia and documented as a trade route traversing Jordan up to Hazor, and thence to Damascus, Palmyra and the Euphrates river, it is likely that people, ideas and cultural styles were able to circulate and blend even in the Early Bronze Age. This hypothesis is a plausible explanation for the unique Syrian black goblet found at the site.

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