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NEW DATA FOR THE DEFINITION OF THE DFBW HORIZON AND ITS INTERNAL DEVELOPMENTS. The Earliest Phases of the Amuq Sequence Revisited

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ABSTRACT

The recently renewed excavations at the Cilician Neolithic site of Yumuktepe have guaranteed a large baulk of well stratified ceramics the classification of which has resulted into an excellent comparative material for the analysis of the settlement's relations with the contemporary neighbouring societies of the Amuq, the Rouj basin and the site of Ras Shamra, in Syria. The analogies in the pre-Halaf ceramic production of these regions, which were considered by Braidwood and by all scholars after him as part of a single "Syro-Cilician culture", are here pointed out and bring to reconsider the participation of these regions within the single cultural development identified by Braidwood. Analogies and disparities between sites and regions bring to re-define the boundaries of this Horizon.

The classification and comparison of the pottery, with special attention to the Dark Faced Burnished Ware (DFBW), diagnostic precisely of this regional culture, is used to propose a stratigraphic correlation of the sites, slightly divergent from that traditionally used by scholars. With the few radiocarbon dates available, a first attempt to fix these phases into a chronological grid is also made. An examination of the DFBW from these different sites is also aimed at diminishing the confusion that reigns today in its recognition.

This revision of the Amuq sequence in particular, on the basis of more recent data from the other sites, brings to some important considerations on the early Amuq developments and its inter-regional relations.

Keywords: Neolithic, Cilicia, Yumuktepe-Mersin, Amuq, Rouj, Dark Faced Burnished Ware, Syro-Cilician Culture, Pottery, Chronology

INTRODUCTION

Any research in the prehistory of the Near East passes by Robert and Linda Braidwoods' work and writings. With their investigations they touched the east (the Iran-Iraq "hilly flanks" and mountains), the north (the Çayönü project in Anatolia) and the West (the Amuq), in probably one of the broadest field projects (The Joint Prehistoric Project of the OIC). Enormous was the amount of data they collected and its study has,

since the beginning, provided a cultural and stratigraphic grid to which all archaeologists still return to today. Most of the archaeological projects going on at this time in the prehistoric Near East inevitably take their initial data from that of the OIC Prehistoric team and often build their first working hypotheses on the observations made by the Braidwoods.

The Amuq sequence, amongst these, is probably the most complete and the one to which every western site's stratigraphy is compared to, at least for levels from the Neolithic up to the Bronze Age. This is valid also for its earliest Neolithic stages (Phases A and B) that are defined, though, basically on data from one single site, that of Judaidah, even though material from such phases was also found at tell Dhahab[1]. At Judaidah, one single trench reached the Early and Middle Ceramic Neolithic periods, nominated by Braidwood as phases A and B; this was trench Jk3, that had started off as a 10 x 15m excavation, but, by the time it got down to phase B, its size had greatly diminished. It is not said to exactly what size it had reduced, but we do know that the total amount of phase A soil removed, at Judaidah and Dhahab together, was of 41,2 m^3, thus the Judaidah trench must have made up a very small area indeed. Furthermore, the water level had been encountered whilst digging phase B levels at Judaidah, thus making the excavation nearly impossible. Obviously, no architectonic remains have been recognised and levels too change mostly on an arbitrary basis.

Full definition of these phases was given by the Braidwood's in Chicago, after a thorough study of the sampled materials, essentially ceramics in the case of phases A and B[2]. The main production of these levels is the category of ceramics called by Braidwood Dark Faced Burnished Ware (DFBW). It is from these studies that the first definition of a "Dark Faced Burnished Ware Horizon" was given. It identified an area, comprising the Amuq and, more to the north, Cilicia, represented by the site of Yumuktepe (modern Mersin), that was hypothesised as forming a single cultural development, with a somewhat analogous structure to that of the eastern Neolithic culture of Hassuna (fig. 1)[3].

Since then, all archaeologists involved with research on Neolithic communities in the western regions of the Near East, have used the Judaidah sequence as a reference point, for both chronological and cultural interpretations of the settlements by them excavated, since this has effectively been for many years the most complete and solid sequence available. De Contenson, in 1982, proposed a correlation between the early Ras Shamra sequence and that of the Amuq[4], and later Breniquet did the same with the Yumuktepe sequence[5]. Matthers, in analysing the material from the survey of the Qoueiq, a region actually very near to that of the Amuq and with similar material culture, adopted directly the sequence of the latter for its own area[6]. Today still, research on early

[1] Dhahab, though, having no proper stratigraphic subdivision, cannot help as Judaidah in the analysis of the evolution of ceramic production in the region.
[2] Braidwood and Braidwood 1960: 29.
[3] Braidwood and Braidwood 1960: 502.
[4] De Contenson 1982.
[5] Breniquet 1995.
[6] Matthers 1981.

Neolithic sites in the Rouj Basin (Syria) uses the Amuq to discuss its stratigraphic sequence[7].

None of these works though have yet tried to re-read the Judaidah sequence proper, on the basis of the new available data. Results and material collected from these Neolithic phases are now so abundant that I believe such an aim can be pursued. Systematic excavations have in fact been started in the early 90s in the Rouj basin by the university of Tsukuba[8], as well as at Yumuktepe (Mersin[9]) by the universities of Rome and Istanbul[10]. The occasion for looking through this material has been given by my PhD study of the Yumuktepe assemblage relative to these early pre-Halaf phases, work which has also brought me to Chicago, precisely to compare this material with that of the Amuq[11]. Direct comparison between this and the Rouj material was also carried out. The greater completeness of data from the more recent excavations at Yumuktepe and in the Rouj Basin, not only because of more advanced excavation techniques but also because of greater time availability and excavating conditions, has permitted a deeper analysis of the Judaidah material and thus provided a series of interesting and new observations on the site's sequence.

THE DFBW HORIZON – THE TRADITIONAL DEFINITION OF ITS BOUNDARIES

The pre-Halaf occupation of phases A and B, in the Amuq plain, which has been defined by Braidwood exclusively on the basis of its ceramic production, has rare if not absent architectonic remains and the other, non ceramic, finds are so few that little do they tell on these early developments. The Rouj basin and Yumuktepe are much richer in data from this point of view, as more extensive excavations have brought to light various structures and categories of objects. The pre-Halaf, Ceramic Neolithic phase in the Rouj basin is period 2, whilst in Yumuktepe it is represented by levels XXXIII-XX. Changes in the pottery production within these phases are, in all three regions, great, as the following paragraphs will evidence.

Amuq phases A and B are characterised mainly by the presence of DFBW and smaller quantities of Coarse, chaff tempered, Ware. A Red Washed Impressed Ware is also present in both moments, but is a very particular category of pottery, as will be pointed out further on. Later phase B sees the development of two new classes: the Dark Faced Unburnished Ware and the Brittle Painted. Next to these, changes are visible both in the DFBW and in the Coarse Ware, which is often decorated with incisions or red slipped.

Sites in the Rouj basin evidence, for period 2, a very similar composition of their ceramic assemblage, as already pointed out by the Japanese scholars working in that

[7] Miyake 1997 and 2001.
[8] Iwasaki and Nishino 1991; 1992; 1993.
[9] First excavations at this site had been carried out in the 30s by the university of Liverpool under the direction of Garstang. Garstang 1953.
[10] Köroğlu 1998.
[11] Balossi 2002.

area[12]. A Coarse Ware in all similar to that of the Amuq is present and is also incised or red slipped in the later phases of period 2, when the Unburnished Dark Faced Ware develops too. As in the Amuq, the great majority of its production is DFBW. Later phases of the Rouj 2 period, furthermore, see the beginning of painted pottery, some decorations of which are indeed similar to those of the Amuq. Other elements are present in the Rouj assemblage that have not been found in the site excavated by Braidwood, but these, rarer, weigh less upon the general composition of the ceramic production. These strong similarities between the Rouj and Amuq are generally considered as indicative of their participation within a same cultural development.

The coastal, Syrian site of Ras Shamra, fits quite well in this picture, as it too has a great majority of DFBW and a "céramique friable" (coarse and chaff tempered), similar to the Amuq Coarse Ware. Painted ware that develops just before Halaf period, furthermore, has evidence of decorations analogous to those of the above-mentioned sites.

Last of all, Yumuktepe, the other site that Braidwood had considered as part of the Amuq Cultural development, indeed evidences the DFBW, diagnostic of the cultural Horizon. After a first phase composed essentially by DFBW, some mineral (as opposed to vegetal) tempered, light coloured pottery appears. Garstang has never given quantities of these classes of pottery, reason for which it was impossible to know what role this latter pottery had within the assemblage. Certainly, no one has ever assimilated it to the Amuq Coarse Ware. In general, though, the presence of the DFBW was considered diagnostic enough to hypothesise the participation of Yumuktepe within the same cultural horizon of the Amuq, Rouj and Ras Shamra.

Together with these sites, many are considered, by the single excavators or by a larger scientific community, as part of, or as related to, the DFBW Horizon, since dark burnished ware is found during excavation. The nuclear and most important sites are those mentioned above, though, and on these will concentrate this work, through an analytical consideration of the pottery from the different occupation levels of Yumuktepe and a comparison with that of the other mentioned sites, in order to better define these inter-regional relations and to link their stratigraphic sequences. This work will reach a slightly divergent view on the definition of the DFBW boundaries from the most common one cited above.

Amuq A

Judaidah

Amuq A, identifying the first known ceramic development of the Antakya region, has always been correlated to equivalent early stages of other western sites. De Contenson thus made it start with Yumuktepe's level XXXIII and Ras Shamra's VB, and Breniquet did the same for Yumuktepe (tables 1 and 2). Data on the Rouj basin was not yet available to neither of these scholars, but when excavation took place, in the 90s, at Kerkh

[12] The sites of the Rouj basin that have evidenced these levels of occupation are Ain el-Kerkh, el-Kerkh 2, Aray 1, Aray 2 and possibly Abd el-Aziz.

2 and Ain el-Kerkh, it became evident that something was going on in these regions even before Amuq A.

Amuq phase A, corresponding to Judaidah levels Jk3 28-25, is characterised by the presence of essentially one large family of ceramics: that of DFBW, constituting around 80% of the assemblage, and by the Coarse Simple, chaff tempered, Ware. A very small percentage of what Braidwood called Red Washed Impressed is also present.

The DFBW is described to be of dark, but also often of light dull grey-brown and buff tones, and in some cases has a slipped, self-slipped or smoothed surface, even though it is mostly burnished[13]. Shapes are mostly of straight and deep walled bowls, but some necked or hole-mouth jars are also present. Bases are often flat and ledge handles common. Some rims, flat but kind of pointing towards the interior, appear to be particular of this phase, as they will not be so common later on (fig. 2). Last of all, decoration is found on approximately 11% of the sherds and it is always impressed[14]. Impressions are generally of small segments, fingernails or points, repeated, singularly, many times on the body of the vessel (fig.3).

The Washed Impressed Ware is essentially a class of small bowls of DFBW, well burnished and decorated with finger impressions and a red wash.

Matson, who carried out some archaeometric analyses on the Amuq material, has indicated that DFBW from Judaidah could be separated into two compositional groups, that he calls respectively the "*actinolite type paste*" and the "*calcite in red clay*"[15]. Sherds from these two groups, not separated but noticed by the archaeological classification done by the Braidwoods and their colleagues[16], also appear to have distinct wall thickness: generally thinner the first and slightly thicker the second. The latter also appear to be those with the ledge handles (lugs). Colour too separates the groups, as the actinolite type paste is mostly dark, whilst the other group has light brown, buff and red surface colours. The first, furthermore, generally has a better quality burnish. The shapes reconstructed of the second group are exclusively large bowls, whilst amongst the "*actinolite paste*" are also hole-mouth and collared jars.

As I tried to separate, at the OIC, these two groups of pottery, I realised that their stratigraphic distribution was distinct: most of the "*calcite in red clay*" sherds are concentrated in the earliest levels of the Judaidah sequence, precisely in Jk3 28-26, where the other dark burnished sherds are instead fewer. Level 25 has, the opposite way round, many more finer dark burnished sherds than these thicker and light, sandy ones. There is thus, apparently, at Judaidah, a chronological distinction between the "calcite in red clay" group of DFBW and the rest of the dark burnished pottery. What appears to be most strange of all this is probably the fact that Braidwood kept the "*calcite in red clay*" group

[13] Braidwood and Braidwood 1960: 49.
[14] Braidwood and Braidwood 1960: 51.
[15] Matson's notes in Braidwood and Braidwood 1960: 49.
[16] Even though Braidwood didn't believe this to be a strong enough reason for creating two separate classes or families of ceramics, he had noticed that a group of sherds within the DFBW of phase A was rather lighter coloured and had ledge handles, whilst not so was for another group of sherds. The percentage and description he gives for the first of these groups is so near to that given by Matson for the "calcite in red clay" sherds (23% of the DFBW sherds) that it is most probable that these groups coincide. Braidwood and Braidwood 1960: 50.

of sherds together with the DFBW. In fact, the light colour and the presence of slipped surfaces are two characters that one would not expect to find amongst the DFBW.

The Rouj Basin

The first Ceramic Neolithic phase of the Rouj Basin (period 2a) is characterised by the presence of the so-called Kerkh Ware, a highly granular crude, thick pottery (about 10mm), with a sandy/mineral paste and a burnished, or at times smoothed, surface[17]. The paste can also have mica inclusions and a variable texture, from rather granular to fine[18]. Colour is light brown, buff or greyish and burnishing is in general of not too good quality. Shapes of this ware are generally thick hemispherical and globular bowls, at times with flat bases, but in general with a more rounded bottom. Next to this pottery, even though in small quantities, are Coarse Ware and Dark Faced Burnished Ware[19].

The Japanese excavators of the Rouj region rightly pointed out that the absence of the Kerkh Ware from the earliest levels in the Amuq indicated a greater antiquity of Rouj phase 2a in respects to Amuq A (table 3)[20]. The continuity in occupation between Rouj 1 (PPN) and 2a at el-Kerkh 2[21], furthermore, convinced them of this temporal distinction, as, at Judaidah, no pre-pottery levels have been found below phase A, thus leaving open the possibility that preceding phase A might be some ceramic phase undocumented at the site[22]. Neither Yumuktepe, with its long Neolithic sequence, nor Judaidah, would appear to have any testimony of this early phase.

Rouj 2b has a series of innovations in the ceramic production which are all elements classically considered as characterising Amuq A (table 4). The Kerkh Ware, even though it still doesn't disappear, gives way in this phase to the Course Ware and to the category traditionally called DFBW. The first is described as a heavily chaff tempered pottery with no particular surface treatment and moulded probably into large jars and bowls. It appears most obvious that this and the Amuq Coarse Ware are the same thing[23].

DFBW is the most abundant class in this period. Thickness of the walls varies quite a lot, with cases of 2-3mm. Surface colours of the DFBW are not always mentioned in the Japanese reports; Miyake indicates variations from dark brown to reddish brown for Kerkh 2, with a prevalence of dark colours[24] and according to my observations at Ain el Kerkh these are, similarly, brown, reddish-brown and grey, but blacks appear to be nearly absent in this period. The same can be said of DFBW (*actinolite group*) from phase A2 in Judaidah. The deep hemispherical bowl, again as at Judaidah, is the most present and, in some, ledge handles (fig. 2), or decorative motives as bands, "buttons", or half moons, are applied under the rim. Necked jars, mostly with a straight neck, are also seen (fig. 2). Another important character of period 2b DFBW is the high presence of impressed

[17] Iwasaki *et al.* 1995: 147; Tsuneki and Miyake 1996: 114.
[18] Tsuneki and Miyake 1996: 114.
[19] Miyake 1997: 59; Miyake 2003: 120, 126.
[20] Miyake 1997: 55.
[21] Iwasaki and Nishino 1993: 68.
[22] Virgin soil was reached directly under pottery phase A. Braidwood and Braidwood 1960: 46.
[23] Tsuneki and Miyake 1996: 120-121.
[24] Miyake 2003: 122.

decoration, in all similar to that of the Amuq (fig. 3). Particular and worth noting is, finally, the presence of flattened rims, with an internal thickening, analogous to some Amuq A rims (fig. 2).

Yumuktepe

Material from the earliest levels at Yumuktepe is still not very abundant[25], having these levels been excavated only in two very small deep soundings (SA and WA) by the recent excavations and in one single trench (A) by Garstang; furthermore, the aim of the recent soundings was that of collecting botanical material and of reaching virgin soil and not of extensively exposing such early phases[26].

The earliest pottery found, just above virgin soil, has no vegetal inclusions, but is highly sandy in temper with a paste of medium size and homogeneous texture (I will, here, refer to it as Sandy Ware). Fragments are quite thick, ranging from 8 to 15 mm, surface colour is light (cream to pinkish or buff) and generally slipped on the exterior. Most of the time, the slip is also burnished, whilst the inside surface has no slip and is only smoothed. Although whole shapes have not been reconstructed, this ware appears to have been moulded exclusively into flat based bowls. Shapes of this Sandy Ware have not been reconstructed yet, but flat bases are visible.

Next to this, already from level 3 of deep sounding WA, a Dark Faced Burnished Ware (DFbW[27]) of intense brown colours, mineral temper, very thin walls and fine texture, and, of course, burnished surface, appears.

In Yumuktepe levels XXIX-XXVIII the Sandy, slipped Ware of the earliest phases disappears, when DFbW is instead the main and nearly exclusive ceramic production. This early DFbW is very homogeneous, fine or medium-fine in texture, with vessel walls ranging from 3 to 8 mm, but mostly of 6 mm. Surface colours are of various tones of brown or reddish brown, whilst the very dark colours, that will be typical of the later DFbW of the site, are never seen. Very common is also a kind of scarlet or violet-brown. All fragments are carefully burnished, but never polished as will instead be later. Shapes are typically of hole-mouth jars and very deep straight or slightly inverting walled bowls. Rims are mostly plain, but some peculiar characters of the profile are evident, as rims thickened in the interior or abruptly cut (fig. 2). Similar rims have also been mentioned for the Rouj and Amuq. Bases are always round. Some of these sherds have an impressed decoration of semi-moon (fingernails) or straight segments (fig. 3).

No Coarse Ware is present at Yumuktepe, nor Red Washed Impressed Ware, thus underlining some distinction in the ceramic assemblage with that of the Amuq and Rouj. The strong similarities in the DFbW though, do indicate, in my opinion, strong ties.

[25] Balossi 2002.
[26] Caneva 1998: 108.
[27] I will abbreviate this category as DFbW instead of DFBW, in order for it to be distinguished from Braidwood's term and from the generic definition at times used to indicate this class of pottery. DFbW will thus be a very specific class of burnished pottery from Yumuktepe.

Ras Shamra

The coastal site of Ras Shamra too evidences, as has been said, in its earliest levels, strong analogies with the Amuq and Rouj regions. 94-97% of its earliest ceramic VB phase is characterised by DFBW, thus also quantitatively as important as in the Rouj and Amuq assemblages. This dark burnished pottery was decorated by impression, with motifs very similar to those of the early phases of the other two areas, and abundant were lugs, just like in early Judaidah and Ain el-Kerkh. Shapes were generally globular bowls or collared jars, thus again as in the Rouj and Amuq. Next to the DFBW was a "céramique friable", chaff tempered, with quite thick walls and cream or pinkish-yellow surfaces. This pottery appears in all similar to the Coarse Ware of the other two areas.

Relations between Sites in this Early Period

This summary of the earliest ceramic productions from Judaidah, Yumuktepe, the Rouj basin and Ras Shamra have probably well evidenced the existing links between them, as well as the diversities. A first important aspect is the absence, from Yumuktepe, of the Coarse Ware, that characterises instead the Amuq, Rouj and Ras Shamra. This fact might bring to see the Cilician site as slightly distinguished from the more southern communities, but this will be discussed more thoroughly later on.

I believe important, now, a few observations on the Kerkh Ware, the category viewed as the earliest in this regional development and generally considered as testified solely in the Rouj. Matson's description of the group of DFBW that he calls "*calcite in red clay*" seems to resemble, in my opinion, the image of the Kerkh Ware. Paste is sandy, thus courser than that of the rest of the DFBW, surfaces are sometimes slipped or smoothed, colours are lighter, vessel walls are thicker. I feel quite confident to confirm this impression also after having personally seen both these type of sherds, from Judaidah and from the Rouj. Shapes are in both cases mostly those of open or hemispherical bowls, often with flat bases. The only evident difference appears to be the rarity, in Kerkh Ware, of ledge handles, very common amongst the "*calcite in red clay*" DFBW. Impressed decoration in never mentioned for Kerkh Ware, nor does Matson talk about any amongst the "calcite in red clay" group. Furthermore, I have personally seen no decoration on the thicker and lighter coloured sherds from Judaidah A, held at the OIC.

Another important aspect that might confirm this analogy between the Kerkh Ware and the *"calcite in red clay"* DFBW is the stratigraphic distribution of these sherds; it has already been said that the "*calcite in red clay*" DFBW is mostly limited to the earliest levels of the Amuq A sequence, whereas in Jk3 25 it is the other "*actinolite paste*" group that increases strongly. The same happens in the Rouj where Kerkh Ware gives way to the DFBW of period 2b.

The DFBW of Rouj 2b furthermore appears to correspond to the one described as *"actinolite group"* in the Amuq. Colours and shapes are similar, as well as surface treatment and paste

DFBW is found in very high percentages both at Judaidah and in the Rouj (DFBW constitutes 80-90% of the total assemblage)[28]. I believe this to indicate strong relationships between the two regions, that are also confirmed by the presence of Simple Coarse Ware in both areas.

Even though only further research in the Amuq can confirm this, I feel we could hypothesise that the Amuq too, in its earliest phase, had a Kerkh, or similar, Ware (table 4). This would indicate a contemporaneity in the first ceramic occupation testified by both areas and the existence of relations already from that time. It is possible that the earliest levels of Judaidah phase A (Jk3 28-26) were contemporary to Rouj 2a (table 5), whilst the last Phase A level, with higher presence of dark burnished ceramics (Jk3 25), would be the one correlating with Rouj 2b, as proposed by Miyake (table 3). The Judaidah phase A levels would thus have to be separated in two distinct moments, that I here call A1 (corresponding to Jk3 28-26) and A2 (Jk3 25) (table 5). Such an observation would furthermore be in accordance with a similar statement made by Miyake, who suggests that, on the basis of materials from the Rouj site of Tell Aray 2, the Amuq A period could be divided into several sub-phases[29].

A last aspect of the ceramic production of Judaidah still remains partly enigmatic: that of Red Washed Impressed Ware. While quite frequent in Judaidah (phases A2-B), this pottery is never illustrated from the Rouj. The presence of a DFBW with red washed decoration is listed twice, though, in the Rouj reports[30]. The contemporary site of Qminas, to the east of the Rouj Basin, furthermore, has clear evidence of Red Washed Impressed Ware, fact this which would make one believe it highly improbable that the Rouj didn't have any.

Moving now to Yumuktepe, I would centre the attention on the Sandy Ware found in the earliest and deepest trenches (WA-SA). Many of the attributes of this category of ceramics seem to remind the "*calcite in red clay*" group recognised by Matson in Amuq A, as its colour, paste, thickness, and possibly its shape (flat bases). Even though a greater sample of this ware is needed to be able to state with certainty the analogies with the Amuq class of pottery, the fact that these two sites show common trends in the ceramics of other phases too, does indicate that there is a good chance that this Sandy Ware and the "*calcite red clay*" group of sherds belong to a same or similar category of pottery. This would, obviously, mean that the Yumuktepe Sandy Ware and the Rouj Kerkh Ware should be considered analogous ceramic productions too. Correlation between the DFbW that appears in trench SA and Matson's "*actinolite paste*" group from Judaidah, furthermore, is quite evident. Again, the stratigraphic distribution of these two categories, with the Sandy Ware earlier on, that gives way, later, to the DFbW, could well confirm these correlations

Finds are unfortunately very few for these early levels in Yumuktepe and it is probably too early to infer a sure analogy between the Sandy Ware and the Kerkh Ware,

[28] Braidwood and Braidwood 1960: 49; Tsuneki and Miyake 1996: 118; Tsuneki *et al.* 1998: 12.
[29] Miyake 2003: 119.
[30] Tsuneki *et al.* 1998: 12 ; Tsuneki 2003: 127 note 8.

but I believe we should keep in mind this possible correspondence. Was this correct, stratigraphically, it would mean that Yumuktepe levels XXXIII-XXX, Amuq A1 and Rouj phase 2a were all contemporary (table 5), as well as Yumuktepe XXIX-XXVIII, Amuq A2 and Rouj 2b.

In Yumuktepe levels XXIX-XXVIII, Coarse Ware does not appear. This is the first clue, in my opinion, of the separation of Yumuktepe from the Syrian ceramic tradition, fact this that will be even more evident in the following levels. Towards the end of the second phase of ceramic development identified (Yumuktepe XXVII), a very particular Pinkish Ware starts to appear, at Yumuktepe, that will take the site yet further away from the southern tradition.

Turning to the Syrian coastal site of Ras Shamra, on the basis of what has been said above, it can be concluded with a good degree of confidence that this site was participating, since its phase VB, within the same regional developments and relationships of which were part the Amuq and the Rouj, and, probably with minor intensity and varied modes, Yumuktepe. The stratigraphic correlation between Ras Shamra VB and the Amuq though, might not be that proposed by de Contenson (table 1); having I hypothesised for the first part of the Amuq A the presence of a Kerkh Ware or similar pottery and thus having moved the beginning of the Amuq sequence backwards to Rouj 2a, the Ras Shamra sequence would have to start sometime later, possibly with Rouj 2b and Amuq A2 (table 5). There is in fact, for the moment, no trace in Ras Shamra of a sandy, slipped and thick pottery that might resemble the Kerkh Ware. Were further investigations to identify a similar ceramic category, we would then have to admit an early phase for Ras Shamra too.

Yumuktepe XXVII-XXVI - Rouj 2c

Yumuktepe

Yumuktepe levels XXVII-XXVI are those most extensively excavated both by Garstang and by the new Italian investigations[31]. Important data on the architecture of the settlement as well as a very large quantity of ceramics have been retrieved. The ceramic categories distinguished in these levels are five, indicating an increase in variety and complexity of the production[32]. DFbW is no longer the only, nor the most common category present. The Pinkish Ware (class 1) nominated above becomes, here, the most abundant category. This is mineral in temper, of varying texture and wall thickness (3-9 mm), mostly with no surface treatment and generally a dark core. A second group of this pinkish-orange coloured ware is distinguished from this one (class 2), as its surface is smoothed, texture always finer and walls slightly thicker (5-12 mm). These two classes together sum up to 80% of the assemblage[33].

[31] Caneva 1999: 2.
[32] Balossi in print.
[33] The total number of sherds studied for these two levels is 21747, for a total weight of 218,022 kg.

Most interesting in this phase though, is the dark ware, that can be separated into 3 well distinct categories. One is basically the continuation of the DFbW present in the preceding levels (class 3), although with some technological and morphological changes, another is a Dark Faced unburnished Ware (class 4 - DFuW), in all similar to that described by Braidwood for the Amuq phase B, and the third is a Very Fine Dark Faced burnished Ware (class 5) (table 6). This latter class is formed by sherds of an extremely fine texture, so fine that even an observation at the microscope can't distinguish any of the paste components, and with very thin vessel walls, ranging from 2 to maximum 6 mm[34]. Surfaces are black or dark grey and sometimes, but more rarely, of light grey, and burnished. In around 60% of the cases these are actually well polished and shiny.

These three categories of dark ceramics are well distinguishable, not only from their technical characters, but also from their shapes. In fact, the classical (classical because the nearest to Braidwood's description of the category) DFbW (class 3) is moulded mostly into deep bowls and some hole-mouth jars, the Unburnished Dark Ware (class 4) is mostly characterised by hole-mouth jars, many of them with strongly inverting walls, and the last group of Very Fine Burnished pottery (class 5) is identified by small plates, cups and bowls, that never exceed a diameter of 16 cm.

This phase of the Yumuktepe ceramics, in conclusion, sees a major development and increased complexity of the dark burnished pottery and the birth of a new and very important category of ceramics, all this in absence of painted decoration. This is important to be pointed out since the main innovation at Judaidah after Amuq A is instead probably the introduction of painted ware (table 4 and fig. 4).

Rouj

In the Rouj too, as in Yumuktepe, there is a period, 2c, in which painted ceramics are still not present, and in which DFBW continues to develop quite importantly.

Coarse Ware, already present in Rouj 2b, has now, at times, an incised decoration or a red slip. 2c is the period in which Husking trays appear in the Rouj sites and the phase in which White Plastered sherds and White Ware are found (table 4)[35]. The former is essentially formed by Coarse Ware or DFBW sherds totally covered with lime plaster. The latter is well known at coastal Neolithic sites as Byblos and Sukas or in the Beqa'a.

The Rouj DFBW in period 2c sees quite important modifications, amongst which that of shapes are the most visible. Sinuous and carinated profiles become common, together with high necked jars, and flaring profiles. Shallow, tray-like bowls are evident amongst the assemblage (fig. 5)[36]. That of shape is the only major distinction between the Yumuktepe DFW (comprehensive of all the 3 dark classes) and that of Judaidah and the Rouj. In fact, jars in the Cilician site were always moulded out of the Pinkish Ware of classes 1 and 2. In the 2 Syrian sites, as DFBW constituted the great majority of the ceramic assemblage, clearly all shapes were moulded from this ware. It seems to me that colours of the period 2c DFBW, as visible in the middle layers in Yumuktepe, see a

[34] Balossi *et al.* in print.
[35] Tsuneki *et al.* 1998: 16-18; Tsuneki *et al.* 1997: 20.
[36] Tsuneki *et al.* 2000: 7.

strong increase in dark tones, whilst the reddish and light browns often noticed in the preceding period diminish; this is a personal observation made on a sample of Ain el-Kerkh material and has yet no confirmation from the published data. The fact that a similar observation has been made both at Yumuktepe and, as will be seen, in the Amuq, could be somewhat taken as a guarantee of its validity in the Rouj too, though. From a technological point of view, paste appears to be generally finer and more homogeneous and burnish of better quality. Highly polished and thin walled vessels are nominated as characterising this phase and might recall the very fine ware that develops in levels XXVII-XXVI at Yumuktepe (class 5)[37]. Impressed decoration declines strongly and so does the applied one, but pattern burnish appears for the first time. Amongst the few examples of impressed decoration are rocker impressions, as will be seen in Judaidah B (fig. 3) too[38].

Ras Shamra

Plastered Ware, Husking Trays and White Ware are absent from Yumuktepe, but Ras Shamra, nearer to the Syrian communities, evidences presence of all three groups. In phase VA, White Ware, Plastered sherds and Husking trays are found together[39].

DFBW of Ras Shamra VA, which constitutes a little more than 70% of the total ceramic assemblage at the site in that period, has darker colours compared to those of the earlier VB period, burnish is very carefully carried out, impressed decorations have strongly diminished from phase VB, whilst pattern burnish decoration first appears[40]. These are the same characters that seem to develop in the DFBW of Rouj 2c (table 6). Furthermore, a class of finer and more well burnished DFBW vessels has been noticed by Courtois in Ras Shamra VA, which would correspond to Yumuktepe class 5 and the finer vessels of Rouj 2c[41].

Judaidah ?

The main innovation of the Amuq B pottery is probably the introduction of painted ware (table 4 and fig. 4). Apparently this only appears here, as we have seen that it is not yet present in the levels following the earliest phases, at any of the sites examined above. Furthermore, elements as White Ware, Plastered Ware and Husking trays, found in the Rouj and at Ras Shamra in these phases, are instead absent from the Amuq region in phase B[42].

DFBW from Judaidah sees a great deal of changes, that do go in a similar direction as those noted in the above sites, with the appearance of a fine ware and an unburnished one, as well as with the development of pattern burnish decoration and rocker impression. Coarse Ware, furthermore, as in the Rouj, is now also decorated by

[37] Tsuneki *et al.* 1998: 14.
[38] Tsuneki *et al.* 1998: 16.
[39] De Contenson 1992: 193, 150; De Contenson 1982: 95.
[40] De Contenson 1982: 95; De Contenson 1977: 12.
[41] Courtois 1992: 216.
[42] One single fragment of a possible husking tray has been found in Tell Kurdu, dated to phase C.

incision or with a red slip. These elements of the pottery assemblage, though, will also characterise a later phase of the Rouj and Yumuktepe ceramics, and will thus be reported of later.

Relations between Sites in the Rouj 2c Period

The absence of painted pottery from the Rouj and Ras Shamra is certainly puzzling, as the previous comparisons had shown that these sites had an assemblage in all similar, and, on this basis, their participation within the same cultural developments had been confirmed. At the same time, curious is the absence of White Ware, Plastered Ware and Husking trays from the Amuq, considering that these are present in a site to its west (Ras Shamra) and one to its east (Ain el Kerkh, in the Rouj).

The comparison of the dark wares of Rouj 2c, Yumuktepe XXVII-XXVI and Ras Shamra VA seem to indicate analogous developments and thus argue for a contemporaneity of these phases and existing relations between the sites. DFbW (class 3) of Yumuktepe levels XXVII-XXVI in fact appears to develop those same characters visible in Ras Shamra VA and in Rouj 2c (table 6). Colours are darker (mostly grey or black) and pattern burnish, even though rare, is seen.

Yumuktepe, though, has now strongly independent characters in its ceramic production. It is in these levels that the Pinkish Ware and Fine Pinkish Ware develop at Yumuktepe, thus definitely underlining the separate path that this site was beginning to follow. A further aspect that appears to differentiate Yumuktepe from the other sites in this phase is the appearance of the unburnished category of dark ware already in these levels (class 4); both at Ras Shamra and in the Rouj, this appears only with the levels of painted ware[43].

Having demonstrated Ras Shamra's participation within the regional developments of the Amuq and Rouj, the absence, from Judaidah, of various of the Rouj 2c and Ras Shamra VA diagnostic ceramic characters is, in my opinion, to be interpreted as a gap in the Judaidah sequence (table 5). The absence, in Judaidah B, of White Ware, Plastered sherds, and Husking Trays, but also the presence of painted ware, that in the other sites develops later, evidences, in my view, the fact that Rouj 2c and Ras Shamra VA represent a phase absent at Judaidah and earlier than Amuq B[44].

The fact that the DFBW of Amuq B appears to be, as will be illustrated below, similar to that of the Rouj 2c and Yumuktepe XXVII-XXVI levels, which I am here dating as earlier, is no obstacle to this hypothesis, as it will be seen further on that in these two areas no major changes evolve, in the subsequent phases (those that should thus be contemporary to Amuq B), in the DFBW/DFbW (table 6).

The absence from Yumuktepe of the same elements (White Ware, Plastered Ware, Husking Trays) (table 4) is probably to be explained, differently to Judaidah, by its major

[43] This distinction might partly be due to the subjectivity in the recognition of burnished surfaces and their distinction from simply smoothed ones.

[44] The presence of the single Husking tray fragment (Braidwood and Braidwood 1960: fig. 111, 10) from Tell Kurdu phase C furthermore testifies for the participation of this area within the Hassuna developments, of which Husking trays are one of the diagnostic elements.

distance and by the partial distinction of its assemblage, already testified by other classes (Pinkish Ware).

Even though Yumuktepe does not share the totality of its pottery assemblage with the south, the presence of dark faced and burnished pottery, with analogous characters to those of the Rouj phase 2c (table 6), does testify that the southern dark mineral tempered tradition continues to include this site.

Miyake's interpretation of the Rouj 2c correlation with the Amuq sequence is quite different to the one I am proposing here. He sees the 2c period as partly overlapping Amuq A (table 3), I believe partly because of some analogies with the Dhahab material[45]. Dhahab was in fact dated by Braidwood to phase A, solely on the basis of its ceramic assemblage (the site has not stratigraphic subdivisions). Rocker impression is illustrated by Braidwood amongst the Tell Dhahab pottery and with it other complex impressed motives. It has been seen though that in the Rouj rocker impression and such motives are illustrated only from Rouj phase 2c. In Yumuktepe, the new Italian excavations have not evidenced this kind of decoration in the earliest levels and Judaidah only has it in phase B. I would take this to mean that Dhahab must have had a late occupation too and not that this pottery is to be dated to Amuq A. Furthermore, I have seen Dark Faced Unburnished Ware from Dhahab in the OIC collection, thus confirming a later phase at the site. What I am here proposing is the continuation of occupation of Dhahab after phase A, thus the material analogous to that of Rouj 2c found at the site would not pre-date the Rouj phase to Amuq A, but, the opposite way round, the later Dhahab occupation would be contemporary to Rouj 2c[46].

Miyake then correlates the rest of the Rouj 2c to Amuq B[47]. Here too, as explained above, I propose a different interpretation: I believe that, the absence from the Amuq (but presence at Ras Shamra) of various elements characterising the Rouj phase (Husking Trays, White Ware, plastered ware) and vice versa the presence of characters absent in the Rouj (painted pottery, DFuW) (table 4) is a major obstacle in correlating these phases. Rouj 2c, as I have proposed above, would, in my view, correspond to a phase between Amuq A and B. The analysis of the later phases will better confirm this.

Lastly, Miyake sees a gap in the Rouj sequence between 2c and 2d, apparently because of the absence of Red Washed Impressed Ware[48]. I wonder if simply this absence is sufficient to identify a missing phase in the sequence, especially since in the Amuq this particular category is found throughout phases A and B, thus not only in a moment contemporary to the end of Rouj 2c.

[45] Miyake 1997: 37, 59.
[46] Miyake 2003: note 7. He too admits that Dhahab might have had a late occupation, contemporary to Rouj 2c, because of its advanced impressed decorations, but for this reason he post-dates the end of the whole phase of Amuq A.
[47] Miyake 2001.
[48] Miyake 2003: 127.

Amuq B and the FMR

Judaidah B

Some of the innovations of Amuq B have already been anticipated above, as the beginning of painted ware and of the Unburnished Dark Ware, and the incised or red slipped decoration on the Coarse Ware. The second is in all similar to the DFBW, except for the surface, that is simply smoothed. The painted ceramics (Brittle Painted) are mineral tempered, medium to coarse in texture and of light creamy-buff or brown surface colours. The surface is generally burnished or smoothed before applying the painted motives, that are red-orange, purple-red or black (fig. 4).

It has been said that the changes in the DFBW somehow reminded those of the Rouj, Yumuktepe and Ras Shamra. In this phase, technological changes in the DFBW are in fact quite similar to those described for Rouj 2c, Yumuktepe XXVII-XXVI and Ras Shamra VA. New shapes, as very shallow, tray-like bowls[49], and bowls with an abrupt carination near the rim, appear. High straight collared jars become common too, even though the most frequent shape still remains the hemispherical bowl (fig. 5). Rare examples of shapes with a strainer at the opening are also seen. The most common surface colour is grey, but blacks and, on the contrary, lighter colours, are also present. Very interesting amongst the DFBW of phase B is also the evident presence of very fine sherds, 2-4mm thick, and mostly very well burnished or polished. These recall strongly the Very Fine DfbW of Yumuktepe (class 5) and I would thus suggest they be separated from the rest of the Judaidah DFBW. Another major distinction with the Amuq A DFBW is that of decoration: impressed decoration is still present and quite common, but at times it is made before burnishing the pot, thus the latter is given in bands, in order to spare the decorated parts (fig. 3). This creates a pleasant composition of shiny and non-shiny parts on the body of the vessel. A novelty of the decoration is also, at Judaidah, rocker impression, formed by moving an instrument (fork, shell or other) along the surface of the pot (fig. 3)[50]. Pattern burnish, thus basically the creation of decorative techniques through the burnishing, is the other important character of phase B DFBW.

Judaidah FMR

The two Judaidah levels Jk2 23 and 22, covering Jk3 24 and forming the FMR, have had a very singular destiny in the literature. Even though interpreted by the Braidwoods as mixed and contaminated levels, due to the presence of a mixture of earlier material, together with Halaf and Ubaid ceramics, the exclusive character of some of their finds has determined the fact that these, instead of being rejected from the analyses, have acquired a position of their own in all chrono-stratigraphic reconstructions of the Amuq sequence. In these 2 levels, DFBW of phase A, B and also C type is found, together with the ceramic classes characterising the preceding and following levels. Be it a chance or

[49] Braidwood and Braidwood 1960: 9-11.

[50] Actually, one single sherd with rocker impressed decoration is illustrated from Judaidah phase A (Braidwood and Braidwood 1960: Fig. 28,12), but, apart from being the only example that I have noticed in going through all the sherds stored at the OIC, it is a Red Washed Impressed.

not, as I reordered and separated the sherds from levels 23 and 22 at the Oriental Institute in Chicago, I realised that all the later material, that of Halaf and Ubaid, was labelled as found in level 22. Apparently, according to what is held, today, at the OIC, only (or, mostly) level 22 has contaminated materials, whilst level 23 appears to have quite coherent ceramics.

All level 23 categories of pottery are present in phase B, even though some differences have been underlined by different authors. Technically DFBW is exactly that of phase B. Necked jars, bowls and low tray-like shapes are typical, but a couple of particular and new shapes are noticed too. This is the case of a tripod bowl, of Cream bowl profiles (on DFBW) and of strongly carinated shapes (fig. 6). All three are frequent, furthermore, in the Amuq C phase. Some of these shapes and more simple and common ones too, have, in this level, a quite complex and well-made pattern burnish (fig. 6). It is these elements that, as will be seen, have brought Miyake and the Japanese team to see Amuq FMR as correlating with Rouj 2d (table 3).

Another distinction, and probably a more valid one, between the Amuq B DFBW and some sherds found in level 23 is a strong increase in the use of a slip, not only black, but also red, under the burnish, and the general tendency to light colours[51]. Very thick vessels are also seen (table 6). These too are all characters that will be proper of the Amuq C DFBW[52].

Basically thus, level Jk3 23 ceramics appear to have many Phase B characters, together with some elements that will be common in Phase C. Differently to what happened to level 22, which had a mixture of material from all later periods, this might indicate that level 23 was contaminated only by phase C. There is another possible interpretation, which would explain the presence of this limited Phase C material in a phase B context. Level 23 might in fact be seen as representing a slightly more advanced moment than phase B, but preceding C. Level 23 would thus be a good, non contaminated context, in which Halaf period elements start developing in some ceramics, as the result of the first contacts with Early Halaf culture from the east. It would certainly be of no surprise to scholars to imagine such a moment as one of gradual change, in which only a few things change at a time.

Whilst the fact that the sherds from level Jk3 23, kept at the OIC, have no clear evidence of contamination might simply be a chance, the considerations made above on the basis of the ceramics found in this level, do seem to introduce an interesting interpretation of the later pre-Halaf occupation at the site of Judaidah. It is no secret to anyone, as Braidwood had already realised, that between Amuq B and C phases there is clearly something missing. This level might start filling the gap. In proposing that level 23 is slightly later than phase B, I will, in this work, refer to it as to phase B2 (thus B1 will be the proper Amuq phase B). Such an explanation would furthermore finally justify the use that most scholars make of the FMR in constructing stratigraphic sequences for these regions.

[51] Braidwood and Braidwood 1960: 106.
[52] Braidwood and Braidwood 1960: 138.

Rouj 2d

Rouj 2d is the phase in which painted ceramics finally appear and develop in the Rouj basin. Together with these, Dark Faced Unburnished Ware (DFuW) comes to light. This is in all similar to the DFBW, except for the surface, that is simply smoothed, thus like at Judaidah and Yumuktepe. Coarse Ware has decreased compared to the preceding period, but it is still present. It is still, furthermore, also red slipped or incised (table 4). Judaidah phase B is characterised exactly by the same elements: Painted Ware, DFuW and incised or red slipped decoration on the Coarse Ware (table 4)[53].

In the Rouj the painted pottery is classified as Cream Ware, a pottery with mineral inclusions, generally fine in texture, a buff or cream surface colour and a fully oxidised core. Slipped or burnished, many examples found have a painted decoration, that in some cases reminds the motives of the Brittle painted in Judaidah (fig. 4). Not only thus both sites have painted decoration, but stylistic similarities are visible too. The Fine Painted Ware found in the Rouj in this period has instead elements that mostly recall the eastern painted ceramics (Halaf). These are not found in Amuq B1, but they are in B2.

White and plastered wares disappear in Rouj 2d, and, as already mentioned, these have never been found in the Amuq. Many are thus the elements that link Rouj 2d to Amuq B.

The comparison with the Rouj 2d DFBW is somewhat more complicated as this shows quite a variety of attributes. Many vessels are very similar to those of the Rouj 2c, with low tray-like shapes or sinuous profiles and distinction between the period 2c and 2d DFBW is at times problematic[54]; as had been anticipated, in these two phases, DFBW has very similar characters. Carinated shapes seem to increase and necked jars are common, thus as noticed in the Amuq B (fig. 5). A particular shape, quite frequent in period 2d at Ain el-Kerkh is that of necked jars with a strainer at the opening; a few examples are also illustrated by Braidwood from Judaidah phase B (fig. 6)[55]. What appear thus are small novelties in shapes that had not been present in the Rouj 2c.

From my personal observation I also had the impression that in the Rouj 2d light browns and red colours were more abundant than before. In Judaidah phase B the colours of the DFBW tend to be darker than in phase A, often black or grey, but light browns and red colours are present as well. Since the preceding phase in Judaidah is probably missing, we do not know whether colours are now darker or lighter, but the presence of some red and light brown sherds certainly finds good parallels in the Rouj 2d samples.

There are other elements characterising the Rouj 2d DFBW though, that still need to be considered. There are some thick vessels very similar to those that will be found in Amuq C and that have been mentioned from Judaidah phase B2 (FMR level 23), with a more careless burnish and a non homogeneous colour of the surface, changing from

[53] Actually, if we hypothesise the gap between phases A and B, we cannot exclude that DFuW, here as in Yumuktepe, was of earlier development. Furthermore, the fact that Coarse Ware, simple, incised and red slipped, is found in the Rouj from period 2c probably indicates that its production was not a novelty of Judaidah in phase B.

[54] Tsuneki *et al.* 2000: 7-9.

[55] Braidwood and Braidwood 1960: figs. 47,19 and 51,4.

brown to yellowish[56]. Shapes, as was in the other sites, are again the most indicative feature of change: carinated profiles develop more strongly and typical Halaf Cream bowl shapes are visible amongst the DFBW (figs. 5-6). Jars with flaring necks and everted rims are common and shallow plate like bowls are still found (table 6). A new and distinct shape is that of pedestal bowls on a tripod base (fig. 6), as the ones noticed in Judaidah B2. Impressed decoration on the DFBW is by now absent, but pattern burnish has developed strongly, reaching very complex and composite designs, as diagonal and triangular intersecting lines, zigzags, criss-crosses and sequences of triangles (fig. 6).

Yumuktepe XXV-XXIV

At Yumuktepe, it is in level XXV that painted ceramics appear and evidence strong similarity in motives with those of the Amuq (fig. 4).

Data from the Yumuktepe levels in which Garstang and Caneva have found painted pottery together with silos and animal enclosures (XXV-XXIV) is not as abundant as that of the earlier levels, as the recent excavations have only reached this phase in a very small portion of the large central EBA trench[57]. The characters of these first painted ceramics though are quite evident: light coloured, always mineral in temper, at times quite sandy and with a medium sized, but homogeneous, texture, whilst in other cases paste is finer and more compact, most are burnished as well as painted. The more sandy ones instead have no treatment and thus result into quite rough surfaces. Decoration, mostly in red, scarlet or brown, is geometric with various kinds of zigzags, horizontal and vertical bands or criss-crosses, as illustrated by Garstang in his 1953 report (fig. 4)[58]. Similarities thus, as well as with the motives, are visible in the technological features of this category with that of the Amuq B.

Most interesting of this phase in Yumuktepe levels XXV-XXIV is the dark ware, and precisely the fact that next to this painted ware all the three categories of dark wares are still present, thus the classical DFbW (class 3), the unburnished one (class 4) and the Very Fine Burnished Ware (class 5); these appear to have the same characters as before. The only possible distinction with the earlier phases that has been noted is in the presence of some carinated bowl profiles and flat bases, unknown before, but common in the later levels XXIII-XX. Exactly the same situation is visible, as has been underlined above, from Rouj 2d, where differences with 2c were minimal.

Yumuktepe XXIII-XX

Painted ceramics strongly develop and increase in these later levels. Pastes of such vessels become very fine, surface colours are brown, black, red or buff. Painted decoration, mostly on necked jars, but also on bowls and other profiles, is generally of curving lines, zigzags and variously repeated horizontal or vertical lines[59]. Some of these decorations remind Halaf motives. These characters are very similar to those of some

[56] Braidwood 1960: 138; Tsuneki *et al.* 1999: 8; personal observation.
[57] Caneva 1999: 7.
[58] Garstang 1953: 57, 61.
[59] Garstang 1953: figs. 52-58.

finer Rouj 2d and Amuq B2 painted ceramics, thus possibly confirming the correlations with this phase too.

This pottery takes over DFbW, which, apart from evidencing major technical and morphologic changes, decreases quite rapidly. Changes in the DFbW appear to be quite substantial in this period. First of all, the Very Fine DFbW (class 5) disappears. A new group of ceramics is found, technologically similar to that one and probably somehow derived from it, with surfaces of a homogeneous light grey colour and thin paste texture, but thick walls (about 8 mm). Surfaces are burnished but never polished and profiles are quite distinct from those seen until now. Flat bases are visible, and bowls with a flaring profile are seen, slightly resembling flowerpots.

The classical DFbW (class 3) too undergoes several changes in this period providing interesting observations for our inter-regional comparisons. First of all there is a strong increase in vessels of red and light colours. Vessel walls tend to become thicker and the carinated profiles and flat bases first noticed in levels XXV-XXIV become common. Ledge handles or lugs are at times visible on this pottery. A typical burnished ware of this period is a thick and deep bowl, with straight, but outward oriented walls and a round rim, and brown colour. The surface colour is not homogeneous though, but slightly lighter or brighter at the rim and shading to a yellowish brown or a reddish brown. This is exactly the same modification that some DFBW sherds have in the Rouj 2d and Amuq B2 period, and that will characterise Amuq C (Halaf period) dark wares too.

Yumuktepe levels XXIII-XX, immediately preceding Halaf, not only have painted motives on their ceramics, that recall Halaf traditions, but also shapes of DFbW vessels, as the "cream bowls", carinated profiles and low tray-like pots, that indicate for this site too that a move towards the modifications of mature Halaf had started.

Ras Shamra – beginning of IVC

Having mentioned, earlier, Ras Shamra and having shown how similar its pottery production appears to be with that of the Amuq and Rouj regions, I believe it useful to continue this comparison even for this later phase. The moment following VA has been indicated by de Contenson as Halaf (table 1), fact which would mean that at Ras Shamra there was no phase corresponding to Rouj 2d and to the Amuq B phase. Miyake, in fact, in his correlation table (table 3) hypothesises a gap between VA and IVC, contemporary to Rouj 2d.

A careful observation of the stratigraphic subdivision of the site though identifies a level, 15 cm thick, right at the bottom of level IVC, that has painted pottery, very different to the one that will characterise the Halaf period, and that de Contenson correlates with the Yumuktepe painted ceramics of levels XXV-XXIV ("céramique orange à décor peint matt")[60]. The similarity with Yumuktepe and also with some Painted Brittle Ware from Judaidah is indeed striking (fig. 4). Next to this early painted pottery is

[60] De Contenson 1973: 21; 1992: 29. Schaeffer, in the initial stratigraphic subdivision of the site, had in fact dated the beginning of the Halaf period to phase IVB and left IVC to indicate this initial moment of local painted ceramics.

still the typical DFBW of period V, as happens in the Amuq, Rouj and Yumuktepe, and next to it are also some typical Amuq C DFBW sherds (the thicker and yellowish-brown ones).

This is the period, in Ras Shamra, with complex pattern burnished decorations on the DFBW and especially on the very fine one. In Ras Shamra though, the pattern burnish is often accompanied by impressed decoration, delimiting the burnished part. Rocker impression, though never specifically nominated by de Contenson, is actually seen on some illustrated sherds with pattern burnish, thus indicating that this form of impressed decoration was present too and probably that, like at the other analysed sites, it was a quite late character[61]. Last of all, the "céramique commune" is by far the most frequent category of those first 15 cm of period IVC and it is at times found with a red slip. Its affinity with the Coarse Ware of the Amuq and Rouj is amazing.

Relations between Sites in the Amuq B Period

I believe it is quite clear from the above that strong correlations in the ceramic assemblages of Amuq B1-2, Rouj 2d, Yumuktepe XXV-XX, and the earliest level of Ras Shamra IVC are proposed. The appearance of painted pottery at all sites and its typological and stylistic similarities was the first element utilised for proposing this, but the comparison between classes of ceramics and shapes has, in my opinion, further confirmed it. Rouj 2d and Amuq B1 in fact evidence exactly the same category of ceramics (painted ware, DFuW, incised or red slipped Coarse Ware - table 4). The fine painted pottery that is also visible in Rouj 2d is not present in Amuq B1, but it is in B2, thus suggesting that the Rouj 2d must probably include both Amuq phases. This could be further confirmed by the presence, in Amuq B1 of strainers (fig. 6) and footed bowls (fig. 5), and in Amuq B2 of the pedestal bowls with complex pattern burnish decoration (fig. 6); these, in the Rouj, are only found from phase 2d. The difficulty of separating Rouj 2c and 2d dark faced wares and the supposed absence of the level linking A and B in Judaidah do make these correlations difficult, as many elements that are present in 2c are also seen in Amuq B; the presence of the more specific elements mentioned above though attests, in my opinion, the later date of Amuq B compared to that of Rouj 2c. The presence of red or light coloured burnished vessels in Rouj 2d, furthermore, as is in Amuq B1 and 2, could be a confirmation of this.

An important element arguing for the contemporaneity of Amuq B2 and Rouj 2d is the presence of the thick burnished pottery, in all similar to the one described for Amuq phase C[62]. This is a burnished ware generally considered diagnostic of the Halaf period. Japanese scholars have generally taken the presence of ceramics similar to those of the Halaf period, in the Rouj 2d phase, as an indication of the gradualness of contacts with and of assimilation of Halaf characters in the local pottery. Rouj 2d is thus the period corresponding to the Early Halaf, to a moment in which this eastern culture has not yet expanded so strongly to the west, but its presence is beginning to be felt. It would seem

[61] De Contenson 1973: 21.
[62] Braidwood and Braidwood 1960: 138.

that Judaidah level 23 (phase B2) too, as it has so many elements that remind the later Halaf period, represents such a phase. Amuq C, Rouj 3, and Yumuktepe XIX-XVII represent the moment of mature Halaf, but Halaf influence is already felt before.

The Japanese scholars consider only the FMR of Judaidah as contemporary to Rouj 2d. This was, amongst others, because of the presence in the FMR of the pedestal bowl and complex pattern burnish, that they have retrieved in phase 2d. I believe to have demonstrated, by evidencing the major similarities of Amuq B1 and B2 in their ceramics and the analogies of the first with Rouj 2d, that B1 as well is probably to be considered as contemporary with Rouj 2d (its earliest moment?).

The analogies between the Yumuktepe XXV-XXIV dark burnished wares and that of Amuq B1 have been clearly evidenced in the continuation of the tradition of levels XXVII-XXVI. The changes noticed in the following levels XXIII-XX seem then to underline a modification similar to that noticed at Judaidah in the passage between B1 and B2. Some dark wares remain similar, but the fine ones disappear and many very thick vessels, as the later Amuq C ones are seen. This indicates a strong similarity between Yumuktepe XXIII-XX and Amuq B2. The increase in reddish or lighter colours amongst the burnished wares and the fine painted ceramics seem to confirm this too.

The analysis of the Ras Shamra sequence has brought to separate the lowest 15cm of deposit in the IVC phase and its comparison with the material from the other sites has clearly evidenced the correlation between these earliest levels and Rouj 2d, Amuq B (1 and 2) and Yumuktepe XXV-XX (table 5). Testifying this were: 1- the painted ceramics; 2- the typical DfbW of Yumuktepe XXV-XXIV; 3- the thicker burnished vessels typical of Amuq C, that have been found in Yumuktepe XXIII-XX, Amuq B2 and Rouj 2d; 4- the complex pattern burnish; 5- the Coarse Ware with red slip. Even though this phase at Ras Shamra would need to be more thoroughly investigated, I believe we can quite confidently hypothesise this correlation.

In conclusion thus, these observations have led to imagine a quite long Rouj 2d period, contemporary to the Amuq B (B1) and FMR (B2) developments, to Yumuktepe levels XXV-XXIV and XXIII-XX, and to these first 15cm of deposit of period IVC in Ras Shamra.

Absolute Chronology

The correlations that have been proposed between Yumuktepe, Judaidah, The Rouj and Ras Shamra, on the basis of their ceramic production, have unfortunately no confirmation yet on other grounds. Architectural remains are minimal and provide no good comparative material. The only possible similarity is that between three multi-roomed structures of Ain el-Kerkh and Yumuktepe. The first is structure 72 from a phase 2c level at Ain el-Kerkh and the other two are from Yumuktepe levels XXVII and XXVI[63]. The plan of these buildings, although not exactly the same, appears to follow similar trends, with a larger room, surrounded by smaller areas. At Ain el-Kerkh this structure has been interpreted as a storage building, whilst the Yumuktepe buildings have

[63] Tsuneki *et al.* 1998: 6 ; Caneva 2001: 27; Garstang 1953: 28.

no testimony in this direction. Interesting is the fact that the levels these structures belong to (Rouj 2c – Yumuktepe XXVII-XXVI) have been hypothesised, on the basis of the ceramics, as being contemporary. Unfortunately, no other data on settlement organisation and architecture can be at the moment used in the comparison of these different regions.

Absolute dates would be, obviously, a very good source for the verification of the proposed correlations, but in this case too, data is still insufficient. No dates are available from the Amuq and two are those relative to the phases of interest here from Ras Shamra. Ain el-Kerkh and Yumuktepe are in a slightly better situation, even though the first, with three dates for the 2c period and 2 for the 2d, is still not totally reliable (table 7). Yumuktepe has 14 dates from the phases that have been considered in this work, not all coherent, but it does start setting some points for the construction of an absolute chronology for these Early Ceramic Neolithic layers.

For Yumuktepe, the available ^{14}C samples would seem to date the earliest phase XXXIII-XXX to 7000-6500 cal. BC (the 2 sigma calibration results are considered), but the dates are only two thus it should be probably taken as a provisory date (fig. 7). The two dates from level XXIX match between about 6600 and 6400 cal. BC and those from level XXVIII between about 6300 and 6200 cal. BC. I would thus hypothesise a date for the second phase of development identified, that corresponding to Yumuktepe XXIX-XXVIII, at 6600-6200 cal. BC. For the later XXVII-XXVI phase, the 4 available dates are quite coherent and indicate 6200-6000 cal. BC, but possibly even later (5800 BC?). Finally, dates for the last phase identified are coherent with each other, except for sample Rome-1010, which is apparently younger, and date to 6000-5700 cal. BC. It is probable that this phase actually continued for a little longer, not only because of what testified by sample Rome-1010, but because amongst the samples collected none come from the latest contexts of the phase.

The two Ras Shamra dates fit perfectly in this chronological grid, as phase VB, that according to the ceramics should correspond to Yumuktepe layers XXIX-XXVIII, dates between 6749 and 6265 cal. BC, within the interval given by the Yumuktepe dates. The second sample too, from phase VA (ceramic wise, correlated to Yumuktepe XXVII-XXVI), coincides with the dates from the Cilician site, 6223-5844 BC being the 2 sigma calibration interval.

The Rouj does not, unfortunately, seem to follow these same chronological intervals, but evidences apparently earlier dates, compared to the Yumuktepe and Ras Shamra ones, for all phases with ^{14}C samples. Period 2c, that this work has indicated as correlated with Yumuktepe XXVII-XXVI and Ras Shamra VA, has two early dates from 6600 to 6400 cal. BC and one between 6400 and 6100 cal. BC. Only the latter would near itself to the dates seen above. The same can be said for the Rouj 2d dates, one sample of which does fall within the range given by the Yumuktepe samples for this period (5978-5719 cal. BC), but the other is decidedly earlier. Furthermore, the youngest of these dates is from the latest level of the 2d period at Ain el-Kerkh, whilst none of the Yumuktepe dates come from the latest level of that phase; thus this too is probably earlier than what the Yumuktepe one would be (fig. 7).

The interpretation of this discrepancy between the radiocarbon data and the correlations between the ceramic production of these sites is problematic. In fact, even

admitting that the ceramic tradition that these regions share during these phases of the Neolithic were born and derived from the Syrian regions, and might thus have reached Yumuktepe a little later, once the regions were in contact, innovations would not take such a long time to move from one place to another. Admitting that vessels and models moved from the Amuq to Cilicia, or vice versa, I doubt that the short time this took would be detected by the radiocarbon samples.

It might be hypothesised that the Ain el-Kerkh samples refer to wood that had been re-utilised from earlier periods, but again, it is difficult to imagine that this happened for all samples and furthermore, sample NUT A2-2104 is a carbonised grain, thus decidedly of the same age as the context in which it was found[64].

We are thus left with this evident difference between the Rouj dates and those of Yumuktepe and Ras Shamra, that I believe can only be understood with a wider sampling of radiocarbon dates from the Rouj and maybe one day dates from the Amuq. As this region is in between the Rouj and Cilicia, dates from here might prove very interesting in regards to the origins and distribution of the ceramic categories that, has been seen, characterise all three of these western regions of the Neolithic Near East.

DARK FACED BURNISHED WARE – SOME OBSERVATIONS CONCERNING ITS DEFINITION

Braidwood has never distinguished, within DFBW, distinct categories and yet, in this work, evidence is given of the enormous variety of pastes, techniques, colours and shapes of this category. Probably he allowed such a variability within his categories because his interest was that of identifying "families" of ceramics, intended as the product of a particular tradition of craftsmanship, thus something that would certainly comprehend a diversity of solutions[65]; nowadays classifications are generally more strict and try to pin down, within classes, varieties and variations in the production, with the hope of detecting, at times, apart from cultural, organisational and technical differences, right down to individual craftsmanship.

This somewhat too general classification is in part cause of the difficulties scholars have had and accumulated, through the years, in the recognition of DFBW. The simple presence of a more or less dark coloured and burnished pottery is in fact often considered as a good enough similarity for the identification of DFBW, at far away sites, along the Euphrates or even further, in the Syrian Jazira.

A result of the new research demands is a more detailed classification of the pottery, and this work has in fact tried to evidence, within the large DFBW group, distinctions that could bring to refine the categories. Reordering phase A material, I have proposed that the DFBW should be separated into two groups, which correspond to those identified by Matson ("*actinolite paste*" and "*calcite in red clay*") in his archaeometric analysis. Morphological and technical characters of these two groups are well distinct and had apparently been noted by Braidwood too. The presence of ceramics similar to both

[64] Tsuneki *et al.* 2000 : 28.
[65] Braidwood and Braidwood 1960: 29.

groups in Yumuktepe XXXIII-XXX and in the Rouj furthermore, might confirm the validity of this classification.

An analogous situation of internal distinction within the Braidwood DFBW was evidenced in Yumuktepe levels XXVII-XXIV: the dark faced pottery classified there has been divided into 3 groups, a DFbW, a DFuW and a Very Fine DFbW. The second effectively corresponds to Braidwood's class of Dark Faced Unburnished Ware, whilst the other two, have not been distinguished by Braidwood. My personal observations on the Judaidah material at the OIC have brought to distinguish these two classes amongst the phase B ceramics, thus evidencing that there too there was more than one group of DFBW. Comments of the Japanese scholars on the Rouj material, furthermore, might indicate a similar situation in that region during period 2c[66]. Ras Shamra too, finally, has evidence of a very fine DFBW in phase VA[67].

DFBW, thus, is in fact created by at least two smaller classes of ceramics, probably with a distinct function and role, as demonstrates the difference in shape and size between the very fine and polished examples (Yumuktepe class 5) and the thicker and coarser ones (Yumuktepe class 3). Changes in time of these distinct classes are also evident and have been summarised in table 6. Furthermore, not all classes are present in the different phases of development, fact this that demonstrates how not only the technology of DFBW was changing in time, but its function too.

What characterises all groups of this pottery is indeed the dark colour, as Braidwood defined it. The presence of a burnished surface is the other discriminating feature that identifies a sherd as part of the large DFBW family. The Dark Faced Unburnished Ware, though, that the US scholar kept separate, is very similar to such sherds. Paste, wall thickness, vessel shapes and dimensions, colour of the surface, are all identical in the unburnished and in the burnished samples.

Whilst in strict classifications, as are done today, I would propose that these three classes (DFbW, DFuW and Very Fine DFbW) be kept well separate, as their technological, morphological and stylistic characters are quite different, were we to search "traditions" of pottery making, intended in a more broader sense, as I believe Braidwood meant, I would unify the three together. I believe, in fact, that the unburnished ware (DFuW) too derives from the same idea or tradition, that produces mineral (as opposed to vegetal) tempered and dark coloured vessels[68]. The dark colour is intentionally obtained[69], thus evidently it is one of the most important features of this particular tradition of material culture. Furthermore, the function of the three classes of dark vessels at Yumuktepe, thus also including the unburnished one, appears to be specifically delimited to daily use: large and small eating and serving bowls and cooking ware. This is opposed, instead, to the light coloured, storage or conservation vessels. For these reasons

[66] Tsuneki *et al.* 1998: 14.
[67] Courtois 1992: 216.
[68] Balossi 2002.
[69] This is sure at least for Yumuktepe and Judaidah, where many cores of these sherds are red or light coloured, even though the surface is dark. This indicates that, during the firing, an incipient oxidisation had started turning the sherds into a light colour, but a subsequent reducing atmosphere had darkened the surfaces. Such an atmosphere was evidently intentionally created. Balossi in print.

I believe the unburnished class should be considered part of the family too[70]. I would thus probably slightly change Braidwood's terminology and talk about a DFW (Dark Faced Ware) family, composed at least by the three classes of DFbW, Very Fine DFbW and DFuW. Of these, the most long-lived is probably the DFbW, the evolution and changes of which can be followed for many phases (table 6). From this one, probably, in different moments and because of diverse needs, the finer and the coarser wares have developed.

Finally, there is another category of pottery in the Amuq, that in my opinion strongly recalls the Very Fine DFbW: the Red Washed Impressed Ware. This is a very particular category of pottery, having very similar temper, surface treatment, shape and decoration to that of DFBW. Basically, Red Washed Impressed Ware is a class of sherds formed by DFBW that has been decorated with bands of red wash and fingernail or pointed impressions. This is furthermore apparently only done to bowls. Shape, dimension and decoration of this class are extremely "standardised". The specificity of this group would appear to contrast with the apparent diversity and heterogeneity of the DFBW category. For this reason I would tend to see the Red Washed Impressed Ware rather as a "stylistic particularity" of Judaidah and its region, as a group of DFBW vessels with a specific role and/or function. These small decorated bowls might have been used in special feasts or communal occasions in which eating and/or drinking were involved. Their relatively small number would make this interpretation possible (5-10% of the assemblage). In this sense, their analogies with Yumuktepe class 5 (very fine DFbW) are many. That too, in fact, was a very particular class, decidedly of DFbW tradition, particularly nice and well made, and certainly used in special occasions linked with food consumption (those too were small plates, bowls and goblets). I would thus tend to see the Red Washed Impressed Ware as the Amuq (and Rouj?) counterpart of the Very Fine DFbW that develops in Yumuktepe with levels XXVII-XXVI and is still produced in levels XXV-XXIV.

The DFW Horizon

The analysis of the DFW and its distribution in some of the main sites that evidence its presence has brought to a slightly divergent and probably more complex view to that of the traditional "DFBW Horizon".

The Rouj basin, Hatay (Amuq) and Ras Shamra have demonstrated analogies in the totality of their ceramic assemblage and can thus indeed be considered as belonging to one same cultural system. Yumuktepe is probably the site that most distinguishes itself from the others. In its earliest levels it evidences a possible Kerkh-like Ware and a dark burnished ware, in all similar to that of the Syrian sites, but by levels XXVII-XXVI, things change. A pinkish, mineral tempered pottery appears and rapidly overtakes in quantity the DFW. This is totally distinct from the chaff tempered, Coarse Ware of the Amuq, Rouj and Ras Shamra. This latter never appears at Yumuktepe. The Dark Faced Unburnished Ware is present though, DFbW continues to develop through all the pre-

[70] The Japanese archaeologists too consider the DFBW and the unburnished Ware as originating from a same "model". Tsuneki *et al.* 1999: 8.

Halaf phases, and painted ceramics comparable to those of the Amuq appear in the second part of the period, thus indicating that, even though this site had probably taken a distance from those to its south, relations between them probably continued. I believe that Cilicia belonged to a distinct, but strongly related, cultural system. The similarities in particular classes of pottery production might be due to a complex network of relations between these two systems, that were probably based on kinship ties and relations.

To the Syrian cultural system also participated other contemporary excavated sites that have not been analysed here, but that evidence similar ceramic production; this is certainly the case of the Qoueiq, that probably finds itself at a frontier area facing the Middle Euphrates communities, and other Syrian settlements as Janoudiyeh, Qal'at el Mudiq and Hama[71]. Data from these is unfortunately very little, but their nearness with the Amuq, Rouj and with Ras Shamra, together with the little available information do seem to agree with this hypothesis. To the Cilician system instead is to be included Gözlükule-Tarsus[72].

Interpreting the kind of relations between Yumuktepe, and most probably Tarsus, and the Syrian communities is rather difficult. Ceramics evidence separate developments and probably distinct cultures, but DFW shows constant contacts and exchange, which also tells us that DFW must have played a particular role within these relations. This pottery might have been, in fact, the instrument with which social relations were ruled and functioned[73].

Conclusions

This comparative analysis of the pottery assemblages from the Syro-Cilician region, defined by Braidwood as belonging to a single cultural development during the first Ceramic Neolithic period, has provided some valuable instruments for reconsidering the sequences of occupation of these sites and community relations.

A thorough classification of the dark ware from the site of Yumuktepe and its comparison with the dark ceramics of the Syrian sites has provided interesting considerations on this important ceramic category, which was considered the diagnostic element of the Syro-Cilician culture. Within the DFBW at least two different classes of ceramics have been distinguished: one with a very fine texture and a medium textured one. The very fine textured class is limited to certain levels of occupation only (Yumuktepe XXVII-XXV), whilst the developments of the other can be followed in time. This division has brought to propose a two level classification, in which the Dark Faced Unburnished Ware too was included. In fact, the similarities in colour, shape, vessel size and thickness have been considered major elements in the classification of this large family of ceramics. More than the surface treatment, it is the deliberateness of the dark colour, accompanied then by all the other single attributes, that defines, in my opinion, the large family of wares, which could thus be called DFW. A broad DFW family

[71] De Contenson and Van Liere 1964; Collon *et al.* 1975; Thuesen and Riis 1988; Mellaart 1981.
[72] Mellink 1956.
[73] Balossi 2002.

composed by the three classes of ceramics (DFbW, Very Fine DFbW, DFuW) was proposed.

Absolute chronology unfortunately still doesn't provide enough data for a confirmation of these "typological" observations. The rarity of radiocarbon samples makes the available dates still preliminary. Whilst Yumuktepe, with a relatively higher number of samples, might set a good chronological grid (7000-5700 cal BC, for the pre-Halaf phases considered in this work), in which could be positioned all the other sites, the absence of dates from the Amuq does not permit any real correlation. The 5 samples present from Ain el-Kerkh, in the Rouj, furthermore, apparently do not match with the Yumuktepe ones, thus still leaving an interrogation mark on the proposed stratigraphic correlations. The two available radiocarbon dates from Ras Shamra, instead, would well correspond to those of the Cilician site, but again the paucity of samples would need further confirmation.

As to what regards the definition of the DFW Horizon, an important observation has been that of a distinct participation of the Cilician site of Yumuktepe within these regional developments. Whilst the first levels of occupation, in fact, might demonstrate a ceramic assemblage strongly analogous to that of the Amuq and Rouj regions, very early the more northern site develops autonomous categories, that have no link at all with those of the Syrian communities (Pinkish Ware, classes 1 and 2). No matter this increasing distance between the Anatolian and Syrian regions, communication between the villages must have continued quite permanently and intensively, though, as the production of the Dark Faced ceramics appears to follow the same developments in time. The Rouj, Amuq and Coastal regions of Syria, instead, appear to actually belong to a same cultural region, as they share their entire ceramic assemblages.

Having identified the correlations in ceramic productions of the Syrian communities and the continuity of relations they had with Cilicia, this work has compared the analogies in the DFWs and the appearance and disappearance of other particular ceramic categories in the Rouj, Amuq, Ras Shamra and Yumuktepe, fact this which has permitted to revisit most stratigraphic correlations proposed in the past by various scholars. This article has in fact mainly concentrated on this aspect, on which a couple of interesting observations have been made.

An important point regarding the temporal correlations between these communities that this work has discussed, is that of the very first phases of ceramic development. The investigations in the Rouj basin had in fact, until now, suggested that the earliest ceramic occupation was solely in this region, as Kerkh Ware did not seem to be present at any other site. Technological and morphological comparisons between ceramics from the lowest levels in Judaidah A, the Yumuktepe deep sounding SA and Rouj 2a have indicated though, the possible analogy between Kerkh Ware and pottery from the other two sites as well (table 6). Were this to be confirmed by further investigations, it would mean that occupation at the sites of Ain el-Kerkh and el-Kerkh 2 in the Rouj, at Yumuktepe and at Judaidah probably begun at more or less the same time (table 5).

Probably most rich in implications amongst all hypotheses made by this paper is the proposed gap in the Judaidah sequence between phase A and B, motivated by the

absence in the Amuq site of White Ware, Plastered vessels and Husking Trays, all elements characterising a same phase both in the Rouj (period 2c) and at the coastal site of Ras Shamra (phase VA) (table 4). Husking trays are of sure Hassuna influence, thus coming from the east, and their presence at Ras Shamra would be difficult to explain were they not also to be found in the Amuq. White Ware and plastered sherds, on the contrary, are elements commonly considered as characteristic of coastal communities as those of Byblos and tell Sukas. In this case, thus, their presence in the Rouj basin but absence from the region in between (the Amuq) would be quite astonishing. Correlations between DFWs and painted ceramics have confirmed in my opinion that a phase is missing from the Judaidah sequence.

Interesting is, finally, the appreciation that a re-evaluation of the FMR of Judaidah has permitted of the phase indicating the passage from the pre-Halaf to the Halaf levels of occupation. Rouj 2d levels very well demonstrate how Halaf influence gradually starts reaching the more western regions, without initially totally upsetting and changing local material culture and production. Halaf influenced ceramics are in fact visible in the latest period 2 levels, under the form, for example, of DFbWs with typical Halaf profiles. A non-local shape is thus adapted to a local technology, in a period corresponding to Early Halaf, thus when Halaf culture still hadn't expanded so significantly as will be later. It is evident from this that communities were always in contact throughout the Near East in this period, even when strong movements of economic or political expansion did not take place. A consequence of these relations evidently was influence in material culture production. The analysis of the earliest level of the FMR (Jk3 23) has indicated very well this initial Halaf influence in the pottery. This is important both because it starts filling the stratigraphic gap already noticed by Braidwood in the Amuq sequence between the end of phase B and the Halaf period phase C, and because it gives evidence in the Amuq too of the gradualness of this arrival.

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Yumuk.	Amuq	Ras Shamra
XIX XX XXI XXII XXIII XXIV	C	IVC
XXV XXVI XXVII	B	VA
XXVIII XXIX XXX XXXI XXXII XXXIII	A	VB

Table 1

Yumuk.	Amuq
XIX - GAP?	C
XX - XXII	B
XXIII - XXV	A
XXVI - XXXIII	

Table 2

Amuq	Rouj	Ras Shamra
D	3	IVB
C		IVC
FMR	2d	GAP
B	hiatus?	VAII
	2c	
A		VAI
	2b	VB
	2a	

Table 3

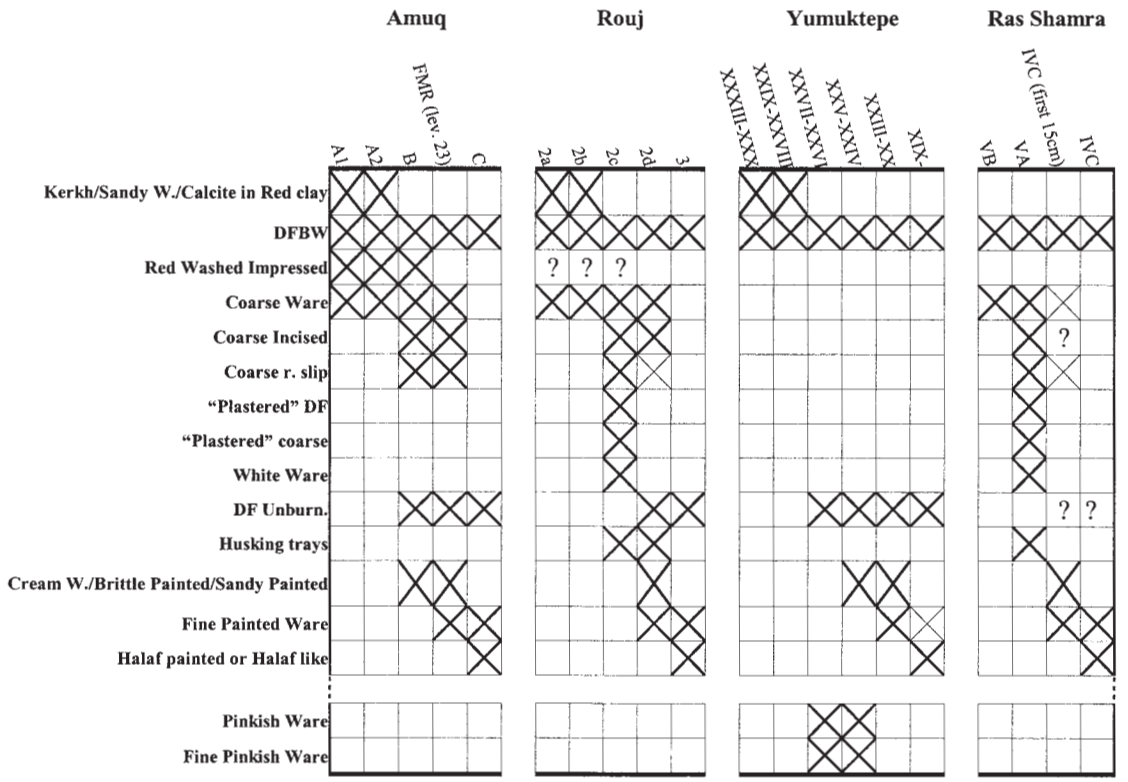

Table 4.

Yumuk.	Amuq	Rouj	Ras Shamra		
XIX	C	3	IVC		
XX					
XXI	?	2d			
XXII					
XXIII	B2				
XXIV			IVC (lowest 15 cm)	5500 5600	
XXV	B1				
XXVI	GAP	2c	VA	5900 6000	
XXVII					
XXVIII	A2	2b	VB	6200	
XXIX				6500	
XXX	A1	2a			
XXXI					
XXXII					
XXXIII			?	7000	

BC Calibrated

Table 5.

class	paste, texture and thickness of walls	surface colour	surface treatment	shape	decoration	Yumk.	Rouj	Amuq	Ras Sh.
Kerkh Ware	mineral, sandy temper, medium texture.	Cream, buff or brown colour.	Burnished or smoothed.	Mostly hemispherical bowls.	no decoration.	XXXIII-XXX	2a	A1	?
DFbW	mineral temper, medium and fine texture. Mostly thin walled (around 6mm) vessels.	Mostly deep brown colours, grey and scarlet-brown.	Burnished.	Most common shapes are hemispherical bowls, but in the Amuq and Rouj necked jars also appear. Rims are mostly simple. Some lugs.	Decoration, on a small percentage of vessels, is impressed. These are mainly obtained with fingernails and various pointed instruments. motives are generally repeated on the whole body of the vessel.	XXIX-XXVIII	2b	A2	VB
time ↓ **DFbW**	mineral temper, medium texture. Thickness of vessel walls varies, but doesn't generally reach 10mm.	Dark colours increase at the disadvantage of light, cream or red tones.	Burnish is generally of a better quality.	Shapes are, in the Amuq and Rouj, mostly necked jars. Some flaring necks and carenated profiles are observed. In Mersin, bowls and hole-mouth jars	Amongst the impressed decoration, rocker impressions appear. Some applied decorations. Also some initial and simple pattern burnish.	XXVII-XXIV	2c	B1	VA
Fine DFbW	mineral temper, very fine paste and texture. Vessel walls are 2-4mm thick.	Colours are dark, even though rare red slipped vessels are seen.	Burnish is very good and often surfaces are polished.	Shapes are small bowls, plates or tray-like, low bowls.	rarely, impressed decoration.	XXVII-XXIV	2c	B1	VA
DFuW	mineral temper, medium and course texture.	Colours are mostly grey or dull browns.	Surface is only smoothed, not burnished.	Shapes are mostly hole-mouth jars.	generally no decoration.	XXVII-XXIV	2d	B1	?
DFbW	mineral temper, medium and fine texture. Some vessels are like those of the previous phase, but others tend to be thicker in wall dimensions.	Colours are browns, greys, but many reds and buffs, or yellowish tones appear.	Burnish is not always of good quality. Sometimes slipped.	Shapes, apart from the usual ones, see the increase in sinuos profiles, carenated bowls and jars, flaring necks. Cream bowl shapes are found.	pattern burnish evidences complex designs and is at times combined with impression (at Ras Shamra).	XXIII-XX	2d	B2 (Jk3 23)	IVC begin.
DFuW	mineral temper, medium and course texture.	Colours are mostly grey or dull browns.	Surface is only smoothed, not burnished.	Shapes are mostly hole-mouth jars.	generally no decoration.	XXIII-XX	2d	B2 (Jk3 23)	?

Table 6.

Site and Phase	context	Sample	BP date	Stand. dev.	Calib BC - 1 sigma max	Calib BC - 1 sigma min	Calib BC - 2 sigma max	Calib BC - 2 sigma min
Yumuktepe XXXIII	WA 4a	Rome-467	7920	90	7045	6646	7075	6512
Yumuktepe XXXII	SA 5	Rome-734	7790	80	6684	6484	7026	6457
Yumuktepe XXIX	F2 3c (lens)	Rome-1344	7750	80	6647	6465	6749	6438
Yumuktepe XXIX	F2 3c	Rome-1343	7640	80	6585	6425	6641	6241
Ras Shamra VB	SC, 11,15m (=12,15m	P-458	7686	112	6640	6435	6749	6265
Yumuktepe XXVIII	F2 3b	Rome-1011	7545	75	6456	6268	6498	6230
Yumuktepe XXVIII	A25 1b*	Rome-1226	7280	70	6222	6030	6326	5994
Ain el-Kerkh 2c	E310, 6, str. 167	NUT A2-2024	7730	80	6643	6461	6693	6431
Ain el-Kerkh 2c	E310, 6, str.167	NUT A2-2023	7670	45	6503	6456	6592	6435
Yumuktepe XXVII-XXVI	NA A36 2a	Rome-808	7380	80	6377	6094	6418	6032
Ras Shamra VA	SC, 9m (= 10m)	P-457	7184	84	6159	5928	6223	5844
Yumuktepe XXVII-XXVI	EBA1 A20	Rome-807	7160	80	6156	5923	6214	5842
Yumuktepe XXVII-XXVI	EBA6 1m	Rome-957	7100	70	6020	5891	6157	5807
Yumuktepe XXVII-XXVI	EBA6 A10	Rome-956	7090	70	6016	5844	6156	5805
Ain el-Kerkh 2c	E270-290, 4	NUT A2-2089	7420	45	6379	6226	6399	6109
Ain el-Kerkh 2d	E271,3, str. 240	NUT A2-2104	7230	40	6159	6025	6210	6007
Yumuktepe XXV	EBA4 A41 1a	Rome-806	7030	90	5992	5800	6063	5721
Yumuktepe XXV	NA-A' 1b	Rome-809	6980	80	5979	5739	6009	5715
Yumuktepe XXIV	F2 A71 2p	Rome-1010	6675	70	5658	5531	5720	5479
Yumuktepe XXIII-XXII	GF6 A46	Rome-1345	7010	75	5986	5797	6017	5723
Ain el-Kerkh 2d	E271,2b, str. 211	NUT A2-2105	6950	50	5873	5737	5978	5719

Table 7.

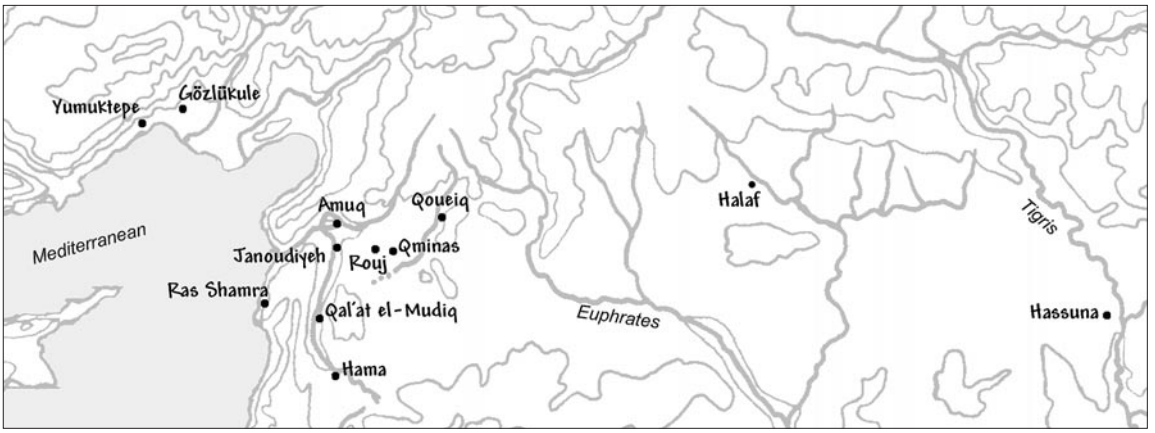
Yumuktepe
Gözlükule
Amuq
Qoueiq
Halaf
Tigris
Mediterranean
Janoudiyeh
Rouj
Qminas
Ras Shamra
Qal'at el-Mudiq
Euphrates
Hassuna
Hama

Fig. 1.

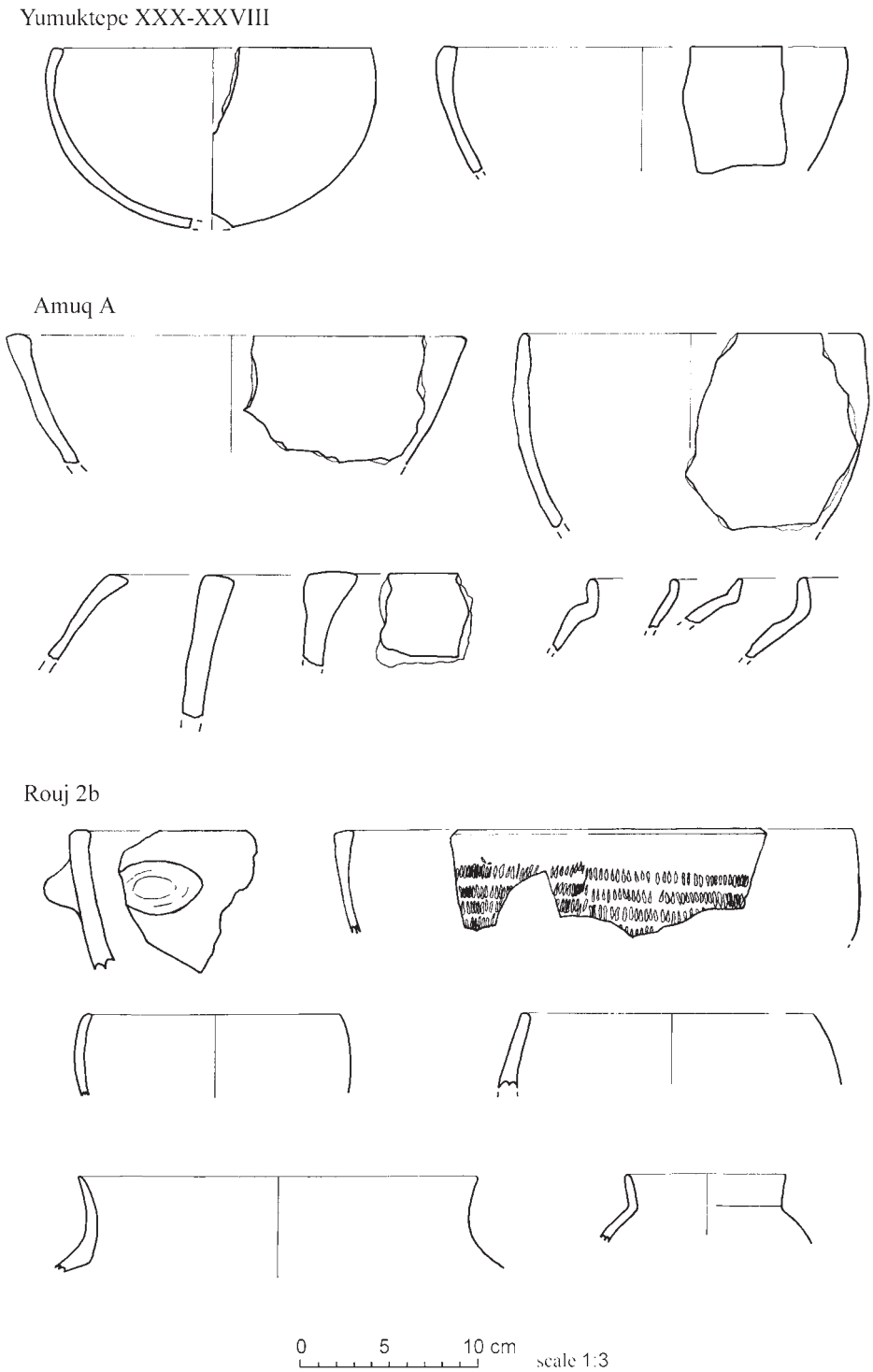

Fig. 2.

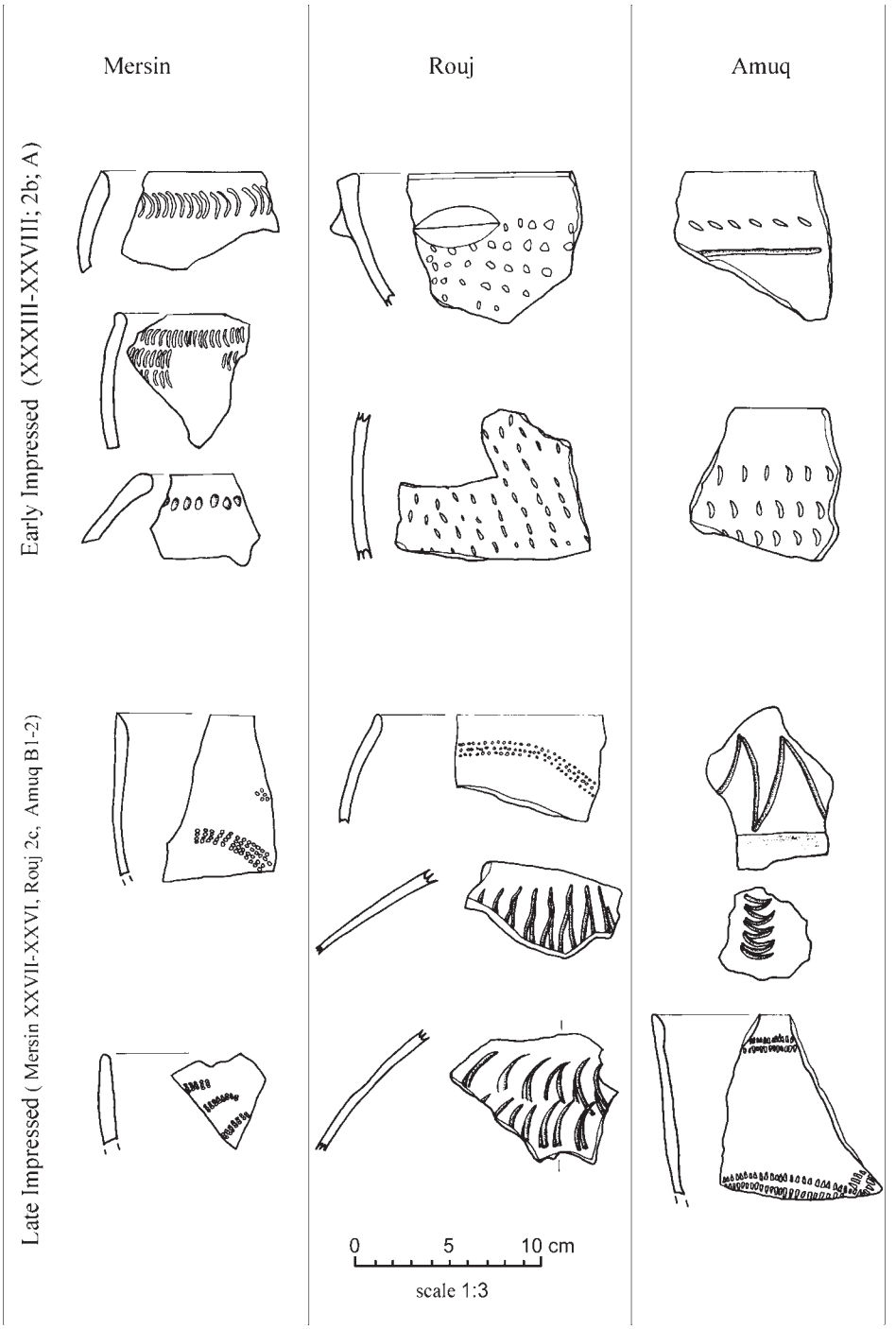
Mersin
Rouj
Amuq
Early Impressed (XXXIII-XXVIII; 2b; A)
Late Impressed (Mersin XXVII-XXVI, Rouj 2c, Amuq B1-2)
0 5 10 cm
scale 1:3

Fig. 3.

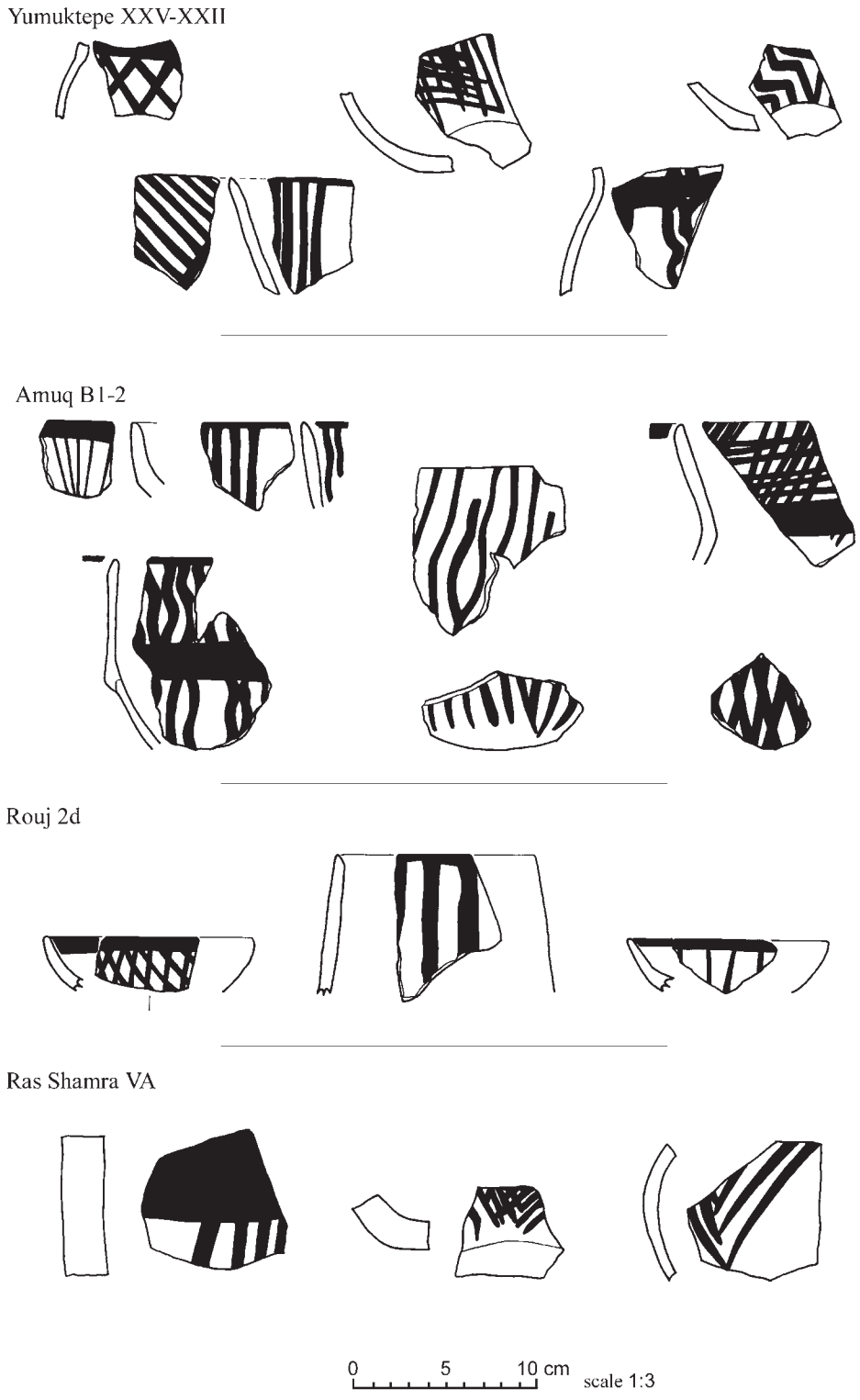
Yumuktepe XXV-XXII
Amuq B1-2
Rouj 2d
Ras Shamra VA
0 5 10 cm
scale 1:3

Fig. 4.

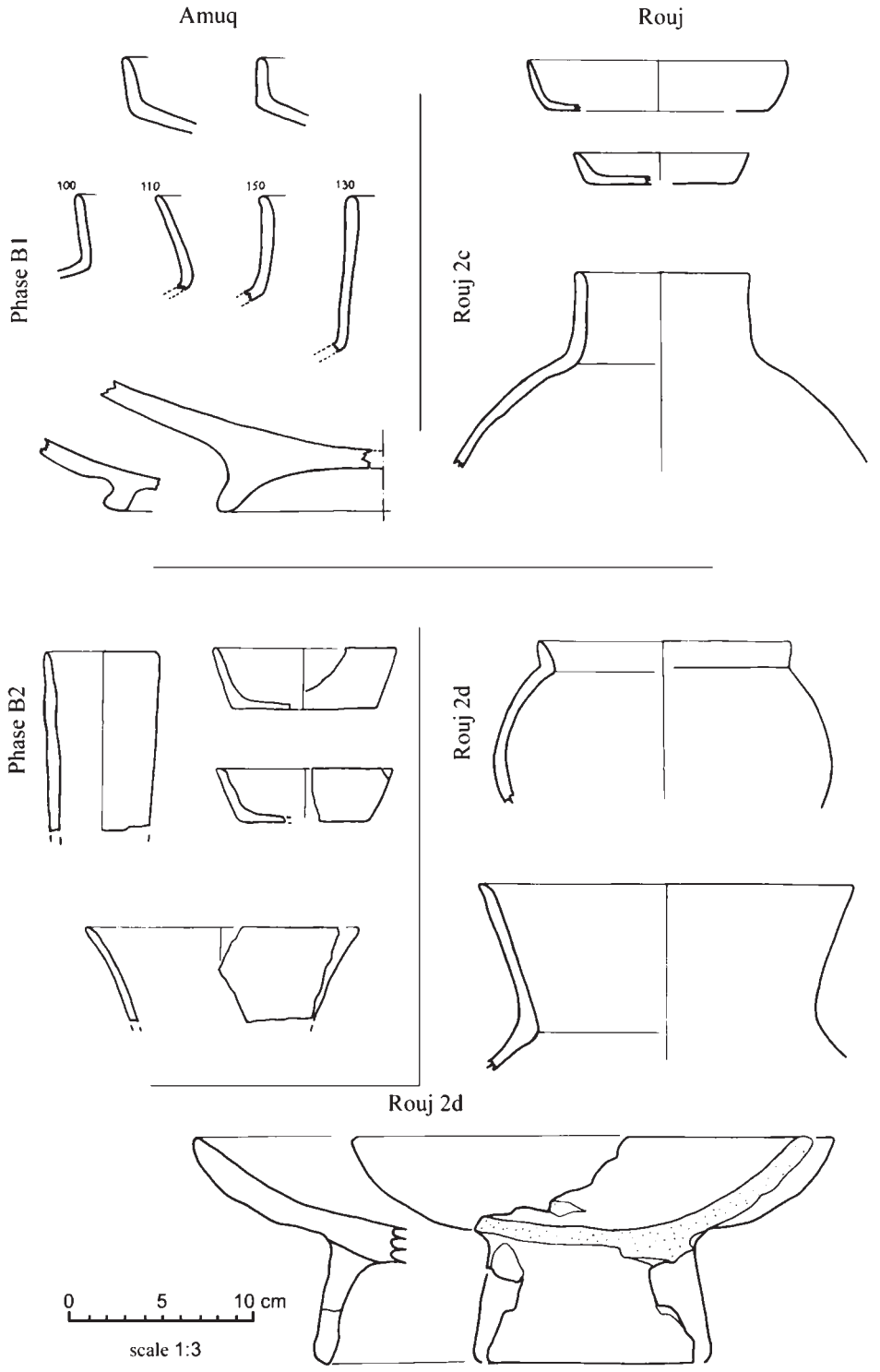
Amuq
Rouj
Phase B1
100
110
150
130
Rouj 2c
Phase B2
Rouj 2d
Rouj 2d
0 5 10 cm
scale 1:3

Fig. 5.

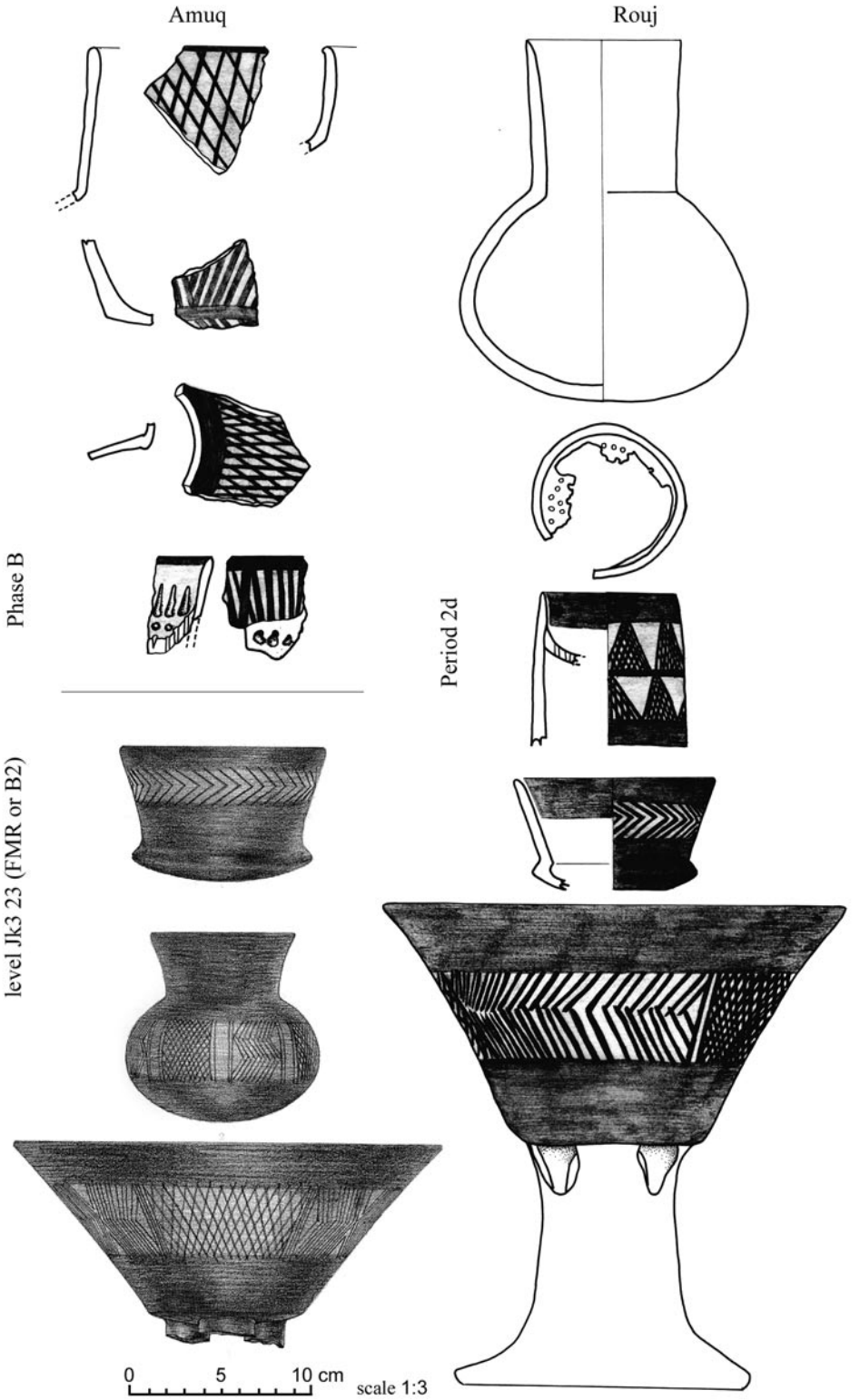
Amuq
Rouj
Phase B
Period 2d
level Jk3 23 (FMR or B2)
0
5
10 cm
scale 1:3

Fig. 6.

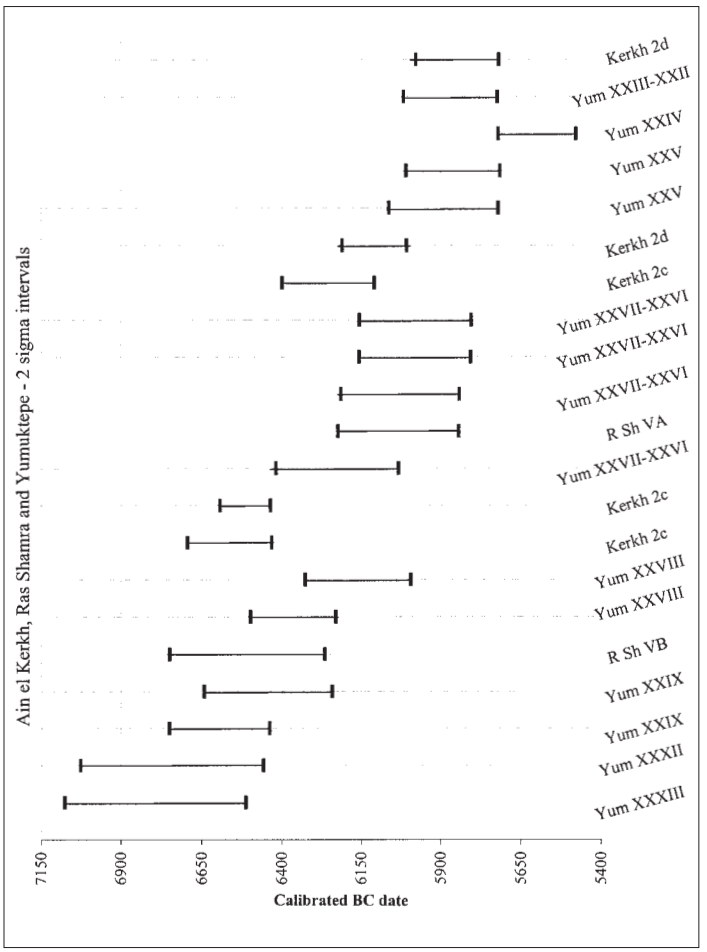
Ain el Kerkh, Ras Shamra and Yumuktepe - 2 sigma intervals
Kerkh 2d
Yum XXIII-XXII
Yum XXIV
Yum XXV
Yum XXV
Kerkh 2d
Kerkh 2c
Yum XXVII-XXVI
Yum XXVII-XXVI
Yum XXVII-XXVI
R Sh VA
Yum XXVII-XXVI
Kerkh 2c
Kerkh 2c
Yum XXVIII
Yum XXVIII
R Sh VB
Yum XXIX
Yum XXIX
Yum XXXII
Yum XXXIII
7150
6900
6650
6400
6150
5900
5650
5400
Calibrated BC date

Fig. 7.