

The Upper Khabur and the Upper Tigris Valleys during the Late Bronze Age: Settlements and Ceramic Horizons

o. Introduction

Field research undertaken in recent decades in northern Syria and southeastern Turkey has significantly improved our understanding of the material culture and settlement patterns in the area, offering new evidence that merits discussion. Although the new stratigraphic sequences brought to light in the recent excavations have enhanced the archaeological profile of some sites, a comprehensive picture of the composition and development of the settlements and ceramic assemblages during the second half of the second millennium BC is still lacking, mainly due to the very limited number, and the limited size, of settlements excavated to date. One of the key issues in the debate on the second millennium BC in northern Mesopotamia concerns the nature and development of the settlement pattern at the time of the Middle Assyrian conquest and the changes that occurred under the Mittani and Assyrian hegemonies in the upper Khabur and upper Tigris valleys.

This paper offers a general overview of Late Bronze Age settlements in the valleys of the upper Khabur and Tigris Rivers, and takes into account the results from both early and more recent excavations as well as small and large regional surveys, aiming to highlight some interesting advances in our knowledge of the area whilst also drawing attention to the many questions that remain unanswered in our attempts to reconstruct the cultural sequence and historical events of these territories.¹

1. The geographical and historical contexts

The upper Tigris and upper Khabur valleys comprise two distinct geographical and ecological zones within the upper Mesopotamia/Southeastern Anatolian region, straddling the high terrain of the Tur Abdin. The upper Khabur valley, part of the upper Syrian Jezirah and located in the Khabur River catchment area, is a wide, well-watered plain that lies at 300–450 m a.s.l. The upper Tigris valley, located in the foothills of the eastern Tauros mountain range in modern day southeastern Turkey, is a hilly area, crossed by a narrow plain that flanks the river with a maximum width of about 3–6 km, and is approximately 550 m a.s.l.

Although they differ in size, both areas are characterized by a high level of agricultural productivity and are located north of the 200 mm isohyet, usually considered to be the border of dry-farming cultivation. Although periods of low rainfall have been registered, both areas thus usually receive sufficient rainfall to produce crops without needing to resort to irrigation. The weather conditions are also similar, with high temperatures in the summer and long, cold winters.

¹ I would like to record my gratitude to the organizer of the workshop, Prof. Dominik Bonatz, for giving me the

opportunity to participate, for the hospitality, and for the fruitful encounters made during the stay in Berlin.

The valleys of the Khabur and Tigris are connected by routes along the Jaghjagh River, across the eastern slopes of the Tur Abdin (Radner 2006, 277), and along the Tigris in the area of Cizre, although the latter would have been a less convenient route.

Both areas were part of Ḫanigalbat, the Assyrian term for the land of Mittani, a territory that was to become a theater of conflict between Hittites, Mittani, and Assyrians, who all emerged as regional powers during the Late Bronze Age. The area north of the Tur Abdin was probably the home of the Hurrian city-states (Wilhelm 1989), which were subsequently integrated into the confederation that made up the Mittani kingdom.

The strategic position of these territories, at the crossroads of the routes leading to the west and penetrating into the Anatolian mountains, their rich markets and economic networks, and their potential for agriculture were the main reasons behind the Assyrians' interest in the region and undoubtedly triggered their conquest. The weakening of the Mittani State under Hittite pressure and their resulting expansion allowed the Assyrian kings to take control of parts of the eastern Mittani territories. Flanking the northwestern boundaries of the territorial nucleus of Assyria, these plains were a constant target for Assyrian expansionism, serving as a source of agricultural land and a gateway to the raw materials and natural resources of the mountains. Middle Assyrian military accounts tell us that two kings, Adad-nirari I (1295–1264 BC) and Šalmaneser I (1263–1234 BC), claim to have destroyed the cities of Ḫanigalbat from Taidu to Carchemish on the banks of the Euphrates (Harrak 1987, 61–87, 132–154). Also, cuneiform textual evidence points toward the conclusion that the Assyrian occupation of the upper Tigris began during the 13th century BC as the Middle Assyrians expanded (Radner 2004, 72).

2. The archaeological evidence from the upper Khabur valley

Excavations

Late Bronze Age levels have been found at different sites in the upper Khabur and upper Tigris valleys, and sherds dating to this period have also been recorded during territorial surveys. When evaluating the current state of evidence, we encounter difficulties connected to both the research methods and the quality of the documentation. The archaeological evidence is limited for several reasons: firstly, the excavations involve few sites and very small areas; secondly, the published data have different levels of resolution and completeness; and thirdly, the surveys were undertaken in different periods using different techniques of prospection and with different objectives. In general, according to Daniele Morandi Bonacossi (2000, 351, 363), the picture of the settlement landscape that emerges is incomplete and therefore not entirely representative of the different areas.

The most consistent archaeological evidence for the Late Bronze Age period comes from some multi-period sites in the upper Khabur valley whose occupation was largely continuous. Sites such as Tell Barri, Tell Brak, Tell Hamidiye, or Tell Fekheriye, all important Mittani cities, continued to be inhabited during the Late Bronze Age. Others, such as Tell Arbid, Tell Beidar, Tell Halaf, Chagar Bazar, and Tell Mohammed Diyab, were small rural centers during the period of Mittani hegemony in the valley and were probably abandoned thereafter. Others, such as Tell Amuda, show a new foundation during the Middle Jazirah II period.

Regarding the archaeological contexts, the evidence emerging from the Tell Brak and Tell Barri excavations allows us to establish some reference points for dating and also helps to evaluate the consistency and quality of occupation in the upper Khabur valley.²

The excavations at Tell Brak, which show a contextual presence of written documents, seals, and sealings as well as pottery, yield an important reference sequence for the Late Bronze Age. The investigations in area HH ('High Hill') allowed the unearthing of a palace and temple dating to the Mittani period (Oates *et al.* 1997, 1–18). Six Mittani-period tablets, including two legal documents related to the reign of Artasšumara and Tušratta, as well as seals and sealings, were found in rooms of the palace. As for the ceramic sequence, useful information emerged from trenches A–C south of the temple, where an area of private houses was found. The HH sequence (strata 7–1) covers the period between the construction of the palace (mid-16th century, but no later than 1500 BC) until its collapse and the Middle Assyrian conquest. Middle Jazirah I period houses were also found in the area north of the mound and in area SS. The remains of some private houses that reuse the walls of the palace, which suffered a partial collapse, and two floors overlying portions of the Mittani palace constitute the scarce elements datable to the Middle Jazirah II–III period (Oates *et al.* 1997, 14). The Middle Jazirah level is marked by visible differences both in the architectural features and in the associated pottery. A sequence of strata (phases 2–7) extending over a timespan from the 16th to the early 13th century BC, and characterized by a peculiar repertoire of common, painted, and gray wares, is topped by a level dating to the end of the 12th to the 11th centuries BC, whose production is limited to a reduced range of types in common ware (Oates *et al.* 1997, 66–79).

Evidence at Tell Barri concerning the final part of the second millennium BC has been found and investigated in two different areas: on the southeastern slope in area G, where a continuous stratigraphic sequence from the third millennium BC (Early Jazirah II) up to the post-Assyrian period has been exposed between 1983 and 2006; and on the northern slope in area P, where recent excavations, from 2007, revealed part of a large building dated to the Middle Jazirah I period, which was reused for craft activities during the Middle Jazirah II. Squares A–D 1–6 (strata 28–15, 14–8), investigated between 1989–1999 (Pecorella 1998; 1999a; 1999b), and A–D 7–10 (strata 40–33), investigated between 2002–2006 (Pecorella / Pierobon Benoit 2005; 2008a),³ yielded a sequence of strata covering the second part of second millennium BC. The two sectors are contiguous. The stratigraphic continuity between the two main sectors has been verified on the basis of recent excavations in G.A–D 7–10. Some walls and beaten-earth floors of stratum 37 are the continuation of those of strata 24–23, which are visible in the old north section of G.A–D 3–6. The two sectors, dug in different years, cover an area of 32 × 16 m. A–D 3–6 is located more externally in proximity to the slope, whereas A–D 7–10 is behind it, closer to the inner part of the old settlement, in the direction of the center of the tell. The material from G.A–D 7–10,⁴ a well-stratified sector without intrusions from recent levels, has yielded a more reliable sequence. The presence of pits and ancient soil disturbances in A–D 1–6, as well as the less clear stratigraphy, make it difficult to identify the relation between basic excavation units and the exact equivalences within the A–D 7–10 structures.

2 In this article I will adopt the regional chronological periodization proposed for the Syrian Jazirah (Pfälzner 2007, 231–232). The Late Bronze Age will be classified Middle Jazirah subdivided into Middle Jazirah I (Mittani period) and Middle Jazirah II–III (Middle Assyrian period). Middle Jazirah I A extends approximately from 1550/1400–1350 BC; Middle Jazirah I B from 1400/1350–1270; Middle Jazirah II A from 1270–1200;

Middle Jazirah II B from 1200–1120; Middle Jazirah III from 1120–1050.

3 The preliminary reports on the 2005–2010 seasons of work at Tell Barri are forthcoming from Pierobon Benoit.

4 Strata 40 and 39 have been exposed on a surface of 9 × 3 m, the stratum 38–37 on a surface of 13 × 8 m; the other strata cover the whole area.

After the abandonment of the Old Jazirah III residential buildings, changes in the settlement layout and in the artifacts reflect a new phase in the occupation of the site (Pecorella 1999a, 40–48), which is characterized by poor domestic architecture and open spaces used for handicraft and household activities. This change in plan together with the fact that new ceramic types and morphological attributes appear along with types of the late Old Jazirah III tradition, have been considered to be indicative of the beginning of the Middle Jazirah period.

The stratigraphic segment relating to the second half of the second millennium BC includes several architectural phases gathered in two main levels. Small houses, kilns, and domestic devices are recurrent elements of the earliest level (strata 39–34), whereas the more recent level is dominated by the presence of a unique, large, residential building (stratum 33) (Pecorella / Pierobon Benoit 2005, 61–67; 2008a, 48–62; 2008b, 52–75; D’Agostino 2008). Such a change in the floorplan of the area is mirrored in the composition of the ceramic assemblage. The repertoire of the earliest level consists of common, painted, and gray wares, while that of the later level consists only of common ware.⁵ According to our comparisons with the assemblages, which include seal impressions and written cuneiform texts, from other sites such as Tell Brak, Tell Sheikh Hamad, Tell Sabi Abyad, or Tell Bderi, we may consider the earliest level as belonging to the Middle Jazirah I period and the second phase to the Middle Jazirah II–III periods. A cuneiform tablet, which describes hunting expeditions in the regions of Nairi, Lulume, and Muski, probably dating to the period of Tiglath-pileser I (1114–1076 BC) or Aššur-bel-kala (1076–1056 BC) (Salvini 2005, 143–152 and article in this volume), was found in the debris filling an open area immediately outside the Middle Assyrian residential building, thus providing an important reference point in the Middle Jazirah sequence. The stratigraphic evidence and architectural modifications reveal that the building, constructed in the first phase of the Middle Jazirah II period and renovated during the 12th century BC, was abandoned during the second half of 11th century BC.⁶

In area P on the northern slope, the reutilization of parts of a building that is dated to the Mittani period on the basis of the potsherds found smashed on the floor, and the finds of pottery types from the Middle Jazirah II A period suggest that there was also a clear change in the pottery horizon in this sector of the settlement on the occasion of the Assyrian conquest and confirms the picture that has emerged from area G. Here a well preserved up-draught kiln individuates the only preserved Middle Jazirah II A stratum. This entire area was leveled during the Late Assyrian period for the construction of a huge retaining wall.

Both the Mittani and Middle Assyrian repertoires are characterized by chaff-tempered wares with inclusions more or less minced, along with secondary inclusions of limestone particles and sometimes fine sand. A buff-color surface is the norm; different firing conditions could produce color nuances tending to green, yellow, orange, or brown. The surface is smoothed with differing degrees of attention and care. Burnishing is only documented in a low percentage of the Middle Jazirah I repertoire and is attested in just a few pieces in the Middle Jazirah II–III repertoires. Cooking-ware sherds are attested in Middle Jazirah I strata but are almost completely absent in the Middle Jazirah II–III building.

5 Thanks go to Raffaella Pierobon Benoit, director of the Italian Archaeological Expedition at Tell Barri, for the permission to use material from the excavations archive. The final publication of the Tell Barri pottery sequence is forthcoming; Costanza Coppini is in charge of studying the Mittani ceramic sequence.

6 The Middle Assyrian building was probably the place of origin of the basalt basin, re-used in a domestic context (stratum 32), with a cuneiform inscription assigning it to Adad-nirari I (Salvini 2004, 147; 2005, 152). In particular, we can date the pottery of stratum 33c of the large Middle Assyrian building to the 12th century; as the building was used for a long period, using the same floors for years, little survives from an earlier phase.

The Middle Jazirah I level is marked by the presence of painted and gray wares constituting a significant percentage of the total amount of excavated fragments (D'Agostino forthcoming). A large part of the fragments with painted bands belong to the typical Khabur ware of the Middle Jazirah period and have the characteristics typical of the so-called younger or late variant (fig. 1, 1–11). Besides the painted bands we often find triangles, lozenges, dots, and other geometric and linear compositions. In some cases the decoration also includes figured anthropomorphic and zoomorphic motifs. Sherds of Nuzi Ware (fig. 1, 12–19) and shallow bowls or plates with a red-edged rim (fig. 1, 20–22) are further typical finds from this level. The gray ware forms a distinct class; typical of it are carinated bowls. Most of the pieces have a dense paste and a burnished surface, although fragments that are highly smoothed and not burnished are also documented (fig. 1, 23–31). A distinctive shape linked to the gray ware is a bowl with deep notches cut into the lower edge of the rim and often with tripod legs (fig. 1, 29–31). Most of the ceramic sherds belong to a common ware that is characterized by a high variability in the pot shapes (Coppini 2008). Generally speaking, the pieces are well manufactured, have an accurately smoothed surface, are sometimes burnished, are more or less well fired, and often have a clear clay slip. We are able to recognize a finer temper and a medium one. Special shapes, such as the widely known tripod vessels or vases with a filter pouring rim or spout are characteristic of this phase.

With regard to the Middle Jazirah II level we note a significant change in the ceramic repertoire. The assemblage from the large building of stratum 33 shows that the number of variants is strongly reduced in comparison to the previous period and that standardization in shape and temper has increased. The assemblage seems substantially more homogeneous and in morphology and manufacturing it seems consistent with Middle Assyrian standard types (fig. 2). The pots belong to a low-cost, specialized production, with typical shapes of the period including conical bowls, carinated bowls, jars with a ribbon rim, and pot-stands. The tempers are few in number and the differences concern the amount and density of chaff inclusions. Most of the shapes known from the previous phase have disappeared. There is an absence of painted decoration and of gray ware. A sort of fine Middle Jazirah II–III production is represented by beakers and 'fine' carinated bowls, whereas the presence of curved bowls with superficial grooves under the rim seems to be a characteristic element of this level.

At Tell Fekheriye in the western Khabur valley, the Middle Jazirah sequence, according to the recent results from the Syrian-German expedition, seems to be similar to that emerging from sites such as Tell Brak and Tell Barri. The site should probably be identified with the ancient Waššukanni, the Mittani capital city (Bonatz *et al.* 2008, 92, 112). Middle Jazirah sherds from contexts were first found in soundings IX and I–IA, opened by American archaeologists in 1940 (McEwan 1958, 1, 4–10; Kantor 1958, 23–25). Subsequently, German excavations on the high mound in the 1950s found a stratified collection of pottery that also dates to the Middle Jazirah period (Hrouda 1961, 209–222). In the published sections of the trenches (Hrouda 1961, 224–225), the stratigraphic sequence clearly shows a distinction of deposits with Middle Jazirah I–II pottery.

The remains of two building phases dating to the Middle Jazirah period have recently been exposed by German archaeologists (Bonatz *et al.* 2008). Sparse evidence of a Middle Jazirah I period layer has been found under the base of Middle Jazirah II–III walls. Four excavation areas in the upper city have been opened: area A and B near the *hilani* (the old sounding IX); area C, being an enlargement of sounding VI from the American expedition, near to the soundings opened by the Syrian-German expedition in 2001 (Pruß / Bagdo 2002); and area D on the southwestern slope of the high mound. In area B, levels III and IV are assigned to the Middle Jazirah period. Middle Jazirah II ceramic types are documented



Fig. 1 | Tell Barri, area G: pot-sherds from Middle Jazirah I level (Archivio Missione Archeologica a Tell Barri).

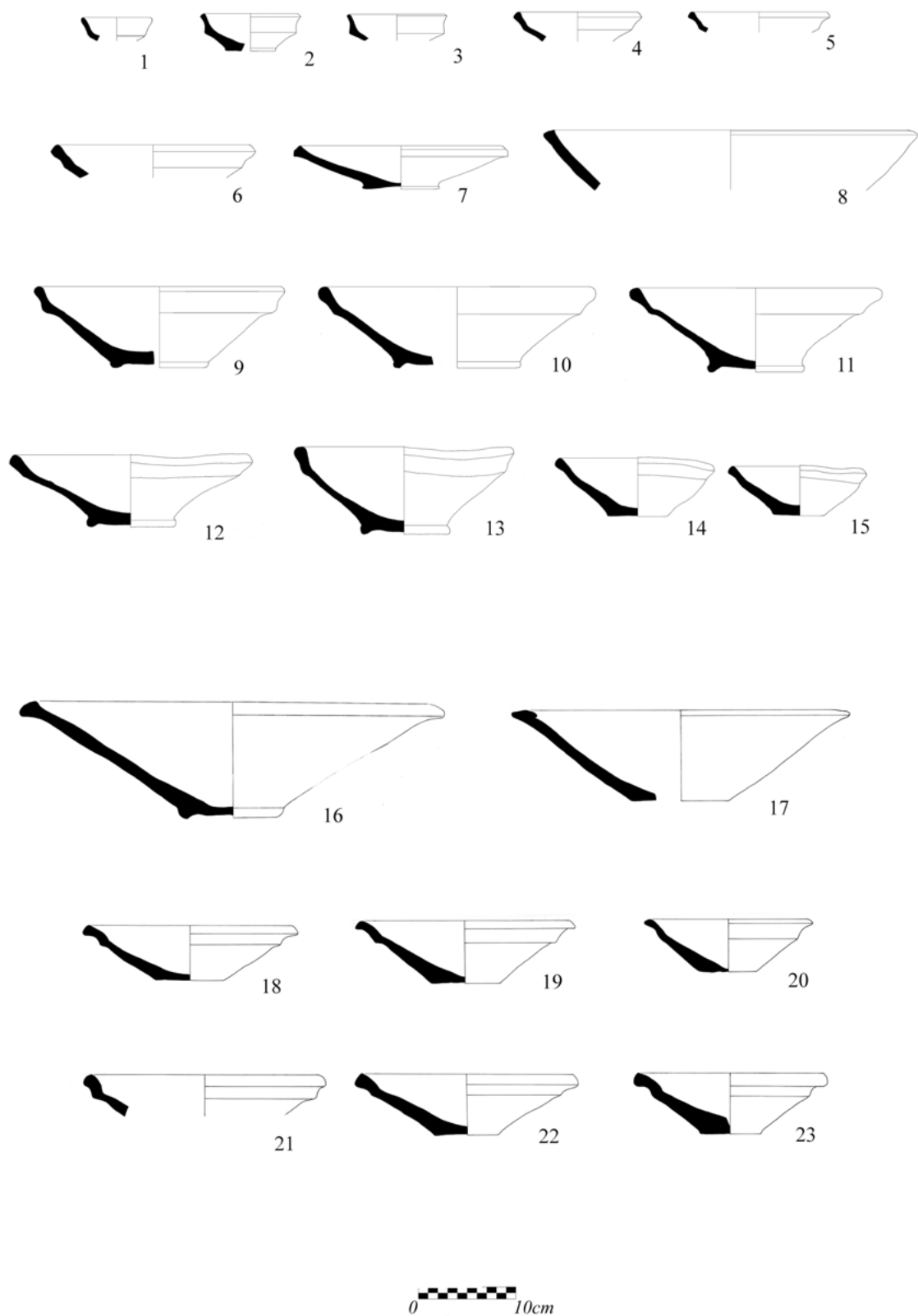


Fig. 2 | Tell Barri: Middle Jazirah II bowls from area P kiln (n. 1–15) and area G building (n. 16–23)
(Archivio Missione Archeologica a Tell Barri).

in level III, including red-edged bowls and fenestrated and pie-crust stands, which allows a preliminary dating of level IV to the Middle Jazirah I (Bonatz *et al.* 2008, 106). In area C, houses I–III and material dating to the Middle Jazirah II period have been found (Bonatz *et al.* 2008, 111), as have some remains dating to the same timespan in area D.

At Tell Hamidiye, a site identified with Taidu (Eichler *et al.* 1985, 53–70; 1990), another capital city of Mittani, evidence dating to the second half of the second millennium BC has been found in different sectors but mainly concentrated on the high mound, where a large building, developed on different terraces, has been discovered. The area of the Mittani palace on top of the mound was partially reconstructed and used until the Late Assyrian period (Eichler *et al.* 1990, 237–258; Wäfler 1993, 198). Unfortunately the pottery and other material from the Middle Jazirah and Late Assyrian periods found in the published contexts have been considered mixed (Pfälzner 1995, 187).

The excavations on the high mound of Tell Mohammed Diyab provided levels from the second half of the second millennium BC. The fill 848, pits 853 and 854, and floor 914 belong to the intermediate level, which yielded Middle Jazirah materials (Faivre 1992a, 63) together with Old Jazirah III sherds. Evidence of the Middle Jazirah II period has been detected in area 841 (pit 836), within the house levels and in level 6 of sondage 3, 6 and 7 in the lower town (Faivre 1992a, 63, 67).

Sites attesting Middle Jazirah I occupation are Tell Beidar, Tell Arbid, Chagar Bazar, Tell Mozan, and Tell Halaf.

In the lower town of Tell Beidar a portion of a Middle Jazirah I settlement has been exposed, which is characterized by domestic dwellings and a good percentage of Nuzi Ware sherds. This occupation, consisting of a unique building level and two phases of use, was dated to the 14th century BC (Bretschneider 1997a; 1997b).

Excavations at Tell Arbid revealed Middle Jazirah I occupation in sector A on the western slope of a small mound northeast of the main mound and in sector S at the top of the main mound, where a layer with some houses and two rich burials (Bieliński 2003, 307–311; Smogorzewska 2006) has been documented. ‘Pie-crust pot-stands’ as well as Nuzi Painted Ware footed beakers and sherds are reported as finds from these layers.

Tell Mozan, too, has shown traces of Middle Jazirah I occupation, although the state of preservation of this level is very bad due to the erosion of the terrain (Dohmann-Pfälzner / Pfälzner 1999, fig. 8). Very modest houses in trench AS at the summit of the mound and in BH were found during the first seasons (Buccellati 1998, 32).

The excavations carried out by Max E. L. Mallowan at Chagar Bazar provided evidence in which the Khabur and Nuzi pottery traditions in level I overlapped. The latest phase of level I is characterized by some pebble floors and is where a Nuzi fragment was found; it seems to date to the Middle Jazirah I period (Mallowan 1947, 84–87).

At Tell Halaf, the very few potsherds from the Mittani period are the only elements to document a Middle Jazirah occupation (Hrouda 1962, 75).

In contrast, Tell Amuda/Tell Shermola, on the Syrian-Turkish border, exclusively revealed evidence of the Middle Jazirah II period in sondage D at the foot of the northern slope and in sondage C on the southern slope (Faivre 1992b, 139–140, 142). Layers Iva–b and IIIa–b represent the first phase of occupation, dated to the second half of the second millennium BC, with a homogeneous assemblage located in the proximity of the floors of the buildings, which probably had official functions. A second phase, individuated by layers IIa–e, represents a late occupation within the same cultural horizon; the pottery is in fact similar even as new shapes appear.

Girnavaz, 5 km north of the Syrian-Turkish border, has yielded evidence of Middle Jazirah occupation (Erkanal 1988, 142); Tell Abu Hafur (Bielinski 1990, 24–25), Tell Hwes (Pfälzner 2007, 234), and Tell Hassake (Abd al-Masih Bagdo, pers. comm.), located in the southern limit of the upper Khabur valley, attest a second millennium BC occupation with Middle Jazirah I–II pottery.

Surveys

Research on the settlement pattern of the territory has provided us with little evidence. The surveys conducted in the past year were often extensive surveys that focused on selected sites. Because of the limited knowledge of the ceramic sequence, in particular concerning the common ware repertoire, and a limited survey methodology able to individuate fine-grained trends in settlement, it is very difficult to distinguish between Middle Jazirah I–II occupations when analyzing the survey results. In many cases the sites were labeled generically as ‘Late Bronze Age sites’ and the only reliable chronological indicator to specify the date within the Late Bronze Age was painted wares (*in primis* Nuzi Ware beakers). Furthermore, when the drawings of collected sherds have not been published, the label ‘Late Bronze Age site’ attached to sites with Middle Jazirah I or/and II period pottery makes it very hard to establish when exactly the occupation should be dated within the Middle Jazirah. In consequence, very little can be inferred about structural change in the settlement pattern during this period. Although the field evidence remains sparse, some remarks can be made and some trends can be suggested.

From the data from a limited survey in the territory around Tell Brak, it appears that 14 sites were occupied during the Middle Jazirah period. Two of them, Umm Kahf I and Tell al-Adhan, are potentially Middle Jazirah II (Eidem / Warburton 1996, 59).

Settlement in the eastern Khabur valley declined dramatically during the second millennium BC (Meijer 1986; Eidem / Warburton 1996, fig. 1b).

Through the survey of the Tell Beidar area (Wilkinson 2002, 363), a more regular occupation during the Middle Jazirah, around the bases of the tells, has become evident. Most occupations occur in the form of small, low mounds (rarely on the tells) and the pattern is rural and dispersed. This pattern is also mirrored by the presence of Middle Jazirah I layers in the small mound near Tell Arbid. The Late Bronze Age remains consist of ceramic materials comparable to the repertoire from Tell Brak area HH level 2 (Middle Jazirah IB), and Nuzi Ware is documented exclusively in the Beidar lower town. The other settlements are adjacent to six or eight tells. In the western and northern part of the valley a good number of sites have shown occupation dating to the Middle Jazirah II period, whereas minimal settlement, with a few smaller occupations, has been documented around Tell Beidar (Wilkinson 2002, 365–366).

Along the Khabur, south of Tell Fekheriye, the Middle Jazirah II settlement pattern has been defined as sparse (Lyonnet 1996, n. 18). The results of an extensive survey in the area between Tell Beidar and al-Hassake (Oates 1977, 234), where only six mounded sites have revealed evidence of occupation with Late Bronze Age wares, confirm a contraction in settlement for this area.

The northern portion of the valley appears less occupied. During the extensive survey of the area around Qamishly, west of the Jaghjagh River (Lyonnet 1992, 107; Anastasio 2007), only three bowlsherds of Nuzi Ware were collected at Tell Bezari and Tell Hamdoun, along with a few red-edged rims or bases of straight-sided beakers from Tell Farfara, Tell Ain Qard, Tell Qarassa, and Tell Roumeilan. At these sites, Middle Jazirah II–III types have also been collected. Thirty-eight sites document occupation during the Middle Jazirah I period whereas 55 have an Assyrian (Middle-Neo-Late) occupation. In the

western portion a more dense occupation is attested. Here the number of sites with demonstrated occupation during the Middle Jazirah II period is 48 (Anastasio 2007, 104–105, 140–142).

In general, the decline in settlement during the second millennium BC in most parts of Mesopotamia reached its peak in the Middle Jazirah period immediately before or just after the Middle Assyrian expansion, as suggested by Tony J. Wilkinson (2002, 368). Despite the general trend of an overall decrease in the number and extent of settlements on a regional scale, the evidence from several sites in the central and eastern-central Khabur valley shows that there was a relatively significant occupation concentrated at some large mounds which continued to be occupied for a long time. Rural settlements are also documented in small mounds near the main sites covering the entire Middle Jazirah.

3. Between the Khabur and Tigris Rivers: The Iraqi northern Jazirah

Excavations and surveys

Some remarks on the neighboring eastern territories of northwestern Iraq are necessary in order to give a brief outline of the territory contiguous to the upper Khabur valley, also a part of the northern Jazirah. This area, close to the periphery of the Assyrian heartland, was part of the Mittani kingdom and was involved in the first steps of the Assyrian imperial expansion. Here the archaeological investigations revealed an elusive occupation during the Middle Jazirah period.

The area north of Jebel Sinjar, within the boundaries of modern Iraq, has been the object of intensive survey.⁷ Sherds of Nuzi Ware were not identified at any sites except Tell al-Hawa and Tell Hamide (Ball *et al.* 1989, 18; Wilkinson 1990, 57). At Tell al-Hawa, the principal settlement of the region with 15 ha, Middle Jazirah I material and substantial Middle Jazirah II remains with associated material were excavated on the main mound and mound F (Ball *et al.* 1989, 35, fig. 25). Middle Jazirah I pottery was found more often in the areas with Middle Jazirah II material. In general, a substantial decrease in the total number of sites has been noted in the Iraqi Jazirah between the Old Jazirah III and Middle Jazirah period (Wilkinson / Tucker 1995, 59). Twenty-eight sites, with an average size within the range of 1–5 ha, attest to a pattern of small settlements (Wilkinson 1995, 145). The large central settlements of Tell al-Hawa, Kharaba Tibn, Abu Kular, Tell al-Samir, and Tell Man'a continued to be occupied, mainly on the lower mounds (Wilkinson 1990, 57).

It is worth noting what happened in the middle Tigris valley, north of Mosul, where surveys and excavations were carried out within the Eski Mosul Dam Salvage Project. In the Zammar region an apparent lack of Late Bronze Age settlements has been noted (Ball 2003, 15–16), which can probably be interpreted as a direct consequence of its location as a kind of buffer zone between the Mittani and Assyrian territories, open to the incursions of nomads from the steppes and mountains during a time of instability. Only Khirbet Karhasan has revealed stratified remains of Middle Jazirah I and Middle Jazirah II occupations, which are stratigraphically quite distinct from preceding and subsequent layers. The settlement was probably an outpost controlling the river or a *dunnu* dependent on Tell al-Hawa, the main center of the region. A few sherds of Nuzi Ware were found at Tell Abu Dahir and Tell Shelgiyya in residual contexts. Doubtful Middle Jazirah II sherds have been found in the Bardiya cemetery and at Abu Dahir. Downstream a few sites gave further evidence for this period. Remains dating to Middle Jazirah I

7 For maps see Anastasio *et al.* 2004, maps 11, 15.

and Middle Jazirah II have been exposed at Tell Jigan, Tell Fisna, Tell Jessary (Fujii 1987a, 34, 41–42, fig. 9, 5–13; 1987b, 63; 1987c, 70), Nemrik (Reiche forthcoming), and Tell Rijim (Bieliński 1987, 18; Koliński 2000, 3), whereas at Tell Mohammed Arab (Roaf 1984, 144–150) two large areas of Middle Jazirah II settlement with well stratified building levels were unearthed.

On the plain southwest of Jebel Sinjar at Tell al Rimah, extensive strata belonging to the Middle Jazirah period have been exposed (Postgate *et al.* 1997, 21–35, 37–40). The poor traces of a reused part of the great temple of site A on the high mound and the construction, over and against the remains of the original walls, of small houses (level 2) document the Middle Jazirah I–II occupation (level 1). The private houses and small shrines at site C, where two main phases were identified from the Middle Jazirah I period (level 5), gave a radiocarbon measurement from burned debris with a date calibrated approximately around 1450 BC (Postgate *et al.* 1997, 37). The same pattern of private houses is retained in the following strata (levels 4–2) dating to the Middle Jazirah II period.

South of Jebel Sinjar sporadic evidence dating to the Middle Jazirah II have been found at Tell Koshi (Kepinski 1990, 276–277).

4. The archaeological evidence from the upper Tigris valley

Excavations

The archaeology of the upper Tigris mainly results from excavations undertaken as a part of the international Ilisu Dam Salvage Project initiated by the Turkish Ministry of Culture and Tourism in the late 1990s (Tuna / Öztürk 1999; Tuna *et al.* 2001; 2004; Tuna / Velibeyoğlu 2002; Tuna *et al.* 2004), involving areas and sites to be either flooded or heavily affected by the realization of the dam project. The valley around Diyarbakır and the area between this city and Batman have been the target of recent and extensive archaeological projects, whereas almost nothing is known about the northern hills and uplands, or about the Tur Abdin area, as these territories are under-explored from an archaeological point of view.

At the beginning of the 1990s the valley was explored and after the first reconnaissance survey several mounds were chosen on which to begin excavations. Sites such as Giricano, Ziyaret Tepe, and also Gre Dimse, Kenan, and Salat Tepe, provided interesting evidence that helps to delineate the evolution of local culture between the end of the second and the beginning of the first millennium BC. Because the material culture of the valley is still only known very fragmentarily, the categories of finds that identify a Late Bronze Age occupation are common sherds of indisputable Middle Jazirah I date (Nuzi, Late Khabur ware, red-edged bowls, and a few other types), which represent ceramic classes that are easy to recognize but which are a rare find, usually due to the limited quantity in ceramic repertoires, as we noted for the upper Khabur valley too. The categories that identify a Middle Jazirah II occupation are the standardized ceramic types (carinated bowls, jars with ribbon rim) similar to those found in Middle Jazirah II–III at northern Syrian and Iraqi sites where an Assyrian presence has been documented.

Furthermore, the stratigraphic position of the different pottery repertoires in the few excavated trenches was used as a tool to date and to understand the development of the pattern of small (often 1–3 ha) sites scattered over the valley. This data enabled the archaeologists to attempt the reconstruction of a settlement pattern and its development, understood as a direct consequence and reflection of events recorded in historical texts (Parker 1993 for the Iron Age).

For the end of second millennium BC, the period immediately prior to the Late Assyrian penetration into the region, we do not yet possess clear evidence that would allow us to understand the local settlement system in the upper Tigris. This also applies to the sparse Middle Jazirah archaeological evidence available, although we should not rule out that the reduced number of Middle Jazirah sites may simply be ascribed to our inability to recognize the full range of ceramics for this period.

Levels dated to the Middle Jazirah have been found at different sites concentrated along the river and its floodplain. Key sequences that help us to reconstruct the development of the local material culture are those exposed at Üçtepe, Giricano, and Ziyaret Tepe.

In trench III on the eastern slope of the Üçtepe high mound, a continuous stratigraphy encompassing the second millennium BC without substantial interruption has been exposed (Köroğlu 1998, 25–37; Özfiat 2005, 56–58), providing the first sequence for the Middle Jazirah of the upper Tigris. Although the size of the areas exposed is small and the architecture was not explored to a wide extent, the excavations provide us with data for a ceramic repertoire sequence.

The architecture of level 10 comprises walls with irregular, mid-sized stones, probably part of houses with hearths and *siloi*. ‘Beige-Brown Ware with Plant Temper’ forms the majority of the sherds attested in level 10 and is characterized by organic temper, a slipped surface approximately the same color as the paste, the presence of fine or medium sand temper, and the presence of burnishing on half of the pieces (Özfiat 2005, 56–58). A few potsherds of Nuzi beakers (six fragments) and a sherd of a Late Khabur beaker or bowl with a representation of a bird were also found in level 10, all with the typical characteristics of corresponding wares found at Syrian and Iraqi sites, as were footed bases (Özfiat 2005, figs. CII, CIII, 1–7). Level 9, directly on top of the level holding the Beige-Brown Ware, is characterized by a single building with two floor-levels containing standard pottery of the Middle Jazirah II period (Köroğlu 1998, figs. 5–8).

At Giricano, a middle-sized mound with a maximum extent of *ca.* 2.4 ha, Middle Jazirah occupation levels were found in trenches 01 and 06, respectively on the top of the mound and on the south slope (Schachner 2002, 12–14, 17–19). Architectural remains include rectangular structures, probably belonging to simple houses and open-air working areas, and some pits cutting the early second millennium levels, which contain Middle Jazirah II–III ceramic types. In the latest phase archaeologists found a small archive of about fifteen tablets dated to the reign of Aššur-bel-kala (Radner 2004, 52–53). These texts indicate that Giricano functioned as a special type of site known as a *dunnu* in Middle Assyrian texts and can be described as an agricultural production center (Schachner 2002, 26; Radner 2004). In trench 01, directly below the Middle Jazirah II remains one architectural level can be dated to the Middle Jazirah I period on the basis of the pottery and cylinder seals. The ceramic repertoire is homogeneous and has morphological and technological characteristics typical of contemporaneous repertoires found at sites in northern Syria and Iraq (Schachner 2004, 9).

Ziyaret Tepe, the largest site in the valley, was an important settlement during the second millennium BC and was capital of the Assyrian province during the first millennium BC (Radner / Schachner 2001, 754–757). Traces of the Middle Jazirah occupation is mainly represented by the presence of Middle Jazirah II pottery forms spread across the high mound and lower town. This indicates that the site expanded considerably at the beginning of the 13th century BC, although both survey and excavation work have shown that remains dating to this period are mainly concentrated in the upper levels on the high central mound, the maximum extent of which was 3 ha. Excavations have yet to yield coherent levels dating to the Middle Jazirah period. Operation E, a step trench on the eastern slope, provided a sequence from the Islamic period to the end of the third millennium BC and yielded layers belonging to the

Middle Jazirah I period. Above step 5 the remains of a mud-brick building known as the 'Brightly Burned Building', the use of which ended in a violent fire around the 17th–16th centuries BC, have been exposed (Matney *et al.* 2002, 63–64; Roaf 2005, 21). Middle Jazirah II domestic structures and surfaces with typical Middle Assyrian sherds directly below the topsoil were cut by a pit that contained hand-made Early Iron Age grooved pottery (Matney *et al.* 2003, 178).

In Kavuşan Höyük, a site *ca.* 1.3 ha in size, several levels of occupation gathered in at least three or four phases dating to the Middle Jazirah period have been identified. The last phase, characterized by the presence of very simple domestic structures, contains typical Middle Jazirah II–III types which are similar to specimens found at sites in the Syrian-Iraqi Jezirah (Kozbe 2007a, fig. 8; 2008, 292–293), although the published figures lack standard carinated bowls and jars with ribbon rim, which are markers of Middle Jazirah II production. Sherds of Middle Jazirah I period pottery and red-edged bowls have also been found (Kozbe 2007a, fig. 7).

The site of Hirbemerdon Tepe was partially occupied during the Middle Jazirah period. During phase IIIC, scattered remains uncovered in the northern sector of area A, on the top of the mound, consist of stone foundations with outdoor courtyards, which are not well preserved due to the proximity of the mound slope and to disturbance by later pits (Crescioli / Laneri forthcoming). In terms of pottery, the Middle Jazirah phase was marked by some fragments of late Khabur and Nuzi Ware, one rim of a red-edged bowl, and several types of common ware. All these fragments can be dated to the Middle Jazirah I period. In addition a couple of carinated bowls show a morphology similar to that of the standard Middle Jazirah II bowls (Laneri *et al.* 2009, fig. 20.1, 4), although these local versions are hand-made and bear traces of burnishing.

Late Khabur and sherds of Nuzi Ware were found during the first survey of Salat Tepe, a site 2.5 ha in size, and out of context in trenches M13 and L13 together with an example of painted pottery (Ökse *et al.* 2001, 616, n. 23; Ökse / Alp 2002, 661). Furthermore, fine-walled beakers with light-colored decorations (Nuzi Ware) and late Khabur sherds also occur in level 1, attesting a reoccupation of the site after the collapse of the building in level 2, together with Red-Brown Wash Ware specimens typical of the local Middle Bronze Age repertoire (Ökse / Görmüş 2006, 183, n. 39–40).

Further evidence of second millennium BC occupation has been unearthed at Gre Dimse, a medium-sized mound *ca.* 4 ha in size, located on the northern bank of the river Tigris near Batman. Here, two trenches on top of the mound and two trenches on the slope have yielded pottery dating to the Middle Jazirah period, including some sherds of Nuzi Ware, but these are not in good stratigraphic contexts, close to the modern surface (Karg 2001 681–687; 2002, 717).

Surveys

The first extensive survey of the upper Tigris valley has shown that Middle Jazirah materials have been difficult to identify, although they were certainly present (Algaze *et al.* 1991, 183). The valley in particular shows a paucity of material for the Middle Jazirah I period. The preliminary report of the survey notes that only one fragment of Nuzi Ware was found along the Tigris, although similar materials exist in the eastern area of the Batman River.

During the survey of the Diyarbakır and Bismil regions, specimens of Beige-Brown Ware, similar to those found in level 10 at Üçtepe and dated to the Middle Jazirah I period, were discovered on the surface of five sites (Özfirat 2005, 57) in the western part of the valley, distributed approximately along a south-

north axis that connects the Tur Abdin with the Tauros mountains (Ergani and Lice passes). In this area, about 25 sites yielded Middle Assyrian and Neo-Assyrian pottery (Köroğlu 1998, 54–74). An analysis of the published drawings of sherds suggests that there is evidence of Middle Jazirah II occupation at eight sites at least. Pottery of the Middle Assyrian period has been found in significant quantities but only in a few centers north of the river. These are located on the route that probably ran in the direction of the Lice-Genç Pass (Köroğlu 1998, fig. 17, 109–110), where Assyrian carved reliefs and inscriptions of Tiglath-pileser I and Šalmaneser III have also been found (Schachner 2007, 232–243). The principal large mounds are mainly located on the right bank of the Tigris.

It is even more difficult to define the extent and type of settlements on the Garzan and Bohtan Rivers, both tributaries on the left bank of the Tigris, as only very extensive and low-intensity surveys have been undertaken. These found no Middle Jazirah pottery types (Velibeyoğlu *et al.* 2002; Parker 2003, 548–549) with the exception of Gre Amer on the Garzan River, probably a Middle Jazirah I settlement and a Middle Jazirah II *dunnu*, and Turbe Höyük, where a Late Bronze Age fortress was found, probably controlling the route along the Bohtan River. There, some sherds of red-edged bowls typical of the Middle Jazirah II horizon were discovered. This would seem to suggest that they were in use throughout the entire Middle Jazirah period (Sağlamtimur / Ozan 2007, figs. 8, 9).

The surveys of the lower course of the upper Tigris (in modern-day Turkey), south of the Tigris-Bohtan confluence, and of the middle Tigris (in modern-day Iraq) have yielded fragmentary evidence of Late Bronze Age occupation. The valley narrows south of the Bohtan-Tigris confluence before reaching the Cizre-Silopi plain, leaving little room for settlements and agriculture. No mounds were found in this area (Algaze *et al.* 1991, 189–190).

The Cizre-Silopi plain, located between the upper Tigris valley and the plains of northern Iraq, is reached by the Tigris, which crosses the mountain of Cudi Dağ through a deep gorge. Because of its position immediately north of the Assyrian nucleus and capitals, and near the highlands of southeastern Anatolia, the Cizre plain was strategically important throughout the course of history.

Archaeologists analyzing the sherds collected on the Cizre plain have identified a total of 10 sites dating roughly to the Middle Jazirah period (Parker 2003, 542; 22 according to Algaze *et al.* 1991, fig. 22b). Basorin Höyük offers the best evidence for the Middle Jazirah period and is also the only site where sherds of Nuzi Ware have been identified (Algaze *et al.* 1991, 197). It appears that there was no expansion of settlements during the Middle Jazirah II period. Only three large sites existed at one time and the size of the majority of the settlements has been estimated to be below 5 ha, in a few cases even less than 1 ha (Parker 2003, 542). On the basis of data collected during a recent survey on the south portion of the plain, archaeologists have argued that there was a clear decrease in the number of sites settled during the end of Middle Jazirah period in the latter half of the second millennium BC (Kozbe 2007b, 324).

This picture is rather fragmentary as only a few surveys and even fewer excavations, usually rescue projects, have been carried out in these regions. Whether the situation described above is a real pattern of settlement, or rather represents our incomplete knowledge, we have no way of knowing.

5. Discussion

Both the cuneiform texts and the archaeological evidence from surface surveys and excavations suggest that the valleys of the Khabur and Tigris Rivers were a part of the Mittani kingdom and were subsequently incorporated into the Middle Assyrian system by the time of the 13th century expansion.

Our reconstruction of the settlement patterns within the landscape is incomplete and unbalanced due to many and varied factors. The surveys, although providing a wealth of additional data that undoubtedly widen the terms of our analysis, do not provide a clear solution. A preliminary examination of the evidence from sites located in the valleys reveals that we have only a small corpus of data from a limited number of multi-period sites. This is the case particularly for the upper Khabur but also applies to the upper Tigris, where the excavations undertaken to date have been mainly of urban centers, with the excavation trenches limited in their extent.

The data, although limited, point to a pattern of rural settlement with villages organized around a few main centers that maintain their importance throughout the Middle Jazirah period. In contrast to the main sites occupied throughout the Middle Jazirah, several settlements changed in size, and in some cases were abandoned, whilst others were founded anew. The persistence of small settlements during the Middle Jazirah I–II periods suggests that land-use was similar throughout the second half of second millennium BC, with agriculture probably the major factor behind the settled occupation of the valleys.

In terms of artefacts, ceramics are the most commonly recorded. These provide us with direct evidence of domestic life. I would argue that the material culture, understood as the ceramics, together with the textual evidence, suggests that there were close cultural links between the upper Khabur and Tigris valleys during the Middle Jazirah and that both were integrated into the Mittani kingdom, thereafter becoming a part of the Middle Assyrian state at the end of the period. Two distinct traditions in pottery production emerge in the upper Khabur and Tigris regions during the Late Bronze Age. In terms of the stratigraphic sequences, the Middle Jazirah I–II repertoires are distinct. They are deposited on top of the Old Jazirah III levels and covered by IA levels respectively. All sites where coherent archaeological contexts were found show a clear stratigraphic distinction between these phases.

The Middle Jazirah I tradition can be understood as a development of the Old Jazirah III pottery tradition: it is subject to various degrees of external influence, but nevertheless maintained features which characterized the previous productions, especially in terms of manufacture techniques, decoration patterns, and some morphological characteristics. It can be said that the repertoires of Tell Barri and Tell Brak are representative of the pottery horizons that characterize the upper Khabur region during this period.

The ceramics from the Middle Jazirah I period in the upper Tigris region are yet to be published systematically, with the exception of some data on the Üçtepe repertoire. According to the excavators (Roaf 2005, 21) the ceramic assemblage from trench E at Ziyaret Tepe is similar to those from northern Mesopotamia and apparently shows no connections to the repertoire from the Old Jazirah III period. The horizon of Üçtepe level 10 (i.e., Beige-Brown Ware) has been described as different from the Old Jazirah III repertoire in terms of its forms and manufacture technique.⁸ In contrast, pottery types from the Middle Bronze Age tradition in Salat Tepe level 1 (Red-Brown Wash Ware) have been recorded together with pottery that is clearly datable to the Middle Jazirah I period. However, in order to evaluate whether this represents a layer at the beginning of the Late Bronze Age, it will be necessary to wait for the publication of the site's pottery assemblage.

The composition of Middle Jazirah II repertoires is more uniform than the more varied Middle Jazirah I assemblages and it is probable that there was more than one center of production. The wares of this Middle Jazirah I tradition do not seem to have survived in Middle Jazirah II period contexts. At Tell Barri the large residential building in stratum 33 and the kiln in area P mark places where vessels that

8 But some types (Özfiat 2005, figs. CI:7–II, CV:1) are reminiscent of Red Brown Wash Ware carinated bowls

typical of a Middle Bronze Age local horizon (D'Agostino forthcoming).

were typical of the production during the Middle Jazirah II were made. At Tell Brak, in the houses above the Mittani palace and temple, there is a similarly clear change in the pottery production;⁹ these areas were probably controlled directly by the Assyrians. There has been no excavation of a settlement that exhibits a clear transitional level documenting the coexistence of both repertoires.

Concerning the categories of painted and gray wares that were being produced during the Middle Jazirah I period, it must be stated that there is insufficient evidence available to determine whether they were in use after the end of Mittani control, with the exception of a few specimens found in the Assyrian heartland; the latter require a separate explanation however. At Tell Fekheriye sherds of red-edged bowls have been found in areas B, C, and D in the same contexts as materials associated with the Middle Jazirah II as well as from a mixed deposit. However, the excavated area is too limited to be able to judge whether they are residual or really constitute a link between the Middle Jazirah I and Middle Jazirah II repertoires as documented in the Assyrian triangle.¹⁰ What is presently unknown is whether these sites, characterized by a non-Assyrian type of ceramic assemblage, were contemporary. There is no evidence from the upper Khabur that would allow the settlements with typical Middle Jazirah I types, but no Middle Jazirah II, to be assigned to the end of the Late Bronze Age, i.e., the period of Middle Assyrian rule. In other words, it is an obvious possibility that small rural settlements continued to produce types common to the Middle Jazirah I for a certain period of time up until the end of Middle Jazirah II and that a parallel, differentiated, contemporary manufacture existed at some sites. Likewise, we can only speculate on how long it took for the production of Middle Jazirah I types to disappear.

Certainly the specialized productions, such as the Nuzi, late Khabur, or gray wares, in this their main area of distribution, disappeared when their specialized craftsmen, located at a few production centers (identified according to the presence of a recurrent typology and decorative patterns over a wider territory), ceased work; this was presumably as a consequence of the new organization of the major settlements and their production systems by the Assyrians.

The changes in the material culture recorded at many settlements during the period of the Assyrian expansion must be explained within the context of the conqueror's dynamics of 'imperial' hegemony. The Assyrians dismantled the structures and management system of the Mittani kingdom and modified the local economy in favour of Assur's interests. The main settlements of the upper Khabur were probably quickly and entirely integrated into a new organism as the territory came to be intensively exploited. As this had been the core of the Mittani kingdom, the dismantling of the social and political fabric was more decisive than in other areas. The local communities may have been in part deported and those remaining were first acculturated and then assimilated.

There is a connection between pottery production and the establishment of Assyrian administration and political control. Alongside the re-organization of administrative and economic life there was also a transformation in ceramic production. The latter is the most visible consequence of the introduction of this new Assyrian socioeconomic model as the foundation of their production system. The new

9 The bowl n. 154 from Tell Brak is considered 'possibly Middle Assyrian' on the basis of its shape. Oates *et al.* (1997, 18) judge the first level of the trench as 'poorly preserved' and note as follows: "In trenches A-C a small quantity of Middle Assyrian pottery was found within the uppermost deposits, although no floor level of this date had survived. In some places, moreover, the surface material was clearly contaminated by Mallowan's dumps."

10 Red-edged bowls and pie-crust stands characterize both Middle Jazirah I and Middle Jazirah II levels at Tell al-Rimah in the levels of areas C and A. (Postgate *et al.* 1997, 61-75). The red-edged bowls are found at Tell Mohammed Arab (Pfälzner 1995, 204-206) in Middle Assyrian 14th-century levels. Also at Tell Sheikh Hamad there are examples in the domestic assemblage of area L, but none were found in the material excavated from the official building P (Pfälzner 1995, 162-163).

territorial organization and the changing socioeconomic system provided the backdrop for a process of specialization and standardization in the pottery production and the adoption of an Assyrian ceramic tradition.

The trademark techniques and styles connected to the period of Mittani cultural and political predominance disappeared as the role that pottery played within group strategies changed, and it is probable that the demand for earlier types disappeared with the arrival of the Assyrian rulers.

If we assume that the presence of specific ceramic categories at a given site is determined by functional as well as aesthetic choices, then the ceramic tradition is a good indicator of a given social and cultural environment; this, in turn, is closely connected to the nature of the political structures by which it was created.

Specific sets of ceramic shapes recur throughout the Middle Assyrian empire and were found at various sites in contexts with different functions, for example in the administrative building at Tell Sheikh Hamad, in the fortified agricultural village of Tell Sabi Abyad, in the agricultural production center at Giricano, in the residential building at Tell Barri, in areas and contexts in the main cities of the Assyrian heartland, and in several smaller and peripheral sites. A common element tying these sites together is the new socioeconomic model established by the Assyrians, which was to structure the organization of ceramic production at these settlements.

Nevertheless, for those sites strongly influenced by the Assyrians during the later Middle Jazirah period, only small differences can be discerned within the Middle Jazirah II production, which are probably due to the legacies of local traditions, the typology of the settlement, and the characteristics of the settlement area in which the archaeological trench was located. For example, Kim Duistermaat's (2008) analysis of the materials from Tell Sabi Abyad argues for a higher variability in production than previously claimed (Pfälzner 1995). Similar results emerge from the analysis of the Tell Barri assemblage. As Duistermaat notes (2008, 420), we probably have to reconsider the hypothesis of a rigid direct control on production. Despite the evident standardization in pottery repertoires and the impoverishment in terms of manufacturing quality, the presence of independent workshops connected to the centralized administration of the settlement could in fact be suggested. At Tell Barri there is evidence that some elements of the pre-existing local traditions survived: this is probably best represented in the conical bowls, 'fine'-carinated bowls and tall goblets/beakers, together with a range of variants in the conception of 'standard' types. There is also evidence for types showing the influence of neighbouring areas, evident in round bowls with grooves under the rim. These pots were produced alongside the new types introduced under the influence of the Assyrian heartland, foremost standard carinated bowls, jars with a ribbon rim, and high-shouldered flasks, probably within the same local workshops. However, the persistence of a few characteristics from previous manufacturing traditions and the appearance of external, non-Assyrian, influences are to be considered as secondary phenomena within the Middle Jazirah II–III horizons. After the Middle Assyrian expansion into the Khabur valley all local ceramic production underwent a major transformation with new traits by far exceeding the traditional ones in morphology and production technology. It is beyond all doubt that the pottery repertoire is almost completely reshaped and that the change in making vessels was substantial; it is also clear that the invasive Assyrian influence on manufacturing processes and methods may be linked to this. Given that, one may expect that the conformity of the new assemblage, with higher standardization than during the Mittani period, to some extent reflects the centralized system of control on pottery production as a part of those state-controlled activities, an idea which is also the subject of a recent article by J. Nicholas Postgate (2010). This redirecting of local pottery and hand-craft production, which identifies the Assyrian interference in local

economic management, was aimed at meeting the demand for new products within a new socio-economic framework moulded by the Assyrian polity in the upper Khabur region.¹¹

The change in ceramic repertoires, the modification of architectural plans, and the cultural connotations of some rural sites as Assyrian settlements are all elements that help to sketch out the heavy impact of the Assyrian presence on the region as a consequence of political control and direct management of more productive and fertile land and of strategic territories. The archaeological evidence from sites colonized by Assyrians suggests an almost complete transformation in the material culture, coincident with the absorption into a new system. This change affects and redirects the economic life of the settlement and the local productive activities, for instance farming, breeding, markets, pottery production, and in general the organization of work along with the functionality of some sectors of the settlement.

If we accept the limits on the meaning of 'Middle Assyrian territorial state' imposed by Mario Liverani (1988), and adopt his model of a 'network empire' in which only the core is a territorially dominated region, then there is a margin to the discussion about the dimensions of the 'nodes' in the areas that became a target of Assyrian expansion, the so-called periphery. Evidently, in the first steps of the conquest of new territories, the Assyrian sites assumed the aspect of interconnected outposts and strongholds embedded in a hostile environment. As Reinhard Bernbeck (2010) recently wrote in reference to the Neo-Assyrian period, "the empire was not able to control all regions within its network reach" and "territories of control may often have barely reached beyond the immediate surroundings of an urban Assyrianized stronghold, and political voids between such spheres, the lands of guerrilla resistance against established powers must not be underestimated because Assyrian texts silence them." This could also be valid for the settlements in the Khabur valley at the time of the first Middle Assyrian kings, or for the middle Euphrates, Balikh, and Tigris valleys, which were at the border of the area directly controlled by the Assyrians and were probably controlled by means of a network of nodes for the whole Late Bronze Age period. As in the 'network empire', the territorial control concerns the core and not the periphery and we, therefore, have to ask ourselves how extended the territorial control was and what periphery means in this period.

Discussing the presumable extent of the territorially dominated area after the first conquest during the 13th century BC, as regards the upper Khabur valley, and in particular the central-eastern portion of the valley, we have to consider the reduced distance between centers where an Assyrian presence is well attested by archaeological and textual evidence. The nodes, constituted for example by Tell Brak, Tell Barri, Tell Hamidiye, Tell Farfara, and Tell Qarassa, or to the north by Nusaybin, Girsavaz, and Tell Amuda, must have produced a dense distribution of satellite sites, for instance farmsteads and economically integrated settlements, spread over the land around the main centers. Consequently, the mesh of the network had to be thick, leaving very little space for territories outside Assyrian state control. The necessity of ensuring a steady flow of traffic along the principal Assyrian roads connecting the nodes of control (Faist 2006) and the traffic routes, as well as the maintenance of the water canals that were fundamental for agriculture and transport (Ergenzinger / Kühne 1991, 186; Cancik-Kirschbaum 1996, 44), are other elements that also suggest an effective control of the land between the main centers. In fact,

11 In this regard, Feinman *et al.* (1984), dealing with the ceramic production of the Oaxaca valley (Mexico) during the Prehispanic period, have proposed that administrative control of economic institutions, including craft production, can be expected to occur in contexts of high population density, high investment of labor in agricul-

tural production, and high political consolidation. The authors note that control of ceramic or other craft production resulted in two phenomena that have important archaeological implications. The first is the increased scale of production and the second is a decrease in competition between producers.

the lower Khabur region and the eastern part of the area under Middle Assyrian control during the 13th century BC were considered by Hartmut Kühne (1995, 72, 84) to be a territorial empire, as opposed to the reconstruction of Liverani (1988). Control of the fertile and productive territory, including fields for agriculture and pastures, was presumably achieved and a new Assyrian 'core' was created, dismantling the previous Mittani structures, both political and socioeconomic. By thickening the mesh of the network during the effort to replace the Mittani hegemony and to gain control over the Khabur plains, Assyria probably achieved a greater control of the territory than expected. It thus formed a sort of additional nucleus with its own hinterland, outside the heartland, bypassing the steppe in a further westward and northward expansion. This produced the territorial annexation and the Assyrianization of the settlements during the Late Bronze Age, as the Assyrians extended their directly controlled territory to include large portions of the upper Khabur valley (Postgate 1992; 2010, 31). The area perceived as peripheral was the territory at the margins of the farmed area, or at some distance from that privileged target of Assyrian interest, i.e., fields exploitable for agricultural purposes. In the Khabur valley the territories under direct control became part of an enlarged core together with Assyria or, alternatively, a second core within a cluster model. The steppe between these cores was outside the Assyrian sphere of interest, except for the routes passing through it.

This reconstruction does not exclude that other groups, such as pastoralists, semi-nomads, or small farmers in marginal areas, lived in the region, particularly in areas perceived by the Assyrians as marginal and not of strategic interest for Assur; these areas were in part integrated into the Assyrian system in a different way and in part represented a complementary element at the border of the directly managed Assyrian territory (Tenu 2009, 233–243). According to Bernbeck, the 'interstices' within the network existed but, in my opinion, populations inhabiting it could have only represented a real threat during a period in which the central power was weakened and not in a phase of political and economic stability. However, no room was left for other organized political entities or direct competitors for the control of the local farming economy. The Assyrians probably found little resistance during the first establishment of administrative centers and farm-colonies in the region and when they first took possession of the main Mittani sites, which were not structured so as to form an obstacle to the program of agricultural colonization, exploitation of local economic resources, and political substitution of the local Mittani elites. The archaeological evidence that the Assyrian character of some settlements was preserved during the Early Iron Age, visible in the case of Tell Barri where layers covering the Late Bronze Age–Iron Age period have been exposed (D'Agostino 2009), could indicate that after the weakening of the Middle Assyrian state the local elites did not impose an alternative alignment that revived the region's political and cultural traditions. In other words, the Assyrians transformed Mittani settlements, such as Tell Barri, into Assyrian settlements, probably as an effect of the direct control of the sites and their land, consolidating their presence in the area. These were the territorial islands that became the pillars of the Neo-Assyrian re-conquest and nuclei of the Neo-Assyrian provinces (Liverani 1988). Although limitations in the dataset mean that it is too early to offer a comprehensive picture of the pottery production in the upper Tigris valley, some general observations can be made. Sites dating to the Middle Jazirah were identified in the survey on the basis of the existence of several ceramic types known to correspond to 'Middle Jazirah I' or 'Middle Jazirah II–III' assemblages. As for the excavated sites, the similarity with the upper Khabur region repertoires has been noted in the analysis of the published materials, although this mainly regards the painted pottery. The Middle Jazirah II–III pottery repertoire at Giricano is homogeneous and has morphological and technological characteristics that are typical of contemporary repertoires found at sites in modern-day northern Syria and Iraq (Schachner 2002, 32–35).



Fig. 3 | Tell Barri, area G: grooved sherds from the Middle Jazirah II level (Archivio Missione Archeologica a Tell Barri).

Similarly, it is possible to make some observations on the chronology of the ceramic assemblages in the upper Tigris region from the Middle Jazirah II–III periods to the Early Iron Age. The extensive use of grooved pottery appears later in the upper Tigris region than elsewhere (Bartl 2001; Müller 2003), i.e., only after the Middle Assyrian decline and sometime after the abandonment of Giricano (mid-11th century, *ca.* 1068 BC) (Roaf / Schachner 2005, 120). It is possible that grooved pottery arrived in the area during the final phases of the Middle Assyrian occupation (Köroğlu 2003, 233–235).

A number of issues arise from these observations. Was the increase in the number of smaller sites with grooved pottery a process contemporary to the Assyrian colonization and, if so, how did this process relate to the *dunnu*-settlements? And related to this issue: can the upper Tigris be regarded as part of the territorial possessions of the Middle Assyrians? The ceramic assemblage of Tell Barri may provide additional evidence that will shed light on this debate.

In area G at Tell Barri, a class of curved, wheel-made bowls, a technique common to the rest of the production, has been found that is worthy of further consideration. These bowls have superficial grooves or well-cut grooves, and are a specific feature of the Middle Jazirah II–III repertoires.

This group of curved bowls is found from stratum 33C onwards in the same contexts as typical Middle Jazirah II–III types.¹² Hand-made grooved sherds of hole-mouthed pots have been found in the Early Iron Age levels, with a few specimens from the Middle Iron Age strata.

The repertoire found at Tell Halaf, too, is characterized by hand-made shapes with grooves. Its characteristics have stylistic parallels with grooved-ware assemblages from southeastern and eastern Anatolia (Bartl 1989; 2001) dated to the Early Iron Age. However, their context is unclear because of a lack of systematic recording during the old excavations (Bartl 1989, 261). The bowls from the Middle Jazirah II–III

12 The peak of the presence is in strata 33b–a. Here the curved bowls represent about 20 per cent of the total amount of potsherds. Within the category of the curved

bowls, those with grooves under the rim are about 30 per cent of the potsherds. See D'Agostino 2009, table 1.3 and fig. 7, type 210W.

Fig. 4 | Tell Barri, area G: grooved sherds from the Early Iron Age and Iron Age levels (Archivio Missione Archeologica a Tell Barri).



level at Tell Barri have some superficial grooves that vaguely resemble forms of the grooved-ware horizon.¹³ The bowl-shape and the grooves do not seem to have a precursor in the Middle Jazirah I assemblage.

This could be evidence of a 'grooved' tradition in an otherwise typical Assyrian type of production, and would demonstrate diversity in the repertoire of the Middle Jazirah II B period when compared to the early Middle Jazirah II A repertoire.¹⁴ If we also consider the evidence from Tell Barri, where bowls with grooves under the rim, found alongside standard Middle Jazirah II–III forms, are a less significant feature of the ceramic assemblage during the Middle Jazirah II–III period, then our reliance upon grooved pottery as a chronological marker in the upper Tigris area should be reconsidered. Given that this group of vessels appears at Tell Barri, located in an area that is marginal to the main zones of diffusion of Early Iron Age and Iron Age grooved horizons, one could argue that the grooved phenomenon was actually diffuse during the late Middle Jazirah period. In that case, it would seem likely that the influence of grooved ware visible in the Middle Jazirah II repertoire at Tell Barri indicates the contemporary appearance of such a grooved ware in the neighbouring regions, in particular in the upper Tigris valley where a capillary diffusion in the Early Iron Age has been documented.

It is worth pointing out that this grooved pottery assemblage is not homogeneous. Indeed, there is considerable evidence that more than one grooved pottery horizon existed and that this is probably due to a variation over time (Konyar, 2005; Matney 2010, 138–139). This complicates the use of survey data in any analysis of landscape settlement chronologies. It may be that many of the sites have not been identified as the primary ceramic indicators for dating the late Middle Jazirah occupation, similar to the types found at the settlements in modern-northern Syria and Iraq where the presence of Assyrians has been proved. At the same time, these types have also been found at the main sites of the area and their satellite settlements, for example Üçtepe, Ziyaret Tepe, and Giricano.

¹³ In Tell Bderi and Tell Taban similar specimens have been found (Pfälzner 1995, fig. 140 c, d; Numoto 2007, fig. 13, n. 19).

¹⁴ In the repertoire of area P, but also in well 200, this bowl is not recorded. In fact the date of these contexts could be earlier, probably between Middle Jazirah II A and Middle Jazirah II B.

But did settlements exist that were not involved in direct Assyrian control? And did these sites, intermingling with Assyrian-managed settlements, produce a different pottery? Just to speculate, the Assyrian agricultural colonization and the settlement by grooved pottery producers, possibly semi-nomadic groups, could both be processes that happened from the end of the Middle Jazirah period in the 12th century BC, involving a territory with very few inhabitants, farmed and frequented by stockraisers and semi-nomads in their seasonal movements. Middle Jazirah II–III and grooved types are both introduced here and have no relation to the previous pottery horizons, but are instead superimposed and belong to ‘external’ traditions. We cannot exclude the possibility that, after the decline of Mittani power and the vacuum left by years of war, Middle Assyrians and groups using grooved pots occupied areas at different times and distributed themselves over the territory, maintaining the traditional economic activities in two different fashions: the Assyrians by building new settlements and agricultural *dunnus*, and by controlling the ‘urban’ centers, while the grooved-pottery user groups acted in a less invasive way, settling mainly in little rural sites and carrying out pastoral and agricultural activities. The groups using grooved pottery also settled on the sites first directly managed by Assyrians after the collapse of Middle Assyrian control in the valley.

The differences in the development of local material culture recognizable in the archaeological assemblages of both the Khabur and Tigris valleys, and documented for the Middle Jazirah period and the Early Iron Age, require explanation. They are the result of dissimilar strategies of management pursued by Assyrians during different chronological phases, in accordance with the structural diversities of the subjected territories and their social composition. In the upper Khabur, the production of lower status and daily-use objects, such as ceramics, continues to be locally oriented, with a Middle Jazirah II–III imprint (D’Agostino 2009). In the upper Tigris region a stratigraphic and cultural break has been suggested, visible in the sites where Middle Jazirah II–III evidence has been characterized by a change in architectural and ceramic traditions.

Considering the sociopolitical changes experienced in the upper Tigris valley, the appearance of settlements occupied by grooved pottery users, particularly at sites previously used as *dunnus* and subsequently integrated into the Neo-Assyrian system of agricultural exploitation, may have been a deliberate realignment of the cultural boundary of the inhabitants of the region, an idea that has been suggested by Jeffrey Szuchmann (2009). Alternatively, if the Middle Assyrians and users of the grooved pottery coexisted, it may be that the latter represented an alternative sociopolitical system, individuating an ‘interstice’ within the Middle Assyrian network, one that offered a different pole of aggregation for the people of the valley. This hypothesis is not currently supported by substantial or final archaeological evidence and has been proposed here in order to inspire further debate. Nonetheless, the shift from Middle Jazirah II–III pottery to grooved pottery should not be considered merely a reflection of the collapse of the Middle Assyrian system of management, but an explicit rejection of Assyrian forms of domination and a cultural realignment with the northern and western area within a more integrated and balanced two-pronged economy.

6. Concluding remarks

Within the territories where Assyrians had hegemonic interests and which were directly administered by the state, different ‘core–periphery’ relationships were established. During the course of the second millennium BC two processes affected the regions in question: firstly, the cultural and territorial inte-

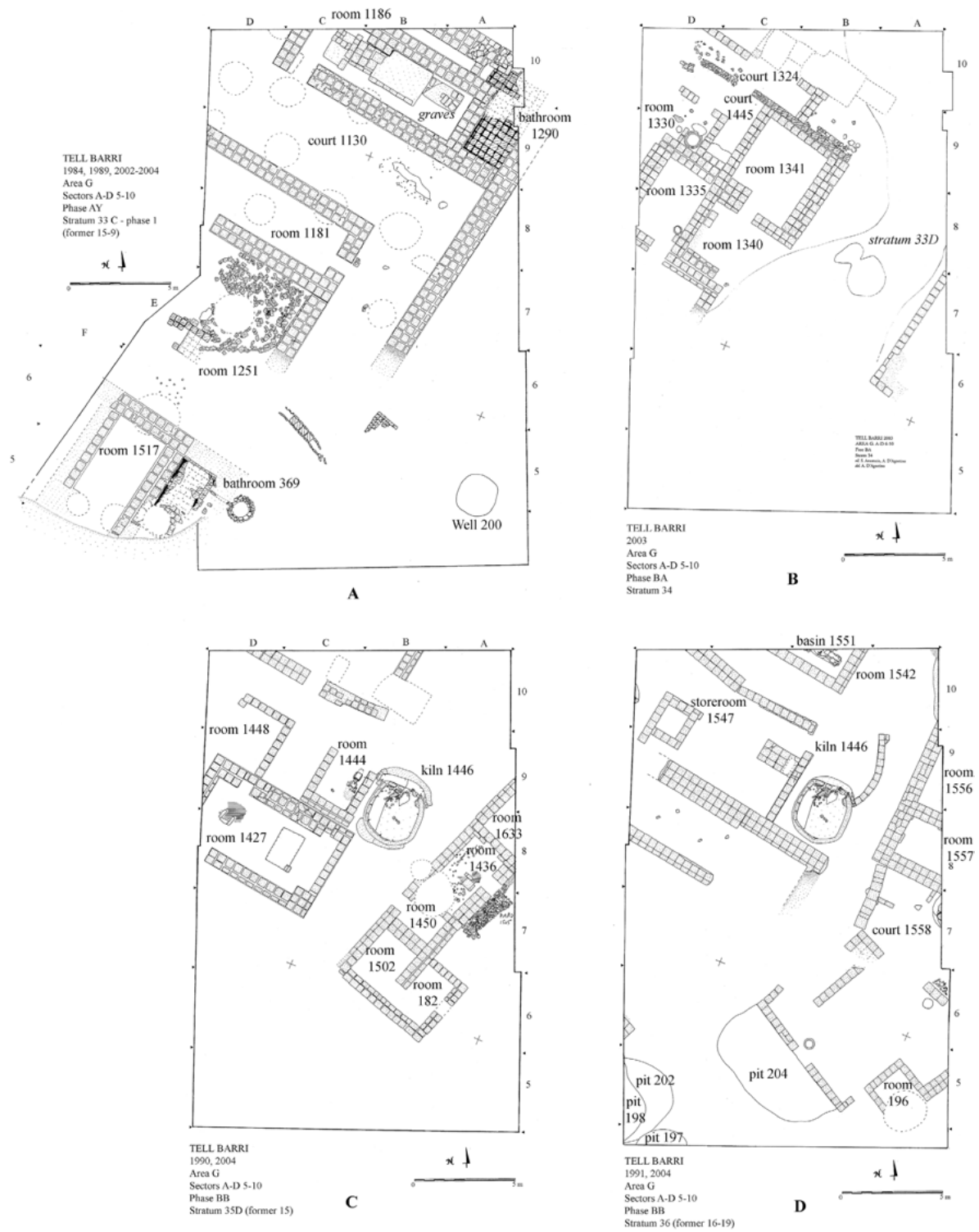


Fig. 5 | Tell Barri, area G: plans of stratum 33C, Middle Jazirah II period (a) and 34-36, Middle Jazirah I period (b-d). Adapted from Pecorella / Pierobon Benoit 2008a; 2008b.

Table 1 | Tell Barri, area G: the sequence of the Middle Jazirah period and preliminary ceramic phases.

Middle Jazirah period: the Tell Barri sequence of area G

<i>periods</i>	<i>phases</i>	<i>strata</i>		<i>ceramic phases (preliminary)</i>	<i>diagnostic sherds (A-D 7-10 + A-D 5-6)</i>
		A-D 7-10	A-D 1-6		
Middle Assyrian (MJII)	AY	33d-c	15(well)	Middle Assyrian Ia-b	1656+1168
	BA	34	18-15	Mittanian IV	791+1681
	BB	35	20-19	Mittanian III	1542+873
Mittanian (MJI)	BB	36	22-21	Mittanian III	789+497
	BC	37	24-23	Mittanian II	1623+1146
	BD	38	26-25	Mittanian I	680+3218
	BE	39	27	Early Mittanian	40+1515
Late Old Babylonian (OJIII)	BF	40	28	Late Old Babylonian	25+1157

Area G.A-D 7-10 (strata investigated between 2006 and 2002)

The percentage refers to the total amount of sherds without considering sherds from bases.

	<i>period</i>	<i>LOB</i>	<i>EM</i>	<i>MI</i>	<i>MII</i>	<i>MIII</i>		<i>MIV</i>	<i>MAI</i>
		OJIII	OJIII/MJI A	MJI A		MJI B			MJII
	<i>stratum</i>	40	39	38	37	36	35	34	33d-c
<i>numbered sherds</i>									
total		25	40	680	1623	789	1542	791	1656
total without bases		24	34	629	1313	657	1205	595	
Khabur Ware		10	11	195	549	199	412	123	0
Khabur Ware without body		5 20.83 %	9 26.47 %	87 13.83 %	173 13.18 %	67 25.42 %	136 11.29 %	43 7.23 %	0
Nuzi Ware				5 0.79 %	48 3.66 %	26 3.96 %	66 5.48 %	27 4.54 %	0
red-edged bowls					4 0.30 %	9 1.37 %	9 0.75 %	5 0.84 %	0
Gray Ware		2		42 6.68 %	139 10.59 %	86 13.09 %	133 11.04 %	9 6.89 %	0

Area G.A-D 1-6 (strata investigated between 1989 and 1999)

	<i>period</i>	<i>LOB</i>	<i>EM</i>	<i>MI</i>	<i>MII</i>	<i>MIII</i>		<i>MIV</i>	<i>MAI</i>
		OJIII	OJIII/MJI A	MJI A		MJI B			MJII
	<i>stratum</i>	28	27	26-25	24-23	22-21	20-19	18-15	15(well)
<i>numbered sherds</i>									
total		1157	1515	3218	1146	497	873	1681	1168
total without bases		893	1166	2499	929	386	668	712	0
Khabur Ware		144	649	1355	573	162	220	240	0
Khabur Ware without body		144 16.13 %	239 20.50 %	428 17.13 %	179 19.27 %	50 12.95	67 10.03 %	22 3.09 %	0
Nuzi Ware		0	1 0.09 %	1 0.04 %	2 0.22 %	7 1.81	21 3.14 %	100 14.04 %	0
red-edged bowls		1 0.11 %	1 0.09 %	1 0.04 %	1 0.11 %	9 2.33 %	21 3.14 %	40 5.62	1?
Gray Ware		17 1.90 %	24 2.06 %	71 2.84 %	27 2.91 %	75 19.43 %	15 2.25	11 1.54	0

gration of some portions of the upper Khabur, at least in the central-eastern part of the valley; and, secondly, an intensive, direct form of domination over some strategic sites in the upper Tigris region. The distribution of small agricultural centers throughout the territory follows similar patterns in both regions. The main differences between the Middle Jazirah and Early Iron Age lies in the status and role of the sites and in the hierarchical organization between the sites, perhaps resulting from a varied interpretation and implementation of imperial policy on the part of the local community. The development of settlements and material culture during the Early Iron Age, and subsequently the Iron Age proper, would seem to support this interpretation. During the transition to the first millennium BC, new forms of aggregation developed in the region, according to the specific cultural and socioeconomic traditions of local groups inhabiting both the settlements and the wider landscape. That large portions of the territory located in the central-eastern Khabur region, and strategic settlements beyond the Tur Abdin in the Tigris valley were successfully Assyrianized is a well established fact. However, there was a reaction to the system and to the pressure imposed from Assur, and the influence of groups inhabiting the interstices of the network grew, producing new forms of sociopolitical aggregation in the upper Tigris region, though apparently not in the upper Khabur valley. This documents the outcome of a differentiated approach to the management of the subjected territories and the intensity of Assyrian political control in the border region at the foot of the Anatolian highlands.

To date, it has not been possible to determine whether the archaeological evidence from the upper Khabur and the upper Tigris regions, which lends itself so well to different and opposing interpretations, reflects a true pattern of settlement and sociocultural development. Nor is it possible to say whether it is our incomplete knowledge of the area that is to blame for this unclear picture, although, as this is mainly due to the limited extent and depth of surveys and excavations undertaken to date, this factor may change with further research. In either scenario, it is difficult on the basis of the archaeological evidence to make any assumptions about the events that characterized the region. Although the theory that Early Iron Age levels were composed of distinct cultural horizons between the Late Bronze Age and the Middle Iron Age is partly convincing, the scant evidence leaves space for alternative explanations and we must be wary of oversimplifying the situation. However, we risk reaching a premature conclusion if we do not first clearly understand the characteristics of the local material culture and settlement patterns for those areas contemporary with the *dunnu* and before the Assyrian expansion. Once we have understood the pattern of the settlements and the composition of regional ceramic assemblages, and not only the assemblages of the *dunnu* and administrative centers, it may be possible to investigate the Assyrian impact on the upper Khabur and upper Tigris valleys and the ways hegemonic control was exercised over the subjected territories.

Bibliography

Algaze, Guillermo / Breuninger, Ray / Lightfoot, Chris / Rosenberg, Michael (1991)

"The Tigris-Euphrates Archaeological Reconnaissance Project: A Preliminary Report of the 1989–1990 Seasons", in: *Anatolica* 107, 175–240.

Anastasio, Stefano (2007)

Das Obere Habur-Tal in der Jazira zwischen dem 13. und 5. Jh. v. Chr. Die Keramik des Projects 'Prospection Archéologique du Haut-Khabur Occidental (Syrie du N.E.)', Florence.

Anastasio, Stefano / Lebeau Mark / Sauvage Martin (2004)

Atlas of Preclassical Upper Mesopotamia, (Subartu 13), Turnhout.

Ball, Warwick (2003)

Ancient Settlement in the Zammar Region: Excavations by the British Archaeological Expedition to Iraq in the Saddam Dam Salvage Project, 1985–86, (BAR International Series 1096), Oxford.

Ball, Warwick / Tucker, David J. / Wilkinson, Tony J. (1989)

"The Tell al-Hawa Project: Archaeological Investigations in the North Jazira 1986–1987", in: *Iraq* 51, 1–66.

Bartl, Karin (1989)

"Zur Datierung der altmonochromen Ware von Tell Halaf", in: Odette M.C. Haex / Hans H. Curvers / Peter M.M.G. Akkermans (eds.), *To the Euphrates and beyond: archaeological studies in honour of Maurits N. van Loon*, Rotterdam, 257–274.

Bartl, Karin (2001)

"Eastern Anatolia in the Early Iron Age", in: Ricardo Eichmann / Hermann Parzinger (eds.), *Migration und Kulturtransfer. Der Wandel vorder- und zentralasiatischer Kulturen im Umbruch vom 2. zum 1. vorchristlichen Jahrtausend*. Akten des Internationalen Kolloquiums Berlin, 23. bis 26. November 1999, Bonn, 383–410.

Bernbeck, Reinhard (2010)

"Imperialist Networks: Ancient Assyria and the United States", in: *Present Pasts* 2, 30–52.

Bieliński, Piotr (1987)

"Tell Raffaan and Tell Rijim 1984–85. Preliminary Report on two seasons of Polish Expedition", in: *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Research*, Baghdad, 13–19.

Bieliński, Piotr (1990)

"Polish Excavations on Northeast Syria 1988–1989", in: *Polish Archaeology in the Mediterranean I*, Warsaw, 17–25.

Bieliński, Piotr (2003)

"Tell Arbid: The Seventh Season of Excavations. Preliminary Report", in: *Polish Archaeology in the Mediterranean XIV*, Warsaw, 301–314.

Bonatz, Dominik / Bartl, Peter / Gilibert, Alessandra / Jauss, Carolin (2008)

"Bericht über die erste und zweite Grabungskampagne in Tell Feheriye 2006 und 2007", in: *Mitteilungen der Deutschen Orient-Gesellschaft* 140, 89–135.

Bretschneider, Joachim (1997a)

"Die Unterstad (Feld J)", in: Mark Lebeau / Antoine Suleiman (eds.), *Tell Beydar, Three Seasons of Excavations (1992–1994). A Preliminary Report*, (Subartu 3), Turnhout, 209–230.

Bretschneider, Joachim (1997b)

"Nuzi-Keramik" aus der Unterstadt (Feld J)", in: Mark Lebeau / Antoine Suleiman (eds.), *Tell Beydar, Three Seasons of Excavations (1992–1994). A Preliminary Report*, (Subartu 3), Turnhout, 231–243.

Buccellati, Giorgio (1998)

"Urkesh as Tell Mozan: Profiles of the Ancient City", in: Giorgio Buccellati / Marilyn Kelly Buccellati (eds.), *Urkesh and the Hurrians. Studies in Honour of Lloyd Costen. Urkesh/Mozan Studies 3*, (Bibliotheca Mesopotamica 26), Malibu.

Cancik-Kirschbaum, Eva (1996)

Die mittellassyrischen Briefe aus Tall Seh Hamad, (Berichte der Ausgrabung Tell Schech Hamad 4), Berlin.

Coppini, Costanza (2008)

"Mitannian Pottery from Tell Barri", in: Joaquín Mª Córdoba / Miquel Molist / Mª Carmen Pérez, Isabel Rubio, Sergio Martínez (eds.), *Proceedings of 5th International Congress on the Archaeology of the Ancient Near East*, vol. I., 3–8 April 2006, Madrid, 477–491.

Crescioli, Lorenzo / Laneri, Nicola (forthcoming)

"Downsizing a Ceremonial Center: a brief overview of the Late Bronze Age period at Hirbemerdon Tepe (SE Turkey)", in: *Anatolica* 37.

D'Agostino, Anacleto (2008)

"Le tombe medioassire dell' G: alcune riflessioni", in: Paolo Emilio Pecorella / Fiorella Pierobon Benoit (eds.), *Tell Barri/Kahat. La campagna del 2003. Relazione preliminare*, (Ricerche e Materiali del Vicino Oriente Antico 4), Florence, 159–173.

D'Agostino, Anacleto (2009)

"The Assyrian-Aramaean Interaction in the Upper Khabur: the archaeological evidence from Tell Barri Iron

Age levels”, in: Christine Kepinski / Aline Tenu (eds.), *Interaction entre Assyriens and Araméens*. Proceedings of the workshop, 6th ICAANE, May 6, 2008, Rome, Syria 86, 15–40.

D’Agostino, Anacleto (forthcoming)

“The Tell Barri Sequence of LBA levels: evolution trends within 2nd millennium ceramic culture”, in: Claudia Beuger / Arnulf Hausleiter / Marta Luciani (eds.), *Recent Trends in the Study of Late Bronze Age Ceramics in Syro-Mesopotamia and Neighbouring Regions*. Workshop Proceedings, 2–5 November 2006, DAI, Berlin.

Dohmann-Pfälzner, Heike / Pfälzner, Peter (1999)

“Ausgrabungen der Deutschen Orient Gesellschaft in Tall Mozan/Urkeš, Bericht über die Vorkampagne 1998”, in: *Mitteilungen der Deutschen Orient-Gesellschaft* 131, 17–46.

Duistermaat, Kim (2008)

The Pots and Potters of Assyria. Technology and organization, ceramic sequence, and vessel function at Late Bronze Age Tell Sabi Abyad, Syria, (Papers on Archaeology from the Leiden Museum of Antiquities 4), Turnhout.

Eichler, Seyyare / Haas, Volkert / Steudler, Daniel / Wäfler, Markus / Warburton, David (1985)

Tall al-Hamidiya 1. Vorbericht 1984, (Orbis Biblicus et Orientalis, Series Archaeologica 4), Freiburg.

Eichler, Seyyare / Wäfler, Markus / Warburton, David (1990)

Tall al-Hamidiya 2. Vorbericht 1985–87, (Orbis Biblicus et Orientalis, Series Archaeologica 6), Freiburg.

Eidem, Jesper / Warburton, David (1996)

“In the Land of Nagar: a survey around Tell Brak”, in: *Iraq* 58, 51–64.

Ergenzinger, Peter J. / Kühne, Hartmut (1991)

“Ein regionales Bewässerungssystem am Habur”, in: Hartmut Kühne (ed.), *Die rezente Umwelt von Tall Seh Hamad und Daten zur Umweltrekonstruktion der assyrischen Stadt Dur-katlimmu*, (Berichte der Ausgrabung Tell Schech Hamad 1), Berlin, 163–190.

Erkanal, Hayat (1988)

“Girnavaz”, in: *Mitteilungen der Deutschen Orient-Gesellschaft* zu 120, 139–152.

Faist, Betina (2006)

“Itineraries and Travellers in the Middle Assyrian Period”, in: *State Archives of Assyria Bulletin* 15, 147–160.

Faivre, Xavier (1992a)

“La céramique de Mohammed Diyab, 1990–1991”, in: Jean-Marie Durand (ed.), *Recherches en Haute Mésopotamie. Tell Mohammed Diyab. Campagnes 1990 et 1991*, (Mémoires de Nouvelles Assyriologiques Brèves et Utilitaires Publications 2), Paris, 55–89.

Faivre, Xavier (1992b)

“Le Tell d’Amouda”, in: Jean-Marie Durand (ed.), *Recherches en Haute Mésopotamie. Tell Mohammed Diyab. Campagnes 1990 et 1991*, (Mémoires de Nouvelles Assyriologiques Brèves et Utilitaires Publications 2), Paris, 133–150.

Feinman, Gary M. / Kowalewski, Stephen A. / Blanton, Richard E. (1984)

“Modelling Ceramic Production and Organizational Change in the Prehispanic Valley of Oaxaca, Mexico”, in: Sander E. van der Leeuw / Alison C. Pritchard (eds.), *The Many Dimensions of Pottery: Ceramics in Archaeology and Anthropology*, Amsterdam, 297–333.

Fujii, Hideo (ed.) (1987a)

“Working Report on First Season of Japanese Archaeological Excavation in Saddam Salvage Project”, in: *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Research*, Baghdad, 33–61.

Fujii, Hideo (ed.) (1987b)

“Working Report on Second Season of Japanese Archaeological Excavation in Saddam Salvage Project”, in: *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Research*, Baghdad, 62–67.

Fujii, Hideo (ed.) (1987c)

“Working Report on Soundings at Tell Jessary (the first season)”, in: *Researches on the Antiquities of Saddam Dam Basin Salvage and Other Research*, Baghdad, 68–72.

Harrak, Amir (1987)

Assyria and Hanigalbat. A Historical Reconstruction of Bilateral Relations from the Middle of the Fourteenth to the End of the Twelfth Centuries B.C., (Texte und Studien zur Orientalistik 4), Hildesheim–Zurich–New York.

Hrouda, Barthel (1961)

“Tell Fecherije. Die Keramik”, in: *Zeitschrift für Assyriologie und Vorderasiatische Archäologie* 54, 201–240.

Hrouda, Barthel (1962)

Tell Halaf IV. Die Kleinfunde aus Historischer Zeit, Berlin.

Kantor, Helene J. (1958)

“The pottery”, in: Calvin W. McEwan / Linda S. Braidwood / Henri Frankfort / Hans G. Güterbock / Richard G. Haines / Helene J. Kantor / Carl H. Kraeling (eds.), *Soundings at Tell Fakhariyah*, (Oriental Institute Publications 79), Chicago, 21–41.

Karg, Norbert V. (2001)

“First Sounding at Grê Dimsê 1999”, in: Numan Tuna / Jean Öztürk / Jâle Velibeyoğlu (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 1999*, Ankara, 643–693.

Karg, Norbert V. (2002)

"Sounding at Grê Dimsê 2000", in: Numan Tuna / Jâle Velibeyoğlu (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 2000*, Ankara, 699–737.

Kepinski, Catherine (1990)

"Tell Khosi/Huwaish. Djebel Sinjar", in: Khalid Nashef, "Archaeology in Iraq", *America Journal of Archaeology* 94, 275–277.

Koliński, Rafał (2000)

Tell Rijim, Iraq. The Middle Bronze Age Layers, (BAR International Series 837), Oxford.

Konyar, Erkan (2005)

"Grooved Pottery of the van Lake Basin", in: *Colloquium Anatolicum* 4, 105–127.

Köroğlu, Kemalettin (1998)

Üçtepe I: Yeni Kazı ve Yüzey Bulguları Işığında Diyarbakır/Üçtepe ve Çevresinin Yeni ssur Dönemi Tarihi Coğrafyası, Ankara.

Köroğlu, Kemalettin (2003)

"The Transition from Bronze Age to Iron Age in Eastern Anatolia", in: Bettina Fischer / Hermann Genz / Éric Jean, Kemalettin Köroğlu (eds.), *Identifying Changes: The Transition from Bronze to Iron Ages in Anatolia and its Neighbouring regions*, Proceedings of the International Workshop Istanbul, November 8–9, 2002, Istanbul, 232–244.

Kozbe, Gulriz (2007a)

"Kavuşan Höyük 2005 Yılı Kazısı", in: 28. *Kazı Sonuçları Toplantısı CILT.1*, 573–588.

Kozbe, Gulriz (2007b)

"Şırnak İli Cizre-Silopi Ovası Yüzey Araştırması, 2005", in: 24. *Araştırma Sonuçları Toplantısı CILT.1*: 307–326.

Kozbe, Gulriz (2008)

"The Transition from Late Bronze Age to Early Iron Age in the Upper Tigris Region, Southeastern Anatolia: Identifying Changes in Pottery", in: Karen S. Rubinson / Antonio Sagona (eds.), *Ceramics in Transitions. Chalcolithic through Iron Age in the Highlands of the Southern Caucasus and Anatolia*, (ANES Supplement 27), Leuven–Paris–Dudley, MA, 291–322.

Kühne, Hartmut (1995)

"The Assyrians on the Middle Euphrates and the Habur", in: Mario Liverani (ed.), *Neo-Assyrian Geography*, Rome, 69–86.

Laneri, Nicola / Schwartz, Mark / Valentini, Stefano / D'Agostino, Anacleto / Nannucci, Simone (2009)

"The Hirbemerdon Tepe Archaeological Project: The First Four Seasons of Archaeological Work at a Site in the Upper Tigris River Valley, SE Turkey", in: *Ancient Near Eastern Studies* 46, 212–276.

Liverani, Mario (1988)

"The Growth of the Assyrian Empire in the Habur/Middle Euphrates: A new Paradigma", in: *State Archives of Assyrian Bulletin* II, 81–98.

Lyonnet, Bertille (1992)

"Reconnaissance dans le haut Khabur", in: Jean-Marie Durand (ed.), *Recherches en Haute Mésopotamie. Tell Mohammed Diyab. Campagnes 1990 et 1991*, (Mémoires de Nouvelles Assyriologiques Brèves et Utilitaires Publications 2), Paris, 103–132.

Lyonnet, Bertille (1996)

"La prospection archéologique de la partie occidentale du Haut-Khabur (Syrie du NE), méthodes, résultats et questions autour de l'occupation aux III et II millénaires av. Cn. è.", in: in Jean-Marie Durand (ed.), *Amurru I, Mari, Ebla et les Hourrites, dix ans de travaux, I partie*, Actes du colloque internationale, Paris 1993, Paris, 363–376.

Mallowan, Max E. L. (1947)

"Excavations at Brak and Chagar Bazar", in: *Iraq* 9, Part 1, 1–87.

Matney, Timothy (2010)

"Material Culture and Identity: Assyrian, Arameans and the Indigenous Peoples of Iron Age Southeastern Anatolia", in: Sharon R. Steadman / Jennifer Ross (eds.), *Agency and Identity in the Ancient Near East: New Paths Forward*, London, 129–147.

Matney, Timothy / Roaf, Michael / MacGinnis, John / McDonald, Helen (2002)

"Archaeological Excavations at Ziyaret Tepe, 2000 and 2001", in: *Anatolica* 28, 47–89.

Matney, Timothy / MacGinnis, John / McDonald, Helen / Nicoll, Kathleen Rainville Lynn / Roaf, Michael / Smith, Monica L. / Stein, Diana (2003)

"Archaeological Investigations at Ziyaret Tepe – 2002", in: *Anatolica* 29, 175–215.

McEwan, Calvin W. (1958)

"Notes on the Soundings", in: Calvin W. McEwan / Linda S. Braidwood / Henri Frankfort / Hans G. Güterbock / Richard G. Haines / Helene J. Kantor / Carl H. Kraeling (eds.), *Soundings at Tell Fakhariyah* (Oriental Institute Publications 79), Chicago, 1–10.

Meijer, Diederik J.W. (1986)

A Survey in Northeastern Syria, Istanbul.

Morandi Bonacossi, Daniele (2000)

"The Syrian Jezireh in the Late Assyrian Period: A View from the Countryside", in: Guy Bunnens (ed.), *Essays on Syria in the Iron Age*, (Ancient Near Eastern Studies, Supplement 7), Louvain–Paris–Sterling, Virginia, 349–396.

Müller, Uwe (2003)

"A Change to Continuity: Bronze Age Traditions in Early Iron Age", in: Bettina Fischer / Hermann Genz / Éric Jean / Kemalettin Köroğlu (eds.), *Identifying Changes: The Transition from Bronze to Iron Ages in Anatolia and its Neighbouring regions*, Proceedings of the International Workshop Istanbul, November 8–9, 2002, Istanbul, 137–149.

Numoto, Hirotooshi (2007)

"Excavation at Tell Taban, Hassake, Syria (5). Preliminary Report of the 2005 Summer Season of Work", in: *al-Rafidan* 27, 1–62.

Oates, David (1977)

"The Excavations at Tell Brak 1976", in: *Iraq* 39: 233–244.

Oates, David / Oates, Joan / McDonald, Helen (eds.) (1997)

Excavations at Tell Brak, vol. 1: *The Mitanni and Old Babylonian Periods*, (McDonald Institute Monographs, British School of Archaeology in Iraq), Cambridge–London.

Ökse, A. Tuba / Alp, A. Oğuz / Dağ, H. Uğur / Engin, Atila / Görmüş, Ahmet / Mustafaoglu, Gökhan (2001)
"Salat Tepe – 1999 Survey", in: Numan Tuna / Jean Öztürk / Jâle Velibeyoğlu (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 1999*, Ankara, 593–642.

Ökse, A. Tuba / Alp, A. Oğuz (2002)

"2000 Excavations at Salat Tepe", in: Numan Tuna / Jâle Velibeyoğlu, (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 2000*, Ankara, 645–670.

Ökse, A. Tuba / Görmüş, Ahmet (2006)

"Excavations at Salat Tepe in the Upper Tigris Region: Stratigraphical Sequence and Preliminary Results of the 2005–2006 Seasons", in: *Akkadica* 127, fasc. 2, 167–197.

Özfırat, Aynur (2005)

Üçtepe II. Tunç Çağları: Kazı ve Yüzey Araştırması Işığında, Istanbul.

Parker, Bradley J. (2003)

"Archaeological Manifestations of Empire: Assyria's Imprint on Southeastern Anatolia", in: *American Journal of Archaeology* 103, 525–557.

Pecorella, Paolo Emilio (1998)

"L'area G di Tell Barri/Kahat, 1983–1993", in: Paolo Emilio Pecorella (ed.), *Tell Barri/Kahat 2. Relazione sulle campagne 1980–1993 a Tell Barri/Kahat, nel bacino del Khabur (Siria)*, (Documenta Asiana 5), Rome–Florence, 78–132.

Pecorella, Paolo Emilio (1999a)

Tell Barri/Kahat. La campagna del 1998. Relazione preliminare, Florence.

Pecorella, Paolo Emilio (1999b)

Tell Barri/Kahat. La campagna del 1999. Relazione preliminare, Florence.

Pecorella, Paolo Emilio / Pierobon Benoit, Raffaella (eds.) (2005)

Tell Barri/Kahat. La campagna del 2002. Relazione preliminare, (Ricerche e Materiali del Vicino Oriente Antico 3), Florence.

Pecorella, Paolo Emilio / Pierobon Benoit, Raffaella (eds.) (2008a)

Tell Barri/Kahat. La campagna del 2003. Relazione preliminare, (Ricerche e Materiali del Vicino Oriente Antico 4), Florence.

Pecorella, Paolo Emilio / Pierobon Benoit, Raffaella (eds.) (2008b)

Tell Barri/Kahat. La campagna del 2004. Relazione preliminare, (Ricerche e Materiali del Vicino Oriente Antico 5), Florence.

Pfäzner, Peter (1995)

Mittanische und Mittelasirische Keramik. Eine chronologische, funktionale und produktionsökonomische Analyse, (Berichte der Ausgrabung Tall Schekh Hamad/Dur-Katlimmu 3), Berlin.

Pfäzner, Peter (2007)

"The Late Bronze Age ceramic traditions of the Syrian Jazirah", in: Michel al-Maqdissi / Valerie Matoian / Christophe Nicolle (eds.), *Céramique del l'Âge du Bronze en Syrie, II* (Bibliothèque Archéologique et Historique 180), Beirut, 231–291.

Postgate, J. Nicholas (1992)

"The Land of Assur and the Yoke of Assur", in: *World Archaeology* 23/3, 247–263.

Postgate, J. Nicholas (2010)

"The Debris of Government: Reconstructing the Middle Assyrian state apparatus from tablets and potsherds", in: *Iraq* 72, 19–37.

Postgate, Carolyn / Oates, David / Oates, Joan (1997)

The Excavation at Tell Rimah: The Pottery, Warminster.

Pruß, Alexander / Bagdo, Abd el-Masih (2002)

"Tell Fecheriye. Bericht über die erste Kampagne der deutsch-syrischen Ausgrabungen 2001", in: *Mitteilungen der Deutschen Orient-Gesellschaft* 134, 311–329.

Radner, Karen (2004)

Das mittelasirische Tontafelarchiv von Giricano/Dunnuša-Uzibi. Ausgrabungen in Giricano 1, (Subartu 14), Turnhout.

Radner, Karen (2006)

"How to Reach the Upper Tigris: the route through the Tur Abdin", in: *State Archives of Assyria Bulletin* XV, 273–305.

Radner, Karen / Schachner, Andreas (2001)

"Tušhan to Amēdi: Topographical Questions concerning the Upper Tigris Region in the Assyrian Period", in: Numan Tuna / Jean Öztürk / Jâle Velibeyoğlu (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 1999*, Ankara, 729–776.

Reiche, Andrzej (forthcoming)

"Late Bronze Age pottery from Nemrik (Northern Iraq)", in: Claudia Beuger / Arnulf Hausleiter / Marta Luciani (eds.), *Recent Trends in the Study of Late Bronze Age Ceramics in Syro-Mesopotamia and Neighbouring Regions*. Workshop Proceedings, 2–5 November 2006, Berlin.

Roaf, Michael (1984)

"Excavations at Tell Mohammed 'Arab in the Eski Mosul Dam Salvage Project", in: *Iraq* 46, 141–156.

Roaf, Michael (2005)

"Excavations in Operation E", in: Timothy Matney / Lynn Rainville (eds.), "Archaeological Investigations at Ziyaret Tepe, 2003–2004", in: *Anatolica* 31, 21–23.

Roaf, Michael / Schachner, Andreas (2005)

"The Bronze Age to Iron Age Transition in the Upper Tigris Region: New Information from Ziyaret Tepe and Giricano", in: Altan Çilingiroğlu / Gareth Darbyshire (eds.), *Anatolian Iron Ages 5*. Proceedings of the Fifth Anatolian Iron Ages Colloquium held at Van, 6–10 August 2001, London 115–123.

Sağlamtimur, Haluk / Ozan, Ali (2007)

"Türbe Höyük Kazısı Ön Rapor", in: *Arkeoloji Dergisi* X, 1–31.

Salvini, Mirjo (2004)

"I documenti cuneiformi della campagna del 2001", in: Paolo Emilio Pecorella / Fiorella Pierobon Benoit (eds.), *Tell Barri/Kahat. La campagna del 2001. Relazione preliminare*, 146–151.

Salvini, Mirjo (2005)

"I documenti cuneiformi della campagna del 2002 a Tell Barri", in: Paolo Emilio Pecorella / Fiorella Pierobon Benoit (eds.), *Tell Barri / Kahat. La campagna del 2002. Relazione preliminare*, (Ricerche e Materiali del Vicino Oriente Antico 3), 143–153.

Schachner, Andreas (ed.) (2002)

"Ausgrabungen in Giricano (2000–2001). Neue Forschungen an der Nordgrenze des Mesopotamischen Kulturraums", in: *Istanbuler Mitteilungen* 52, 9–57.

Schachner, Andreas (2004)

"Die mittellassyrischen Siedlungsschichten von Giricano", in: Karen Radner, *Das mittellassyrische Tontafelarchiv von Giricano/Dunnu-ša-Uzibi*. Ausgrabungen in Giricano I, (Subartu 14), Turnhout, 1–13.

Schachner, Andreas (2007)

Bilder eines Weltreiches. Kunst- und kulturgeschichtliche Untersuchungen zu den Verzierungen eines Tores aus Balawat (Imgur-Enlil) aus der Zeit von Salamanassar III., König von Assyrien, (Subartu 20), Turnhout.

Smogorzewska, Anna (2006)

"Mitanni Grave at Tell Arbid", in: *Damaszener Mitteilungen* 15, 67–93.

Szuchman, Jeffrey (2009)

"Bit Zamani and Assyria", in: Christine Kepinski / Aline Tenu (eds.), *Interaction entre Assyriens et Arméens*. Proceedings of the workshop, 6th ICAANE, May 6, 2008, Rome, Syria 86, 55–65.

Tenu, Aline (2009)

L'expansion medio-assyrienne. Approche archéologique, (BAR International Series 1906), Oxford.

Tuna, Numan / Öztürk, Jean (eds.) (1999)

Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 1998, Ankara.

Tuna, Numan / Öztürk, Jean / Velibeyoğlu, Jâle (eds.) (2001)

Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 1999, Ankara.

Tuna, Numan / Velibeyoğlu, Jâle (eds.) (2002)

Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 2000, Ankara.

Tuna, Numan / Greenhalg, Jean / Velibeyoğlu, Jâle (eds.) (2004)

Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs. Activities in 2001, Ankara.

Velibeyoğlu, Jâle / Schachner, Andreas /

Schachner, Şenay (2002)

"Erste Ergebnisse eines Surveys im Botan Tal und in Çattepe (Tilli)", in: Numan Tuna / Jâle Velibeyoğlu (eds.), *Salvage Project of the Archaeological Heritage of the Ilisu and Carchemish Dam Reservoirs, Activities in 2000*, Ankara, 783–857.

Wäfler, Markus (1993)

"Tell al-Hamidiya", in: Olivier Rouault / Maria Grazia Masetti-Rouault (eds.), *L'Euphrate e il tempo. Le civiltà del medio Euphrate e della Gezira siriana*, Milano, 193–198.

Wilhelm, Gernot (1989)
The Hurrians, Warminster.

Wilkinson, Tony J. (1990)
“The Development of Settlement in the North Jazira between the 7th and the 1st Millennia B.C.”, in: *Iraq* 52, 49–62.

Wilkinson, Tony J. (1995)
“Late-Assyrian Settlement Geography in Upper Mesopotamia”, in Mario Liverani (ed.), *Neo-Assyrian Geography* (Quaderni di Geografia Storica 5), Rome, 139–159.

Wilkinson, Tony J. (2002)
“The Settlement Transition of the Second millennium BC in the Western Khabur”, in: Lamia Al-Gailani Werr / John Curtis / Harriet Martin / Augusta McMahon / Joan Oates / Julian Reade (eds.), *Of Pots and Plans. Papers on the Archaeology and History of Mesopotamia and Syria presented to David Oates in Honour of his 75th Birthday*, (Nouvelles Assyriologiques Brèves et Utilitaires Publications), London, 361–372.

Wilkinson, Tony J. / Tucker, David J. (1995)
Settlement Development in the North Jazira, Iraq: A Study of the Archaeological Landscape, (Iraq Archaeological Reports 3), Warminster.

