

Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State

Papers Presented at a Workshop Held
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Edited by

Federico Manuelli and Dirk Paul Mielke

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Contents

Foreword.....	iii
Introduction – Throwing Some Colour on a Plain World	1
<i>Federico Manuelli and Dirk Paul Mielke</i>	
Geometric Painted Pottery of the 2nd Millennium BC in the Central Black Sea Region. A Contribution to the Archaeology of the Kaška	21
<i>Dirk Paul Mielke</i>	
Archaeometric Investigations of Late Bronze Age Painted Pottery from Oymaağaç Höyük/Nerik, Central Black Sea Region, Türkiye	59
<i>Mustafa Kibaroğlu, Sonja Behrendt, Tillmann Viefhaus and Dirk Paul Mielke</i>	
The Painted Pottery Tradition in Inland South-Western Anatolia during the Late Bronze Age.....	81
<i>Fulya Dedeoğlu and Erim Konakçı</i>	
Late Bronze Age Painted Pottery and its Contextual Relationship to the Hittite Levels at Ovaören	99
<i>S. Yücel Şenyurt and Atakan Akçay</i>	
Late Bronze Age Chronology and Painted Pottery in Inland Southern Anatolia	113
<i>Alvise Matessi</i>	
The Cross-Hatched Red Painted Pottery Tradition at Mersin-Yumuktepe	130
<i>Éric Jean</i>	
Style as Representation of Political Hegemony? A View from the Edge of the Hittite Kingdom.....	147
<i>Elif Ünlü</i>	
Red Band Decorated Pottery from Tepebağ Höyük/Adana	163
<i>Deniz Yaşın and Belgin Aksoy</i>	
Painted Pottery Traditions at Sirkeli Höyük in the 2nd Millennium BC	177
<i>Ekin Kozal</i>	

Just a Matter of Style? Late Bronze Age Painted Pottery Traditions in the Upper Euphrates Region: Origins and Significance.....	204
<i>Federico Manuelli</i>	
Archaeometric and Technological Investigations of the Late Bronze Age Painted Pottery from Arslantepe (Malatya, Eastern Türkiye)	233
<i>Pamela Fragnoli and Alexandra S. Rodler</i>	
Painted Pottery Traditions of Late Bronze Alalakh.....	248
<i>Mara T. Horowitz</i>	
Some Final Remarks	280
<i>Hermann Genz and Geoffrey D. Summers</i>	
Index	286

Foreword

The idea to bring the ‘Late Bronze Age Painted Pottery Traditions at the Margins of the Hittite State’ in the focus of supra-regional research was born at the beginning of 2017. At that time, both editors worked at the Freie Universität Berlin, where our researches were shaped in a bustling atmosphere with lots of exciting projects. Moreover, a decisive factor was that both of us were engaged in the study of painted ceramics from the Anatolian Late Bronze Age world in the context of our own projects. In addition, there were other scholars dealing independently with similar findings from their excavations...it seems that sometimes certain issues are in the air. Accordingly, we developed the idea to organise a workshop about the different painted pottery traditions that were apparently clustered around the ‘unpainted’ core region of the Hittite State in the framework of the 11th International Congress on the Archaeology of the Ancient Near East (ICAANE). Many colleagues accepted the invitation to the workshop with great enthusiasm and we all met together at the Ludwig-Maximilians Universität München on the 4th of April 2018. The workshop was very intensive and the fruitful exchange produced a great gain in knowledge for all participants. But the volume on hand is not only the result of this workshop. For the publication, the research topic was supplemented with further contributions that expanded the knowledge of the phenomenon in question. Therefore, we wish to express, first of all, our gratitude to all the contributors of the volume, both those that participated in the original workshop and those who decided later to join this project. A special word of gratitude is needed to Hermann Genz and Geoffrey Summers, who have accepted the double effort of carefully reviewing all the papers and writing the final remarks of the volume: their patience and enthusiasm have been fundamental for its successful publication. We extend our thanks to the Archaeopress team for having supported this project and have provided us with all the necessary technical support. Moreover, we are thankful to the organizers of the 11th ICAANE, and in particular to Michael Herles, for their help and hospitality in Munich. Lastly, it should be stressed that the publication of this volume was possible due to the research project awarded by the Deutsche Forschungsgemeinschaft (DFG project #324049112). With the awareness that the painted pottery traditions at the margins of the Hittite State represents an outstanding and to date unexplored phenomenon, we trust that the book will find its own place in the scientific community and the subject gets its due attention within the research topics of Late Bronze Age Anatolia.

Federico Manuelli and Dirk Paul Mielke

Berlin/Rome and Münster, August 2022

Just a Matter of Style? Late Bronze Age Painted Pottery Traditions in the Upper Euphrates Region: Origins and Significance

Federico Manuelli

Abstract

Painted pottery is significantly attested in the main Late Bronze Age sites of the Upper Euphrates valley. It has usually been recognized as a long-lasting reminiscence of local traditions stemming from the connections that the area had with Northern Mesopotamia and Northern Syria during the early 2nd millennium BC. Nonetheless, analyses mostly focused on examining the significance that the North-Central Anatolian plain wares played in the development of the pottery repertoires of this peripheral region under the Hittite sphere of influence, often leaving aside the importance and endurance of the local traits. This article aims at contextualizing and comparing the Late Bronze Age painted pottery assemblages brought to light in the main settlements of the Upper Euphrates region. Painted pottery coming from Arslantepe, the most extensively investigated site of the area, is presented here and its origin and development described from a diachronic and regional perspective. The comparison is extended to other areas at the margin of the Hittite State, providing insights into the emergence and importance of extra-regional connections. The purpose is to define the geographical and cultural borders of this phenomenon, identifying its local aspects and understanding to which extent similarities in style might reflect common origins or shared tastes.

Keywords

Arslantepe, Upper Euphrates valley, Hittite State, painted pottery, stylistic tastes

Özet

Boyalı seramikler bilhassa Yukarı Fırat Vadisi'nin Geç Tunç Çağı'na tarihlenen başlıca yerleşimlerinde görünürler. Bölgenin, M.Ö. 2000'lerin başlarında, Kuzey Mezopotamya ve Kuzey Suriye ile olan ilişkilerine dayanan yerel geleneklerin uzun erimli yansıması olarak kabul edilirler. Araştırmalar, ağırlıklı olarak Hitit etki alanındaki bu periferik bölgenin çanak çömlek repertuarının gelişiminde Kuzey-Orta Anadolu seramiklerinin oynadığı rolün önemi üzerinde durmakla birlikte, yerel özelliklerin önem ve dirençlerini göz ardı ederler. Bu makalenin amacı Yukarı Fırat bölgesinin başlıca yerleşimlerinde gün ışığına çıkarılan Geç Tunç Çağı boyalı seramik gruplarını çevresel öğeleriyle ele almak ve karşılaştırmaktır. Çalışmada, bölgenin en çok araştırılmış yerleşimi olan Arslantepe'de bulunan boyalı seramiklerin kökeni ve gelişimi diyakronik ve bölgesel perspektifte ele alınmaktadır. Yapılan karşılaştırmalar, Hitit Devleti'nin sınırlarındaki diğer bölgeleri de kapsar ve böylelikle bölge dışı bağlantıların önemini ve ortaya çıkışlarını kavramayı sağlarlar. Buradaki gaye, boyalı seramiğin kültürel ve coğrafi sınırlarını tanımlamak; yerel unsurlarını belirlemek ve biçimsel benzerliklerinin hangi ölçülerde ortak köken ve paylaşılmış üslupları yansıttığını anlamaktır.

Anahtar Kelimeler

Arslantepe, Yukarı Fırat Vadisi, Hitit Devleti, boyalı seramik, biçimsel üsluplar

Introduction and research questions

Painted pottery assemblages have largely been recovered from the main Late Bronze Age sites in the Upper Euphrates region. Despite the lack of specific studies, painted repertoires always constitute a well-represented group of the published material. Generally, they are well-attested during the first part of the 2nd millennium BC sequences, while they drastically decrease from the 15th century BC onwards, purportedly in association with the appearance and spread of standardized Hittite ceramics. Although correct to a general extent, the latter assumption clearly represents an oversimplification of this phenomenon, mostly established to support the involvement of the region in the main historical events of these centuries: the Assyrian colonies trade and the Hittite expansion.

A more detailed analysis shows that the circumstances are in fact more heterogeneous and multifaceted. In contrast to the Hittite center, the Euphrates area shows a continuous and strong use of painted pottery during the second half of the 2nd millennium BC as well. Moreover, similarities in pattern decorations and associated pottery shapes lead us towards a wide set of connections that move from Anatolia to Mesopotamia up to Cilicia and Northern Syria.

Many questions are raised here: what is the role played by these painted productions on a local, regional, and extra-regional scale? What is their role within the interaction that the Upper Euphrates area developed with the surrounding regions from the final Middle Bronze Age up to the advanced Late Bronze Age? Do the affinities reveal the existence of a proper common style? And if so, are we dealing with proper aspects of emulation or imitation over long distances, or is there any other wider phenomenon of social identity or exchange involved?

In the following pages I will try to answer some of these questions through the analysis of the Late Bronze Age painted pottery assemblages brought to light in the main Upper Euphrates sites. Specific attention is paid to material from Arslantepe, as the most extensively investigated and important site of the area, evaluating it within a wider regional and extra-regional perspective.

First of all, the geographical and historical background of the region needs to be briefly introduced. The Central-Eastern Anatolian area around the provinces of Malatya and Elazığ is commonly identified as geographically coherent (**Figure 1**). The territory spread over the two sides of the Euphrates has been affected by a multitude of features originating from different regions, and by their merger with the deep-rooted aspects of the local tradition. This is mostly due to the geographical location of this area, standing in the fluvial environment between the Taurus and the Anti-Taurus chains, which allowed the penetration of a large set of influences from the Central Anatolian as well as the Syro-Mesopotamian and the Transcaucasian worlds.¹ Despite the historical sources showing that the trade route of the Assyrian colonies mostly involved the Euphrates south of this region, the introduction of new categories of material emphasizes the connections that the area somehow had with Anatolia and Mesopotamia.² It was in any case only during the mid-17th century BC that the Upper Euphrates began to come under the strong influence of the Central Anatolian power, as testified by the Hittite campaigns of Hattušili I and Muršili I.³ However, until the time of Šuppiluliuma I, who subjugated the land of Išuwa and moved down towards the lower territories around the mid-14th century BC, this was a politically unstable area where the interests of Hittite and Mitanni clashed.⁴ During the 13th century BC, the rise of the Middle Assyrian kingdom created further frictions at the Euphrates border and the protection of the eastern valley was delegated to the local ruler of Išuwa, now appointed as

¹ See Frangipane and Liverani 2013, 349–352; Brown and Wilkinson 2017, 146–150.

² See Di Nocera 1998, 149–154; Şerifoğlu 2007, 102; Barjamovic 2011, 217–219; Di Filippo and Mori 2018, 41–44.

³ Crasso 2009, 211–212; De Martino 2012, 378–381; Alparslan 2017, 212–215.

⁴ Torri 2007, 236; Glocker 2011, 267–273; Devecchi 2017, 285.

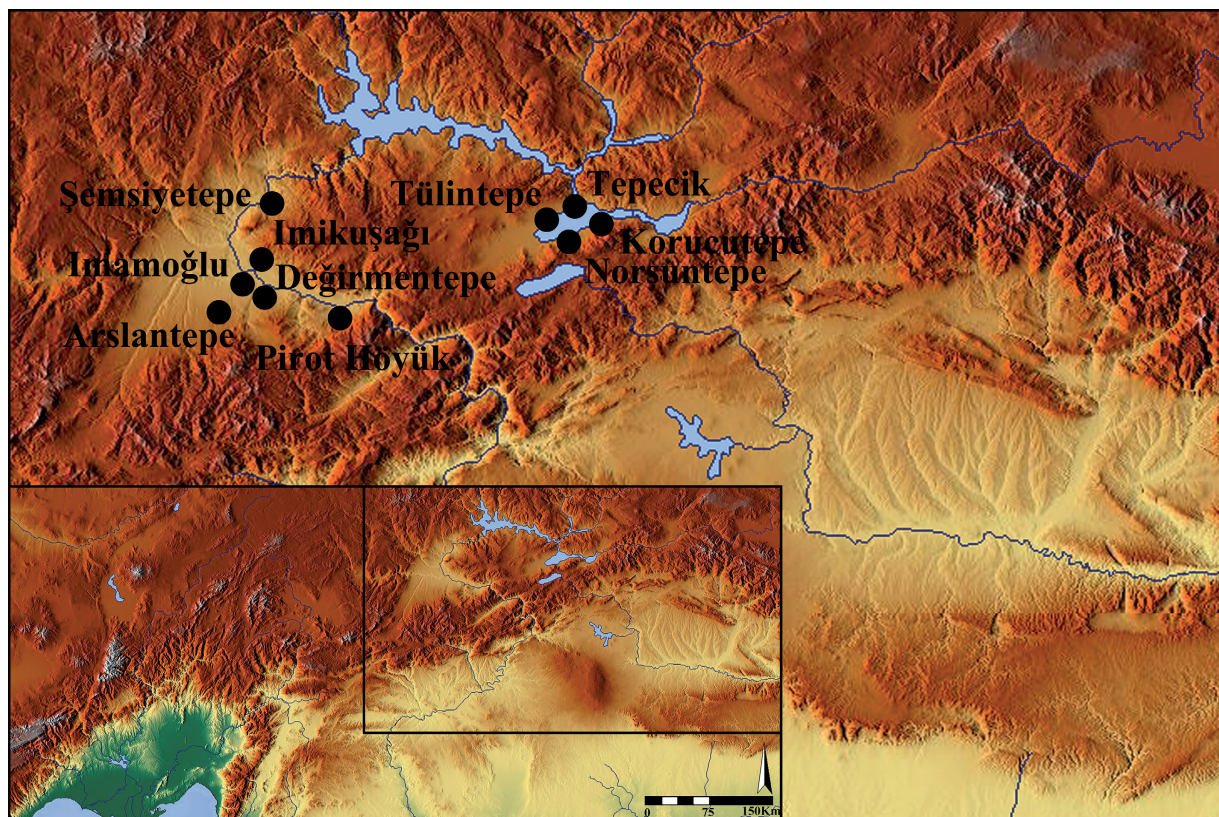


Figure 1: Map of the Upper Euphrates region with its main investigated sites.

a vassal of Ḫatti.⁵ Henceforth, the whole region fell under a more stable Hittite control, which ceased only with the disintegration of the Central Anatolian power at the beginning of the 12th century BC.⁶

Investigations on the Late Bronze Age Upper Euphrates region

These geographical characters and historic-political circumstances lead us to see the Upper Euphrates as a region characterized by changing political connections and a proliferation of military activities. Nonetheless, it is not always easy to match and support this reconstruction with the archaeological evidence. This is mainly due to the nature of the investigations in the area, which have been mostly conducted with the aim to explore settlements that would be flooded by the construction of the Keban and the Karakaya dams. Hence, research was restricted to a limited number of settlements and often only small areas of them have been excavated, leading to the publication of fragmentary data not always fully comprehensive or reliable.⁷

This frequently resulted in a forced attempt to correlate the excavated sequences with historical events. It leads quite regularly to the misuse of the term ‘Hittite’ to identify the whole Late Bronze Age period, based on the not-always consistent appearance of North-Central Anatolian artifact-types, often due to misconceiving or neglecting the development of the local material culture.⁸

⁵ De Martino 2010; Forlanini 2014, 254–258.

⁶ Liverani 2004; Manuelli 2013, 413–423.

⁷ For an updated overview and related bibliography, see Manuelli 2017, 139–145.

⁸ For discussions about the topic, see Glatz 2009, 129; Manuelli 2013, 399–403; Matessi 2017, 117–122; Mielke 2017, 125–140; Pucci 2019a, 173–177.

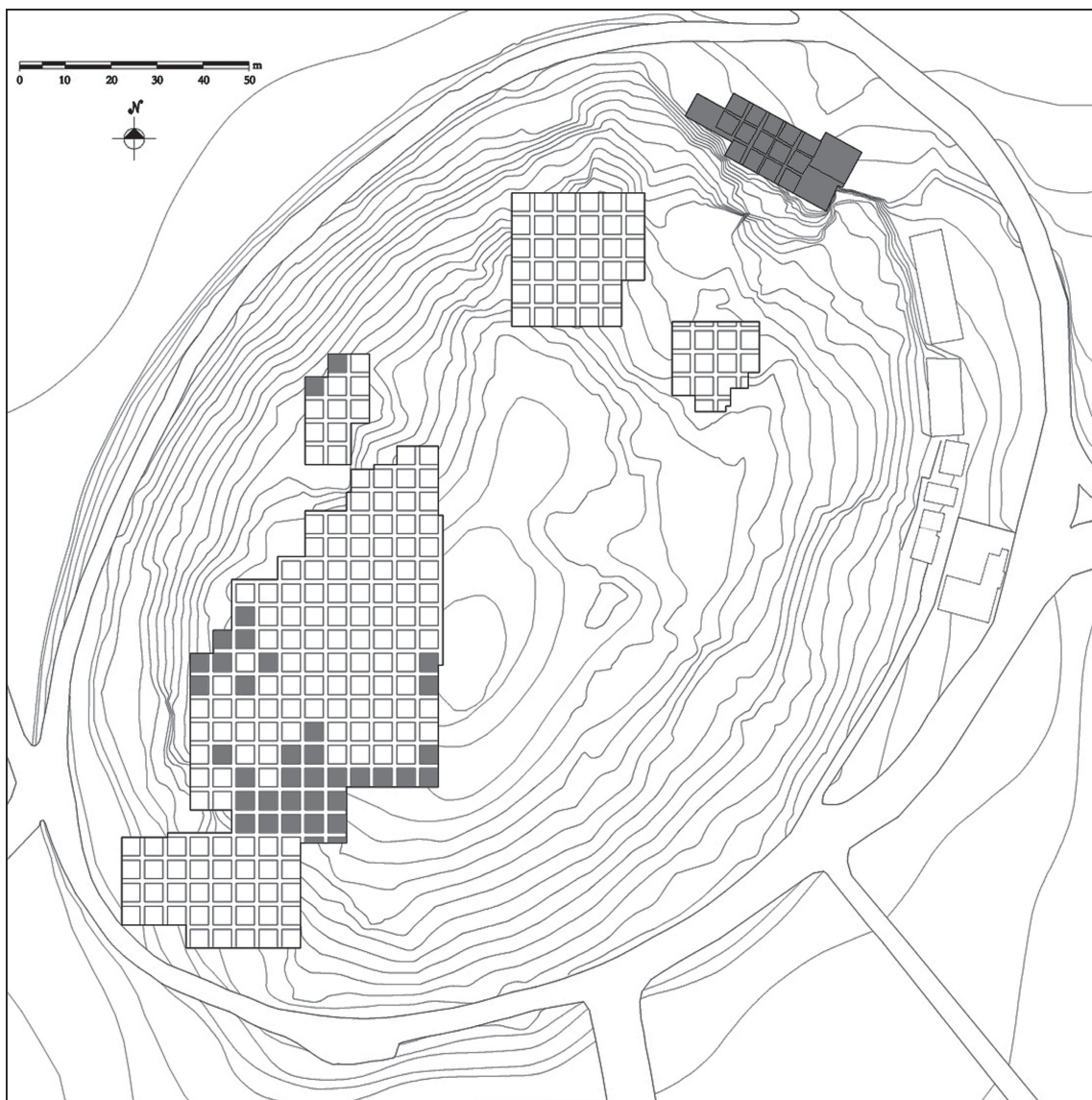


Figure 2: Topographic plan of Arslantepe. The Late Bronze Age excavated squares from 1969 to 2018 are colored grey.

The most recent studies on the territorial and material development of the Upper Euphrates region have in any case convincingly shown that within a generalized set of shared traits, two main cultural areas can be identified: the Malatya plain on the one hand, and the Elazığ-Altınova territory on the other, besides a sub-region corresponding to the peri-fluvial zone east of the Euphrates.⁹ The set of above-mentioned geographical, historical and archaeological circumstances allows us to better comprehend how the cultural borders of the region were ambiguous and fuzzy, always changing and fluctuating according to the balance of forces between adjacent and surrounding states.¹⁰

Excavations in the Altınova plain and the Keban dam region were mostly undertaken in the late 1960s and the 1970s.¹¹ Four sites dated to the final Middle Bronze Age and the Late Bronze Age have

⁹ Şerifoğlu 2007, 111–112; Manuelli 2013, 392–397; 2017, 137–139.

¹⁰ See Torri 2005; Liverani 2007, 8–9; Fales 2011, 9–11, 23–27; Chrzanowska 2017; Di Filippo and Mori 2018.

¹¹ For an updated synthesis with related bibliography, see Manuelli 2017, 139–142.

DATING (BCE)	CHRONOLOGY	ARSLANTEPE SEQUENCE		ARCHITECTURAL CONTEXTS AND EVENTS	HITTITE KINGS	HISTORICAL CORRELATIONS
		North	South			
1700	VB1 Late Bronze Age IA	-----	Phase I	<ul style="list-style-type: none"> • Gate system and earthen rampart (?) • Southern dwellings phase I • Destruction 	Ḫattušili I Muršili I	Campaigns in Syria and Mesopotamia
1600	VB2 Late Bronze Age IB	Vd	Phase II	<ul style="list-style-type: none"> • Level Vd gate-system and earthen rampart • Southern dwellings phase II • Destruction 	Telipinu	Mitannian control of Syria
		Vc-b				
1400	IV Late Bronze Age II	Va-V	Phase III	<ul style="list-style-type: none"> • Abandonment of the southern part of the mound 	Tudḫaliya III Šuppiluliuma I	Campaigns in Syria Control of Išuwa Elimination of Mitanni
1300		IVd-c		<ul style="list-style-type: none"> • Level IV gate-system 	Ḫattušili III Tudḫaliya IV	Battle of Niḫriya
		IVb-a		<ul style="list-style-type: none"> • Destruction 	Šuppiluliuma II	Downfall of Boğazköy
		IV				

Figure 3: The Late Bronze Age sequence at Arslantepe.

been investigated: Korucutepe, Tepecik and Norşuntepe were extensively excavated, while Tülintepe has only provided sporadic remains. The Malatya plain and the Karakaya dam region have instead been mostly explored during the second half of the 1970s.¹² Here, the only site that has supplied abundant 2nd millennium BC remains is İmikuşağı, while İmamoğlu, Değirmentepe, Pirost Höyük and Şemsiyetepe were only briefly excavated.

An exception to the above-mentioned trend of targeted research and short-term excavations is represented by Arslantepe, where the team from Sapienza University of Rome has been working since 1961 (Figure 2).

Because of its long-lasting investigations and reconstruction of an uninterrupted sequence covering several millennia, the site represents the cultural and chronological guide for the whole region.¹³ A detailed Late Bronze Age sequence has been established at Arslantepe through seriation, by means of ordering archaeological contexts and artefacts contained in them in a chronological progression enabling us to identify the typological evolution of the material over time.¹⁴ Three main phases have been recognized, corresponding to a tripartite relative chronology. It must be said that the use of pottery sequences to establish relative chronologies has so far played a very modest role in Late Bronze

¹² For an updated synthesis with related bibliography, see Manuelli 2017, 142–145.

¹³ See Frangipane 2011.

¹⁴ Manuelli 2013, 326–333; 2017, 145–147; in press.

Age Anatolian studies. However, the recent application of statistical approaches to pottery from well-dated deposits at Boğazköy and other Hittite sites has allowed a better definition of the morphological transformations of their assemblages, demonstrating the utility of these procedures.¹⁵ At Arslantepe, the sequence has also been supported with C14 dating obtained from well-contextualized samples so as to establish a more detailed chronological framework.¹⁶ Their calibration and overlap allow us to link the three above-mentioned phases within a framework of absolute dates stretching between the 17th and the 13th centuries BC (**Figure 3**).

In a general overview, Period VB1 (Late Bronze Age IA) covers the 17th century BC. Several dwellings arranged in small elongated rooms for domestic goods storage and provided with single or double horseshoe-shape hearths have been brought to light in the southwestern part of the site.¹⁷ The material culture shows strong links with the Middle Bronze Age tradition and contacts with Southern Anatolia and Northern Syria. At the same time, North-Central Anatolian influences are already clearly manifested throughout the whole repertoire.¹⁸ Period VB2 (Late Bronze Age IB) nearly corresponds to the 16th and the 15th centuries BC. It is characterized by the presence of an earthen rampart built through clayey soil that surrounds the whole mound and a gate system provided with protruding rectangular bipartite towers.¹⁹ Although it seems highly plausible that the entire defensive system was already in use at least during part of the previous Period VB1, the evidence only allows us to date its destruction with any certainty, which occurred during the 15th century BC.²⁰ Aspects of continuity with the former period are attested in domestic architecture and pottery production. Nonetheless, a drastic increase of typical North-Central Anatolian shapes characterizes the assemblage.²¹ Towards the end of the 15th century BC a violent conflagration destroyed the gate system and represents an end to the Late Bronze Age I occupation. During the following Period IV (Late Bronze Age II), approximately covering the 14th and 13th centuries BC, remarkable changes are noticeable in the settlement pattern of the site. A gradual abandonment of the southern part of the mound and exclusive use as a dump is attested by the total lack of any structures and presence of only pits there.²² A new chambered gateway and fortification system that now encloses only the northern portion of the mound, as a sort of military outpost, is found.²³ The material culture is mostly characterized by elements related with the Hittite influence, implying the site's new extra-regional dimension.²⁴

The Late Bronze Age II gateway and related structures have been found deeply destroyed by a massive fire that was identified all over the investigated area. The conflagration has been assigned, by the archaeologists that excavated it at the end of the 1960s, to a phase that follows the disuse of the gate system.²⁵ Indeed, it has been assumed that the above-mentioned buildings underwent a first phase of disruption, characterized by the installation of modest structures that altered the main architectural project and suggesting a change of use before their final obliteration, marking the existence of a crisis period that might be somehow related to the events that brought the Hittite civilization to its end.

¹⁵ See Schoop 2006; Mielke 2006, 158–159, 174–176; Schoop 2009; Strupler 2013; Mühlenbruch 2014, 179–188; Gruber 2017, 124–138.

¹⁶ The details of the analysis are described and discussed in Manuelli 2013, 347–353. For a synthesis and update, see also Manuelli 2017, 145–147; in press; Manuelli *et al.* 2021.

¹⁷ Palmieri 1978, 58–71; Manuelli 2013, 48–66.

¹⁸ Manuelli 2013, 392–397; 2017, 146.

¹⁹ Palmieri 1978, 35–37; Alvaro 2012, 350–352; Manuelli 2013, 41–43.

²⁰ Palmieri 1974, 137; Manuelli 2013, 297–299, 347–353.

²¹ Manuelli 2013, 392–397; 2017, 146.

²² Manuelli 2013, 404–409.

²³ Pecorella 1975, 3–5; Alvaro 2012, 353–355; Manuelli 2013, 404–409.

²⁴ Manuelli 2013, 216–221, 389–391; in press; Mora 2013, 266–270.

²⁵ Puglisi 1968, 128; Pecorella 1975, 10.

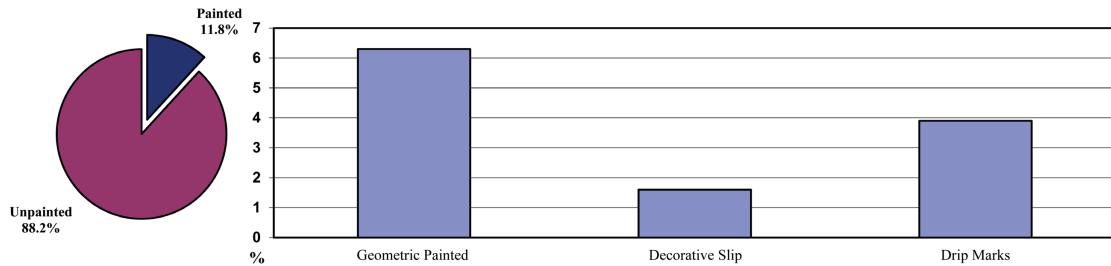


Figure 4: Arslantepe, percentage of painted decorated pots and sherds and their patterns (total decorated items 1,092).

Painted pottery at Late Bronze Age Arslantepe: classification and description

The whole Late Bronze Age pottery assemblage from Arslantepe consists of approximately 11,000 items. Traces of paintings are seen on 11.8% of this collection.²⁶ Painting is here considered as the result of the application of a fluid suspension of clay and coloring pigments onto the vessel surface, most probably always realized before firing when containers were dry or in their leather-hard stage of drying.²⁷ Three main types of painted techniques occur (**Figure 4**).

‘Geometric painting’, as an application of natural colored pigments made with brushes or sticks onto restricted parts of the vessel to create specific patterns, is the most common one. At a lower percentage a so-called ‘decorative slip’ is realized still using the same paint and a brush but to create a band motif which only covers restricted parts of the vessels with a vivid coating. A last category is represented by ‘drip marks’, consisting in a thick series of vertical and irregular colored traces of fluid suspension that drips down from the rim to the bottom of the vessels.

Geometric painted decorations are quite variable as far as their association with vessel shapes and wares as well as colors is concerned (**Figure 5**). They are mostly made on small and medium-sized neckless and short-necked jars, realized with mineral fabric and semi-fine texture wares. They also occur on large-sized high-necked jars, mainly made with mineral fabric and medium texture wares. With the exceptions of the largest containers, the production is completely wheel-made. As far as the color of the decoration is concerned, it almost always occurs in red tones: light red, light-reddish brown, and reddish-brown hues. A taxonomic classification of the decorative motifs is essential for better comprehending and interpreting the occurrence of trends and tastes. Six main motifs are distinguishable. However, a total amount of eleven patterns can be identified if we consider the merging of the main motifs on the same vessel and the occurrence of secondary and more complex decorative themes.

The design is in general modest, but it has to be considered that the fragmentation of the material clearly limits the reconstruction of more elaborated patterns. Line, stripe, and band decorations are widely attested, along with triangle and cross-hatching motifs, while other more complex themes are barely represented. Lines, stripes, and bands occur in single or combined patterns on both open and closed shapes (**Figure 6**). Carinated bowls, as well as small and medium-sized neckless or short-necked jars, are the most common associated shapes. Decorations are mostly realized with dark-red tones.

²⁶ For a comprehensive description of the Late Bronze Age pottery assemblage at Arslantepe, see Manuelli 2013, 73–213. It should be stressed that the percentage of painted decorations on the whole inventory could be overestimated, since the collection methodologies of the excavations conducted during the 1960s recorded only vessels and diagnostic sherds. Hence, the proportion between diagnostic and non-diagnostic or undecorated sherds is erratic for these years.

²⁷ See Cuomo di Caprio 2007, 475; Laneri 2009, 105–106; Rice 2015, 161–162.

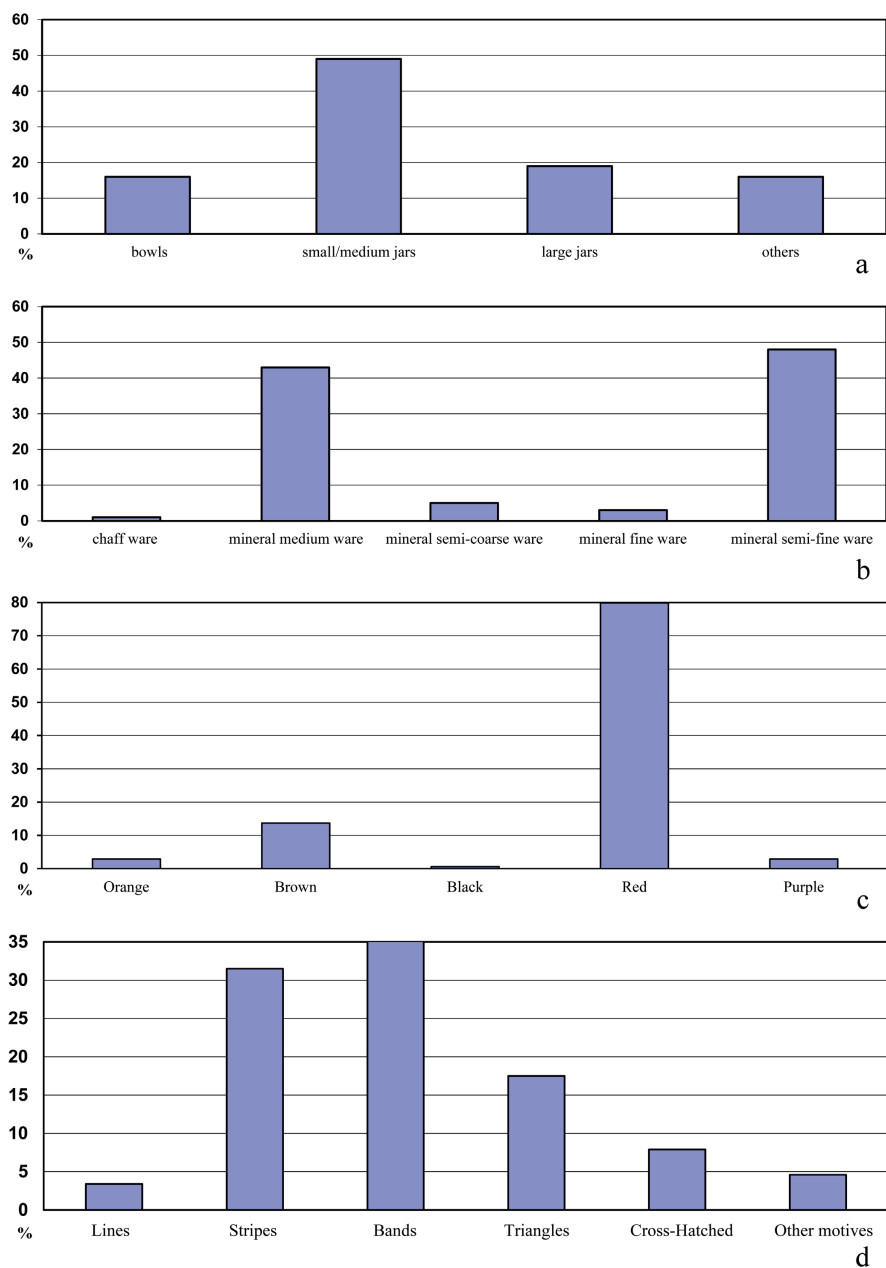


Figure 5: Arslantepe, geometric painted decorations (total items 504). Percentage associated with (a) shapes, (b) wares, (c) colors, and (d) motifs.

Triangles mainly occur with linear motifs realized between stripes and bands and only sporadically with filled patterns (**Figure 7**). They are attested on small and medium-sized neckless and short-necked jars and occasionally on large-sized high-necked types. Decorations are mainly realized in red, while a few examples in purple also occur.

Cross-hatching motifs are constituted by the combinations of rows of lines, stripes, or bands (**Figure 8**). They occur on kraters and on small and medium-sized neckless and short-necked jars. The color of the decoration is red or reddish-brown.

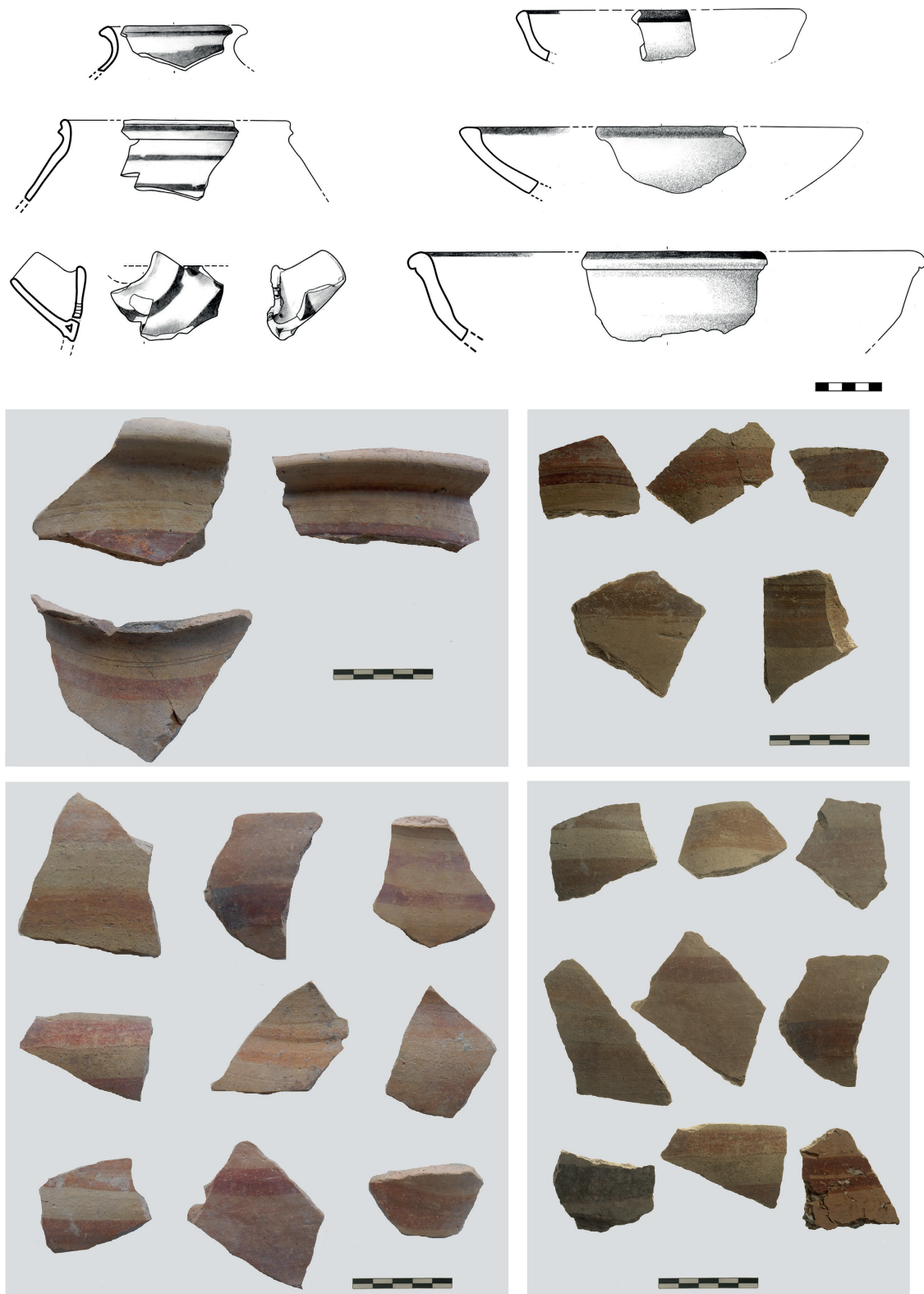


Figure 6: Arslantepe, geometric painted decorations: lines, stripes, and bands patterns (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli - ©MAIAO).



Figure 7: Arslantepe, geometric painted decorations: triangle patterns (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli - ©MAIAO).



Figure 8: Arslantepe, geometric painted decorations: cross-hatching patterns (drawings by A. Siracusano; photos by R. Ceccacci - ©MAIAO).

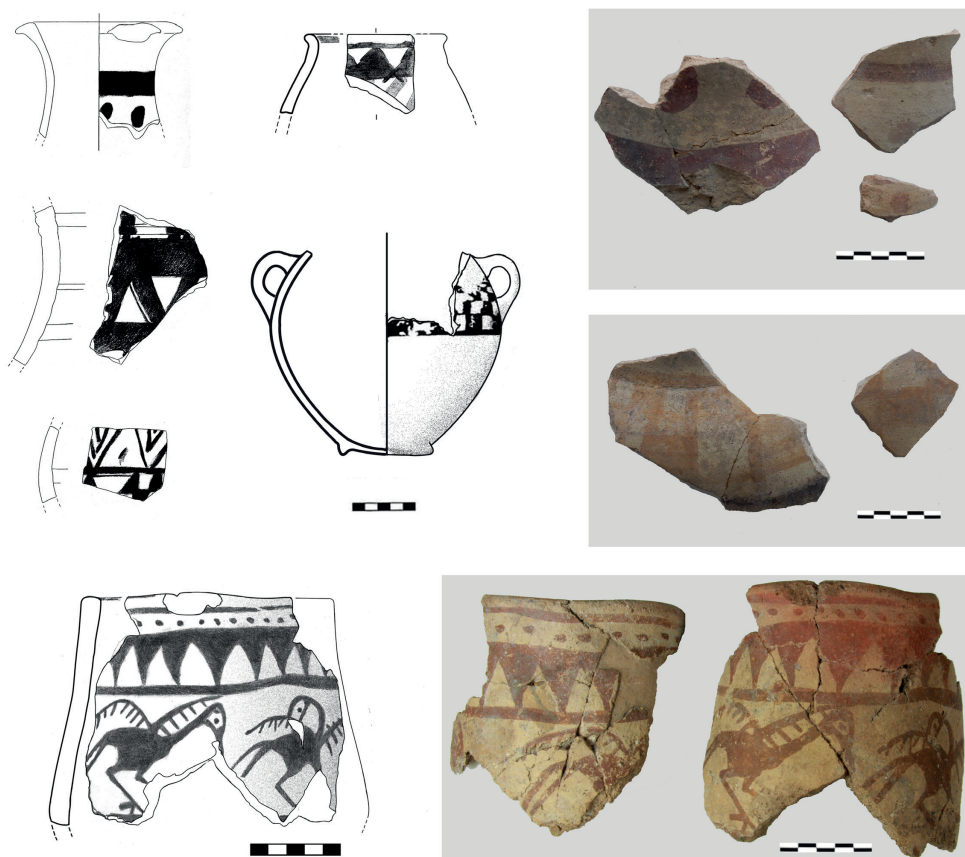


Figure 9: Arslantepe, geometric painted decorations: complex patterns (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli - ©MAIAO).



Figure 10: Arslantepe, red decorative slip (drawings by A. Siracusano; photos by R. Ceccacci and F. Manuelli - ©MAIAO).



Figure 11: Arslantepe, drip marks (drawings by A. Siracusano; photos by R. Ceccacci - ©MAIAO).

Complex motifs are poorly represented (Figure 9). Dots, angles, and cross-boards patterns are attested on small-sized jars with red or reddish-brown colors. It is worth noting the presence of one fragmented shoulder beaker with figurative decoration. This is realized in red by means of a series of full triangles and dots between stripes, above three birds ready to take flight, one of them looking backwards.

Decorative slips and drip marks generally occur at lower percentages and within a more standardized set of associated shapes when compared to the geometric decorations. As far as the decorative slip is concerned, it is always realized with an intense and dense red tone (Figure 10). The decoration is above

all realized over the upper parts of carinated bowls as well as over the rim and the neck of small and large necked jars. The associated shapes are mostly made with mineral fabrics and medium and semi-fine texture wares.

The presence of drip marks is extremely interesting (**Figure 11**). They are exclusively associated with medium-sized necked jars and pithoi realized with chaff fabrics and semi-coarse texture wares. The decoration color is always orange, light-red, and sometimes white. It also needs to be considered that the color of each single drop can easily change shade along its path on the vessel surface. Drip patterns seem to be made intentionally by letting a suspension of colored liquid drip from the vessel rims, where its traces cover the entire vase surface, down to the bottom, where it gradually wears thin. In some case it seems also plausible to assume that this effect has been emphasized thanks to the use of a double firing session that alternates oxidising and reducing atmospheres.²⁸ In this perspective, it is plausible to assume that these signs were created in order to indicate a specific product contained in the vessels. This hypothesis is further supported by the fact that more than the 60% of the specimens with drip marks are associated, on their internal surfaces, with a thick and porous layer. This coating was certainly intended to waterproof the surface of the vessel in case of contact with specific liquids, improving the preservation and the quality of the stored product.²⁹

Local and diachronic perspectives

The described painted assemblage needs first of all to be set within the general horizon of Arslantepe pottery. Archaeometric analyses show a complete local provenience of this material and a strong continuity with the painted wares attested at the site from the end of the 3rd millennium BC.³⁰ In a wider perspective, the Late Bronze Age ceramic production at Arslantepe is characterized by a merging of local 2nd millennium BC traditions and North-Central Anatolian Hittite influences.³¹ During Period VB1 both common mineral and chaff productions are attested. Strong links with the Middle Bronze Age tradition and contacts with Southern Anatolia and Northern Syria are especially visible through the occurrence of closed shapes, e.g. short-necked and necked cooking pots as well as necked jars and pithoi. However, North-Central Anatolian influences are also manifested through the prevalence of high funnel-necked jars and the presence of thickened-in rim shallow bowls and small-sized neckless cooking pots. During Period VB2 a drastic decline in number of the above-mentioned necked closed shapes is attested, while only the funnel high-necked jars are widespread. In this period, the pottery repertoire is characterized by a clear increase of North-Central Anatolia shapes, e.g. large plates with inverted rims, thickened-in rim deep bowls, medium sized kraters, and high-necked large and small-sized bottles. These forms all continue to be attested during Period IV, together with the appearance of new ones, such as straight wall profile flat bowls and thickened-out rim flat big bowls, that underline a definitive imposition of new trends resulting from firmer relationships with the Hittite Empire. This is also evident in the presence of pot-marks and metal weapons comparable with typical North-Central Anatolian examples, as well as of biconvex seals sometimes bearing Luwian hieroglyphic inscriptions. From a technological point of view a simplification, standardization and deterioration of the production

²⁸ See Roux 2017, 137–138. For a description of this procedure see also the contribution presented in this volume by Fragnoli and Rodler.

²⁹ Organic residual analyses have been carried out on samples from pithoi found *in-situ* in room A1200. Analyses are still running ongoing the direction of G.M. Di Nocera from the *Dipartimento di Scienze del Mondo Antico* of *Università della Tuscia*, Viterbo, Italy (Di Nocera 2016). At present, only infrared analyses (FTIR) have been completed and unidentified organic remains have been distinguished. New chromatography and mass spectrometry analyses are expected to be carried out for a more precise identification of the substances contained into the vessels.

³⁰ See Fragnoli and Mallegni 2016. See also the contribution presented in this volume by Fragnoli and Rodler.

³¹ Manuelli 2013, 392–397; 2017, 147–149.

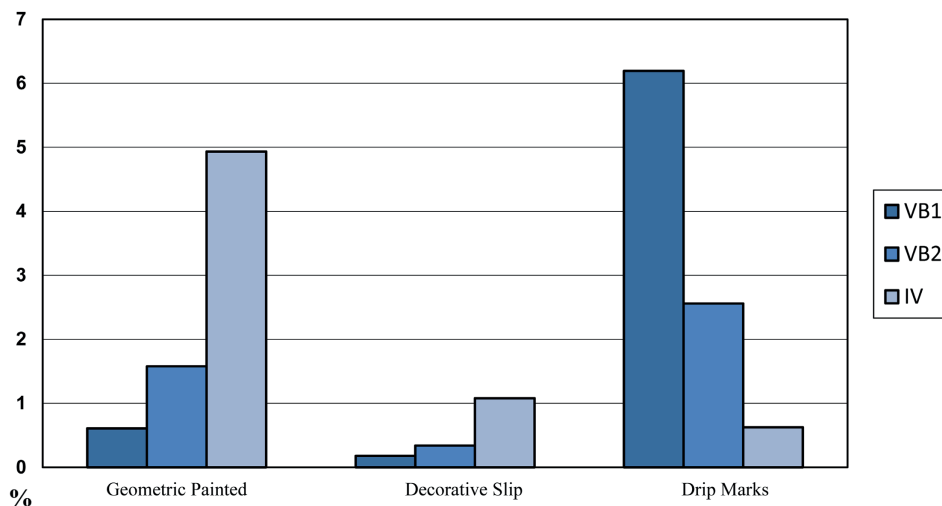


Figure 12: Arslantepe, quantitative development of painted decorations over time (total items 1,092).

is attested through a decrease of the number of pottery types and an increase of mineral tempered wares as well as deformed, over-fired and dark-cored sherds.³²

This diachronic evolution can also be seen if we include the above-mentioned painted pottery. Indeed, on a temporal perspective it can be noted that geometric paintings and decorative slips increase over time, corresponding to a clear reduction of drip marks (**Figure 12**). Despite the fact that the changing percentage of decorative slip is not significant, since its quantity is always very limited, it is also clear that drip marks are typical of the beginning of the Late Bronze Age while geometric painting characterizes the later phases.

Over a longer timeframe, the presence of linear geometric decorations indicates a clear continuity with the local wheel-made monochrome painted ware attested at the site during the Middle Bronze Age.³³ When compared with the Late Bronze Age production, these earlier painted pottery shows an association with more depurated clays and paler pastes. It is important to stress that the appearance of wheel-made geometric painted wares during the Middle Bronze Age represents a break with the previous late-3rd millennium BC tradition at the site, which was instead characterized by the prevalence of handmade painted ceramics associated with complex decorative patterns.³⁴ The development of this new style and tendency might be seen in association with the general spread, attested during the first half the 2nd millennium BC, of other geometric painted ceramics, such as the Khabur Ware in Northern Mesopotamia and the Syro-Cilician Wares in the Levant.³⁵

The decorative slip also originates at the site during the Middle Bronze Age.³⁶ This is a well-known red slip wheel-made production that essentially differs from the Late Bronze Age one since is characterized by a very uniform and dense dark-red coating, sometimes even polished and applied to the whole vessels, mostly on bowls. The spread of red-slip wares at Arslantepe during the Middle Bronze Age probably derives by the contacts that the site developed with the Central Anatolian region during the

³² For recent discussions about standardized pottery production during the Hittite period, see Schoop 2011; Glatz 2015; Horowitz 2015, 153–159; Mühlénbruch 2014, 191–194; Mielke 2016, 161–163; Pucci 2019a, 173–177.

³³ See Di Nocera 1998, 79–85.

³⁴ Fragnoli and Mallegni 2016.

³⁵ For an overview on the spread and relationship between these wares, see Bieniada 2009.

³⁶ See Di Nocera 1998, 67, 84–85.

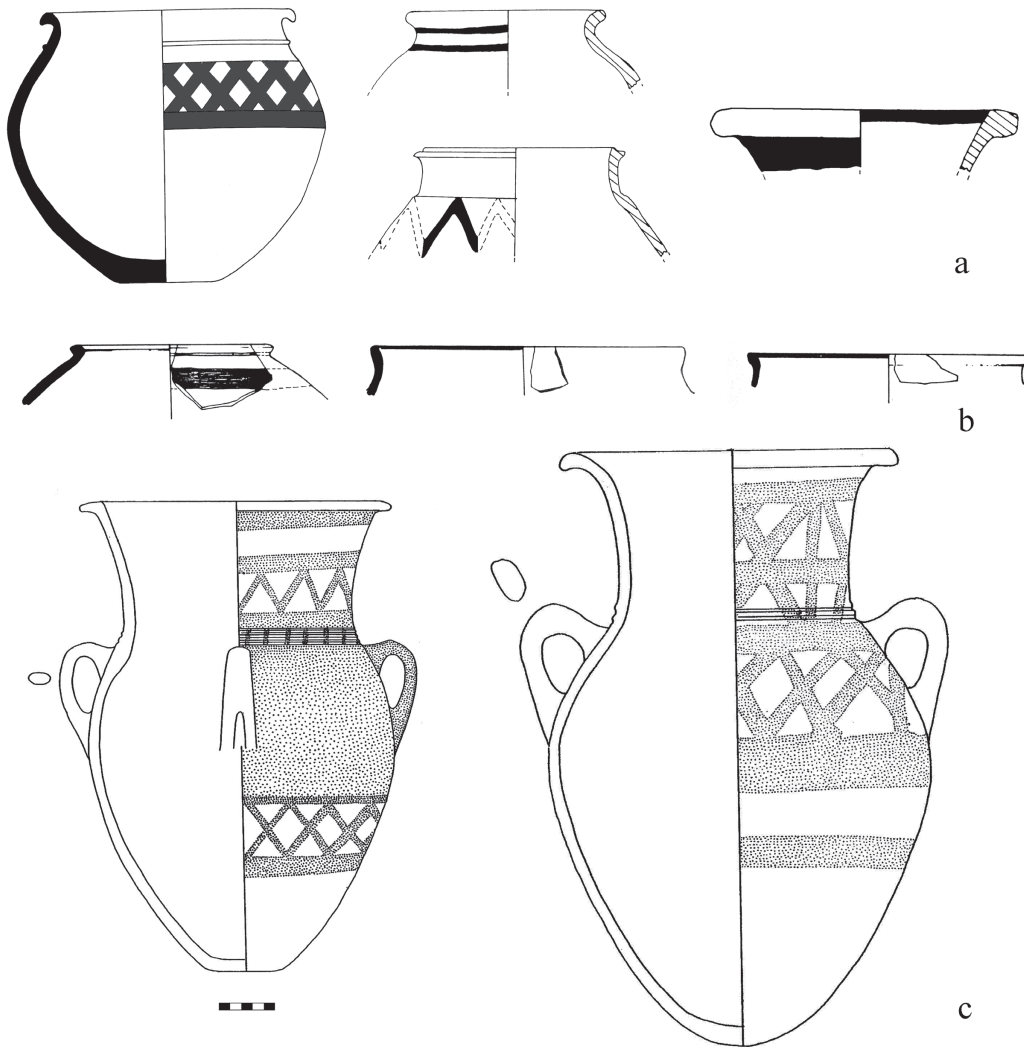


Figure 13: A selection of Late Bronze Age geometric painted pottery assemblage from (a) Korucutepe (adapted from Griffin 1980, Pl. 4c; Umurtak 1996, Lev. 16.2, 3, 7); (b) Norsuntepe (adapted from Korbel 1985, Taf. 139.1591, 140.1053, 1820) and (c) İmikuşağı (adapted from Konyar 1998, Lev. 17.Va.1.a.a.1, Lev. 27.Va.3.1).

Kārum period.³⁷ Unlike the geometric painting and decorative slip decorations, drip marks represent a completely new trend, since they do not show any specific development from the previous periods attested at Arslantepe and they seem to represent a distinguishing mark of the Late Bronze Age tradition at the site.³⁸

As a last consideration, it should be also stressed that the painted productions described here completely disappeared at the end of the Late Bronze Age and that in general decorations are virtually absent in the whole ceramic assemblage of the Early Iron Age at Arslantepe.³⁹

³⁷ Di Nocera 1998, 149–154. For discussions on the development of this ware, see also Schoop 2011; Gruber 2017, 94–95; Orsi 2018, 193–194.

³⁸ The significant presence of drip marks on the Late Bronze Age pottery at Arslantepe had been already acknowledged during the first round of excavations at the site, see Pecorella 1975, 33.

³⁹ Manuelli 2018, 150–155.

Regional and extra-regional comparisons

The assessment of the local and temporal horizon of the Late Bronze Age painted pottery assemblage from Arslantepe allows us to contextualize this material within a wider set of comparisons, so as to reconstruct its specific areas of distribution and relationships with other regions.

First of all, it must be considered that painted pottery is generally rare in the Hittite world and when attested they are mainly concentrated in the earliest Late Bronze Age phases.⁴⁰ Some of the simple geometric decorations occurring at Arslantepe show similarities with a few linear geometric patterns attested on Hittite pottery in North-Central Anatolia, which find their roots in the late-Early and the Middle Bronze Age periods.⁴¹

From a closer geographical perspective, geometric painted decorations very akin to those from Arslantepe are attested in the Upper Euphrates region, especially in the earliest Late Bronze Age levels at İmikuşağı and Korucutepe, and at lower quantities at Norşuntepe as well (**Figure 13**).⁴² We should specifically mention İmikuşağı, where in Level 10, which can be dated to a transitional Middle-Late Bronze Age phase approximatively corresponding to the 17th century BC, painted pottery is ubiquitous.⁴³ Besides the presence of typical linear geometric patterns, the repertoire also includes the prominent occurrence of complex motifs that are associated with almost all of the closed shapes attested at the site.

Interesting similarities with the geometric repertoire from Arslantepe emerge when we look at the material coming from the Elbistan plain, in both the excavations conducted at Karahöyük and the survey carried out in the region.⁴⁴ Moreover, it is important to remark that comparable painted sherds have also been found in the survey conducted in the Kahramanmaraş region.⁴⁵

One of most interesting set of comparisons with the material from Arslantepe stems in any case from the Late Bronze Age painted pottery coming from South and South-Eastern Anatolia, specifically from the main sites in Cilicia to the Amuq valley.⁴⁶ These productions probably find their origins in the well-known Syro-Cilician wares that spread during the Middle Bronze Age across a wide region stretching across the Orontes valley to the Euphrates on one side and to the Amanous mountains and Cilicia to the other.⁴⁷ For example, a reasonable quantity of geometric painted sherds, comparable with the repertoire from Arslantepe, characterizes Level III at Kilise Tepe.⁴⁸ As far as some of the more complex painted designs are concerned, interesting affinities are especially visible with the Late Bronze Age levels at Tarsus.⁴⁹ Further interesting similarities can also be seen specifically with the local painted monochrome wares from Phase M at Chatal Höyük in the 'Amuq.⁵⁰

⁴⁰ Schoop 2009, 148–150; 2011, 245–258; 2013, 356–360; See also the introductory article presented in this volume by Manuelli and Mielke.

⁴¹ See examples from Büyükkale (Fischer 1963, Taf. 13–20); See the introductory contribution presented in the volume by Manuelli and Mielke.

⁴² See Umurtak 1988, Lev. 181; 1996, Lev. 31; Konyar 1998, Lev. 14, 45–46; 2002, 415–416, Lev. X–XI; Griffin 1980, Pl. 14.

⁴³ See Konyar 2006.

⁴⁴ See Özgüç T. and Özgüç N. 1949, 85–86, Lev. XLVI; Çifçi and Greaves 2010, 93–94.

⁴⁵ See Konyar 2007.

⁴⁶ See the contributions presented in this volume by Kozal, Jean, Ünlü, and Horowitz.

⁴⁷ Bagh 2003, 220–223, 231–235.

⁴⁸ See Hansen and Postgate 2007, 330–331, Fig. 387, 389, 391. For further discussions, see also Bouthillier *et al.* 2014, 141–144.

⁴⁹ See Goldman 1956, Pl. 379; Korbel 1987, Taf. 43.

⁵⁰ See Pucci 2019b, 65–67, 70, 177, Pl. 45–46, 144.

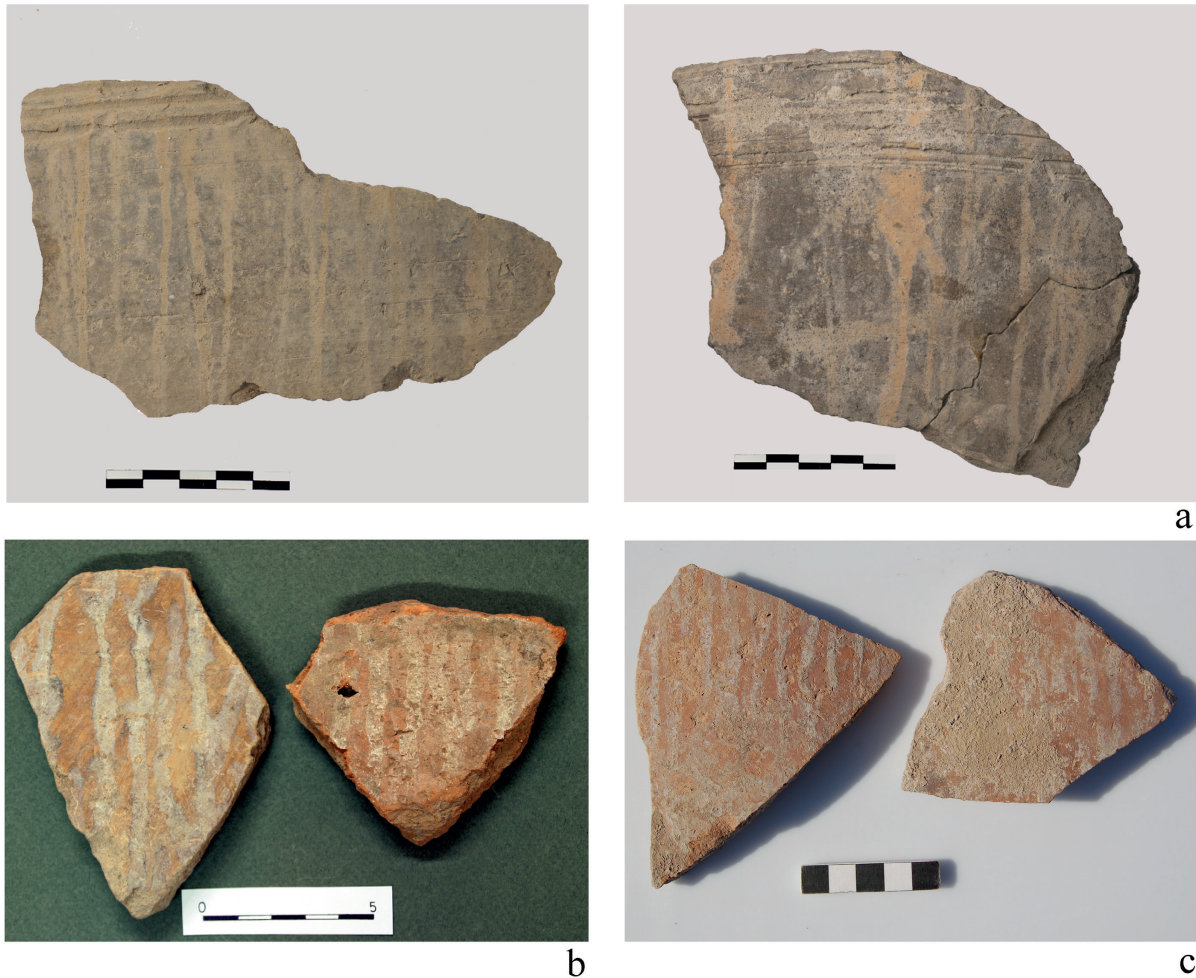


Figure 14: Drip marks from (a) Arslantepe (photos by R. Ceccacci - ©MAIAO), (b) Giricano (courtesy of A. Schachner - ©Giricano Expedition Archive) and (c) Hirbemerdon Tepe (adapted from D'Agostino 2016, 651, Tav. 105).

The shoulder beaker with figurative decoration belongs instead to a different cultural sphere and its presence at Arslantepe shows fascinating affinities with the Mesopotamian world. Indeed, this type of décor should be related to the Late-Khabur Ware and to its spread from the Jazira region, in Northern Syria, up to Central-Eastern Anatolia approximately during the third quarter of the 2nd millennium BC.⁵¹ Monochrome painted decorations with geometric or figurative motifs associated with shoulder beakers with slightly rounded belly are typical of this production.⁵² Despite the fact that the decoration of the Arslantepe beaker seems to fit perfectly within the Late-Khabur style, it should also be considered that its fabric is coarser, and the figures are rendered very rough compared with those from North-Eastern Syrian sites. It might be thus possible to assert that the vessel represents a local imitation of this well-known production.

Colored slips represent a decoration technique typical of North-Central Anatolia during the whole 2nd millennium BC.⁵³ This is a characteristic feature of the Hittite repertoire, usually employed to emphasize

⁵¹ See Oguchi 1997, 195–196; Pfälzner 2007, 237–244.

⁵² See specific comparisons with Tell Brak (Oates *et al.* 1997, 201–203); Tell al-Rimah (Postgate *et al.* 1997, 203–207, Pl. 76–78); Tell Chagar Bazar (McMahon *et al.* 2009, 379, Pl. 68).

⁵³ Schoop 2011, 244. See also the description provided by D'Agostino and Orsi 2015, 83–85.

those parts of the vessels where a clear change in the profile is visible, e.g. on carinated shapes. The technique derives from the final Early Bronze Age phases of the main sites in Central Anatolia, continuing through the 2nd millennium BC with a peak during the Kārūm and Old Hittite periods.⁵⁴ During the 16th century BC slipped parts start to be reduced to the rim of the vessel and red-coated specimens gradually disappear.⁵⁵ It should be also considered that red-slipped wares are well-attested in the Jazira as well, especially during the third quarter of the 2nd millennium BC and peaking in the 14th century BC.⁵⁶ In this case, a great variety of shapes are also associated with this decoration, mainly bowls entirely or partially covered by the red painting. Shallow bowls and plates with red-edged rim are widespread in the Upper Khabur up to the Upper Tigris region and are usually considered as typical markers of the Mitannian material culture.⁵⁷ Besides Arslantepe, red decorative slips are attested in the Middle Bronze Age levels of the main sites of the Upper Euphrates area as well and their production continues during the Late Bronze Age.

The drip marks appear instead as a peculiar characteristic of the Late Bronze pottery production at Arslantepe. If we look for similarities, small strokes or dribbles of paints are often visible on Khabur Ware.⁵⁸ Nonetheless, in most of the cases these seem have been made accidentally.⁵⁹ Moreover, in a few instances the signs on Khabur Ware take the shape of vertical undulating lines that, although more linear in pattern and closer to a proper wavy painted decoration than to irregular drops, resemble those from Arslantepe.⁶⁰ White colored, irregular, vertical and wavy lines, probably made by letting a solution of clay mixed with diluted lime drip on the vessel surface, are attested on sherds belonged to the so-called Red Brown Wash Ware, a hallmark production of the Middle Bronze Age in the Upper Tigris region.⁶¹ Despite the fact that no specific analyses have been conducted on it so far and only very little material has been published, these white drip marks are attested on several sites of the region.⁶² Specific relevance has been recently attributed to this production thanks to the survey activities conducted around the site of Pir Hüseyin, where the presence of a 'Dribbled White Wash Ware, decorated with a thick white wash, which was allowed to drip down the sides of the vessels' has been identified.⁶³ If we compare this Dribbled White Wash Ware from the Tigris region with the examples of white drip marks from Arslantepe, a clear similarity emerges, showing fascinating affinities between the two productions (**Figure 14**).⁶⁴

⁵⁴ Schoop 2011, 244, 260.

⁵⁵ Schoop 2009, 151, 155. See also Parzinger and Sanz 1992, 47; Müller-Karpe 1988, 19–20. A similar evolution of this decoration can also be highlighted in the sequences of Gordion (Gunter 1991, 46–49) and Kaman-Kalehöyük (Matsumura 2005, 431; Katsuno 2004, 99–101).

⁵⁶ Pfälzner 2007, 247–248.

⁵⁷ D'Agostino 2014, 173–182.

⁵⁸ See, e.g. Chagar Bazar (McMahon *et al.* 2009, 263–271, Pl. 10–14, 279, Pl. 18, 283–287, Pl. 20–22); Tell Mozan (Schmidt 2013, Taf. 246–250, 258, 390–393, 402, 443); Tell Brak (Oates *et al.* 1997, 181, Fig. 190, 185, Fig. 192; McDonald and Jackson 2003, 297–301, Fig. 7.23–7.25, 304–312, Fig. 7.27–7.31); Tell Barri (Bacelli and Manuelli 2008, 199, Pl. 2, 201, Pl. 4); Tell el-Rimah (Postgate *et al.* 1997, 167, Pl. 58, 171, Pl. 60, 199, Pl. 74, 207, Pl. 78); Tell Rijim (Koliński 2000, 116, Pl. 13, 120, Pl. 15, 156, Pl. 32).

⁵⁹ Koliński 2000, 57. Actually, at Tell Brak and Tell al-Rimah the presence of a paint splash is constantly associated with carefully made Khabur decorations, suggesting a deliberate realization of these signs (Oates *et al.* 1997, 64; Postgate *et al.* 1997, 52). See also McMahon *et al.* 2009, 170–171 on this topic.

⁶⁰ See, e.g. Salat Tepe (Ökse and Gormüş 2006, 174–175, Fig. 17); Giricano (Schachner 2002, 46–48, Abb. 38).

⁶¹ D'Agostino 2016, 81.

⁶² See, e.g. Salat Tepe (Ökse 2014, 157–159, Fig. 3); Hirbemerdon Tepe (D'Agostino 2016, 81, 651, Tav. 105); Pir Hüseyin (Peasall and Algaze 2010, 174, 195, Fig. 15). Significant amounts have been also identified at Ziyaret Tepe and Giricano (P. Bartl, personal communication).

⁶³ Peasall and Algaze 2010, 174.

⁶⁴ Looking at the later periods, the presence of dark colour drip patterns is commonly attested on the Levantine roman amphorae. Their presence was due to pitch, which was dropped inside the vessels in liquid form and then poured out causing these long runs of dark colours, see Reynolds 2000; Woodworth 2011.

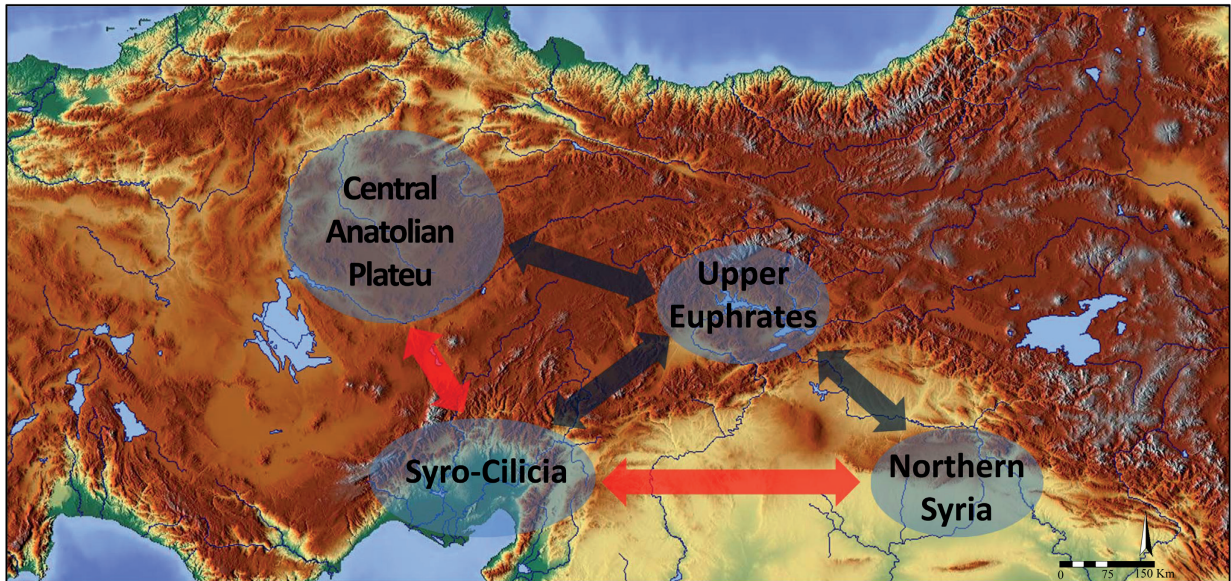


Figure 15: Late Bronze Age painted pottery in the Upper Euphrates region: channels of interrelationships.

Channels of interrelationship

This analysis identifies the affinities that the Late Bronze Age painted pottery tradition of the Upper Euphrates area shows with three main cultural regions: the Central-Anatolian plateau, the Upper Khabur and Upper Tigris valleys, and the Syro-Cilician world. Their interaction and relationships are evaluated here in an attempt to establish whether similarities in material culture and especially decorative patterns might reveal aspects of a community of taste and style. The first thing to note is that each painted pottery tradition shows cultural borders that are highly ambiguous. Indeed, decorative patterns that, in most of the cases, are similar to each other are widespread within approximately the same time span in all of the regions here considered. This of course creates more than a few problems when trying to identify proper trajectories of influence and to evaluate the impact that each of these traditions might have produced in Upper Euphrates region, especially considering the nature of this area as a bridge of cultures.

Two main sets of connections can be in any case isolated (Figure 15). The first is a two-way channel of influences that has deep roots into the Middle Bronze Age and that runs on an east-west track crossed by the Euphrates area at one point. The geometric painted decoration of the Late Bronze Age at Arslantepe and the main sites of the Upper Euphrates certainly derives from the development of similar prototypes that are attested in the region during the first quarter of the 2nd millennium BC. Their origin has been usually seen as a local variation and adaptation of the Northern Mesopotamian Khabur Ware. Similarly, the Late Bronze Age decorative slip seems to develop from the local Middle Bronze Age red-slip production attested all around the Upper Euphrates region, stemming from similar productions mainly attested in the Kārum period in Anatolia.

The long-distance trade route of the Old Assyrian colony period mostly affected the Euphrates area south of the Malatya-Elazığ region.⁶⁵ However, the existence of routes coming from Ergani Maden, crossing the Eastern Anatolian region north of the Taurus range, has been also postulated.⁶⁶ In any

⁶⁵ See Palmisano 2017.

⁶⁶ See Oguchi 1999, 100–101; Forlanini 2006, 168–169; Di Filippo and Mori 2018, 43–44.

case, the echo of this trade clearly somehow reached the Upper Euphrates region, influencing its local material culture and bringing the assimilation of specific external features that continued to be used and re-elaborated even during the Late Bronze Age. This is mainly visible in the pottery repertoire of the Middle Bronze Age closed shapes attested at Arslantepe and other sites of the region. The most resounding evidence is the spread of the high funnel-like necked jars, typical of Kültepe Levels II-Ib and later attested in all the main Hittite sites.⁶⁷ In this framework, it is important to mention the discovery recently made at Arslantepe of a cylindrical seal belonging to the Anatolian group of the glyptic style of the Kārum period contemporary with Kültepe Level II.⁶⁸ Moreover, routes connecting the eastern part of the Kızılırmak bend to the east are also well attested.⁶⁹ Specifically, from Kuşaklı several valleys allow access to the Tohma Çay and join the Euphrates north of the Malatya plain, and alternatively eastern routes connect the Kuru Çay from the Kangal valley.⁷⁰ This connectivity is further confirmed by the fact that relationships in material culture, linking the Upper Euphrates and the North-Central Anatolian region, do not just suddenly appear during the Middle Bronze Age, but rather are attested since the mid-4th millennium BC.⁷¹

This path of east-west connections seems to be only partially maintained during the Late Bronze Age. Indeed, if the weight of the influence of the Hittite material culture on the main sites of the Upper Euphrates region during this period is well-known and distinguishable, there is only slight evidence of any connections with the Northern Mesopotamian region. It is actually hard, at the current state of the research, to interpret the presence of the drip marks from Arslantepe as a direct development of similar patterns occurring in the Upper Tigris valley during the Middle Bronze Age. First of all, because of the relative low quantity of known material coming from the Tigris region belonging to this group and consequently the absence of any specific study on it, and second because of the total lack of drip marks on the pottery assemblages from sites in the Keban dam region and the fact that the case of Arslantepe appears as a completely isolated example within the whole Upper Euphrates. In any case, the abundance of complex painted geometric motifs belonging to the pottery assemblage of İmikuşağı Level 10 can instead be seen as evidence of the continuation of the Khabur Ware influence in the region.⁷² Certainly, a further confirmation of this assumption might also be found in the presence of the Late-Khabur Ware shoulder beaker from Arslantepe, which suggests the existence of some form of contact between the above-mentioned areas during the advanced Late Bronze Age.

However, it seems that besides the presence of Khabur Ware, other forms of influence from Northern Mesopotamia failed to fully impact the Upper Euphrates material culture. Mitannian Nuzi Ware is for instance only attested through a very few sherds from Tepecik, while it is totally unknown at any other site of the whole region.⁷³ On a wider scale of comparisons, looking for instance at the glyptic material, biconvex Hittite-style seals and seal impressions have been discovered in abundance at Arslantepe, Norşuntepe, Tepecik, and Korucutepe.⁷⁴ In contrast, proper Mesopotamian specimens are definitely more isolated. At Arslantepe one Old Babylonian, one Mitannian and two Middle Assyrian seals have

⁶⁷ Schoop 2009, 165. See also Di Nocera 1998, 153; Şerifoğlu 2007, 102; Özgüç T. and Özgüç N. 1953, Lev. XXXIII; Özgüç T. 1950, Lev. LI; 2003, 146.

⁶⁸ For discussions and comparisons, see Manuelli 2013, 385–388.

⁶⁹ Barjamovic 2011, 214–216.

⁷⁰ Ökse 2007.

⁷¹ See Çalışkan Akgül 2012.

⁷² See Sevin 1984, 102, Fig. 11; Sevin and Köroğlu 1985, 178, Fig. 12; For an updated synthesis of the Middle Bronze Age Khabur Ware chronology, see Pfälzner 2017.

⁷³ See Esin 1971, 131, Pl. 91.2.

⁷⁴ See Mora 2013 (Arslantepe); Hauptmann 1974, Pl. 80, 2–3 (Norşuntepe); Esin 1971, Pl. 88 (Tepecik); Güterbock 1980; Ertem 1988, Kat 6.8–9 (Korucutepe).

been discovered.⁷⁵ Moreover, some few Mitannian-style cylindrical seals have been found at Norşuntepe, Tepecik, and Korucutepe.⁷⁶

A second two-way channel of contacts follows a north-south flow instead. Indeed, connections with Cilicia during the Late Bronze Age are remarkable. Strong similarities can be specifically emphasized between the geometric painted pottery from Arslantepe and Tarsus. Moreover, it is also very interesting to note that the painting production from Tarsus specifically contains some of the exact decorative motifs also recurring at Korucutepe.⁷⁷

Once again, the origin of this long-distance contact could be found in the Middle Bronze Age tradition and specifically in the development and spread of the Syro-Cilician Wares. Routes from Cilicia to the Upper Euphrates are well-known, especially across the Kahramanmaraş plain, following the Ceyhan river and through Gölbaşı.⁷⁸ Otherwise, eastward roads lead toward the Euphrates roughly in the area of the Atatürk dam.⁷⁹ An interesting crossroad is also represented by the Elbistan area, which is easily reachable from the Malatya plain and from which routes to North-Central Anatolia northward and to Cilicia southwards are attested.⁸⁰ It is actually interesting to note how the affinities linking Arslantepe as well as the other sites of the Upper Euphrates region with Cilicia and partially with the Northern Levant are not exclusively represented by painted decorations. The most remarkable relationships are indeed attested by the presence of closed pottery shapes, i.e. short-necked and necked cooking pots and jars, that are well-known in Cilicia up to Northern Syria and very typical of the earliest Late Bronze Age phases at Arslantepe but, interestingly, are totally unknown to the core of the Hittite world.⁸¹

From a wider perspective, it seems that the development of the linear painted geometric patterns during the 2nd millennium BC in the Upper Euphrates was due to the concurrence and combination of two specific cultural influences exerted on the one hand by the Khabur area and on the other by the Syro-Cilician region. The appearance of red-slip decorations in contrast entirely follows the Anatolian tradition, while drip marks mostly appear as a local trend although interesting comparisons lead to affinities with the Upper Tigris region.

This multidirectional impact of Northern Mesopotamian and Levantine trends reflects the large set of relationships between these regions during the whole 2nd millennium BC. Indeed, the existence of a reciprocal wide-range influence affecting the origin and development of both the Khabur and the Syro-Cilician wares has been repeatedly assumed by scholars over the years.⁸² Moreover, in an even wider geographical sphere of relationships, we should not ignore how the presence of geometric painted decorations in Central Anatolia and Cappadocia has often been interpreted as deriving from contacts developed with Cilicia.⁸³ In this global perspective, the Late Bronze Age painted pottery traditions of the Upper Euphrates region developed continuously from a wide and complex phenomenon of mutual influences that stemmed from the Middle Bronze Age and that involved a large geographical area. This seems to find a suitable crossroad in the Arslantepe site, where many trends originating from different regions got assimilated and re-elaborated within a new set of original styles.

⁷⁵ See Mora 2013, 259–261.

⁷⁶ See Hauptmann 1970, Pl. 53; Van Loon 1980, Pl. 46H, 49P; Esin 1971, Pl. 88.1.

⁷⁷ Umurtak 1996, 104.

⁷⁸ See Gates 2011, 400; Barjamovic 2011, 216–217; Di Filippo and Mora 2018, 51–53.

⁷⁹ Dodd 2007, 210.

⁸⁰ Barjamovic 2011, 215; Çifçi and Greaves 2010, 98; Di Filippo and Mori 2018, 51–53.

⁸¹ See Manuelli 2013, 154–167, 370–373, 383–392.

⁸² See Nigro 1997, 287–291; Oguchi 2001; Bagh 2003; Bieniada 2009.

⁸³ Di Nocera 1998, 121, 153.

The complexity of the plain motifs: a matter of style and utility

In light of what has been discussed here, some final observations are in order. The Late Bronze Age painted pottery tradition of the Upper Euphrates valley does not develop as an isolated local case. Its origins do not seem to be related to a proper regional development, but rather to the wide set of relationships that the Upper Euphrates started interweaving with the surrounding areas during the Middle Bronze Age. Indeed, the emergence of wheel-made monochrome geometric painted productions, as well as colored slips at the beginning of the 2nd millennium BC, shows a clear break with the previous regional system of painted decorations of the final Early Bronze Age, projecting the region towards a new set of international contacts. Hence, the development of the painted pottery tradition of the Late Bronze Age reflects a local adaptation to a broad range of diachronic and geographic phenomena.

Despite the fact that the political expansion of the Hittite State towards this region, from approximately the 15th century BC onwards, corresponds with a gradual disappearance of the more complex geometric painted patterns, it is also noteworthy that the simple decorative motifs continue to characterize the pottery repertoires of these sites until the end of the Bronze Age. Moreover, it is also important to stress that none of the geometric painted decoration overlaps with the typical Hittite pottery shapes, as though the two traditions did not interfere or intertwine with each other, rather running through two different and parallel sets of cultural models.

It is nonetheless difficult to trace the proper reasons behind the appearance and development of this painted tradition. The spread of similar patterns in several and distant regions and the reproduction of local variations and arrangements certainly implies that these decorative styles were fully appreciated by the communities that produced and used them, also testifying to the existence of specific meanings and of some common and shared taste.⁸⁴ Nonetheless, the fact that the decorations here analysed are undoubtedly characterized, in most cases, by very modest, simple and similar patterns seems not to imply any attempt at social distinction or identification. Rather, their development probably derives by processes of imitation, emulation and mutual influence within the framework of the complex and entangled set of cultural relationships that marks this period.

Two final further aspects of the Late Bronze Age painted pottery tradition of the Upper Euphrates region deserve a final consideration. On the one hand, the above-described decorations reflect aesthetic and stylistic logics, and on the other they are made for more practical and functional purposes. Drip marks represent a typical local decoration of Arslantepe that does not show any similarities within the region but resembles comparable patterns attested in the Upper Tigris area. Undoubtedly, they were not made to be stylistically appreciated, as testified by their rough and random style and their constant association with large storage forms. Their production did not show any specific aesthetic value and was probably only done with the intention of visually identifying the exact content of the vessels. Geometric paintings and decorative slips, on the contrary, were clearly realized with the purpose of respecting a certain standard of beauty. Their association with small or medium-sized jars as well as bowls attests that they were mainly used for serving and consuming food. Their geographical distribution and spread certainly also reflect the degree of visibility that the vessels bearing these decorations were subject to, confirming the phenomenon of patterns shared among sites and regions.

⁸⁴ On these topics, see Feldman 2014, 47–51 and Rice 2015, 392–410 on art and pottery styles respectively.

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Bibliography

- Alparslan, M. 2017. The East: Upper Land, Işuwa-Malitiya, Azzi-Hayaša philology, in M. Weeden and L.Z. Ullmann (eds) *Hittite landscape and geography*: 209–218. Leiden, Boston: Brill.
- Alvaro, C. 2012. The topography and architecture at Arslantepe during the second and first millennia BC: reconsidering more than 100 years of research, in M. Frangipane (ed.) *Fifty years of excavations and researches at Arslantepe – Malatya (Turkey), proceeding of the conference held at Rome, 5th–8th December 2011* (Origini 24): 345–360. Rome: Gangemi.
- Bacelli, G. and F. Manuelli 2008. Middle Bronze Khabur Ware from Tell Barri/Kahat, in J.M. Cordoba, M. Molist, M.A. Pérez, I. Rubio and S. Martínez (eds) *Proceedings of the 5th international congress on the archaeology of the Ancient Near East (Madrid 3–8 April 2006), Vol. I*: 187–206. Madrid: Universidad Autónoma de Madrid.
- Bagh, T. 2003. The relationship between Levantine Painted Ware, Syro/Cilician Ware and Khabur Ware and the chronological implications, in M. Bietak (ed.) *The synchronization of civilization in the Eastern Mediterranean in the second millennium B.C. Proceedings of the SCIEM 2000 – Euro conference, Haindorf, 2nd of May–7th of May 2001* (Contributions to the chronology of Eastern Mediterranean 4): 219–239. Wien: Österreichische Akademie der Wissenschaften.
- Barjamovic, G. 2011. *A historical geography of Anatolia in the Old Assyrian Colony Period*. Copenhagen: Museum Tusulanum Press.
- Bieniada, M.E. 2009. Habur Ware – Where are the stylistic and functional sources of the painted pottery of the Second Millennium BCE Habur River Basin? *Ancient Near Eastern Studies* 46: 160–211.
- Bouthillier, C., C. Colantoni, S. Debruyne, C. Glatz, M.M. Hald, D. Heslop, E. Kozal, B. Miller, P. Popkin, N. Postgate, C.S. Steel and A. Stone 2014. Further work at Kilise Tepe, 2007–2100: refining the Bronze to Iron Age transition. *Anatolian Studies* 64: 95–161.
- Brown, M. and T.J. Wilkinson 2017. The Euphrates states and Elbistan: archaeology, in M. Weeden and L.Z. Ullmann (eds) *Hittite landscape and geography*: 146–158. Leiden, Boston: Brill.
- Chrzanowska, A.C. 2017. Fortified cities, high rocky mountains, steep places: what do we know about the border between the Hittite state and Azzi-Hayaša?, in E.L. Baysal and L. Karakatsanis (eds) *Bordered places, bounded times. Cross-disciplinary perspective on Turkey* (British Institute at Ankara Monograph 51): 53–64. Exeter: British Institute at Ankara.
- Crasso, D. 2009. The region of the Upper Euphrates: The Hittite perspective, in E. Cancik-Kirschbaum and N. Ziegler (eds) *Entre les fleuves – I. Untersuchungen zur historischen Geographie Obermesopotamiens im 2. Jahrtausend v. Chr.*: 211–231. Gladbeck: PeWe-Verlag.
- Cuomo di Caprio, N. 2007. *Ceramica in archeologia 2: antiche tecniche di lavorazione e moderni metodi di indagine*. Rome: L'Erma di Bretschneider.

- Çalışkan Akgül, H. 2012. Looking to the west: The Late Chalcolithic Red-Black Ware of the Upper Euphrates Region, in M. Frangipane (ed.) *Fifty years of excavations and researches at Arslantepe - Malatya (Turkey), proceeding of the conference held at Rome, 5th-8th December 2011* (Origini 24): 97-109. Rome: Gangemi.
- Çifçi, A. and A.M. Greaves 2010. Settlement pattern in the second and first millennia BC Elbistan Plain. *Anatolica* 36: 89-110.
- D'Agostino, A. 2014. The Upper Khabur and the Upper Tigris valleys during the Late Bronze Age: settlements and ceramic horizons, in D. Bonatz (ed.) *The archaeology of political spaces. The Upper Mesopotamian piedmont in the second millennium BCE* (Excellence Cluster Topoi Volume 12): 169-199. Berlin, Boston: De Gruyter.
- D'Agostino, A. 2016. *L'Alto Tigri nell'Età del Bronzo Antico e Medio. Siti, sequenze e ceramiche rosso-brune tra la fine del III e inizio II millennio a.C.* Florence: Firenze University Press.
- D'Agostino, A. and V. Orsi 2015. The archaeological survey: methods and materials, in S. Mazzoni and F. Pecchioli Daddi (eds) *The Uşaklı Höyük survey project (2008-2012). A final report* (Studia Asiana 10): 35-343. Florence: Firenze University Press.
- De Martino, S. 2010. Ali-Şarruma, re di Işuwa. *Studi Micenei ed Egeo Anatolici* 52: 109-117.
- De Martino, S. 2012. Malatya and Işuwa in Hittite texts: new elements of discussion, in M. Frangipane (ed.) *Fifty years of excavations and researches at Arslantepe - Malatya (Turkey), proceeding of the conference held at Rome, 5th-8th December 2011* (Origini 24): 375-383 Rome: Gangemi.
- Devecchi, E. 2017. The eastern frontier of the Hittite empire, in E. Rova and M. Tonussi (eds) *At the northern frontier of Near Eastern archaeology. Recent research on Caucasia and Anatolia in the Bronze Age. Proceeding of the international Humboldt-Kolleg Venice, January 9th - January 12th, 2013* (Subartu 38): 283-298. Turnhout: Brepols.
- Di Filippo, F. and L. Mori 2018. How difficult? Mountain roads and pathways reaching ancient Melid (Malatya) in South-Eastern Anatolia: a reconsideration. *Studi Micenei ed Egeo-Anatolici Nuova Serie* 4: 41-62.
- Di Nocera, G.M. 1998. *Die Siedlung der Mittelbronzezeit von Arslantepe. Eine Zentralsiedlung von Beginn des zweiten Jahrtausends v. Chr. in der Ebene von Malatya (Türkei)* (Scavi e ricerche ad Arslantepe-Malatya 8). Rome: Visceglia.
- Di Nocera, G.M. 2016. Identificazione, uso e conservazione dei cibi nell'età del Bronzo Antico di Arslantepe (Turchia): modello di ricerca interdisciplinare e sperimentale, in G.M. Di Nocera, A. Guidi and A. Zifferero (eds) *Archeo Tipico: l'archeologia come strumento per la ricostruzione del paesaggio e dell'alimentazione antica. Atti del convegno, Viterbo, 16 Ottobre 2015* (Rivista di Studi dell'Agricoltura 56): 253-263. Florence: Le Lettere.
- Dodd, L.S. 2007. Strategies for future success: remembering the Hittites during the Iron Ages, in A. Fletcher and A.M. Greaves (eds) *Transanatolia: bridging the gap between east and west in the archaeology of Ancient Anatolia, proceeding of the conference held at the British Museum, 31 March to 1 April 2006* (Anatolian Studies 57): 203-206. Ankara: British Institute at Ankara.
- Emre, K. 1989. Pottery of levels III and IV at the Karum of Kanesh, in K. Emre, B. Hrouda, M. Mellink and N. Özgüç (eds) *Anatolia and the Ancient Near East. Studies in honor of Tahsin Özgüç*: 111-128. Ankara: Türk Tarih Kurumu Basımevi.
- Ertem, H. 1988. *Korocutepe I. 1973-1975 Kazı yıllarında ele geçen erken Hitit-imparatorluk çağı arası buluntuları.* Ankara: Turk Tarih Kurumu Basımevi.
- Esin, U. 1971. Tepecik excavations, 1969. *Keban projesi 1969 çalışmaları / Keban project 1969 activities*: 119-131.
- Fales, F.M. 2011. Transition: the Assyrian at the Euphrates between the 13th and the 12th century BC, in K. Strobel (ed.) *Empires after the empire. Anatolia, Syria and Assyria after Šuppiluliuma II (ca. 1200 - 800/700 B. C.). Interdisciplinary workshop Klagenfurt, 4 -6. 12. 2008* (Eothen 17): 9-59. Florence: LoGisma.

- Feldman, M.H. 2014. *Communities of style: portable luxury arts, identity and collective memory in the Iron Age Levant*. Chicago: University of Chicago Press.
- Fischer, F. 1963. *Die hethitische Keramik von Boğazköy (Boğazköy-Hattuša 4)*. Berlin: Gebr. Mann.
- Forlanini, M. 2006. Étapes et itinéraires entre Assur et l'Anatolie des marchands paléo-assyriens: nouveaux documents et nouveaux problèmes. *Kaskal* 3: 147–175.
- Forlanini, M. 2014. The survival of dynastic traditions of Bronze Age Anatolia during the transition to the Iron Age: the case of Ḫalpa-šulubi and the historical connections between Išuwa and Milidia, in S. Gaspa, A. Greco, D. Morandi Bonacossi, S. Ponchia and R. Rollinger (eds) *From source to history: studies on Ancient Near Eastern Worlds and beyond. Dedicated to Giovanni Battista Lanfranchi on the occasion of his 65th birthday on June 23, 2014*: 251–172. Münster: Ugarit-Verlag.
- Fragnoli, P. and C. Mallegni 2016. Society and visual image transmission. The painted pottery during the Early Bronze Age at Arslantepe and in the Malatya-Elazığ area, in R.A. Srucky, O. Kaelin and H.-P. Mathys (eds) *Proceedings of the 9th international congress on the archaeology of the Ancient Near East. 9–13 June 2014, Basel. Volume 1*: 111–124. Wiesbaden: Harrassowitz.
- Frangipane, M. 2011. Arslantepe-Malatya: a prehistoric and early historic center in Eastern Anatolia, in S.R. Steadman and G. McMahon (eds) *The Oxford handbook of Ancient Anatolia (10,000–323 B.C.E.)*: 986–992. New York: Oxford University Press.
- Frangipane, M. and M. Liverani 2013. Neo-Hittite Melid: continuity or discontinuity?, in A. Yener (ed.) *Across the border: Late Bronze-Iron Age relations between Syria and Anatolia. Proceedings of a symposium held at the research center of Anatolian studies, Koç University, Istanbul, May 31–June 1, 2010* (Ancient Near Eastern Studies Supplement Series 42): 349–371. Leuven, Paris, Walpole: Peeters.
- Gates, M.-H. 2011. 2009 Season at Kinet Höyük (Yeşil-Dörtyol, Hatay). 32. *Kazı Sonuçları Toplantısı* 3. Cilt: 182–195.
- Glatz, C. 2009. Empire as network: spheres of material interaction in Late Bronze Age Anatolia. *Journal of Anthropological Archaeology* 28: 127–141.
- Glatz, C. 2015. Introduction: plain and simple? Another look at plain pottery traditions in early complex societies, in C. Glatz (ed.) *Plain pottery traditions of the Eastern Mediterranean and Near East: production, use, and social significance*: 13–37. London, New York: Routledge.
- Glocker, J. 2011. Ališarruma, König von Išuwa. *Altorientalische Forschungen* 38/2: 254–276.
- Goldman, H. 1956. *Excavations at Gözlü Kule, Tarsus. II. From the Neolithic through the Bronze Age*. Princeton: Princeton University Press.
- Griffin, E.E. 1980. The Middle and Late Bronze Age Pottery, in M.N. van Loon (ed.) *Korucutepe. Final report on the excavations of the universities of Chicago, California (Los Angeles) and Amsterdam in the Keban reservoir, Eastern Anatolia 1968–1970*: 3–110. Amsterdam, New York, Oxford: North Holland.
- Gruber, M. 2017. Hethitische Keramik vom Mittleren Plateau, in A. Schachner (ed.) *Ausgrabungen und Forschungen in der Westlichen Oberstadt von Hattuša II, Ausgrabungen auf dem Mittleren Plateau zwischen Sarıkale und Yenicekale (2006–2009)* (Boğazköy-Hattuša 25): 63–216. Berlin, Boston: De Gruyter.
- Gunter, A.C. 1991. *The Gordion excavations, 1950–1973: final report II. The Bronze Age*. Philadelphia: University of Pennsylvania Press.
- Güterbock, H.G., 1980. Hittite hieroglyphic seal impressions, in M.N. van Loon (ed.) *Korucutepe. Final report on the excavations of the universities of Chicago, California (Los Angeles) and Amsterdam in the Keban reservoir, Eastern Anatolia 1968–1970*: 127–132. Amsterdam, New York, Oxford: North Holland.
- Hansen, C. and J.N. Postgate 2007. Pottery from Level III, in J.N. Postgate and D. Thomas (eds) *Excavations at Kilise Tepe 1994–98. From Bronze Age to Byzantine in western Cilicia*: 329–342. Exeter: McDonald Institute for Archaeological Research.
- Hauptmann, H. 1970. Die Grabungen auf Norşun-Tepe 1968. *Keban projesi 1968 çalışmaları / Keban project 1968 activities*: 115–131.
- Hauptmann, H. 1974. Die Grabungen auf dem Norşun-Tepe 1971. *Keban projesi 1971 çalışmaları / Keban project 1971 activities*: 87–103.

- Horowitz, M. 2015. The Evolution of plain ware ceramics at the regional capital of Alalakh in the 2nd millennium BC, in C. Glatz (ed.) *Plain pottery traditions of the Eastern Mediterranean and Near East: production, use, and social significance*: 153–181. London, New York: Routledge.
- Katsuno, T. 2004. Beobachtungen zur Keramikentwicklung der Schicht III von Kaman-Kalehöyük. *Anatolian Archaeological Studies* 13: 95–105.
- Koliński, R. 2000. *Tell Rijim, Iraq. The Middle Bronze Age Layers* (BAR International Series 837). Oxford: British Archaeological Reports.
- Konyar, E. 1998. *İmikuşağı 10. yapı katı seramikleri*. Unpublished PhD dissertation, İstanbul University.
- Konyar, E. 2006. Old Hittite presence in the east of the Euphrates in the light of the stratigraphical data from İmikuşağı, in D.P. Mielke, U.-D. Schoop and J. Seeher (eds) *Strukturierung und Datierung in der hethitischen Archäologie. Voraussetzungen - Probleme - Neue Ansätze / Structuring and Dating in Hittite Archaeology. Requirements - Problems - New Approaches. Internationaler Workshop, Istanbul, 26-27. November 2004* (Byzas 4): 333–348. Istanbul: Ege Yayınları.
- Konyar, E. 2007. The eastern borders of Kizzuwatna: mound surveys in the provinces of Adana, Osmaniye and Kahramanmaraş in 2006. *ANMED – Anadolu Akdenizi Arkeoloji Haberleri* 2007/5: 86–92.
- Korbel, G. 1985. *Die spätbronzezeitliche Keramik vom Norşuntepe*. Hannover: Institut für Bauen und Planen in Entwicklungsländern.
- Korbel, G. 1987. *Tarsus (Grabung Goldman). Materialheft spätbronzezeitliche Keramik*. Hannover: Institut für Bauen und Planen in Entwicklungsländern.
- Laneri, N. 2009. *Biografia di un vaso. Tecniche di produzione del vasellame ceramico nel Vicino Oriente antico tra il V e il II Millennio a.C.* Paestum: Pandemos.
- Liverani, M. 2004. Gli Ittiti sulle rive dell’Eufrate, in M. Frangipane (ed.) *Alle origini del potere. Arslantepe, la collina dei leoni*: 160–165. Milan: Electa.
- Liverani, M. 2007. The Middle Euphrates Valley in Pre-Classic times as an area of complex socio-political interactions. *Mediterraneo Antico* 10/1-2: 1–12.
- Manuelli, F. (with the contribution by L. Bartosiewicz, G. Bozzetti, S. Bököny, A. Buccolieri, R. Laurito, C. Lemorini, C. Mora, A. Serra and G. Siracusano) 2013. *Arslantepe, Late Bronze Age: Hittite influence and local traditions in an eastern Anatolian community* (Scavi e ricerche ad Arslantepe-Malatya 9). Rome: Sapienza Università di Roma.
- Manuelli, F. 2017. Hatti and the East. A reassessment of the archaeological evidence from the Upper Euphrates Region: places, spaces and artifacts, in M. Alparslan (ed.) *Places and spaces in Hittite Anatolia I: Hatti and the East, proceedings of an international workshop on Hittite historical geography in Istanbul, 25th-26th October 2013*: 137–158. Istanbul: Ege Yayınları.
- Manuelli, F. 2018. Drifting southward? Tracing aspects of cultural continuity and change in the late 2nd millennium BC Syro-Anatolian region. *Studia Eblaitica* 4: 139–186.
- Manuelli F., C. Vignola, F. Marzaioli, I. Passariello and F. Terrasi 2021. The beginning of the Iron Age at Arslantepe: A 14C perspective. *Radiocarbon* 63/3: 885–903.
- Manuelli, F. in press. Regional dimension and external influences in the Late Bronze Age II pottery horizon at Arslantepe, in M. Pucci and F. Venturi (eds) *Ceramic identities at the frontiers of the empires. The regional dimension of pottery production in Late Bronze Age Northern Syria and Anatolia, proceeding of the workshop held in Florence, 14–17 January 2015*. Pisa: ETS.
- Matessi, A. 2017. The making of Hittite imperial landscapes: territoriality and balance of power in South-Central Anatolia during the Late Bronze Age. *Journal of Ancient Near Eastern History* 3/2: 117–162.
- Matsumura, K. 2005. *Die eisenzeitliche Keramik in Zentralanatolien – auf der Grundlage der Ausgrabung von Kaman-Kalehöyük*. Unpublished PhD dissertation, Freie Universität Berlin.
- McDonald, H. and N. Jackson 2003. A house on the Hill. Second-millennium investigations: the Middle Bronze Age, in R. Matthews (ed.) *Excavations at Tell Brak, Vol. 4: exploring an Upper Mesopotamian centre, 1994–1996*: 271–320. Cambridge: British School of Archaeology in Iraq.

- McMahon, A., C. Colantoni, J. Frane and A. Soltysiak 2009. *Once there was a place: settlement archaeology at Chagar Bazar, 1999–2002*. London: British Institute for the Study of Iraq.
- Mielke, D.P. 2006. *Die Keramik vom Westhang* (Kuşaklı-Sarissa 2). Rahden/Westf: Verlag Marie Leidorf.
- Mielke, D.P. 2016. Produktion und Distribution von Keramik im Rahmen der hethitischen Wirtschaftsorganisation, in K. Piesker (ed.) *Wirtschaft als Machtbasis. Beiträge zur Rekonstruktion vormoderner Wirtschaftssysteme in Anatolien* (Byzas 22): 155–185. Istanbul: Ege Yayınları.
- Mielke, D.P. 2017. From »Anatolian« to »Hittite«. The Development of Pottery in Central Anatolian in the 2nd Millennium BC, in A. Schachner (ed.) *Innovation versus Beharrung. Was macht den Unterschied des hethitischen Reichs im Anatolien des 2. Jahrtausends v. Chr.?* (Byzas 23): 121–143. Istanbul: Ege Yayınları.
- Mora, C. 2013. Seals and seal impressions, in F. Manuelli (with the contribution by L. Bartosiewicz, G. Bozzetti, S. Bököny, A. Buccolieri, R. Laurito, C. Lemorini, C. Mora, A. Serra and G. Siracusano) *Arslantepe – Late Bronze Age. Hittite influence and local tradition in an Eastern Anatolian community* (Scavi e ricerche ad Arslantepe-Malatya 9): 251–274. Roma: Sapienza Università di Roma.
- Mühlenbruch, T. 2014. *Das Gebäude B von Kayalıpınar und die Nutzung institutioneller Gebäude des 2. Jts v. Chr. im ostmediterranen Raum* (Marburger Studien zur Vor- und Frühgeschichte 20 / Kayalıpınar 1). Rahden/Westf: Verlag Marie Leidorf.
- Müller-Karpe, A. 1988. *Hethitische Töpferei der Oberstadt von Hattuša. Ein Beitrag zur Kenntnis spätgroßreichszeitlicher Keramik und Töpferbetriebe* (Marburger Studien zur Vor- und Frühgeschichte 10). Marburg: Hitzeroth.
- Nigro, L. 1997. Ebla and the ceramic provinces of Northern Syria in the Middle Bronze Age: relationships and interconnections with the pottery horizons of Upper Mesopotamia, in M. Lebeau (ed.) *About Subartu. Studies devoted to Upper Mesopotamia. Vol. 1 – Landscape, archaeology, settlement* (Subartu 4 1): 271–304. Brepols: European Centre for Upper Mesopotamian Studies.
- Oates, D., J. Oates and H. McDonald 1997. *Excavations at Tell Brak Vol. 1: The Mitannian and Old Babylonian period*. Cambridge: McDonald Institute for Archaeological Research.
- Oguchi, H. 1997. A reassessment of the distribution of Khabur Ware: An approach from an Aspect of its main phase. *Al-Rāfidān* 18: 195–224.
- Oguchi, H. 1999. Trade routes in the Old Assyrian period. *Al-Rāfidān* 20: 85–106.
- Oguchi, H. 2001. The origins of Khabur Ware: a tentative note. *Al-Rāfidān* 22: 71–87.
- Orsi, V. 2018. Reading the Late Bronze Age ceramic evidence at Uşaklı Höyük (Central Turkey). Pottery from the area A test sounding. *Anatolica* 44: 179–211.
- Ökse, T. 2007. Ancient mountain routes connecting Central Anatolia to the Upper Euphrates Region. *Anatolian Studies* 57: 35–45.
- Ökse, T. 2014. Salat Tepe and its vicinity in the Middle Bronze Age: stratigraphic sequence and ceramic assemblages, in D. Bonatz (ed.) *The archaeology of political spaces. The Upper Mesopotamian piedmont in the second millennium BCE* (Excellence Cluster Topoi Volume 12): 151–166. Berlin, Boston: De Gruyter.
- Ökse, T. and A. Gormüş 2006. Excavations at Salat Tepe in the Upper Tigris Region: stratigraphical sequence and preliminary results of the 2005–2006 seasons. *Akkadica* 127/2: 119–149.
- Özgüç, T. 1950. *Türk Tarih Kurumu tarafından yapılan Kültepe kazısı raporu, 1948. Ausgrabungen in Kültepe. Bericht über die im Auftrage der Türkischen Historischen Gesellschaft, 1948 durchgeführten Ausgrabungen* (Türk Tarih Kurumu yayınlarından, V. Seri – No. 38a). Ankara: Türk Tarih Kurumu Basımevi.
- Özgüç, T. 2003. *Kültepe, Kaniş/Neša. The earliest international trade centre and the oldest capital city of the Hittites*. Istanbul: The Middle Eastern Culture Centre in Japan.
- Özgüç, T. and N. Özgüç 1949. *Türk Tarih Kurumu tarafından yapılan Karahöyük hafriyatı raporu 1947. Ausgrabungen in Karahöyük. Bericht über die im Auftrage der Türkischen Geschichts Kommission im 1947 durchgeführten Ausgrabungen*. Ankara: Türk Tarih Kurumu Basımevi.
- Özgüç, T. and N. Özgüç 1953. *Türk Tarih Kurumu tarafından yapılan Kültepe kazı raporu 1949. Ausgrabungen in Kültepe. Bericht über die im Auftrage der Türkischen Gesellschaft, 1949 durchgeführten Ausgrabungen*. Ankara: Türk Tarih Kurumu Basımevi.

- Palmieri, A. 1974. Arslantepe (Malatya). Report on the excavations 1971–1972. *Türk Arkeoloji Dergisi* 21/1: 137–146.
- Palmieri, A. 1978. Scavi ad Arslantepe (Malatya). *Quaderni de “La Ricerca Scientifica”* 100: 311–352.
- Palmisano, A. 2017. Drawing pathways from the past: the trade routes of the Old Assyrian caravans across Upper Mesopotamian and Central Anatolia, in F. Kulakoğlu and G. Barjamovic (eds) *Movement, resources, interaction. Proceedings of the 2nd Kültepe international meeting. Kültepe, 26–30 July 2015* (Subartu 39): 29–48. Turnhout: European Centre for Upper Mesopotamian Studies.
- Parzinger, H. and R. Sanz 1992. *Die Oberstadt von Hattuša. Hethitische Keramik aus dem zentralen Tempelviertel. Funde aus den Grabungen 1982–1987* (Boğazköy-Hattuša 15). Berlin: von Zabern.
- Peasnell, B.L. and G. Algaze 2010. The survey of Pir Hüseyin, 2004. *Anatolica* 36: 165–195.
- Pecorella, P.E. 1975. *Malatya - III. Rapporto preliminare delle campagne 1963–1968. Il livello eteo imperiale e quelli neoetei*. Rome: Centro per le antichità e la storia dell'arte del Vicino Oriente.
- Pfälzner, P. 2007. The Late Bronze Age ceramic traditions of the Syrian Jazirah, in M. al-Maqdissi, V. Mantoïan and C. Nicolle (eds) *Céramique de l'âge du Bronze en Syrie, II. L'Euphate et la région de Jézireh* (Bibliothèque Archéologique et Historique 180): 213–313. Beyrouth: Institut français du Proche-Orient.
- Pfälzner, P. 2017. Ḫabur Ware and social continuity: the chronology of the Early to Middle Bronze Age transition in the Syrian Jezireh, in F. Höflmayer (ed.) *The late third millennium in the Ancient Near East. Chronology, C14, and climate change*: 163–2013. Chicago: The Oriental Institute of the University of Chicago.
- Postgate, C., D. Oates and J. Oates 1997. *The excavations at Tell al Rimah: the pottery*. Warminster: British School of Archaeology in Iraq.
- Pucci, M. 2019a. Cultural encounters during the LBII and IAI: Hittites and 'Pelesets' in the Amuq (Hatay) Turkey. *Asia Anteriore Antica* 1: 169–194.
- Pucci, M. 2019b. *Excavations in the Plain of Antioch III. Stratigraphy, pottery, and small finds from Chatal Höyük in the Amuq Plain* (Oriental Institute Publication 143). Chicago: The Oriental Institute of the University of Chicago.
- Puglisi, S.M. 1968. Missione archeologica italiana a Malatya. *Oriens Antiquus* 7: 127–132.
- Reynolds, P. 2000. The Beirut Amphora Type, 1st century BC–7th century AD: An outline of its formal development and some preliminary observations of the regional economic trends. *Rei Cretariae Romanæ Favtorvm Acta* 36: 387–395.
- Rice, P.M. 2015. *Pottery analysis: a sourcebook* (2nd Edition). Chicago: The University of Chicago Press.
- Roux, V. 2017. *Des céramiques et des hommes, decoder les assemblages archéologiques*. Nanterre: Presses universitaires de Paris Nanterre.
- Schachner, A. 2002. Ausgrabungen in Giricano (2000–2001). Neue Forschungen an der Nordgrenze des Mesopotamische Kulturraums. *Istanbuler Mitteilungen* 52: 9–57.
- Schmidt, C. 2013. *Die Keramik der Früh-Ğazira V bis Alt- Ğazira II-Zeit*. Wiesbaden: Harassowitz.
- Schoop, U.-D. 2006. Dating the Hittites with statistics: ten pottery assemblages from Boğazköy-Hattuša, in D.P. Mielke, U.-D. Schoop and J. Seeher (eds) *Strukturierung und Datierung in der hethitischen Archäologie. Voraussetzungen - Probleme - Neue Ansätze / Structuring and Dating in Hittite Archaeology. Requirements - Problems - New Approaches. Internationaler Workshop, Istanbul, 26–27. November 2004* (Byzas 4): 215–240. Istanbul: Ege Yayınları.
- Schoop, U.-D. 2009. Indicators of structural change in the Hittite pottery inventory at Boğazköy-Hattuša, in F. Pecchioli Daddi, G. Torri and C. Corti (eds) *Central-north Anatolia in Hittite period. New perspectives in the light of recent investigation. Acts of the international conference held at the university of Florence (7–9 February 2007)*: 145–167. Rome: Herder.
- Schoop, U.-D. 2011. Hittite pottery. A summary, in H. Genz and D.P. Mielke (eds) *Insights into Hittite history and archaeology* (Colloquia Antiqua 2): 241–274. Leuven, Paris, Walpole: Peeters.
- Schoop, U.-D. 2013. Gündelik hayatın va ayrıcalığın nesnelere: Hitit çanak çömleği. Objects of Daily Life, Objects of Distinction: The study of Hittite pottery, in M. Doğan-Alparslan and M. Alparslan (eds) *Hititler. Bir Anadolu İmparatorluğu. Hittites. An Anatolian Empire*: 356–371. Istanbul: Yapı Kredi Yayınları.

- Sevin, V. 1984. İmikuşağı kazıları 6. *Kazı Sonuçları Toplantısı*: 93–102.
- Sevin, V. and K. Köroğlu 1985. İmikuşağı kazıları 1984. 8. *Kazı Sonuçları Toplantısı*: 163–180.
- Strupler, N. 2013. Hethitischer Keramik aus den Grabungen in der Unterstadt. *Archäologischer Anzeiger* 2013/1: 164–170.
- Şerifoğlu, T.E. 2007. The Malatya-Elazığ region during the Middle Bronze Age: a re-evaluating of the archaeological evidence, in A. Fletcher and A.M. Greaves (eds) *Transanatolia: bridging the gap between east and west in the archaeology of Ancient Anatolia, proceeding of the conference held at the British Museum, 31 March to 1 April 2006* (Anatolian Studies 57): 101–114. Ankara: British Institute at Ankara.
- Torri, G. 2005. Militärische Feldzüge nach Ostanatolien in der mittelhethitischen Zeit. *Altorientalische Forschungen* 32: 386–400.
- Torri, G. 2007. L'assetto geografico e le vicende politiche dell'Anatolia orientale nel medio regno ittita, in S. Conti, B. Scardigli and M.C. Torchio (eds) *Geografia e viaggi nell'antichità. Atti del convegno internazionale di studi (Certosa di Pontignano, 9-10 ottobre 2005)*: 231–239. Ancona: Affinità Elettive.
- Umurtak, N.G. 1988. Hitit imparatorluk çağında İšuwa ülkesi çanak çömleği üzerine bir araştırma. Unpublished PhD dissertation, İstanbul University.
- Umurtak, N.G. 1996. *Korocutepe II. 1973–1975 dönemi kazılarında bulunmuş olan Hitit çağı çanak çömleği*. Ankara: Turk Tarih Kurumu Basımevi.
- Van Loon, M.N. (ed.) 1980. *Final report on the excavations of the universities of Chicago, California (Los Angeles) and Amsterdam in the Keban reservoir, Eastern Anatolia 1968–1970*. Amsterdam, New York, Oxford: North Holland.
- Woodworth, M. 2011. *Organic residue analysis of Beirut amphorae by chemical analytical techniques*. Unpublished MA dissertation, American University of Beirut.

Author

Federico Manuelli

National Research Council of Italy, Institute of Heritage Science (CNR-ISPC) / Freie Universität Berlin, Institut für Altorientalistik

federico.manuelli@cnr.it / fmanuelli@zedat.fu-berlin.de