CULTURAL DIVERSITY AND EVOLUTION OF CERAMIC PRODUCTION DURING THE PRE-ACHAEMENID AND ACHAEMENID PERIODS IN CENTRAL ASIA

Johanna Lhuillier

Summary. In Southern Central Asia, the Middle and Late Iron Ages, corresponding to the pre-Achaemenid and Achaemenid periods (Yaz II and III periods, ca. 1000-329 BC) were a period of significant socio-cultural change during which interruptions in material culture evidenced archaeologically do not coincide with political changes. This article aims to present the study of ceramic assemblages, based on three representative sites (Ulug-depe in Turkmenistan, Kuchuk-tepe and Koktepe in Uzbekistan) that permit an understanding of these major transformations following both a diachronic approach throughout the Iron Age and a synchronic approach at the macro-regional level. Major evolutionary trends emerge, which lead to the suggestion of the existence of regional variations within the widespread Yaz II-III culture, likely as a reflection of polities that are independent, but culturally related.

Key words: archaeology, Central Asia, Iron Age, Yaz II-III, pre-Achaemenid and Achaemenid periods, pottery.

Резюме. В южной части Центральной Азии средний и поздний железные века, соответствующие доахеменидскому и ахеменидскому периодам (периоды Яз II и III, около 1000-329 гг. до н.э.), были периодом значительных социокультурных изменений, во время которых перерывы в материальной культуре, подтвержденные археологически, не совпадали с политическими изменениями. Цель этой статьи - представить исследование керамических комплексов, основанное на трех репрезентативных памятниках (Улуг-депе в Туркменистане, Кучук-тепе и Коктепе в Узбекистане), которые позволяют понять эти основные трансформации, следуя как диахроническому подходу на протяжении всего железного века, так и синхронному подходу на макрорегиональном уровне. Выявленные основные эволюционные тенденции приводят к предположению о существовании региональных вариаций в рамках широко распространенной культуры Яз II-III, что является, вероятно, свидетельством существования независимых, но культурно связанных политий.

Ключевые слова: археология, Центральная Азия, железный век, Яз II-III, до-ахеменидский и ахеменидский периоды; керамика.

DOI: 10.33876-978-5-89930-171-1-115-123

The long history of the Central Asian Iron Age is marked by two major cultural breaks. The first of them happened at the transition between the Late Bronze Age and the Early Iron Age (ca. 1500/1400 BC), a period of profound cultural transformation that is characterized by the disappearance of the Bronze Age Oxus Civilization and the appearance of the Handmade painted ware cultures, also known as Yaz I (*Lhuillier*, 2013a).

These cultures disappeared, in turn, around 1000-900 BC, at the beginning of the Middle Iron Age, also known as Yaz II. A new material complex appears that is characterized by highly standardized, wheel-thrown ceramics, and the development of fortifications and small, fortified buildings. At the same time, however, the period is characterized by the continuation of the same funerary practices and occupation of the same sites as during the Early Iron Age.

These latter elements will remain constant until the next period of the Late Iron Age, which is conventionally considered to begin around 540 BC, when Cyrus II conquered Central Asia, which became a satrapy of the empire. Controlled from the capital of the Persian Empire, this satrapy is known to us by Herodotus and lists of cuneiform inscriptions from Iran. Yet, archaeological data that would allow for the characterization of this period are a rare phenomenon, due to the small amount of purely Achaemenid artifacts that have been found

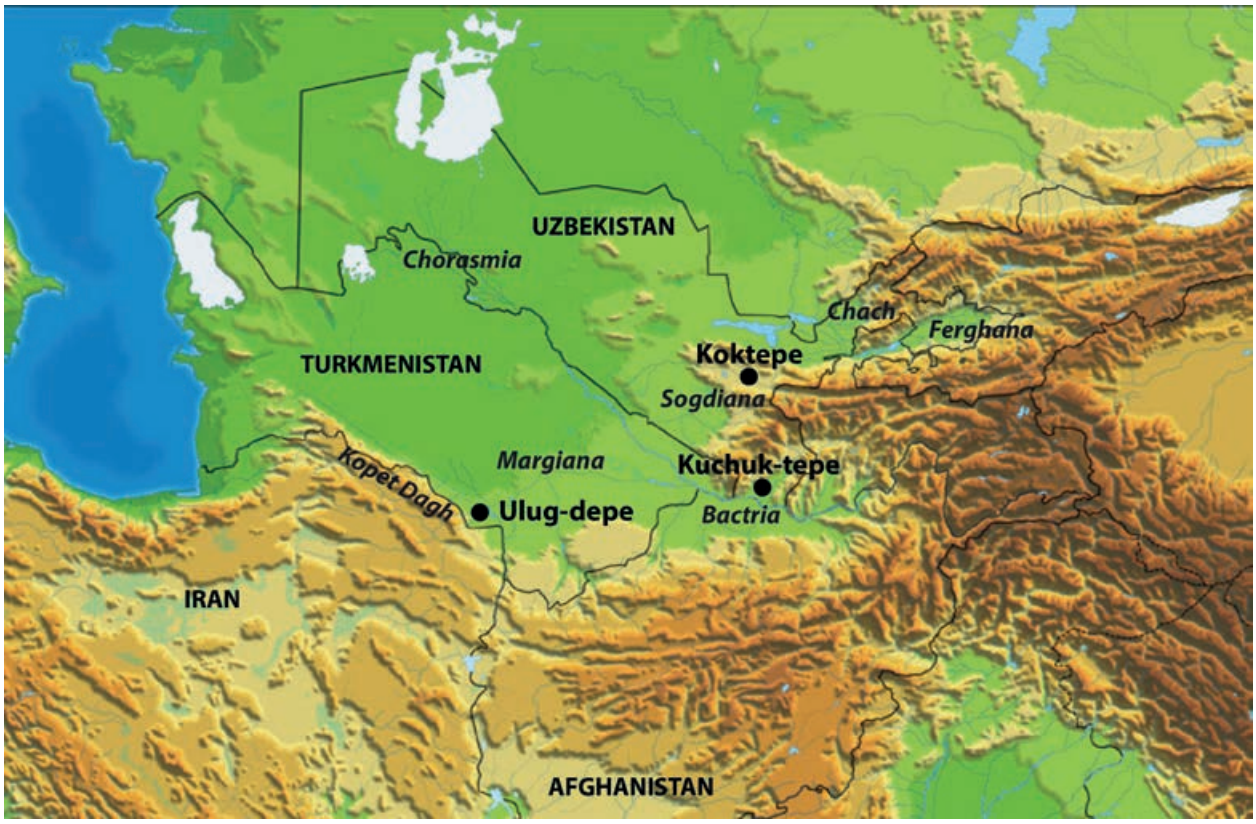

Fig. 1. Map of regions and sites mentioned (© J. Lhuillier)
Карта регионов и памятников, упоминаемых в тексте

(*Lhuillier*, 2018; *Briant*, 2020). This period is generally considered to be the Yaz III period; therefore, the term Yaz III is used here as a chronological marker for the last period of the Iron Age, rather than as a term for the period of Achaemenid control.

Middle and Late Iron Ages: Cultural characterization

In the Middle and Late Iron Ages, the settlements that had appeared during the Early Iron Age period were continuously occupied, but those inhabited from as early as the Bronze Age are generally abandoned, with rare exceptions. New sites were also established and the number of sites during this period is estimated at about 300. They are largely found in the areas already occupied in the Early Iron Age – in Margiana, in the foothills of Kopet Dagh, in Bactria, in Sogdiana, in Ustrushana – but also in areas newly occupied by sedentary cultures – the Chorasmia – while the territory occupied by steppe related cultures now extend to the Chach and Ferghana Valley (Fig. 1). On the margins of this territory, evidences of interaction are found with local cultures, as in the inner Syr-Darya delta in Karakalpakistan (*Bonora*, 2019) or in the upper Atrek Valley in Iran (*Bruno*, 2019).

During this period, the territory seems to have been occupied by a material culture much more homogeneous than previously. Therefore, this apparent homogeneity can be explained in two ways: either the previous local cultural substrates disappeared, and whether this was the result of a local evolution or an exterior influence should be clarified, or, they are still very much present and the occupation of the territory in question is more heterogeneous than it seems at first sight.

The main difficulty in distinguishing between the Middle and Late Iron Ages in Central Asia is that minimal evidence of markers of Achaemenid domination have been discovered, as well as the fact that Central Asian ceramics (Yaz complex II-II) appear to have no commonalities with Achaemenid Persia material culture. A. Cattenat and J.-C. Gardin situate the boundary between the two ensembles near the Helmand River Basin (Afghanistan) and the Kopet Dagh (Turkmenistan), the only regions of Central Asia, including the Chorasmia (*Francfort*, 2005, P. 321), where instances of Iranian pottery are found (*Cattenat, Gardin*, 1977, P. 242-243). Other markers of Achaemenid presence in Central Asia can also be identified, such as coins issued in Central Asia and a few inscriptions of the Achaemenid era (*Francfort*, 2005. P. 324), as well as a group of administrative parchments and inscribed tally sticks, that date to the very end of the Achaemenid domination (*Naveh, Shaked*, 2012). Luxury objects, such as seals and stone vases of local tradition and fabrication integrate Achaemenid designs (*Francfort*, 2013. P. 49), and pieces of gold from the treasures of the Oxus and Mir Zakah I and II contain elements of Achaemenid-type objects either imported or locally manufactured (*Francfort*, 2005. P. 337).

However, it is not necessary to re-discuss the relationship between Iran and Central Asia, as the complexity of these connections were already emphasized long ago in the seminal article by A. Cattenat and J.-C. Gardin. Rather, it is important to focus on Central Asia

itself during this same period: many researchers have indeed demonstrated the existence of a "polity" from the pre-Achaemenid period onward, in speaking of an "ancient Bactrian community" (*D'jakonov*, 1954. P. 140), of an "autonomous cultural entity" (*Cattenat, Gardin*, 1977. P. 245-246), or of an "old Bactrian complex" (*Askarov, Al'baum*, 1979. P. 66), with differences, according to the researchers, concerning the borders given to this cultural entity. As this fact elicits a more or less clear consensus, we seek here to characterize this period to the extent possible, by taking into account the diversity of ceramics, and proposing some very preliminary chronological milestones. Since V.N. Pilipko has devoted his career to investigate the cultures and the pottery of the Iron Age and Antiquity in Central Asia, we believe appropriate to dedicate this small study on the Middle/Late Iron Age to him.

Ceramics: Evidence of manifestations of diversity

In this context, where art objects are very uncommon – a phenomenon accentuated by the absence of burials – ceramics constitute not only the overwhelming majority of the material available, but are also the best indicator of the existence of local characteristics, as well as the technological developments related to the cultural, socio-economic, and political transformations that affected Central Asia during this period.

From a strictly chronological point of view, the distinction between the ceramic complexes of the Yaz II period and the Yaz III period is difficult. However, a few elements of the evolution between these two periods can be found, particularly in northern Bactria, where jars with beak-shaped rims appeared during the Yaz II period and coexisted during the Yaz III period with those that have banded rims (*manzhet*-rims) (*Sverchkov, Boroffka*, 2008; *Shajdullaev*, 2002. P. 313-319). A similar pattern is observed in southern Bactria, at Bactra and Cheshme-Shafa (*Lhuillier et al.* in print). In the oasis of Merv, these types would have been more numerous, and the lips of jars would have had more diverse forms in Yaz III than in Yaz II period (*Cattani, Genito*, 1998. P. 76). B. Lyonnet points out that, generally, beak-shaped rims are characteristic of the Yaz II period and that jars of small dimension, with a rounded, everted lip and incurving walls and those with a banded rim (Fig. 2) are characteristic of the Yaz III period (*Lyonnet*, 1997. P. 108-109). These studies have laid the groundwork for identifying chronological markers. The work presented here is based on the ceramic material from recent and well-stratified excavations conducted at Ulug-depe and Koktepe, as well as on a review of the ceramics from Kuchuk-tepe, and is part of the same conversation.

Ulug-depe and the Yaz II Complex

Located in the foothills of Kopet Dagh in Turkmenistan (Fig. 1), this site is the only one in Central Asia that

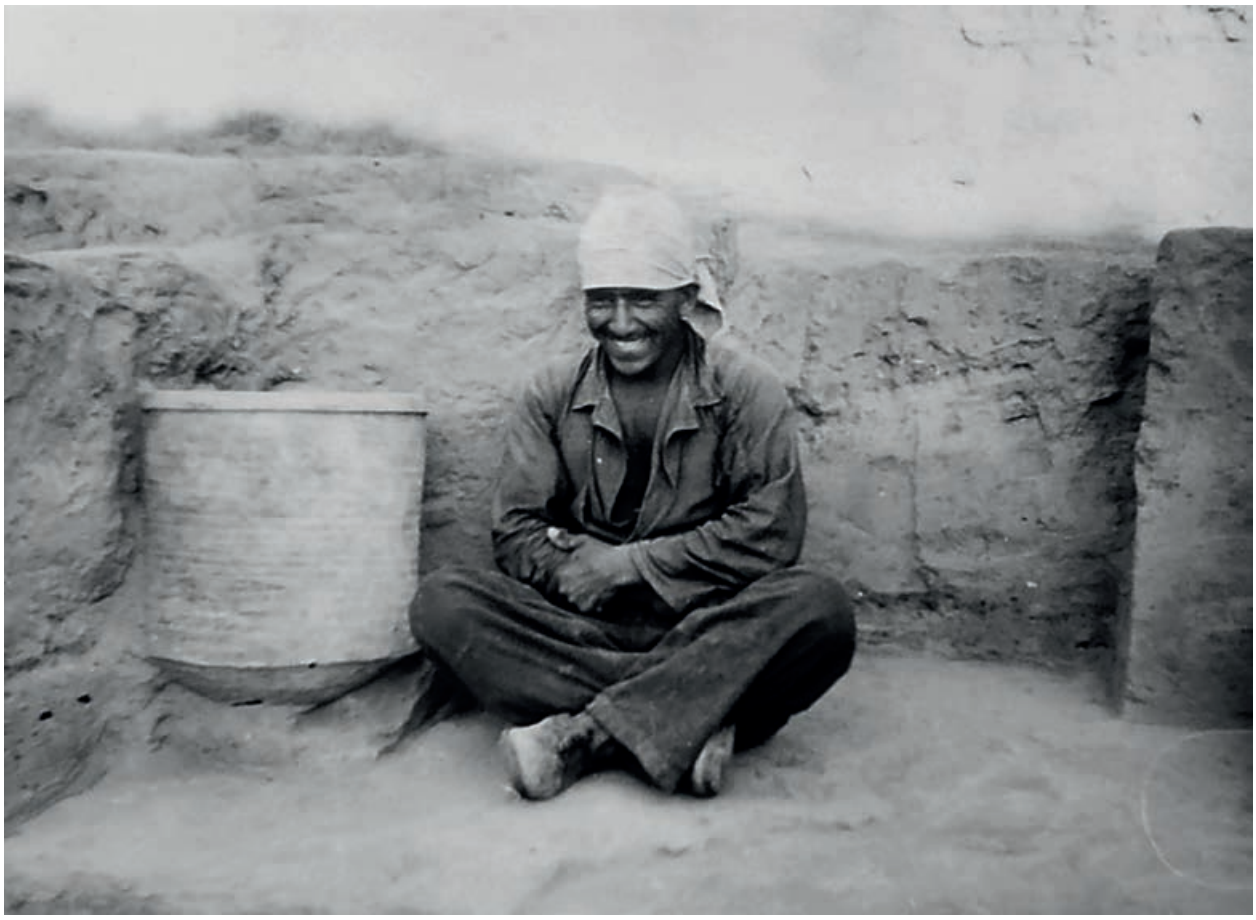

Fig. 2. Yaz-depe, banded rim jar during excavation (© V. M. Masson, unpublished excavation report)
Яз-депе, хум с воротничковым венчиком в процессе раскопок

Fig. 3. Ulug-depe, vases from the Yaz II period: 1. Phase 1; 2. Phase 2 (© MAFTur/ J. Lhuillier & P. Hamouda)
Улуг-депе, вазы периода Яз II: 1. фаза 1; 2. фаза 2 (© MAFTur/ J. Lhuillier & P. Hamouda)

was occupied continuously from the Chalcolithic period to the Middle Iron Age. A Middle Iron Age city, the date of which seems assured by both the stratigraphy and radiocarbon dating, was identified in this area. It consists of an upper town with massive buildings located along a main street and a lower town, surrounded by a fortification wall (*Lecomte*, 2013. P. 170-180; *Lhuillier et al.*, 2015).

This site, therefore, offers the opportunity to better characterize this period: based on the stratigraphy, two phases that are attached to two ceramic complexes[1] —which differ morphologically and probably also technologically – can be defined *(Lhuillier et al.*, 2013).

The oldest complex (Fig. 3-*1*), which follows the Early Iron Age without interruption (*Bendezu-Sarmiento, Lhuillier*, 2011; *Lhuillier et al.*, 2015), seems to be characterized by globular jars, while those with vertical walls are much less frequent. While most of these have a beak-shaped rim, or sometimes hook-shaped rim, examples with a concave, outward slanting, or triangular banded rim are also found. There are also forms that are more prevalent in following periods, such as jars with flat rims or small jars with everted rims. Among the open vessels found, there are also forms that will be frequent during the following periods, including small basins with flared walls and either narrowed or down-turned rims, and semi-spherical bowls with incurving rims. But others seem, in the present state of research, to be only documentable in this period; examples include semi-spherical bowls with rims that are either raised or everted (S-shaped), bowls with incurving walls and rims that are straight and flat, beak-shaped, or thickened. Cylindrical-conical beakers were already present at this time, but appear to be generally smaller in dimension (average diameters at the base: 4 cm). Small basins may also have carinations, with a concave wall in the upper half, which is not the case in the following ceramic complexes. The most striking feature of this complex is the presence of a red slip on some of the sherds, which appears to have been applied heterogeneously on the interior and sometimes the exterior, of the entire wall or only on the lip.

Within the second complex, new forms emerged (Fig. 3-*2*). There is a continuation of jars with beak-shaped rims, with either globular or more or less vertical walls, sometimes with a cordon decorating the shoulder. But essentially, from this point on, jars had vertical walls and a banded rim that has a vertical, triangular, concave, or convex profile. These jars are often carinated, and the carination may be angled, convex, thickened**,** or slanted. There are also small narrow-necked jugs with a thin or rounded outcurving rim, as well as jars with everted rims and in some cases, a neck. Large storage jars with a flat, horizontal rim have a coarser fabric that is often rich in mineral temper. Open vases also show a large variety of forms: small basins with flared or incurving, and sometimes carinated, walls; larger basins with a cordoned rim; plates with a rim that is either narrow, rounded, angular, or down-turned; carinated bowls with a rim that is more or less everted, or even ovoid bowls with incurving rims; beakers with flat bases or more frequently, with truncated bases.

[1] 19 000 sherds from this assemblage were studied.

Fig. 4. Kuchuk-tepe, bowls with banded rims (© J. Lhuillier)
Кучук-тепе, сосуды с воротничковым венчиком

Kuchuk-tepe and the Yaz II and III Complexes

Kuchuk-tepe, located in Bactria in southern Uzbekistan (Fig. 1), was occupied throughout the Iron Age. The site was excavated in the 1970s (*Askarov, Al'baum*, 1979). The study of the material shows a trend towards increased complexity over time. The earliest forms of wheel-thrown pottery from the Iron Age, which, at this site date back to the Yaz I period,[2] are very simple and essentially similar to handmade shapes. These include: bowls, small basins, jars with everted rims, but also jars with pointed beak-shaped rims, and the first truncated beakers with shallow walls (*Askarov, Al'baum*, 1979. Pl. 3-7, 10-11, 13).

Beginning in the Middle Iron Age (Kuchuk II period), new forms appeared (*Askarov, Al'baum*, 1979. Pl. 15-18). These include globular or vertical wall jars, with beak-shaped rims that are frequently pointed and almost hook-shaped, often with a cordon around the shoulder. There are also jars with banded rims, with vertical, convex, triangular, or raised profiles, as well as jars with everted rims. The truncated beakers have a prominent, angular carination. According to A. Askarov, V. Aminov and U. Rakhmanov, there are very few banded rims in the earliest stages corresponding to the Yaz II period (*Askarov et al.*, 1978. P. 54-55). From the following stage on, which correlates approximately to the second part of the Yaz II period, there are a variety of banded rims; these become more common in the Yaz III period.

Indeed, in the following period (Kuchuk III), jars still may have beak-shaped rims, though more rounded, but the rims are more commonly banded rims, with vertical, concave, or convex profiles. The truncated beakers from this period have a prominent, angular carination, but the overall form becomes more elongated. There are also semi-circular bowls with incurving walls.

The preliminary study of this material[3] shows that morphological variations are more significant than what is currently cited in publications: there are much rarer forms, such as beakers with slightly banded rims, evidenced by only a few examples (Fig. 4). This shape is also known in the lower and the upper layers of Talash-kan-tepe (*Shajdullaev*, 2002. Fig. 32-*5*, 50-*4,7*). Study also shows that the jars with banded rims are more numerous than at Ulug-depe, and that these same banded rims present a larger quantity of variants, with so-called "complex" banded rims, which are either cordoned, raised/pinched, or triangular.

Koktepe and the Yaz III Complex

This site, about 30 km north of Samarkand in Uzbekistan (Sogdiana), was occupied primarily between the Early Iron Age and the Hellenistic period (Fig. 1). No architecture clearly associated with the Middle Iron Age period has been identified, but two fortified buildings and various others relate to the Late Iron Age (*Rapin*, 2007. P. 36-38).

Researchers believed until recently that, in Sogdiana, the ceramic forms of Yaz II-III type were known from the Middle Iron Age (*Isamiddinov*, 2002. P. 104-109), but the identification by B. Lyonnet (2013) of an entirely original ceramic complex from Koktepe during the Yaz II period, known as pinkish burnished ware (Fig. 5-*1*), provides new perspectives (see also *Khasanov*, 2021). It seems that in Koktepe the handmade painted pottery of the Early Iron Age (*Lhuillier et al.*, 2012) was replaced during the Middle Iron Age by this pinkish burnished ware and not by wheel-thrown pottery. The fabric, which has a rose to dark purple coloration, is rather coarse and tempered with shale that is very visible on the surface. The vessels, handmade, include both high quality bowls and cups with straight, flat rims, as well as coarse large storage jars and blackened cooking pots. Among these, the forms of cooking pots with lugs partially fall within the continuation of certain forms that appeared during the Yaz I period, but most importantly, they show parallels with Saka culture cooking pots from the Central Asian steppe (*Lyonnet*, 2013. P. 264-266). The appearance of these ceramic types probably indicate an influence of the northern Central Asian cultures, and could be related to the various raids carried out by these nomads to the south of their usual territory; these raids are mentioned later in Achaemenid textual sources.

According to B. Lyonnet (2013), these ceramics seems to have had a long duration of use, since they are found in the following period, where they even imitate

[2] This is not the case at all sites (see *Lhuillier*, 2013b. P. 122-124).
[3] We were able to study more than 1 800 sherds from Yaz II and III levels.

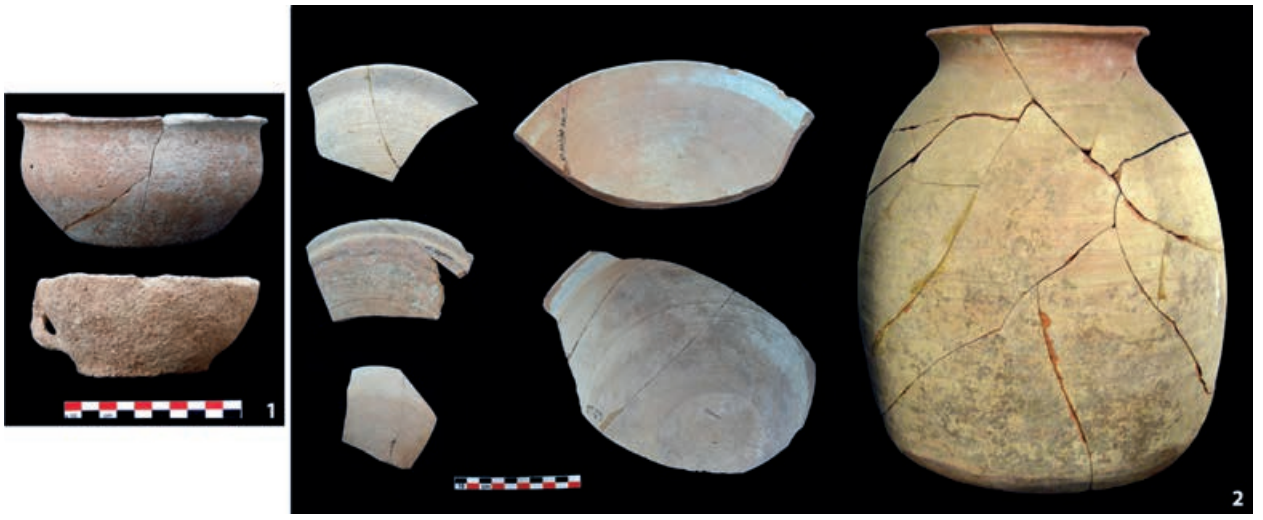

Fig. 5. Koktepe: 1. Handmade pinkish, burnished ware vases from the KT II period; 2. Wheel-made vases from the KT III period (© Mafouz-Sogdiana/ J. Lhuillier & J. Valley Raewsky).
Коктепе: 1. Лепные красно-ангобированные вазы периода KT II; 2. Вазы периода KT III, изготовленные на гончарном круге

wheel-thrown shapes. Indeed, during the Late Iron Age, wheel-thrown ceramics related to the Yaz III type complex appears in Koktepe, similar to pottery known elsewhere in Central Asia during the same period, both by its forms and fabric, as well as by its color.

Therefore, because of the particularity of these ceramic complexes, it remains difficult to link the occupation of Koktepe to the overall Central Asian chronological sequence. It appears that none of the forms considered to be characteristic at the beginning of the Yaz II – particularly, jars with pronounced beak-shaped rims – are attested at Koktepe.[4] Some forms, such as jars with everted lips, bowls with flared walls, or truncated beakers with either convex or angular carinations are present, but they appear to have changed little during the Yaz II-III periods, and are therefore not good markers.

However, some characteristic forms from the second part of the Yaz II period are attested. Notably, this is the case for banded rim jars with vertical profiles, and bowls with triangular, down-turned rims.

Finally, most of the forms from the Yaz III period are present (Fig. 5-*2*). The appearance of banded rims that are either raised or pinched, triangular, or ridged is evidenced during this time. Truncated beakers with angular carinations can be related to this stage. However, it should also be noted that some of the most characteristic forms from the Yaz III period in Bactria are absent, especially complex banded rim jars.

A Study from a Macro-Regional Perspective

Thus emerge common characteristics that can be considered as reliable chronological markers, which confirm earlier observations (beak-shaped rims at the beginning of the period Yaz II; the appearance of banded rims later in the same period, which become more varied and more frequent in the Yaz III period; tendency toward more elongated ceramic walls). The first results obtained on these ceramics show that the overall impression of homogeneity in the Yaz II-III complexes in fact effectively mask smaller, less noticeable differences that constitute the most valuable information concerning the confusing chronology and other problems of cultural attribution in the Central Asian Iron Age.

Other elements must be understood from a regional, synchronic perspective. Indeed, there are certain sites where a cultural differentiation is observed, in part due to various influences: more circumscribed patterns exist, such as at Koktepe, where wheel-turned ceramics only appear at the end of the Yaz II period.

Thus, the comparison between the Yaz II period assemblage from Ulug-depe and that of Bactria – including that of Kuchuk-tepe (*Sverchkov, Boroffka*, 2008; 2016), shows that there are variations even within the dominant assemblage. At Ulug-depe, the oldest ceramics are characterized by an abundance of beak-shaped or hook-shaped rim jars, which is consistent with the evidence found by L. Sverchkov and N. Boroffka: these ceramic types are characteristic of stage Yaz IIA at Bektepa, Kuchuk, Kyzylcha 6, and at small sites near Denau in northern Bactria, as well as at Tillya II in Southern Bactria,[5] or at El'ken III or Garry-Kjariz I in the foothills of Kopet Dagh. According to them, the Yaz IIB complex is mainly defined by the appearance of vertical banded rim jars, which only become abundant during the Yaz III period. However, at Ulug-depe, there are numerous banded rim jars found in buildings occupied already during the second stage of the Yaz II period. Ulug-depe is also distinguished by some scarce evidence of carinated bowls with convex walls and S-rims (tulip bowls), a form that was widespread in Iran during the Achaemenid period and before (*Cattenat, Gardin*, 1977. P. 235-236. Fig. 5). This seems to confirm the observations of Cattenat and

[4] Approximately 4 000 wheel-thrown sherds from the KT II and KT III levels were studied.

[5] The same observation can be drawn from the pottery excavated at Bactra (*Lhuillier et al*. in print).

Gardin (1977. P. 243), that the Kopet Dagh was a zone of co-occurrence of Iranian and Central Asian shapes. Some of the features that have been observed may be explained, in part, by this geographically privileged position at the interface between Iran and Central Asia.

Also during the Yaz III period, indications of regionalization can be pointed out at Koktepe (absence of complex banded rims**,** for example), as well as at Kuchuk-tepe (where, on the contrary, there is a large variety of banded rims). During the same time period, the ceramics from Chorasmia are also characterized by their singularity: these forms are Yaz II-III types, but the fabric is coarser and the vessels are decorated with a red slip on the interior and exterior (*Jagodin et al.*, 1985. P. 329. Pl. CLIX) (Fig. 6).

So the phasing of the Yaz II and Yaz III ceramic complexes do not coincide exactly from one site to another. The following two hypotheses, which should be considered as potentially complementary, could offer an explanation:

1. Either it is necessary to adhere to a chronological perspective only, and postulate the existence of a gap between Margiana and the foothills of Kopet Dagh on one hand, Bactria on the other hand, and, finally, Sogdiana. Banded rims would have appeared earlier in Margiana and in the foothills of Kopet Dagh, beginning in the Yaz IIA stage. In contrast, in Sogdiana, their appearance would have been later, with less variation. If this hypothesis is correct, this would mean that the Yaz IIA stage is represented at Yaz-depe[6] as well as at Ulug-depe, which would be consistent with the stratigraphic continuity observed between Yaz I and II levels at both sites;

2. Either this difference indicates the existence of regional particularities that have been thus far obscured by the apparent uniformity, from one site to another, of the ceramics from the Yaz II-III periods. This phenomenon is well known in the Late Bronze Age (*Luneau*, 2014) and the Early Iron Age (*Lhuillier*, 2013a), and it is therefore quite reasonable to consider a comparable process for the Middle to Late Iron Ages.

Conclusion

During this prolonged period of more than a millennium, Central Asia underwent a major transformation from an autonomous territory during the Early and Middle Iron Ages, to a colony of the Achaemenid Empire during the Late Iron Age. However, it is still difficult to explain the discrepancy between this major political rupture that is well documented by available texts, but almost imperceptible archaeologically (Achaemenid domination), and rupture in material, likely cultural, that cannot be associated with any clear internal or external cause (the disappearance of Yaz I Handmade painted ware cultures).

How can these various elements be resolved? As the zone of Saka culture steppe influence overtook that of the Bronze Age steppe influenced culture (Andronovo culture), the map showing the distribution of Yaz II-III sites more or less clearly overlaps with the sites of the Oxus civilization, even though the territory occupied by the Handmade painted ware culture during the Early Iron Age was much larger. This indicates the existence of major cultural and underlying socio-economic trends that withstand disruptions in material culture.

It seems, therefore, that the cultural entity that we have already mentioned above was likely previously formed, and is evidenced from at least the Late Bronze Age on. After the rich Oxus civilization, the Early Iron Age appears to be a period of significant breaks with the previous period. But if these ruptures do undeniably exist, they are not alone, and it is simultaneously possible to distinguish a clear, parallel tendency toward cultural continuity. This latter is marked by a certain consistency in settlement patterns, architecture, ceramic technology, and likely glyptic in Margiana, in the foothills of Kopet Dagh, in Bactria and to a lesser extent in Sogdiana. It is also within this sociocultural system, distinguished both by persistence and innovations, that it is possible to see the reappearance, in the Middle Iron Age, of elements that disappeared at the end of the Bronze Age. This phenomenon is particularly evident in monumental architecture, evidenced by the development of large fortified sites throughout Central Asia, whose characteristics are largely similar to Bronze Age fortified architecture, defining a Central Asian tradition of military architecture (*Francfort*, 1979. P. 18, 42). The ceramics reflect the same phenomenon, with a return to the Late Bronze Age tradition of wheel-turning. A global analysis of faunal remains from Iron Age contexts of various sites in Uzbekistan and Turkmenistan had similarly demonstrated that localised cultural choices, perhaps responding to local environmental constraints, persisted throughout the Iron Age sequence, despite successive cultural or political shifts (*Lhuillier, Mashkour*, 2017).

What is the nature of this cultural entity? The disappearance of the powerful Oxus civilization, which ensured the homogeneity of a large area, at the end of the Bronze Age, likely led to the emergence of a more variable and less centralized form of power in the Early Iron Age. This resulted in the existence of regional variations within the same cultural group: the society of Early Iron Age was composed of a mosaic of independent polities, which nevertheless shared a common set of characteristic material culture, the same economic base, the same mortuary practices and, thus, probably the same religion.

During the Middle and Late Iron Ages, it is likely that the coherence observed throughout this territory is due to the emergence of a new, strong structure (polity?), though it was apparently not centralized, allowing the expression of some regional and temporal variations. The study of ceramic complexes from this period, from Ulug-depe, Koktepe, Kuchuk-tepe, and other contemporary sites in Bactria, shows that the societal structure, composed of independent but connected units, is likely comparable. The data thus converge to underline the existence of a Central Asian "cultural entity," or "polity", clearly noticeable from the Middle Iron Age on, but the roots of which were probably in place well before that time.

[6] By analogy with the Yaz IIA et Yaz IIB complexes defined in Bactria, L. Sverchov and N. Boroffka (2008. P. 53) conclude that the occupation of Yaz IIA is not represented at Yaz-depe, the reference site for the Iron Age, where the Yaz IIB stage would directly succeed Yaz I. However, there does not seem to be a stratigraphic hiatus between the Yaz I and Yaz II periods at this site (*Masson*, 1959. P. 29-34).

Fig. 6. Kjuzeli-Gyr, vases from the Yaz II-III periods (© J. Lhuillier, courtesy State Oriental Museum, Moscow)
Кюзелигыр, вазы периодов Яз II-III (из коллекций Музея Востока, Москва)

Acknowledgements

I want to thank the archaeological missions that gave me full access to this material: the French Archaeological Mission in Turkmenistan and its successive directors, O. Lecomte, J. Bendezu-Sarmiento, and M. Mamedow; and the French-Uzbek Archaeological Mission in Sogdiana, its directors F. Grenet and M. Isamiddinov, the head of the excavations at Koktepe, C. Rapin, without forgetting B. Lyonnet, initiator of the study of ceramics of Koktepe. I also extend my gratitude to Sh. Pidaev, former director of the Institute of Archaeology in Samarkand, for giving me permission to study pottery from Kuchuk-tepe kept in the reserves. Also thank you to S. Bolelov for allowing me to see the ceramics from Chorasmia housed at the East Museum in Moscow, thanks to a grant from the Franco-Russian Centre for Research in Humanities and Social Sciences.

BIBLIOGRAPHY

Askarov, Al'baum, 1979 – *Askarov A.A., Al'baum L.I.* Poselenije Kuchuktepa. Tachkent: Fan Publ., 1979. 112 p.

Askarov et al., 1978 – *Askarov A.A., Aminov V., Rakhmanov U.* Novye dannye o poselenii Kuchuk-tepa // Obshchestvennye nauki v Uzbekistane. 1978. Vol. 11. P. 51-56.

Bendezu-Sarmiento, Lhuillier, 2011 – *Bendezu-Sarmiento J., Lhuillier J.* Iron Age in Turkmenistan: Ulug depe in the Kopetdagh piedmont // Historical and Cultural sites of Turkmenistan: Discoveries, Researches and restoration for 20 years of independence. Ashgabat: Türkmen döwlet nesiryat gullugy, 2011. P. 238-249.

Bonora, 2019 – *Bonora G.L.* The Cultural Persian and Achaemenid Evidence in the Inner Syrdarya Delta // Ceramics and the archaeological Achaemenid horizon. Near-East, Iran and Central Asia. Naples: Unior Press, 2019. P. 167-190.

Briant, 2020 – *Briant P.* Bactria in the Achaemenid Empire. The Achaemenid Central State in Bactria (again) // The Limits of Empire in Ancient Afghanistan: Rule and Resistance in the Hindu Kush, circa 600 BCE – 600 CE. Classica et Orientalia. Vol. 24. Wiesbaden: Harrassowitz, 2020. P. 21-44.

Bruno, 2019 – *Bruno J.* Between the Iranian Plateau and Central Asia: The Ceramic Complex of the Upper Atrek Valley during the Achaemenid Period// Ceramics and the archaeological Achaemenid horizon. Near-East, Iran and Central Asia. Naples: Unior Press, 2019. P. 109-122.

Cattani, Genito, 1998 – *Cattani M., Genito B.* The pottery chronological seriation of the Murghab delta from the end of the Bronze Age to the Achaemenid Period: A Preliminary Note // The Archaeological Map of the Murghab delta. Preliminary Reports 1990-95. Rome: Istituto Italiano per l'Africa e l'Oriente, 1998. P. 75-87.

Cattenat, Gardin, 1977 – *Cattenat A., Gardin J.-C.* Diffusion comparée de quelques genres de poterie caractéristiques de l'époque achéménide sur le plateau iranien et en Asie centrale // Le plateau iranien et l'Asie centrale des origines à la conquête islamique. Leurs relations à la lumière des documents archéologiques. Paris: Editions du CNRS, 1977. P. 225-248.

D'jakonov, 1954 – *D'jakonov M. M.* Slozhnie klassovogo obshchestva v severnoj Baktrii // Sovetskaja Arkheologija. 1954. Vol. XIX. P. 121-140.

Francfort, 1979 – *Francfort H.-P.* Les fortifications en Asie centrale de l'âge du Bronze à l'époque kouchane. Paris: CNRS, 1979. 95 p.

Francfort, 2005 – Francfort H.-P. Asie centrale // L'archéologie de l'empire achéménide: nouvelles recherches. Paris: De Boccard, 2005. P. 313-351.

Francfort, 2013 – Francfort H.-P. L'art oublié des lapidaires de Bactriane aux époques achéménide et hellénistique. Persika 17. Paris: De Boccard, 2013. 207 p.

Isamiddinov, 2002 – *Isamiddinov M.Kh*. Istoki gorodskoj kul'tury samarkandskogo Sogda (Problemy vzaimodejstvija kaul'turnykh traditsij v epokhu rannezheleznogo veka i v period antichnosti). Tashkent: Izdatel'stvo narodnogo nasledija imeni A. Kadyri, 2002. 256 p.

Jagodin et al., 1985 – *Jagodin V.N., Nikitin A.B., Koshelenko G.A.* Khorezm // Drevnejshie gosudarstva Kavkaza i Srednej Azii. Arkheologija SSSR. Moskva: Nauka, 1985. P. 317-337.

Khasanov, 2021 – *Khasanov M.* Kul'tura Sogda v èpokhu rannego zheleznogo veka i antichnosti. Unpublished PhD. Centre for Archaeological Research of the Academy of Sciences of the Republic of Uzbekistan, 2021.

Lecomte, 2013 – *Lecomte O.* Activités archéologiques françaises au Turkménistan // L'archéologie française en Asie centrale. Nouvelles recherches et enjeux socioculturels, Cahiers d'Asie Centrale 21-22. Paris: De Boccard, 2013. P. 165-190.

Lhuillier, 2013a – *Lhuillier J.* Les cultures à céramique modelée peinte en Asie centrale méridionale. Dynamiques socio-culturelles à l'âge du Fer ancien (1500-1000 av. n.è.). Mémoires de la Mission Archéologique Française en Asie Centrale. T. XIII. Paris: De Boccard, 2013. 377 p.

Lhuillier, 2013b – *Lhuillier J.* Les cultures à céramique modelée peinte en Asie centrale : un aperçu de l'assemblage céramique de la deuxième moitié du 2e millénaire av. J.-C. // Iranica Antiqua. 2013. Vol. XLVIII. P. 103-146.

Lhuillier, 2018 – *Lhuillier J.* Central Asia during the Achaemenid period in archaeological perspective // L'Orient est son jardin, Hommage à Rémy Boucharlat. Acta Iranica. Vol. 58. Leuven-Paris-Bristol: Peters. P. 257-271.

Lhuillier et al., 2015 – *Lhuillier J., Bendezu-Sarmiento J., Lecomte O.* Ulug-depe and an overview of the Iron Age in Turkmenistan // Journal of Iranian Archaeology. 2015. Vol. 4. P. 78-89.

Lhuillier et al., in press – *Lhuillier J., Bendezu-Sarmiento J., Marquis, Ph.* Ancient Bactra: new elements on the Iron Age occupation of Bactra oasis // Archaeology of Central Asia during the first millennium BC, from the beginning of the Iron Age to the Hellenistic period. OREA series/RDAFA. Vienna: Austrian Academy of Sciences press, in press.

Lhuillier et al., 2013 – *Lhuillier J., Dupont-Delaleuf A., Lecomte O., Bendezu-Sarmiento J.* The Middle Iron Age in Ulug-depe: A preliminary typo-chronological and technological study of the Yaz II ceramic complex // Pottery and chronology of the Early Iron Age in Central Asia. Warsaw: The Kazimierz Michałowski Foundation, 2013. P. 9-28.

Lhuillier et al., 2012 – *Lhuillier J., Isamiddinov M., Rapin C.* Rannezheleznyj vek severnovo Sogda: kharakteristika i predvaritel'naja tipologicheskaja khronologija // Istorija Material'noj Kul'tury Uzbekistana. 2012. Vol. 37. P. 57-66.

Lhuillier, Mashkour, 2017 – *Lhuillier J., Mashkour M.* Animal exploitation in the oases: an archaeozoological review of Iron Age sites in southern Central Asia. Antiquity. 2017. Vol. 91/357. P. 655-673.

Luneau, 2014 – *Luneau E.* La fin de la civilisation de l'Oxus. Transformations et recompositions des sociétés de l'âge du Bronze final en Asie centrale méridionale (1500-1500/1400 av. n.è.). Mémoires des Missions Archeologiques Francaises en Asie centrale et en Asie moyenne. T. XVI. Paris: De Boccard, 2014. 425 p.

Lyonnet, 1997 – *Lyonnet B.* Prospections archéologiques en Bactriane orientale 2 (1974-1978). Vol.2. Céramique et peuplement du chalcolithique à la conquête arabe. Mémoires de la Mission Archéologique Française en Asie Centrale. T. VIII. Paris: Recherche sur les civilisations. 1997. 447 p.

Lyonnet, 2013 – *Lyonnet B.* Recherches récentes sur les céramiques de Sogdiane (de la fin de l'âge du bronze à la conquête arabe): contribution à l'histoire de l'Asie centrale // L'archéologie française en Asie centrale. Nouvelles recherches et enjeux socioculturels, Cahiers d'Asie Centrale 21-22. Paris: De Boccard, 2013. P. 261-282

Masson, 1959 – *Masson V.M.* Drevnezemledel'cheskaja kul'tura Margiany. M.-L.: Isd-vo AN SSSR, 1959. 215 p.

Naveh, Shaked, 2012 – *Naveh J., Shaked Sh.* Aramaic Documents from Ancient Bactria, from the Khalili Collections (Studies in the Khalili Collection). London: The Khalili Family Trust, 2012. 224 p.

Rapin, 2007 – *Rapin Cl.* Nomads and the Shaping of Central Asia: from the Early Iron Age to the Kushan period // After Alexander. Central Asia before Islam. Oxford: Oxford University Press, 2007. P. 29-72.

Shajdullaev, 2002 – *Shajdullaev Sh.B.* Untersuchungen zur frühen Eisenzeit in Nordbaktrien. Archäologische Mitteilungen aus Iran und Turan. 2002. Vol. 34. P. 243-339.

Sverchkov, Boroffka, 2008 – *Sverchkov L.M., Boroffka N.* Kompleks perioda Jaz II iz Bandykhana // Istorija Material'noj Kul'tury Uzbekistana. 2008. Vol. 36. P. 50-55.

Sverchkov, Boroffka, 2016 – *Sverchkov L.M., Boroffka N.* Period Yaz II: Etapy i khronologija // Vestnik arkheologija, antropolohija i ètnografii. 2016. Vol. 32 (1). P. 5-16.