

PREHİSTORYA'NIN “ABİ”Sİ

*Harun Taşkıran'a Armağan Kitabı
Studies in Honour of Harun Taşkıran*



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ISBN: 978-625-6925-35-9



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Ön ve arka kapak: Sürmecik (Banaz, Uşak) - 2016

İç kapak: Antalya Müzesi - 1986

Yayınlayan

Şükrü DEVREZ

Grafik Tasarım

İsmet FİLİZFİDANOĞLU

Bilgin Kültür Sanat Şti. Ltd.

Selanik 2 Cad., No: 64/13 Karadeniz İş Hanı 3 Kat, Kızılay-Ankara

Tel: 0312 419 85 67

www.bilginkultursanat.com / bilginkultursanat@gmail.com

Sertifika no: 20193

ISBN: 978-625-6925-35-9

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Baskı: 1. Baskı

Ankara - 2023

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THE UPPER PALAEOLITHIC IN THE GREATER INDUS VALLEY (PAKISTAN): PROBLEMS AND PERSPECTIVES

Paolo Biagi* – Elisabetta Starnini**

Abstract: Archaeological surveys carried out in Sindh in the 1970s were resumed during the last decade and are still underway. They have shown that Upper Palaeolithic assemblages occur in few territories of the Greater Indus Valley, Lower Sindh in particular. Among them are the northern coast of the Arabian Sea and the banks of the seasonal watercourses that flow into the Indian Ocean from the desert regions of the interior. The chronology of the Upper Palaeolithic complexes is difficult to define because the sites consist of surface knapped chert artefacts, in association with which organic material suitable for dating has never been retrieved. The prehistoric lithic assemblages recovered from the southernmost territories of Lower Sindh consist of typical instruments, among which are thick, curved, unilateral abrupt-retouched points obtained from core rejuvenation blade-like flakes. The blanks have been detached from corticated bipolar cores obtained from small chert pebbles. Upper Palaeolithic workshops for the production of bladelet blanks are very common in the Rohri, Ongar and Daphro Hills near Sukkur and Kotri respectively. In contrast, assemblages of this period are very rare in the northern provinces of Pakistan, most probably because of the absence of Palaeolithic research projects and surveys.

Keywords: Pakistan, Greater Indus Valley, Anatomically Modern Humans, Upper Palaeolithic, Lithic Assemblages

BÜYÜK İNDUS VADİSİ'NDE (PAKİSTAN) ÜST PALEOLİTİK: SORUNLAR VE GÖRÜŞLER

Özet: 1970'lerde Sindh'de gerçekleştirilen arkeolojik araştırmalar son on yılda yeniden başlatılmış ve halen devam etmektedir. Araştırmalar Üst Paleolitik toplulukların, özellikle Aşağı Sindh olmak üzere Büyük İndus Vadisi'nin birkaç bölgesinde var olduğunu göstermiştir. Bunlar arasında Umman Denizi'nin kuzey kıyıları ve iç kesimlerdeki çöl bölgelerinden Hint Okyanusu'na akan mevsimsel suyollarının kıyıları yer alır. Yerleşimler, tarihlendirme için uygun organik malzemenin hiçbir zaman elde edilemediği, yüzeyden yontulmuş çört eserlerden oluştuğundan dolayı Üst Paleolitik komplekslerin kronolojisini tanımlamak zordur. Aşağı Sindh'in en güneyindeki alanlardan ele geçen tarih öncesi yontmataş buluntu toplulukları, aralarında çekirdek yenileme için alınan dilgimsi yongalar üzerine yapılmış kalın, kavisli, tek tarafı dik düzeltili uçların bulunduğu tipik aletlerden oluşur. Taşmalıklar küçük çört çakıllardan elde edilen kabuklu iki kutuplu çekirdeklerden yontulmuştur. Dilgicik taşmalıkların üretimi için kullanılan Üst Paleolitik atölyeler sırasıyla Sukkur ve Kotri yakınlarındaki Rohri, Ongar ve Daphro tepelerinde çok yaygındır. Buna karşılık, bu döneme ait

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topluluklar, büyük olasılıkla Paleolitik araştırma projeleri ve yüzey araştırmalarının olmaması nedeniyle Pakistan'ın kuzey bölgelerinde çok nadirdir.

Anahtar Sözcükler: *Pakistan, Büyük İndus Vadisi, Anatomik Modern İnsanlar, Üst Paleolitik, Yontmataş Buluntu Topluluğu*

Introduction

This paper summarises and discusses some aspects of the Upper Palaeolithic archaeology in the Indus Valley and its related regions, Sindh in particular, where most sites and artefacts of this period have been discovered. Before the mid-1970s, Upper Palaeolithic assemblages were reported very rarely from Pakistan¹. During the second half of the same decade, B. Allchin² and A.R. Khan³ published the first Upper Palaeolithic assemblages of Sindh, which they described in different ways according to their fieldwork experience, the location of the sites, and the characteristics of the chert artefacts.

The two aforementioned papers were written ca. a decade after the discovery of the Parkho Darra Cave in the Sanghao Valley (henceforth Sanghao Cave), a so far unique Upper Palaeolithic stratified sequence that opens in the mountains of north-western Pakistan, ca. 64 kms north-east of Mardan⁴ in the Khyber Pakhtunkhwa province. The excavations at Riwat 55 in the Soan Valley (Islamabad, Punjab), were carried out in the early 1980s⁵. Riwat 55 is considered to be the oldest Upper Palaeolithic site of Pakistan, TL-dated to ca. 45000 BP⁶. F. Khan made a few more important discoveries in the Bannu Basin during the same decade⁷.

Regarding Sindh, B. Allchin was the first to remark the uniqueness of the Rohri Hills workshops discovered on the limestone terraces located close to the town of Rohri. The hills elongate in north-south direction, up to the Indus River, where it crosses the Bukkur Gorge between Sukkur and Rohri⁸. Many areas of the hills are rich in very good-quality seams of chert blocks, which were exploited from Acheulian Early Palaeolithic to Indus Bronze Age⁹. According to B. Allchin, the Rohri Hills Upper Palaeolithic workshops consist of hundreds or thousands of local chert artefacts “*based upon the manufacture of parallel-sided blades from unidirectional cores*”¹⁰.

In contrast, A.R. Khan, who conducted research almost exclusively in Lower Sindh, more precisely along the Arabian Sea coast around Karachi and its surroundings,

¹ Krishnaswamy 1947; Gordon 1958; Khatri 1962.

² Allchin 1976.

³ Khan 1979a.

⁴ Dani 1964; Allchin 1973; Ranere 1982; Salim 1986.

⁵ Rendell *et al.* 1989.

⁶ Rendell – Dennell 1987.

⁷ Biagi *et al.* 2021a.

⁸ Allchin 1976, 479.

⁹ Biagi – Cremaschi 1988.

¹⁰ Allchin *et al.* 1978, 320.

reported the presence of lithic findspots characterised by the presence of a unique techno-typological artefact, more precisely an abrupt-retouched, curved, unilateral chert points, which he described “a knife like tool, with strongly curved and steeply blunted back and very sharp and more or less straight cutting edge”¹¹.

The question regarding the existence of an Upper Palaeolithic period in the Indian Subcontinent began to arise after the discovery of stratified artefacts in the gravel deposit of the Kurnool River in south-east India¹², and other lithic tools in Maharashtra¹³. A few years later, these finds led to the first description of the techno-typological characteristics of the Indian Upper Palaeolithic assemblages¹⁴. They were followed by more discoveries, which led to the interpretation of overimposed Middle, Upper Palaeolithic and Mesolithic horizons which were defined thanks to the excavations carried out in a few impressive sand dunes in Maharashtra¹⁵ and Rajasthan¹⁶ in India. According to the available radiocarbon chronology, the first Upper Palaeolithic industries made their appearance in India around 40000 BP¹⁷.

However, due to the still insufficient data available for this period in the entire Subcontinent¹⁸, despite some improvement in the radiocarbon chronology of some Indian sites¹⁹, it is not surprising that most authors rarely paid attention to the Late Pleistocene peopling of this region of South Asia²⁰. This fact contrasts with the importance of the territory, in particular the northern coast of the Arabian Sea and the lower part of the Indus Valley, for the definition of the dispersal route followed by the first Anatomically Modern Humans (henceforth AMH) during their eastern spread²¹, although any robust archaeological evidence of their presence is still missing²².

What happened in the Indian Subcontinent during the transition period between the end of the Middle and the beginning of the Upper Palaeolithic²³? Why is the archaeological evidence so scarce, and human remains almost absent²⁴? Where was the Arabian Sea coastline located during the MIS-3 and MIS-2²⁵? Why evidence of Aurignacian sites or artefacts has never been retrieved from the entire Indian

¹¹ Khan 1979a, 13.

¹² Cammiade – Burkitt 1930.

¹³ Sankalia 1956.

¹⁴ Murty 1969; 2003; Sosnowska 2010.

¹⁵ Sali 1989; Lewis 2017, 127-140.

¹⁶ Misra – Rajaguru 1989.

¹⁷ Mishra 2013, 92.

¹⁸ Athreya 2010; Chauhan – Patnaik 2012, Table 1.

¹⁹ Raju – Venkatasubbaiah 2002.

²⁰ Harvati *et al.* 2022.

²¹ Bulbeck 2007; Field *et al.* 2007; Blinkhorn – Petraglia 2014; López *et al.* 2015; Bolus 2015.

²² Mishra *et al.* 2016; Korisettar 2016, 65; Biagi 2017; 2022.

²³ Brantingham *et al.* 2004.

²⁴ Chauhan 2016.

²⁵ Sneed 1966; 1993a; 1993b.

Subcontinent²⁶? These are just some of the questions which are still waiting for an answer as they were already some fifty years from the present²⁷, since the first recovery of the first Upper Palaeolithic assemblages in the Indian Subcontinent, which took place some a century ago.

The Upper Palaeolithic sites

Sindh

To try to answer some of the questions reported above, intensive surveys were conducted during the last decade at the confluence between the Khadeji and Mol Rivers, ca. 50 km north-east of Karachi (Figure 1). The main scope of the surveys was to improve our knowledge of the Upper Palaeolithic and Mesolithic in Lower Sindh. The knapped stone assemblages recovered during the research project still underway are very important because they help us interpret some of the data achieved by the late Professor A.R. Khan during his geoarchaeological surveys, Rehri for example (Figure 2), re-check the location of the sites he discovered in the 1970s²⁸, and define the characteristics of some of the lithic complexes²⁹. Moreover, one of the Khadeji River sites (KDG-1) has been radiocarbon dated to the Preboreal Mesolithic by one fragment of marine bivalve found in close association. Its $\delta^{13}\text{C}$ (-4.44) tells us that it grew and fed in a mangrove environment, which was already flourishing along the northern Arabian Sea coast around the beginning of the Holocene, which undoubtedly attracted groups of last hunter-gatherers³⁰.

The 2021 surveys were carried out along the terraces that extend at the confluence of the Mol and Khadeji Rivers, some 30 km from the present Arabian Sea coast (Figure 1). The results have confirmed the existence of Upper Palaeolithic assemblages in the territory, which are characterised by knapped stone artefacts made from local chert (Figure 3). The artefacts consist of bipolar bladelet cores, obtained from small pebbles with corticated, smooth surfaces, which were most probably collected from the conglomerate outcrops available at the confluence of the two watercourses³¹. Other implements are represented by thick, curved, unilateral, abrupt-retouched points and simple burins with lateral detachment, obtained from small flakes. At present, we do not know the precise chronology of these assemblages whose most important characteristics have been summarily described by A.R. Khan already in the late 1970s³². However, their general characteristics are very different from those of the Mesolithic complexes known from the same territory³³. Moreover, they differ also from the Upper Palaeolithic assemblage discovered on the Mulri Hills (site MH-

²⁶ Otte 2022.

²⁷ Allchin 1973a, 6.

²⁸ Khan 1979a.

²⁹ Biagi *et al.* 2021b; Biagi 2022.

³⁰ Biagi 2019-2020.

³¹ Khan 1979b.

³² Khan 1979a.

³³ Biagi *et al.* 2021: 28; Biagi *et al.* 2022.

16), south of the Karachi University campus, whose typological aspects have already been described in detail in a previous paper³⁴.

Thanks to the available data, on the basis of the techno-typological traits of the knapped stone artefacts, we can propose a preliminary sequence for the Upper Palaeolithic in Lower Sindh. We can suggest that the Khadeji and Mol River assemblages of this period are older than those from the Mulri Hills, site 16 in particular (MH-16), whose lithic artefacts are represented by abrupt-retouched instruments obtained from microbladelet blanks detached from prismatic and subconical cores, sometimes segmented employing the microburin technique (Figure 4).

Moreover, the presence of different types of microlithic lunates retrieved from the sites discovered along this part of the northern Arabian Sea coast, is one of the most recurring characteristics of the Mesolithic assemblages. Considering their typology and distribution in detail, we can suggest that lunates started to be produced around the end of the Upper Palaeolithic, their manufacture continued, and most probably improved with a greater variety of types, during the first Mesolithic stages, to cease around the beginning of the Atlantic. These considerations, which are based mostly on the preliminary study of all the Upper Palaeolithic and Mesolithic knapped stone assemblages collected by A.R. Khan from the Mulri Hills and other coastal sites³⁵, are still to be better defined, following the detailed description of the typological traits of all the knapped stone artefacts, cores, geometric microliths, and technological pieces in particular.

Regarding this point, the discovery of a series of surface knapped stone artefacts around Jhimpir³⁶, ca. 100 km east of Karachi, in the district of Thatta, is very important. The surveys carried out in 2010 along the eastern edge of the Kirthar limestone terraces that elongate south-west of Jhimpir, close to the western banks of the artificial Kalri Lake, led to the discovery of many lithic findspots, which were attributed to the end of the Upper Palaeolithic³⁷. This attribution has been suggested on the basis of the typology of the knapped stone artefacts. They all are made from local chert nodules, whose outcrops were first reported by W.T. Blanford in his seminal volume on the Geology of Western Sindh³⁸.

The artefacts are represented by prismatic and subconical bladelet cores with prepared platforms, unretouched microbladelets with parallel sides, a few microlithic lunates, one of which is unfinished, while two others have impact fractures at the tip, a few thick, abrupt-retouched curved points, and technical pieces, among which are crested blades and one core *tablette* (Figure 5). Although the typological characteristics of the Jhimpir artefacts are few, we can suggest that they were

³⁴ Biagi 2017, Figs 4-6.

³⁵ Biagi 2003-2004.

³⁶ Biagi 2011.

³⁷ Biagi 2011.

³⁸ Blanford 1880.

manufactured on the spot by groups of late Upper Palaeolithic hunters who shortly camped in the area where they produced hunting weapons. The location of the sites is ideal for the seasonal settling of a small community of hunter-gatherers due to the presence of freshwater and very good-quality chert outcrops. The chronological attribution of the lithic artefacts is based on the techno-typological features of the cores, which can be compared with those from the Mulri Hills site 16 (MH-16), the occurrence of unique types of microlithic lunates, and of thick, unilateral, abrupt-retouched curved points, which are characteristic of the Upper Palaeolithic assemblages of this part of Lower Sindh.

Another typical Upper Palaeolithic knapped stone assemblage was discovered at Ranikot (RNK-1), north of Jamshoro, in 2010. This territory is well-known for the presence of an impressive fort, which was constructed most probably between the first half of the XVIII and the first half of the XIX century AD³⁹.

The Upper Palaeolithic assemblage was recovered from the surface of a Kirthar limestone terrace seasonally settled by a group of Baloch nomads, ca. 720 m north-west of the Sann Gate (Figure 6: top). The assemblage is represented by heavily weathered, local chert artefacts among which are exhausted, prismatic and subconical bladelet cores with one prepared platform (Figure 6: bottom, nn. 4, 6), 4 simple and on retouch burins, 1 probable splintered piece (Figure 6: bottom, n. 5), 1 thick, abrupt-retouched point (Figure 6: bottom, n. 1) and a few technical pieces, among which is a core rejuvenation flakelet (Figure 6: n. 2), which shows that the assemblage was manufactured on the spot. The techno-typological analysis of the RNK-1 assemblage shows some similarities with those from Jhampir and the Mulri Hills (MH-16)⁴⁰.

Apart from the sites described above, we have to remark the presence of Upper Palaeolithic chert manufacturing workshops on the top of the Rohri Hills, in Upper Sindh (Figure 7: top), and Ongar (formerly called Milestone 101)⁴¹, south of Hyderabad, in Lower Sindh. Both these areas are very rich in good-quality chert sources. They were exploited, though in different ways, starting from the beginning of the Palaeolithic to the Bronze Age⁴². Their main characteristics were described in several papers⁴³, and the many problems raised by their presence widely debated⁴⁴. However, more than fifty years have passed since their discovery, and we still have no idea of the distribution radius of the innumerable chert bladelets produced on the hills during the Upper Palaeolithic. These artefacts are very distinctive and easy to recognise due to their technological characteristics, weathering and patina⁴⁵.

³⁹ Biagi – Nisbet 2009.

⁴⁰ Biagi 2009, Fig. 18.

⁴¹ Allchin 1976.

⁴² Biagi *et al.* 2018.

⁴³ Biagi – Starnini 2018.

⁴⁴ Biagi 2017.

⁴⁵ Biagi – Cremaschi 1988.

Moreover, the precise chronology of the workshops is difficult to define because of the absence of any datable, organogenic material. The assemblages are composed exclusively of subconical bladelet cores with one prepared platform, unretouched bladelets, debitage and debris flakes, and bifacial rod-shaped picks, perhaps heavy duty tools, which were probably used to extract chert nodules from the limestone deposit (Figure 7: bottom). Moreover, the surveys conducted on the Rohri Hills in the 1980s⁴⁶ and Ongar in the 1990s⁴⁷, have shed some light on the spatial distribution of the lithic workshops, the technological characteristics of some knapped stone artefacts, and the operative chain employed to obtain bladelet blanks⁴⁸.

The Punjab and Khyber Pakhtunkhwa

As reported above, our knowledge of the Upper Palaeolithic period in the northern provinces of Pakistan is very scarce. The more recent research has been conducted in the 1980s in the Soan Valley (Rawalpindi, Punjab) by the British Archaeological Mission to Pakistan, otherwise called Potwar Project. Despite the important Palaeolithic discoveries made in the thick *loess* deposits of this part of the valley, Riwat Site 55 yielded evidence of an “*initial Upper Palaeolithic*” lithic complex TL-dated to ca. 45000 BP⁴⁹. The authors suggest that it may represent the earliest Upper Palaeolithic site so far known in this part of the Indian Subcontinent. The knapped stone assemblage from Site 55 is made from quartzite pebbles. It consists almost exclusively of cores, unretouched flakes and blade-like flakes.

Other, though very different discoveries were made in the Sanghao Cave (Mardan, Khyber Pakhtunkhwa) in the 1960s. According to A. Dani, who was the first to excavate the site, the ca. 3 m thick deposits, yielded a complex sequence which he subdivided into 12 layers, the two uppermost of which regard the Buddhist occupation of the shelter, while the lower-lying ones were attributed to the Middle Palaeolithic by B. Allchin⁵⁰.

The excavations were resumed in 1975, during which ca. 35000 knapped stone artefacts, made almost exclusively from quartz, were collected throughout the entire sequence, as well as were bone and charcoal samples for radiocarbon dating⁵¹. The knapped stone assemblage was analysed in detail. It was subdivided into four main subsequent complexes, all of which are characterised by the presence of burins. According to the results achieved by the study of the lithics, the author suggested that the occupation of the cave took place during the last glaciation. The only available radiocarbon date was obtained from unidentified charcoals collected from Layer J, at ca. 1.50 m of depth. They yielded the result of 11765±255 BP (TEM-118), which the author considers too recent because of a probable contamination due to the

⁴⁶ Biagi 2008.

⁴⁷ Biagi 2005.

⁴⁸ Biagi 2017, 9-10.

⁴⁹ Rendell *et al.* 1989, 204.

⁵⁰ Allchin 1973b, 40.

⁵¹ Ranere 1982.

presence of calcium carbonates. In conclusion, according to the excavator, “*dating remains a major problem in the interpretation of the Sanghao cave sequence*”⁵².

Another important open-air site of north-western Pakistan, has been discovered in the Red Desert of the Bannu Basin, ca. 1 km from the present course of the Gambila River⁵³. The artefacts from this unique site called Gul Shah Tup (Figure 8: top), have been knapped from local chert available in the form of pebbles from the beds of the neighbouring watercourses which flow from Afghanistan. The retouched artefacts are few. Apart from debitage flakelets and debris, they are represented by microbladelet cores, hypermicrobladelet lunates, a few abrupt-retouched bladelets and truncations and technical pieces, among which are crested bladelets (Figure 8: bottom). They show that the manufacture of the assemblage took place on the spot. Its generic attribution to the end of the Upper Palaeolithic is based exclusively on the techno-typological characteristics of the knapped stone artefacts.

Discussion

From an archaeological point of view, Sindh is a very important province of South Asia due to its location between the Balochistan and Iranian highlands, in the west, India, in the east, and Central Asia, in the north. However, traces of Upper Palaeolithic sites are very scarce or absent as for example in the Punjab and Balochistan (Figure 9).

The Upper Palaeolithic findspots discovered along the northern coast of the Arabian Sea and Lower Sindh in general, are located on the limestone terrace west of the Indus River alluvial Plain and its delta, which started to form in the Holocene⁵⁴. The finds have shown that some unique artefacts are typical of the complexes of this period. They consist of different types of thick, unilateral, abrupt-retouched curved points obtained from crested blade-like flakes, which are known also from a few other areas of the Indian Subcontinent⁵⁵.

Given the present situation of the Upper Palaeolithic studies in Pakistan, many important questions are still waiting for an answer. They regard 1) the chronology and extension of the eventual south-easternmost spread of Neanderthal groups and their related assemblages⁵⁶, 2) the definition of the southern and eastern boundary of the Upper Palaeolithic *Aurignacian* Culture and its related aspects⁵⁷, 3) the precise chronology of the Upper Palaeolithic complexes characterised by thick, abrupt-retouched, curved backed points and burins, which are known in Lower Sindh and some regions of India⁵⁸. It is important to bear in mind that these assemblages have never been recovered west of the Hab River course, which marks the boundary

⁵² Ranere 1982, 132.

⁵³ Biagi *et al.* 2021.

⁵⁴ Inam *et al.* 2021.

⁵⁵ Murty 1969; 1979; 2003; Joshi 1978.

⁵⁶ Biagi – Starnini 2018.

⁵⁷ Otte 2015; 2022.

⁵⁸ Murty, 1970, 126; Paddaya, 1970, 188.

between Sindh and Balochistan⁵⁹, 4) the exact time during which industries with microlithic lunates started to appear and how long they lasted, 5) the reason why so many Upper Palaeolithic workshops for the manufacture of bladelet blanks are present in the Rohri Hills, and which was the destination of the final products.

To conclude: our knowledge of the Upper Palaeolithic of Pakistan is still in its infancy because of the scarcity of research ever conducted on this specific topic, the absence of stratified sites and associated organogenic material to build a radiocarbon chronology of the subsequent events, and the definition of the cultural aspects involved. The available data show a great discrepancy between the southern province of the country (Sindh) and the northern ones (Punjab and Khyber Pakhtunkhwa), while at present no data are available from Balochistan (Figure 9). This incomplete picture is undoubtedly due to the scarcity or absence of research in many areas, the variable characteristics of the landscape and the presence/absence of good-quality raw material sources, chert in particular, in some territories, the availability of water supply and, last but not least the complex political situation of the country which makes fieldwork difficult to conduct.

We have to remark that the only province which yielded a certain amount of reliable data is Lower Sindh, while information from all the other territories is absolutely insufficient. Despite the importance that the northern coast of the Arabian Sea and the Indus Valley undoubtedly played, we know almost nothing of the period during which the spread of the first anatomically modern humans (AMH) took place across this part of the Indian Subcontinent, who were the actors, the role they played, and which were the characteristics of their material culture tradition⁶⁰. There is little doubt that all these important questions are still waiting for an answer.

Acknowledgements: *This paper has been written thanks to the financial support of the Italian Ministry of Foreign Affairs and International Cooperation (MAECI) (Rome, I), the Ca' Foscari University Archaeology Funds (Venice, I), and the Society of Antiquaries of London (UK), with thanks.*

Special thanks are due to Syed Sardar Ali Shah, Minister for Culture, Tourism, Antiquities & Archives, Government of Sindh, and Manzoor Ahmed Kansro, Director General of Antiquities, Government of Sindh, for promoting the December 2021 surveys in Lower Sindh and patronizing the research.

We are grateful to Dr. Barbara Voytek (Berkeley University, USA) for the traceological analysis of some of the artefacts described in this paper.

⁵⁹ Biagi 2017.

⁶⁰ Kaifu *et al.* 2021.

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Figure 1: Distribution map of the Upper Palaeolithic coastal sites discovered around Karachi in Lower Sindh. See the location of the Mulri Hills, Rehri and the confluence between the Khadeji and Mol Rivers (drawing by P. Biagi)

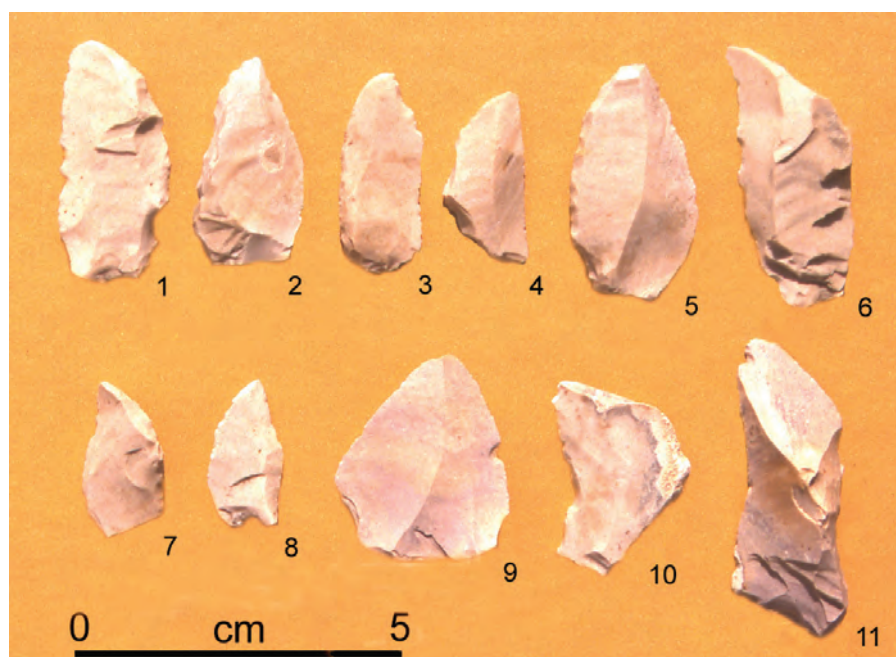


Figure 2: Rehri: Upper Palaeolithic, patinated chert artefacts recovered by A.R. Khan in the 1970s. Abrupt-retouched, curved points (nn. 1-8), unretouched flakelets (nn. 9-11) (photographs by P. Biagi)

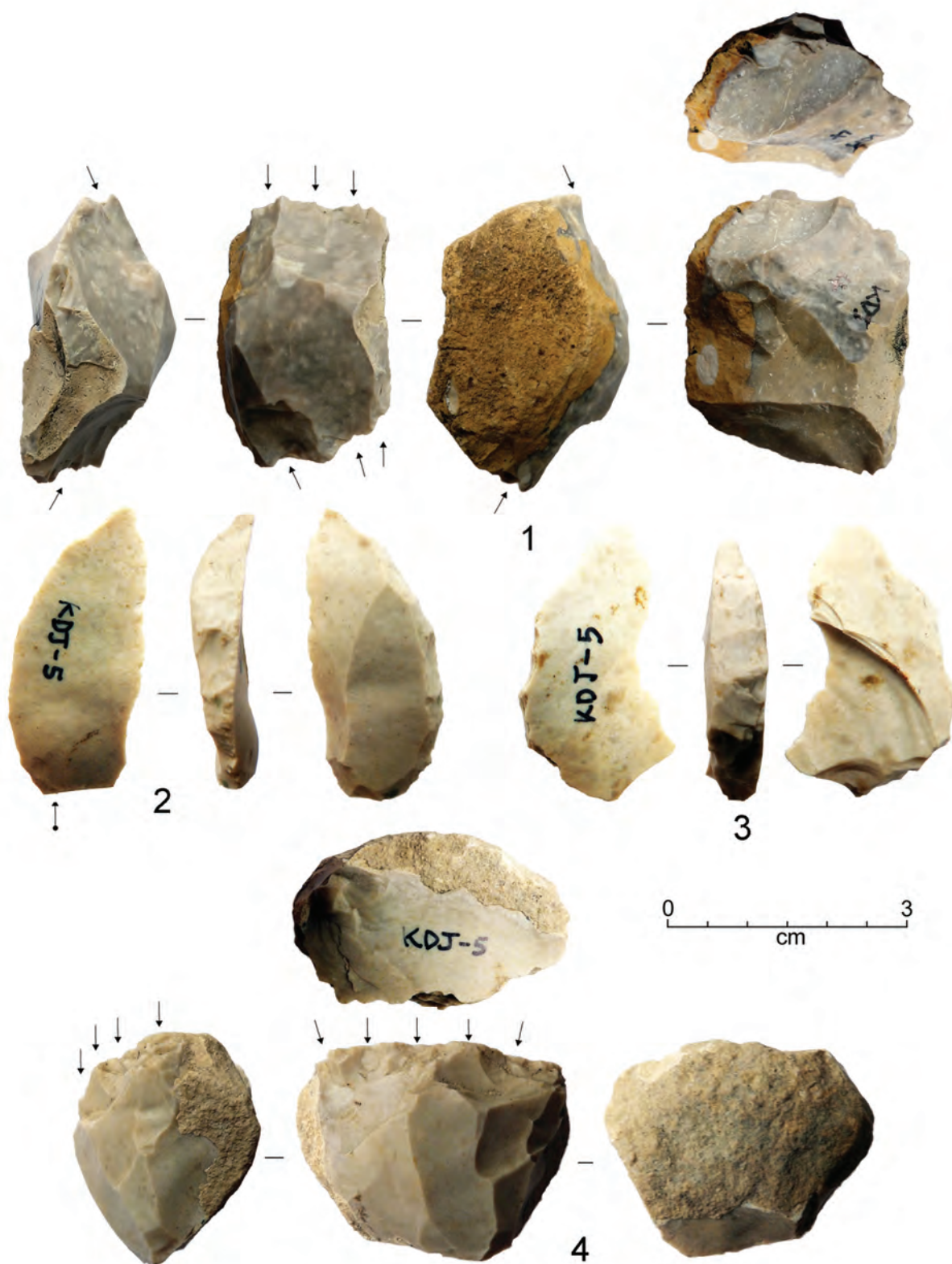


Figure 3: Khadeji River (KDJ-5): Upper Palaeolithic local chert knapped artefacts recovered in 2010. Bipolar flakelet core (n. 1), abrupt-retouched, curved points (nn. 2 and 3), subconical bladelet core (n. 4) (photographs by E. Starnini)



Figure 4: Mulri Hills (MH-16): Upper Palaeolithic artefacts recovered by A.R. Khan in the 1970s. Abrupt-retouched, curved points (nn. 1-6 and 9), abrupt-retouched bladelet and point (nn. 7 and 8), microburins (nn. 10-12), lateral burins (nn. 13 and 14), prismatic bladelet cores (nn. 15 and 16) (photographs by P. Biagi)



Figure 5: *Jhimpir*: The limestone terrace on the top of which most knapped stone artefacts have been recovered (top) (photograph by P. Biagi, 2010); Local chert knapped artefacts from different *Jhimpir* findspots: Microlithic lunates (nn. 1-4), one of which is under construction (n. 3) and two have impact traces (red dots), abrupt-retouched microbladelet (n. 5), crested blade (n. 6), abrupt retouched t, thick curved points (nn. 7 and 8), subconical bladelet cores (nn. 9-11) (bottom) (photographs by E. Starnini)

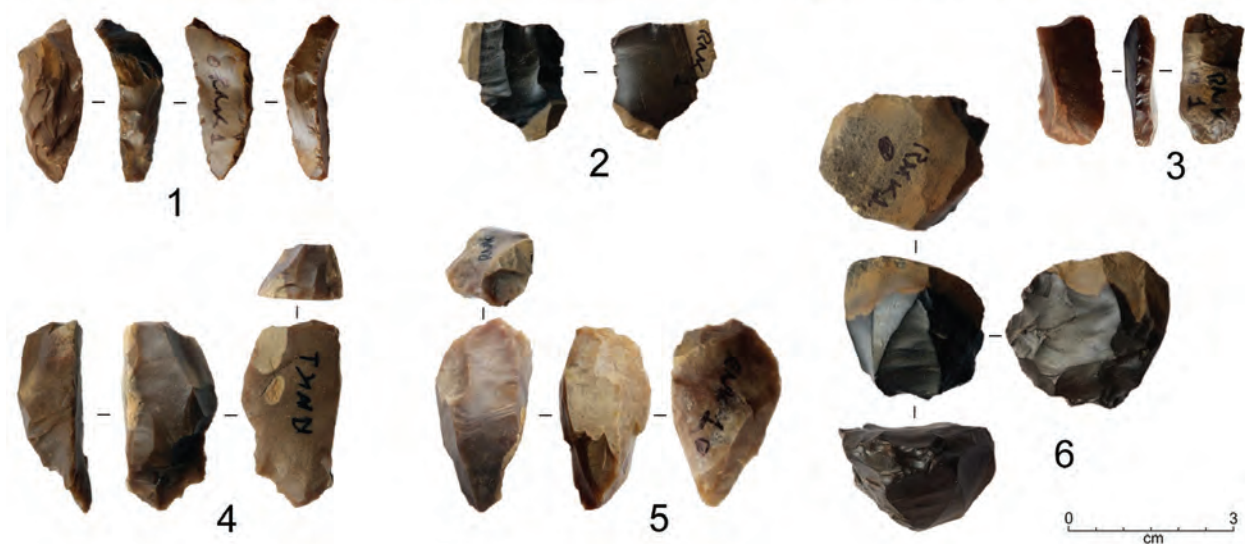


Figure 6: Ranikot (RNK-1): The site from the west (top) (photograph by P. Biagi, 2010). Local knapped chert artefacts from the site's surface: Abrupt-retouched, curved point (n. 1), core rejuvenation flakelet (n. 2), end scraper? (n. 3), microbladelet, subconical cores (nn. 4 and 6), splintered piece (n. 5) (bottom) (photographs by E. Starnini)



Figure 7: Rohri Hills: The terraces which extend east of the shrine of Shadee Shaheed (top) (photograph by P. Biagi, 1986). Local knapped chert artefacts from one of the Upper Palaeolithic workshops: Subconical bladelet cores (nn. 1-3), bifacial pick (n. 4) (bottom) (photographs by E. Starnini)

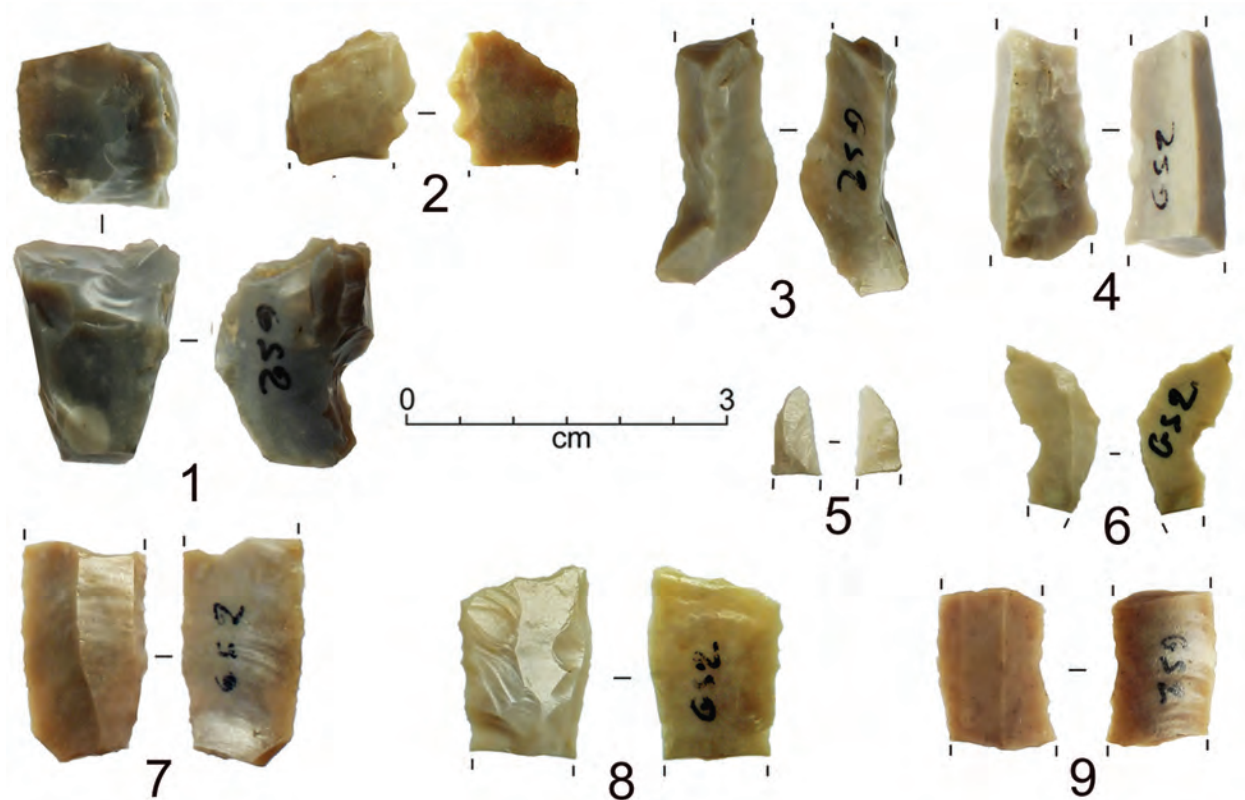


Figure 8: Gul Shah Tup, Bannu: The site from the north (top) (Photograph by P. Biagi, 2019). Local knapped chert artefacts from the site's surface: Subconical flakelet core (n. 1), truncated bladelet (n. 2), crested bladelets (nn. 3 and 4), microlithic lunates (5 and 6), abrupt-retouched bladelets (nn. 7-9) (bottom) (photographs by E. Starnini)

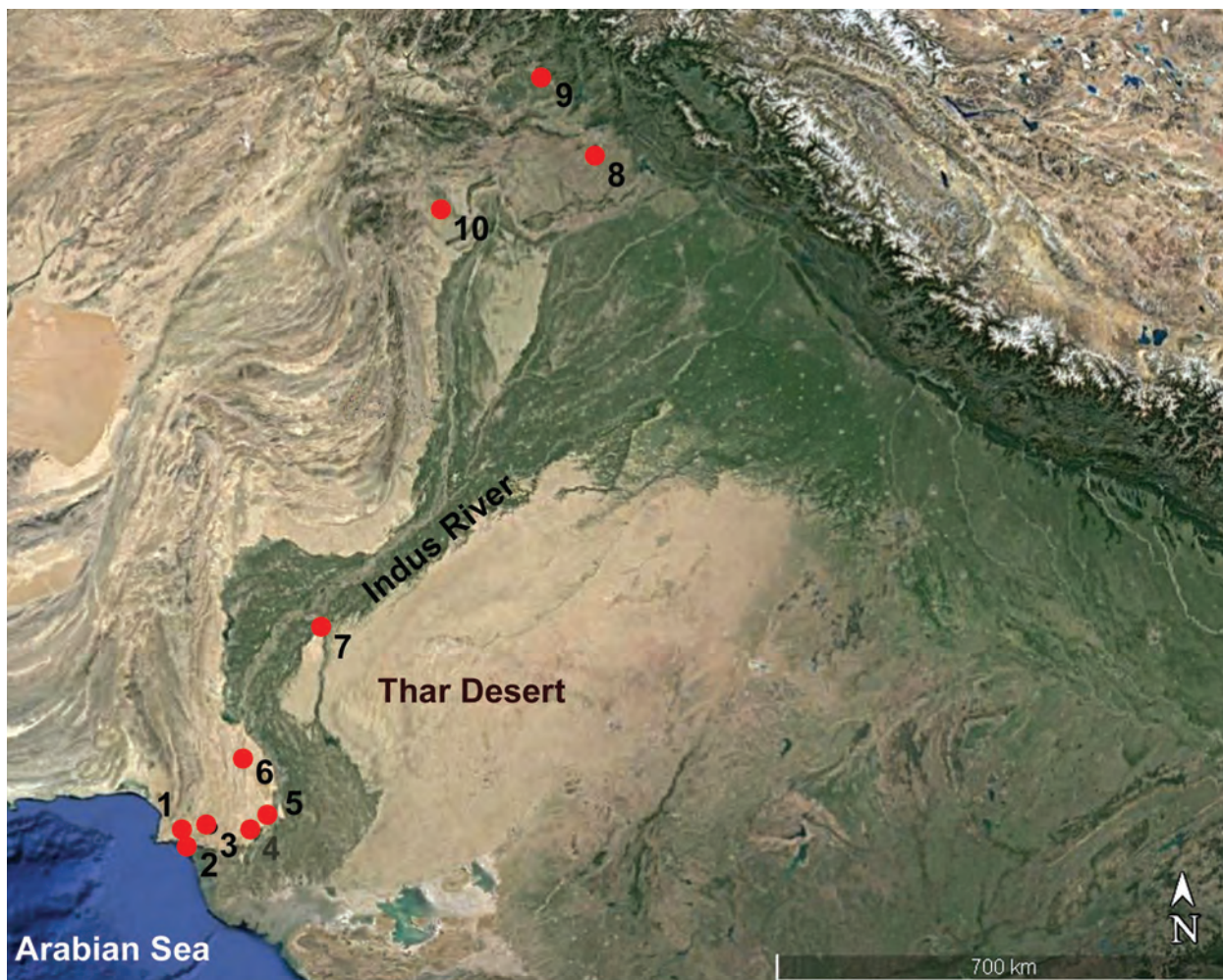


Figure 9: Distribution map of the Upper Palaeolithic sites reported in the text: Mulri Hills (MH-16) (n. 1), Rehri (n. 2), Mol and Khadeji Rivers confluence (n. 3), Jhimpir (n. 4), Ongar and Daphro Hills (n. 5), Ranikot (RNK-1) (n. 6), Rohri Hills (n. 7), Riwat 55 (n. 8), Sanghao Cave (n. 9), Gul Shah Tup, Bannu (n. 10) (drawing by P. Biagi)