Heirloom Beads and Bronze Plates of the Burmese Chin

Their links to the ancient Qiang people and Proto-Indo-Europeans originating in Anatolia/The Levant spreading West and East via the cultures of Yarmukian, Vinca, Cucuteni, LBK, Greece, Ur, Bactria, Hongshan, Daxi, Majiayao, Qijia, Shang, Zhou, Qin and Han Dynasties

6000 BC to the present day

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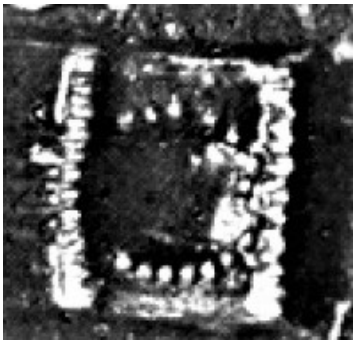
PART 3

The Minoan and Mycenaean stone moulds for relief ornaments and cult objects

Shown on the next few pages are Mycenaean/Minoan moulds which produced similar methods of fastening as would have been used by those to fashion the Chin beads, thousands of miles away. The images were obtained from:
Minoïsche en Myceense stenen mallen voor reliëfornamenten en cultusvoorwerpen by J. G. Velsink 2011

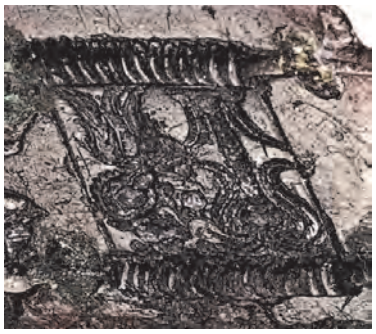


Above: Pl. 21 (top image) and Pl. 3 (centre image); Pl. 29/32 from J. G, Velsink's work 2011 (ibid)

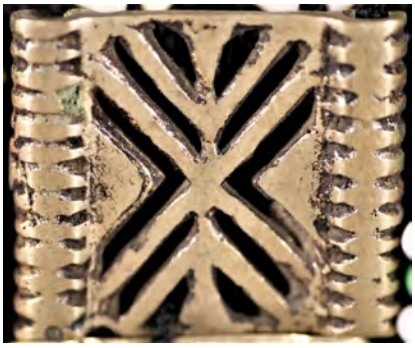
Above we show another angle of the Mycenaean mould from the previous page showing the versatility and sophistication of the piece.

Source: https://www.thetoc.gr/politismos/article/o-neos-tomos-tou-idrumatos-latsianakalupste-tis-mukines-pera-apo-ta-profani



For comparison with the 'wavy' edges used on the Mycenaean mould, we show some Chin belt pieces with a similar arrangement.

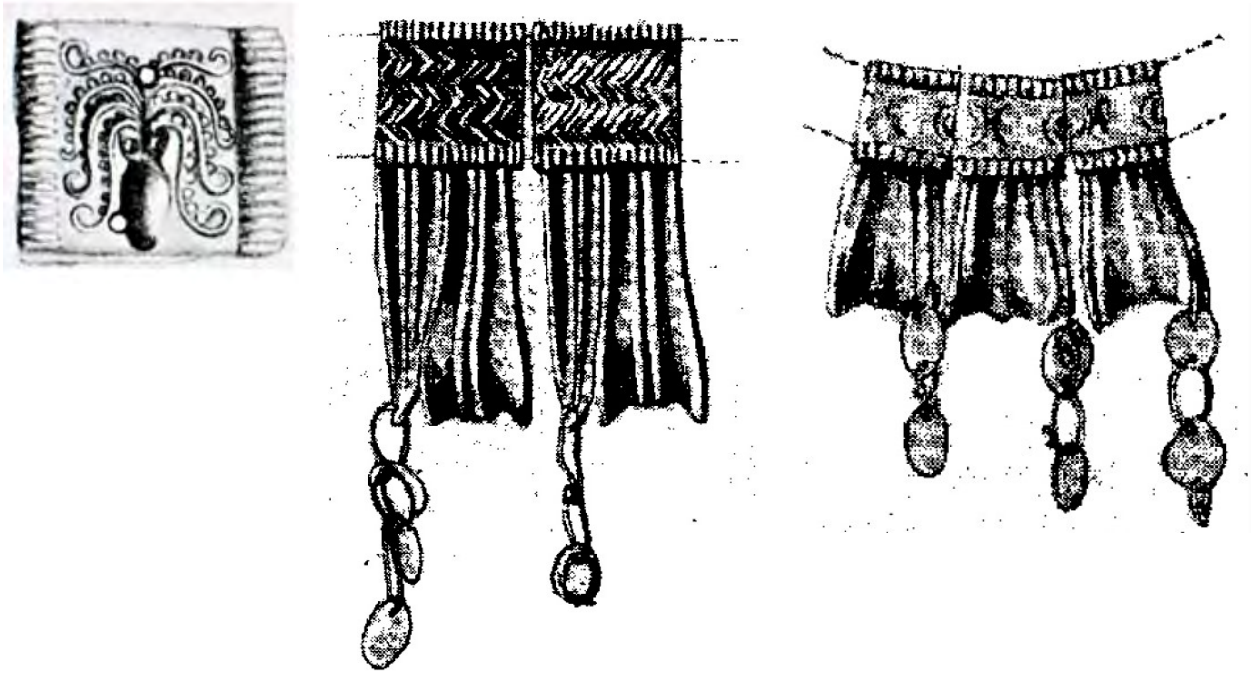
These moulds from Mycenae include examples of methods that were probably used far away to cast the Chin bronze pieces. Plates 11 (top) and 96 (bottom), J. G. Velsink 2011.



We can assume that there were moulds widespread in the East Mediterranean and South West Asia areas capable of making similar designs as are found on the Chin pieces. To illustrate this we show a mould from the EBA third millennium BC site at Titriş Höyük near the Euphrates Valley.

Above: Titriş Höyük 3rd millennium BC mould and drawing. Source: The Discovery of a Funerary Ritual. Inanna/Ishtar and Her Descent to the Nether World in Titriş Höyük, Turkey by Nicola Laneri, East and West, December 2002, Vol. 52, No. 1/4 (December 2002), pp. 9-51. A mould such as this would have been able to make the c. 2300 BC stamp seal from Poliochni shown below (see 4 and 7 in the drawing above right.

Above left: Stamp seal c. 2300 BC. Seals and stamping activity in the Aegean islands during the 3rd millennium BC by Mastrogiannopoulos Lambros. http://users.uoi.gr/gramisar/prosopiko/vlaxopoulos/ergasies_3hxilietia/Mastrogiannopoulos_Seals.pdf
The similarities between the symbols portrayed on the moulds and artifacts are remarkable.



The beads portrayed above are from the Mycenaean/Minoan age LH lll A-B 1400-1200 BC (left image); LH ll B 1450-1400 BC (centre and right images). Images from J. G. Velsnik 2011.
It would appear to be a similar stringing arrangement was used for the Chin/Qiang pieces.

For comparison with the foregoing examples of Mycenaean moulds we show some from the Shang Dynasty.

图四九　陶折肩尊范（M103：04）

图五一　陶折肩尊范（M103：07）

图五〇　陶折肩尊范（M103：05）

图五二　陶折肩尊范（M103：08）

Four pieces of a mould for casting of a bronze vessel. The elements of the deep relief, with spirals as background decoration, can clearly be seen. From Zhongguo Shehui Kexue Yuan Kaogu Yanjiusuo Anyang Gongzuodui (2016).

Above: Decoration markers or "pottery pestles" (taopai 陶拍) with different patterns (stripes, spirals) from Yingtan 鷹潭, Jiangxi. Some have the shape of flat brushes, others are round and "umbrella-shaped" (sanxing 傘形), yet others look like mushrooms (dian 墊). Source: Li 1990: 37'. Description from: http://www.chinaknowledge.de/History/Myth/shang-econ.html.

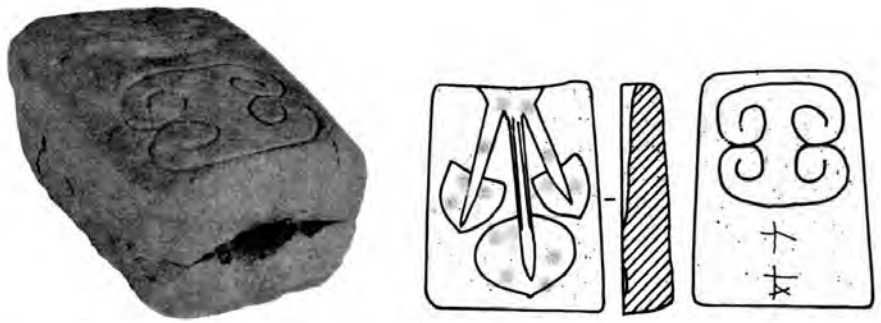
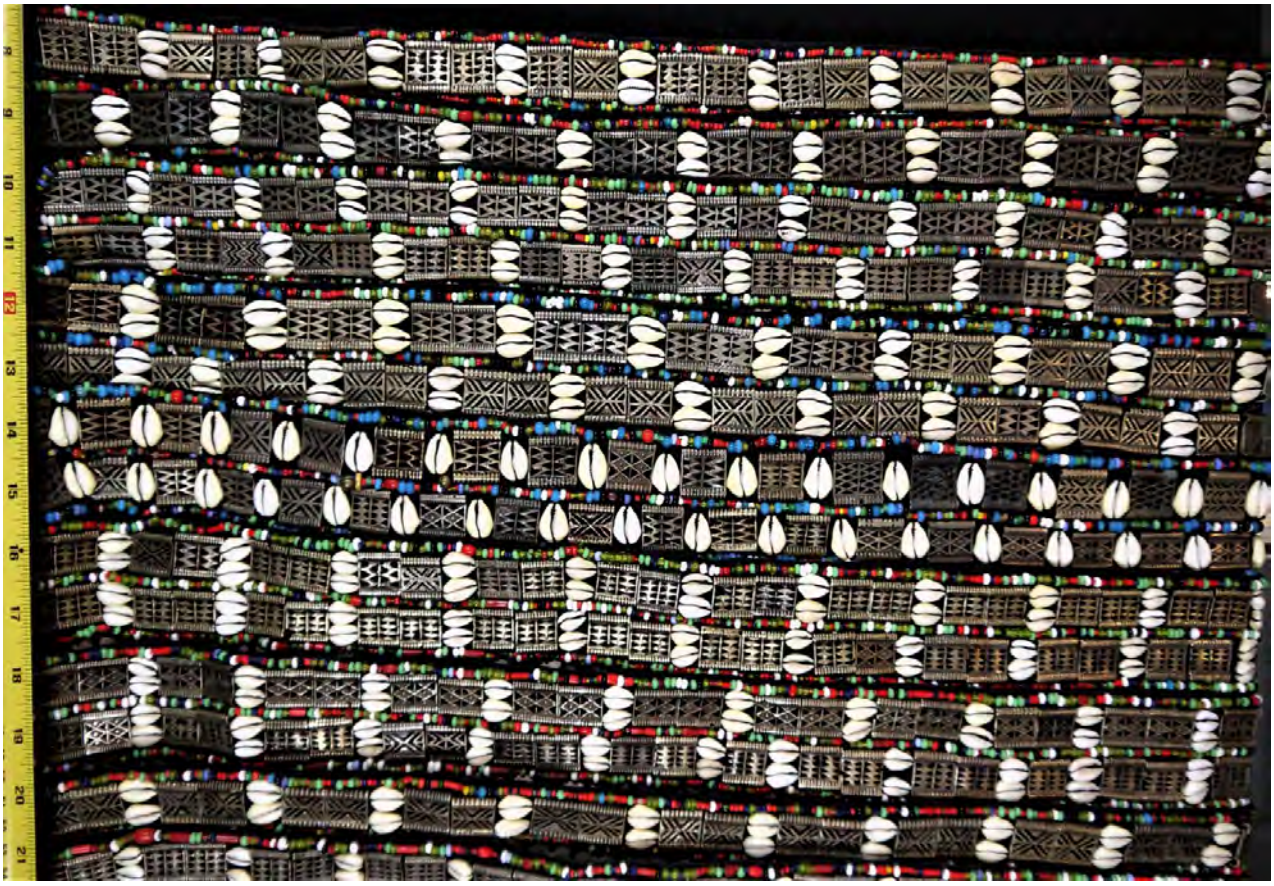


Fig. 6 - Pair of ceramic bivalve casting moulds (M174:2,3) from burial M174 at the site of Yuanlongpo (Wuming, Guangxi Province). (After GXZWG et al. 1988a: fig. 29).

Fig. 7 - Drawing of the ceramic bivalve casting moulds M174:2,3. (After GXZWG et al. 1988a: fig. 31).

Above: Mould, first millennium BC from: Rethinking Yuanlongpo, The Case for Technological Links between the Lingnan (PRC) and Central Thailand in the Bronze Age by Roberto Ciarla, 2007



Above are some of the Chin belts we purchased directly from the Burmese Haka Chin in 1991. It is purely speculation on our part, but we believe that originally, belts or necklaces would comprise pieces of the same design. This could well have denoted to which clan the member belonged. Later, we show images of Haka Chin ladies wearing belts in the late 1890s and early 1900s. Did this result from ancient habits denoting female ancestral lines? We note from early Chin marriage rituals indicating the bride was held in great esteem regarding dowry. See the earlier excerpts from 'Handbook on the Haka Chin Customs' by W. R. Head, Provincial Civil Service and Late Assistant Superintendent, Chin Hills, Burma 1917.

Important jewellery from Mycenaean 'Royal' tombs

Above are Mycenaean necklaces and beads from Shaft Graves Y and Ξ (Xi) of Grave Circle B, c. 1600-1500 BC. (Images on right: National Archaeological Museum, Athens with Chin bronze for comparison). Of Grave Y Upsilon: 'A great number of small beads made of semi-precious stones, of gold, and of silver, and some amulet of faience, similar in decoration and shape to the one found in Grave Xi, formed a large double necklace around her neck.' Ancient Mycenae the Capital City of Agamemnon by George Mylonas 1957.

J. G. Velsink 2011 states that the faience beads measure 27mm x 18mm. The Chin pieces are 20mm x 18mm and appear to contain much greater detail within smaller dimensions. The similarities between the Chin and Mycenaean pieces raises the question as to whether the design was influenced by trade or earlier memories such as the designs found on the 6th millennium BC Stentinello pottery which we cover later. Main image source: https://www.flickr.com/photos/101561334@N08/27845795233/in/album-72157671355159455/

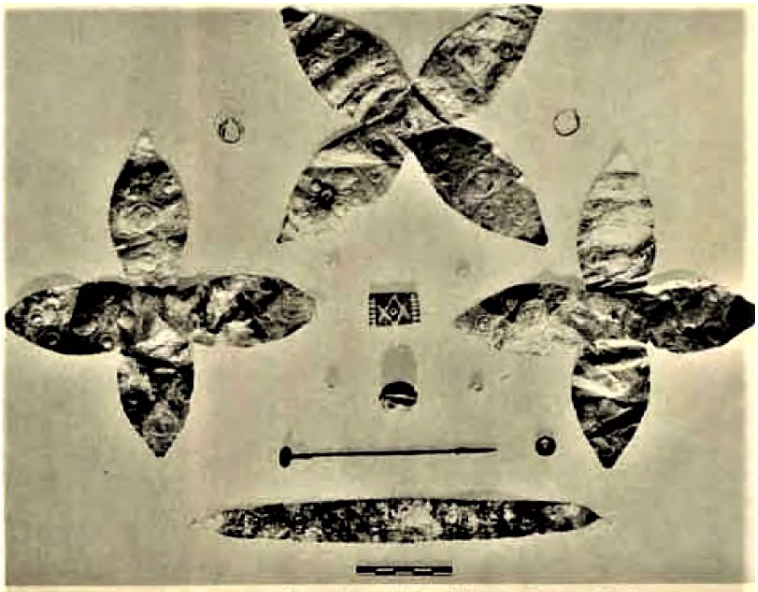
> As for the faience from Grave Circle B, this consists of half a dozen spacer beads from Graves Xi and Upsilon and a cup from Grave Alpha. The beads are all blue green rectangular pieces, each with a relief design of two intersecting triangles forming a lozenge that frames a raised dot.4 Both of the beads' short ends are perforated, and they are set off from the rest of the relief pattern by ribbed borders. Since there are no Minoan counterparts for this sort of faience bead design, I wonder if these beads might not be among the earliest products of a Mycenaean faience industry.
>
> 4 Mylonas, Kyklos B', pls. 159 a center and 209 b center; one of these beads is shown in Mylonas, Ancient Mycenae: The Capital City of Agamemnon (Princeton, 1957), fig. 63.
>
> Faience from the Shaft Graves by Karen Polinger Foster, Temple University Aegean Symposium 6 1981.

Note: see next page for fig. 63 as referred to by K. P. Foster.

It will be very interesting if future finds in Asia turn up similar moulds as those pictured in our study. Was the technology locally conjured up or imported? The following concerns Myenaean moulds and refers to the previous 'eye' lozenge pendants:

> This, again, is a sign of further technical improvement, but a first stage has been achieved as early as the shaft grave period, preliminary to its standardization during the subsequent phases, since the few identical faience relief beads found in the grave circles (71; E-241, Y-243/245) were obviously manufactured by pouring into the cavity of a mould52
>
> 52 About the casting of faience beads and trinkets in moulds, see K. P. Foster, Aegean Faience of the Bronze Age, New Haven and London 1979, pp. 6-7 and 120-121.
>
> Material and Craftsmanship in the Mycenae Shaft Graves: Imports vs Local Production by Robert Laffineur, PASP Conference Thalassa II. Trade With and Within Mycenaean Palatial Civilization; 1600-1200 B.c., 1991.

Mylonas says of the 5 year old in Grave Xi (Ξ): 'Around her neck was found a necklace made of rock crystal beads with a rectangular pendant of bluish faience decorated with lozenge-shaped elements, reminiscent of the Masonic emblem, and parallel small bars along its short edges (Fig. 63).' Images below from Mylonas 1957 including fig. 63 - the faience bead and graves Y and Xi.



63. Gold ornaments from Grave Xi. Scale in centimeters : 0.05 m.

82. Contents of Grave Upsilon. Scale in centimeters : 0.50 m.

62. Contents of Grave Xi, the Grave of the Little Princess. Scale in centimeters: 0.50 m.

With reference to the pendants and faience beads shown on the preceding pages, we quote from sources which denote the importance of these graves and the high status of the individuals buried there. The two graves are Y and Ξ (Xi).

> Grave Ypsilon, also in the south, was certainly that of a woman. It had been badly damaged, partly, it seems, by the construction of Grave Rho, for its north wall, of mud-bricks, was also the south wall of the Grave Rho cutting. Its other walls had been largely destroyed, but may have been of stone, since many stones were found in the grave: these could also have formed a marker on the surface, but it is perhaps unlikely that they should have got so deep into the grave. The dead woman was only about thirty, and was dressed in all her finery. She wore a gold head-dress made up of two leaf-shaped plates, held by a head-band with curved top: all were decorated with repousse bosses and dots, one had silver circlets for earrings, and a double necklace of semi-precious stones, with four faience beads and a pendant of dark brown stone as the centrepiece. Another gold band was found by her shoulder; Mylonas has suggested that it was used to braid her hair. Nine vases were placed around her: six were stemmed goblets, of which one was Grey Minyan with true rings on the stem, while the rest, in various shades, had incised rings. Two were Matt-Painted jars and one was a fine small Matt Painted askos. By the smaller jar, at her right shoulder, were three bronze rings and a fine series of pins, one of silver, three of bronze. Of the bronze ones, one had a flat oval head with five holes, set in the shape of a cross, and another had an obliquely grooved head of rock crystal. This fine array of jewellery may be shown to have MH ancestors, with the exception of the head-dress: but no MH woman's burial was so richly provided.
>
> This grave is closely connected by its contents to Grave Xi, at the north end of the circle. This was much the same size as Ypsilon, and seems to have had a pile of stones as a marker on top. In one corner, there were the heaped bones of an adult, a woman according to Mylonas, while in the centre was the extended skeleton of a small girl. The adult had no goods, and had originally been buried in a contracted position: it may have belonged to an earlier grave, completely destroyed in the construction of Grave Xi, but it might also have been that of a slave, sacrificed to accompany the child and buried in this position.

The child wore an elaborate head-dress of gold leaves with pendant strings of semi-precious stones, a necklace of stone beads with one faience bead of exactly the same type as those in Ypsilon, and two hair-ornaments, a finger-ring and earrings of gold wire. A round grooved gold object may be a rattle or the head of a pin. The head-dress was more elaborate than that of Ypsilon, consisting of three rosettes, made up of two double-leaf plates, held in place by bronze pins, a head-band of long oval shape, and semicircular strings of beads pendent by the temples, Several vases were grouped around the child's body, including ring-stemmed goblets, one of Grey Minyan but with incised rings, jugs, a fine Katt-Painted kantharos and a plain askos. These goods, especially the head-dress, suggest that the child came from a family of considerable importance.
The Origins and Development of Mycenaean Culture by O. T. P. K. Dickinson Pembroke College Oxford 1970

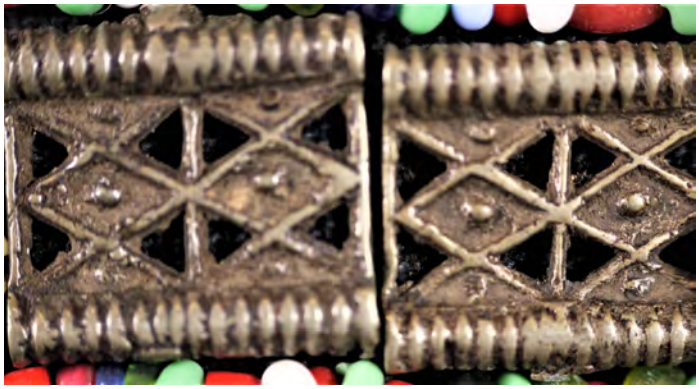
Some jewellery items found in female burials represent rare types which are only known from the richest burials of the Grave Circles at Mycenae. Sometimes these objects find their parallels in child burials: Cross-shaped gold leaves adorning the hair and a Minoan import faience relief-pendant from the burial of an adult woman in grave Y were also found in the burial of a c. 5 years old child in grave Ξ,31 who on the basis of the accompanying jewellery can also be identified as female.....As female-related jewellery turn up more frequently from 5-6 years of age onwards, we can consider this age when the female identity became increasingly expressed in the mortuary sphere at least, and among the elite of the society.

31 MYLONAS (supra n. 10), Y - 438, Y- 243-245, Πιν. 207γ, 209β, 210α; Ξ –401-403, Ξ - 241, Πιν. 159α,β.

Constructions of Gendered Identity through Jewellery in Early Mycenaean Greece by Judit Haas-Lebegyev, KOSMOS: Jewellery, Adornment and Textiles in the Aegean Bronze Age, Proceedings of the 13th International Aegean Conference 2010.

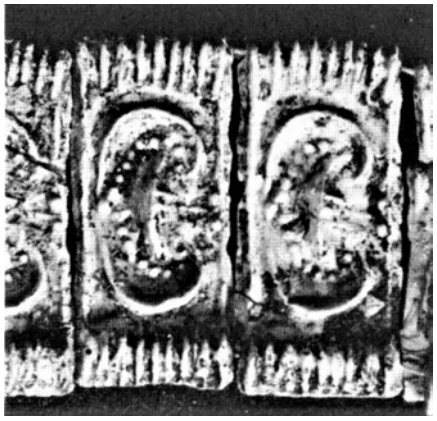
The manufacturing process involved in the manufacture of the Mycenaean pendants and beads may well have been similar to that used to fashion the Shang Dynasty dagger shown below.

Above: bronze dagger engraved with a double-headed centipede, a product of Shang Dynasty c. 1200 BC, unearthed in 1964 from Shaanxi Province. https://www.viewofchina.com/bronze-technology/



Above: Chin bronze pieces with similar design to the Shang dagger shown top. Note the image on the right is from a different piece which is pictured alongside the Mycenaean pendants (shown previously).

Above: Granite jewelry mold from Mycenae 13th Century BC, discovered by Heinrich Schliemann. H. Schliemann, Mycenae and Tiryns, New York, 1877, Fig. 162. Image: Museum of Fine Arts, Boston.



Above we show a Mycenaean Necklace with individual beads measuring 2.8cm x 1.2cm from 'An Unreported Use For Some Mycenaean Glass Paste Beads' by Nicholas Yalouris Journal of Glass Studies, 1968, Vol. 10 (1968), pp. 9-16. As will be noticed on the Chin bronze pieces, the construction of the ribbed, convex parts used for threading, can be varied.

According to Eleni Konstantinidi-Syvridi, Mycenaean jewellery moulds are relatively rare (Casting Finger Rings in Mycenaean Times: Two Unpublished Moulds at the National Archaeological Museum, Athens 2009). Therefore, we are pleased to have found a mould that could cast similar items as the Chin bronze belt pieces.

Above: Mycenaean beads with different, thicker convex spiral threads . Nicholas Yalouris 1968 (ibid).

Above: two Mycenaean-style necklaces from Ialysos. Late Helladic 1400-1300 BC. The British Museum

We speculate later in our study as to how the bronze pieces may have been worn. One of our ideas was that they were sewn onto clothing. Our thoughts may well coincide with a reconstruction of a dress worn by a high-status lady from Grave 110 discovered at the Franzhausen 1 burial ground in Austria and dated c. 2000 BC. The dress was decorated with bronze pieces and described thus:

> The upper part of the reconstructed dress was embellished with replicas of the decorative elements known from the grave. These consisted of sheet bronze plaques with curled ends, which are easy to fasten. In the grave, these items are situated in a row on the neckline area (Fig. 4). As they were placed in a curved line, we arranged the neckline of the dress in a similar way.
> Visuality – Movement – Performance. The costume of a rich woman from Franzhausen in Austria, c. 2000 BC by Karina Grömer and Lise Bender Jørgensen in: Vetus textrinum: textiles in the ancient world: studies in honour of Carmen Alfaro Giner, 2018

Fig. 4: Arrangement of the ornaments in the chest region in in the archaeological evidence (left) and reconstruction (right) (Photo: A. Schumacher, NHM; graph: after Neugebauer and Neugebauer 1997, Taf. 41).

Above top: Detail showing similar hollow rolled spirals as used by the Chin bronzes. From: Visuality – Movement – Performance. The costume of a rich woman from Franzhausen in Austria, c. 2000 BC by Karina Grömer and Lise Bender Jørgensen 2018

Below: Skeleton from Grave 110. Image: Niederösterreichischen Nachrichten. www.noen.at

Later in this study we will investigate the Chin belts in greater depth. For now we would like to show that the method of fastening the pieces together to form for example a belt (see the Fu Hao kneeling man jade) was extant in the second millennium BC - from the Lower Xiajiadian Culture to the Mycenaens.

Above: Lower Xiajiadian work 2200-1600 BC（夏家店文化青铜器 青铜管珠 出土文物【商品保真 三包到代】www.book.kongfz.com. Chin bronze piece 22mm x 22mm

Above: Mycenaen-style jewellery, 14th to 13th Century BC. Threaded as ordinary beads, sewn to cloth or leather, or used in diadems, these objects imitated gold ornaments and were often even made in the same molds. The Israel Museum, Jerusalem. https://www.imj.org.il/en/collections/372050

The importance of quartz placed in ancient graves

We have remarked on the importation of special quartz from The Alps to Stonehenge, and later will provide evidence of this from Qijia burials in China. We are particularly interested in the quartz aspect due to the similarity with the quartz-like state of the silicifed wood used to fashion the Chin beads. Here we remark on this practice in Beaker graves in Argyllshire, Scotland.

> Amongst the dark matter and burnt bones were great numbers of broken quartz pebbles,[1]
>
> [1] The number of quartz pebbles purposely broken was very great in this cist. The same has occurred elsewhere. They must have been placed there with some intention, and probably possessed a symbolic meaning. In other districts flint chippings are the usual accompaniments of interments, and it is possible that the flints and quartz pebbles had the same significance.
>
> Greenwell, W. (1865). An Account of Excavations in Cairns near Crinan. Proceedings of the Society of Antiquaries of Scotland, 6, 336-351.

Please see later in our study an excellent article entitled: The Specific Selection of Stone in Prehistory: (Article: By A. Whitaker.2011) http://www.ancient-wisdom.com/selectivity.htm

A brief introduction to the beads: holes, drilling and material

We shall go into much greater detail regarding the beads' designs, material and manufacture later in our study. For now, we produce some images of the beads which give an idea of what they consist and for bead experts to quickly examine for authenticity. Not all the beads could have been produced at the same time and different methods were used in drilling; pecking, stone implements on some and possibly copper tubing on others, both methods using a fine abrasive harder than the Mohs 7 of the silicified araucarioxylon species selected for the beads.

Surmising that the Chin/Qiang beads are contemporaries of the Indus Valley bead-making process we quote the following excerpts from Bead Making in Ancient Sind by Ernest Mackay, Journal of the American Oriental Society, Vol. 57, No. 1 (Mar., 1937), pp. 1-15:

> Each end of the bead was then prepared for boring by first roughening its centre so that the drill should not slip. It is not quite certain with what kind of tool this was done, but certain ribbon-flakes terminating in a point (P1. II 1-3)11 were, I think, used for this purpose..... That stone and not metal drills were used in boring the hard-stone beads of Chanhu-daro is now proved by a large number of stone drills being found there.... The business end of these stone drills is rounded, with a slight depression in the centre. A micro-photograph (P1. III 8) of the end of one (greatest diameter 0.12 in.) clearly shows the concentric markings formed by an abrasive in its rotation against a hard substance, or, alternatively, the rotation of a hard stone against it..... It might not at first appear possible to use so brittle a drill with the hardness of 7 against a material of similar hardness, such as agate or carnelian. By itself the drill would have made little or no impression on these stones, but the use of a fine abrasive with it, such as emery or crushed quartz, would entirely alter matters.... Every hard stone bead, of whatever size or shape, was bored from both ends so that the drill-holes met in the middle or thereabouts.The holes are never of the same diameter throughout, but definitely narrow from the ends towards the middle owing to a certain amount of play either on the part of the bead or of the drill as the boring proceeded

The 2005 study by P. J. Lu et al, 'The Earliest Use of Corundum and Diamond in Prehistoric China' concluded that corundum was used as an abrasive on polished axes c. 4000-3500 BC and that diamond was used to polish corundum axes c. 2500 BC. Both abrasives (Mohs 9 and 10) could have easily worked the bead material. We reproduce excerpts from this study later.

It is apparent from the following that there is a scarcity of hard evidence reference stone beads' manufacture and materials as of 2017:

> This paper discusses the characteristics of stone beads of the Urban Indus period from the Ghaggar plain based on the evidence from Farmana and Mitathal. Our understanding of the stone beads of the Indus period have been so far limited to the samples from Harappa in Punjab, Pakistan, on which tremendous studies have been made by J. M. Kenoyer (Kenoyer 1991a, 1997, 2005). Needless to say, the site of Harappa is one of the most important urban centres of the Indus Valley Civilization and the evidence from this site have provided significant information for our understanding of the stone beads of the civilization. However, the holistic understanding of the stone beads of the urban society must include more evidence from other sites including minor urban centres and villages as well. The lack of basic information such as how many beads of what kind of forms and materials have been found at each site in the present state of our knowledge on stone beads still makes it difficult to understand the production and distribution system of stone beads during the Indus period and the stylistic and technological aspects of stone beads through time and across space.
> Indus Stone Beads in the Ghaggar Plain with a Focus on the Evidence from Farmana and Mitathal by Akinori Uesugi, Manmohan Kumar and Vivek Dangi 2017

To the best of our knowledge the majority of the Chin beads are made from Triassic-age 225mya silicified araucarioxylon wood. None of the other ancient beads we have come across have been made from this material. Why not use ordinary quartz, which is plentiful in China? As we explain in our study, the Qiang had, and still have to this day, a particular bond with 'white quartz' linking it to ancient religious and symbolic memories. The beads material had to be made from silicified wood and be white in colour.

Of the 1543 beads in our collection, only three are broken. Here we show examples of some complete beads and broken beads to establish that we are not dealing with modern reproductions but ancient beads. The broken round bead appears to be pecked and stone drilled, whilst the square bead appears to be drilled by copper tubing and abrasive. Round: 13mm dia. Square: 20mm x 20mm.

7b
Micrograph of the side walls of a Group 2 seal, showing the characteristic concentric lines.

Above is a compilation by the authors showing an image from The Change From Stone Drills To Copper Drills In Mesopotamia by A. John Gwinnett and Leonard Gorelick 1987 alongside a close-up of the broken Chin square bead.

Here we show close up of very rare authentic ancient beads with extraordinary designs. The lozenge symbol would appear to be three 'eye' bead designs. Some of the beads have three different 'eye' designs (shown here) and could possibly represent an ancient 'three-eyed' god. Both holes are shown. Beads 13mm dia.





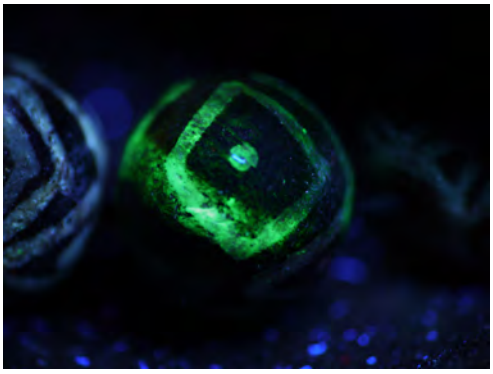
Diversifying for the moment, the pot above is from grave 733 Cemetery N, Aniba, Egypt and dated 2160-1985 BC. Image adapted from: 'The C-Group people in Lower Nubia, 2500 - 1500 BCE. Cattle pastoralists in a multicultural setting' by Henriette Hafsaas 2006. This artifact and its portrayal of different 'eyes' bears a remarkable similarity to the Chin 'eye' bead shown immediately above the Nubian pot. We show many more examples later.

More images of Chin beads showing wear and tear, the green fluorescence is the bead under shortwave light 254nm. Size of beads 13mm. Not all beads fluoresce but would appear to be of the same age.

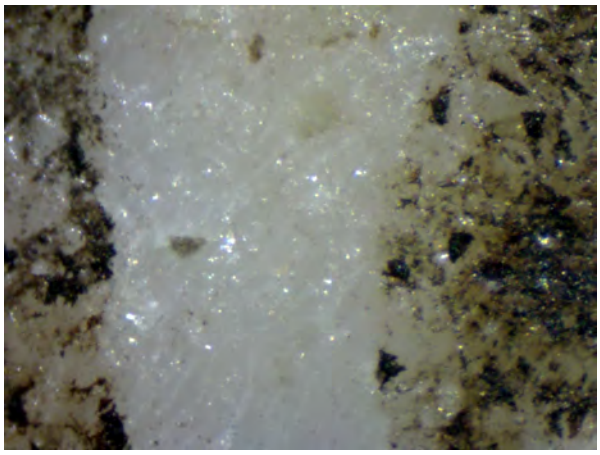
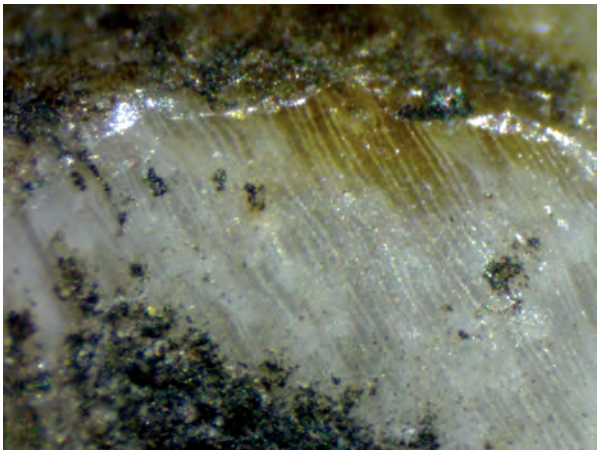
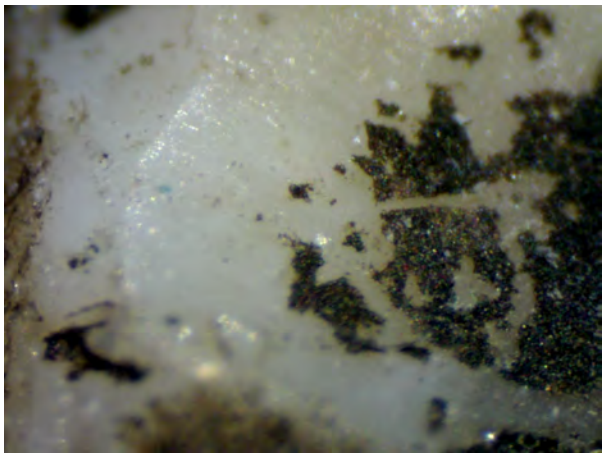
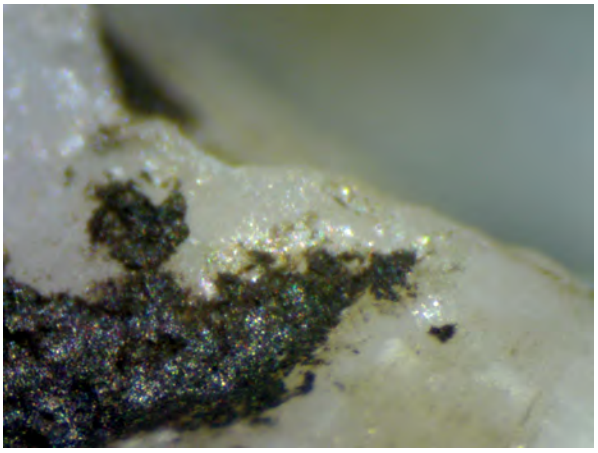


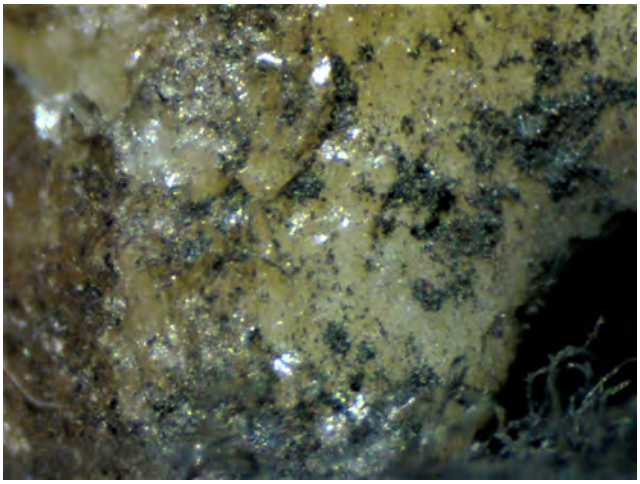




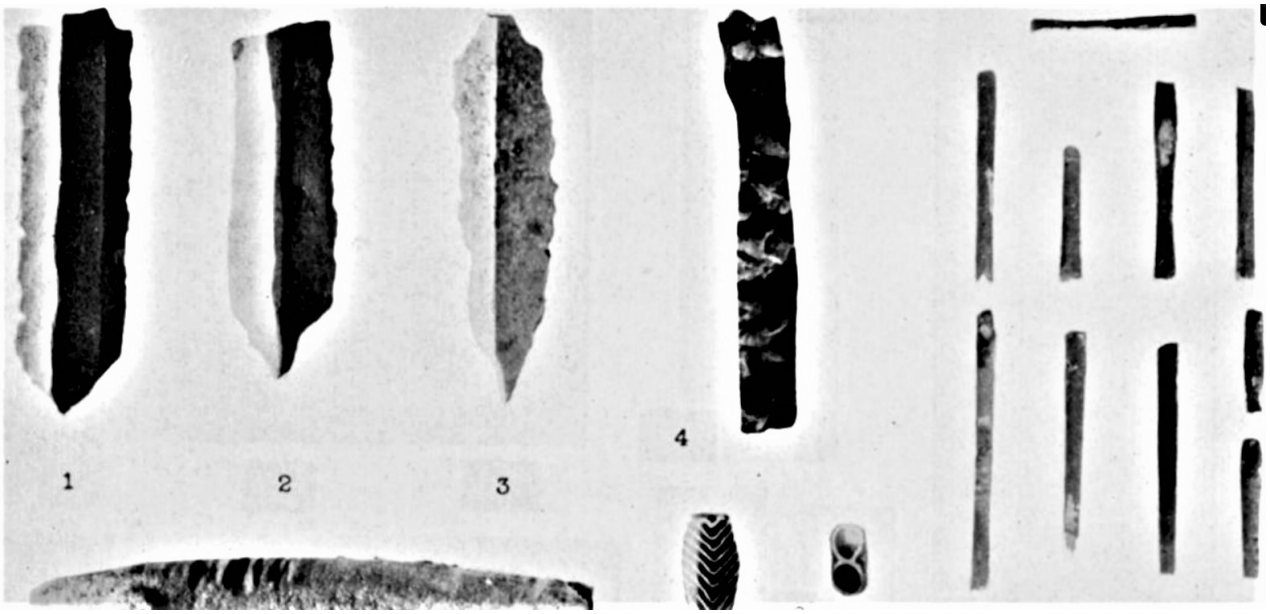



From a distance the beads could appear to be of any age, and it is only with close-up images that the wear and tear shows. We show some examples of this below (40x magnification).

Some of the tools from the Indus similar to those that may have been used to make the Chin beads.



Above: tools as referred to by Ernest Mackay in previously quoted remarks.

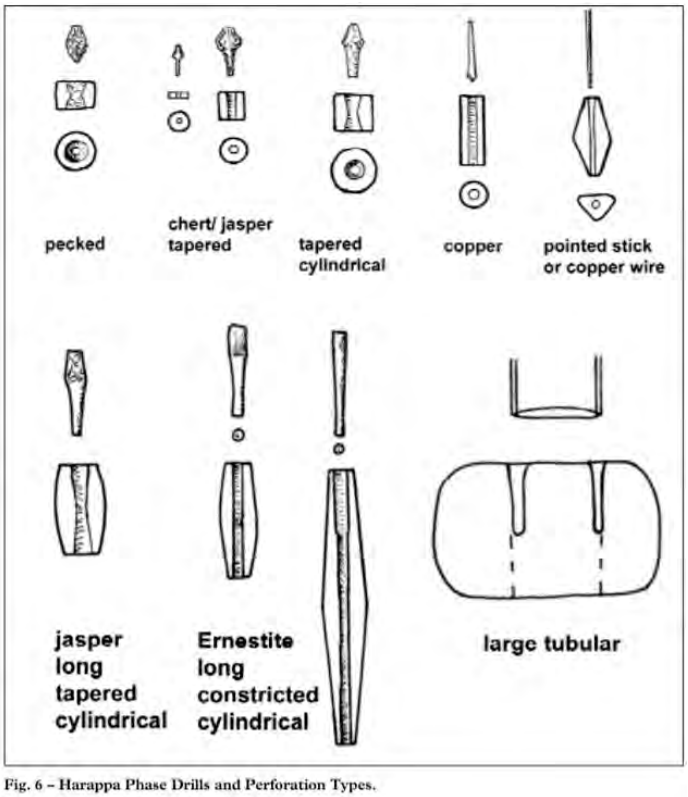
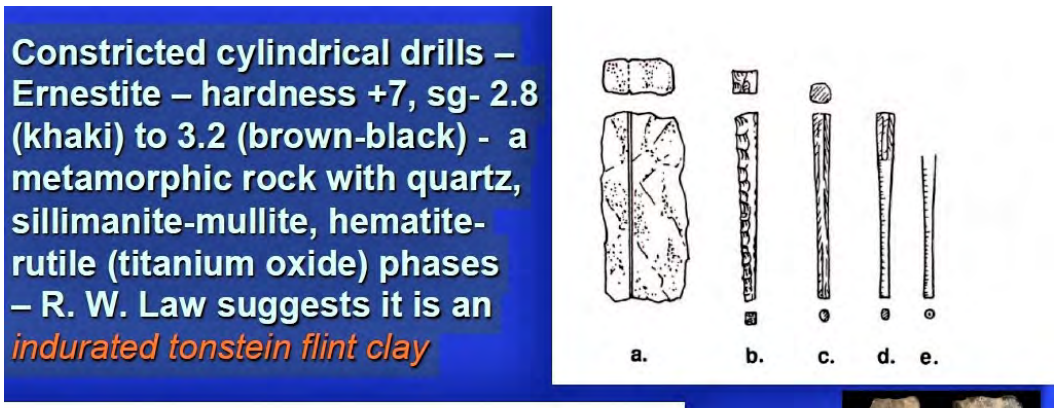


Fig. 6 – Harappa Phase Drills and Perforation Types.

Above: Harappan Phase tools 2600-1900 BC. From: Bead Technologies at Harappa, 3300-1900 BC: A Comparative Summary by Jonathan Mark Kenoyer 2006

More images of ancient bead-making tools. Source: https://www.tifr.res.in/~archaeo/FOP/FOP%20pdf%20of%20ppt/Kenoyer%20Harappa%20Mangalore%202a.pdf



The Northeast route from Southeast Anatolia to China

An intriguing link on this journey is the emergence of strong data linking the M84 haplogroup, which originated in the Levant, MRCA dated c 7300 ybp, with today's Burmese Chin and Southwest Chinese populations. This will be fully explored later.

The map below to which Lord Renfrew is indicating, with route 2 branching northeastward of Mehrgarh, is the route which we followed, discovering the symbols as we went (Figure 4). The other routes indicated, into Europe and along North Africa, are also routes along which we could trace the symbols, to Britain and the Maghreb.

Figure 4. Colin Renfrew presenting at the Conference 8th November 2017 at the Oriental Institute, University of Chicago.
https://www.youtube.com/watch?v=pmv3J55bdZc

Colin Renfrew previously spoke on the ‘Unsolved Mysteries of the Silk Road at the Silk Road Symposium’ held at the Penn Museum in March 2011. Among the many topics he discussed was the important point concerning the population of the Tarim Basin. Although the 'mummies' are dated to c. 1800 BC, he said that did not mean the people had not settled there many thousands of years previously. Although there had been great advances in molecular genetic results concerning ancient DNA, it is not clear when events took place. Indeed, the Silk Road may have had similar languages to Tocharian along its length, possibly as far as Bactria/Margiana.

Renfrew referenced the Y chromosome, and the Western features on the mummies in Xingiang dated c. 2000 BC. This did not mean than they had just swept in but may have been there for thousands of years before the admixture. So far, only graves had been discovered, and until the settlements are found there will be large gaps in the knowledge. In the summing up section he said that it is inconceivable that there was not a continuous population in Xingiang for many thousands of years before 2000 BC and that there is an urgent need to look in depth in the foothills for evidence of earlier habitation - where the pre-Xiaohe population must have existed.

These comments encourage our theory that Proto-Indo-Europeans (PIE) arrived in the Tarim Basin possibly by 4000 BC, not necessarily settling there, but passing through on a journey eastward. This may explain the complex symbols appearing on Hongshan and Daxi artifacts. An easier route for them was south of the Qilian Mountains along the rivers. It is important to note that jade artifacts are dated from 3500 BC in the Hongshan culture (E. Childs Johnson 1991). Sidney Howard Hansford firmly believed that the jade came from Khotan. This indicates a southerly Silk Road route existing from at least 3500 BC and may account for the PIE symbols on the Hongshan ceramic at this early age. It must also be remembered that jade ornaments were being made during the Xinglongwa culture (6200–5400 BC) long before this. We produce many examples of this later in the study (figures 1103-1115).

There are many anomalies concerning ancient links between the West and China. One of these concerns the fact that c. 5000 BC millet was being cultivated in the West and in China at the same time. This could be due to independent cultivation, but the matter is unclear. Wheat was not cultivated in China until about 2500 BC. Renfrew suggested that wheat might have been brought eastwards along the Silk Road by the Tocharians. The wheat in question, red wheat, originated in the West.

This suggests that PIE, for example the proto-Tocharians, may have arrived in China

c. 5000 BC, although Renfrew does not think this likely. Note: domesticated grains have not been documented in Inner Asia before 2500 BC. Our study shows that complex symbols, evolving in the Southeast Anatolia/Levant area 10000–6000 BC, were evident in the Hongshan (4700–2900 BC) and Daxi (5000–3300 BC) cultures. We also follow an almost identical route for the Silk Road (but via Mehrgarh), using archaeological discoveries displaying the same symbols along its length, from the Levant to China. Renfrew mentioned Victor Sarianidi in connection with Bactria/Margiana and we present many examples of the symbols in Sarianidi's works. He also mentioned the work of Lu Enguo in Xingiang, and we explore this work in depth.

Opinions on DNA studies are constantly changing, with even the authors of previous PIE DNA studies changing their minds a few years later. For a quick update on what is what in this area, a good website is: https://indoeuropean.eu/author/admin/ which is run by Carlos Quiles.

There were many distinguished figures in the PIE sphere at the Symposium. One of them was J.P. Mallory, who said that in order for the Tocharians to have appeared in the Tarim Basin they would either a) be geographically remote from the Indo-Iranians of the steppe, or b) must be temporally remote from them, i.e. have been there a lot earlier.

From the abundance of pottery bearing the symbols on recovered items from the Majaiyao culture, especially the Machang phase c. 2300 BC, it is quite conceivable that the Qiang journeyed through the Tarim Basin into Qinghai and thence Gansu. But did they first journey on eastwards towards Liaoning, along the jade route?

The unanswered aspect to all this is that the symbols appeared in the Liaoning area, in particular the Chifeng district, during the Hongshan culture of 4700–2900 BC, unless of course, the PIE followed a well-known route which already supplied the Hongshan jade industry.

Even more puzzling is the fact that the Three Gorges area of the Yangtze River, many hundreds of kms from the Tarim and Liaoning, produced items during the Daxi culture of 5000–3300 BC. Unfortunately, the site of Daxi was destroyed when the dam was built, but artifacts in the Three Gorges Museum can be used as typology for the special item we present with two important symbols from SE Anatolia/Levant, both of which evolved 10000–6000 BC. Jianli county in southern Hubei province, not far from the Three Gorges, produced another artifact remarkably similar to the symbols c. 3000 BC. This is shown later in our study.

We also note that the pre-Daxi Tangjiagang site c. 4400 BC produced pottery with an image remarkably similar to that shown on the Chin square beads and also found on Korean Neolithic comb pottery (see figures 34a-b).

Looked at in a chronological manner, it would appear that the original wave of PIE journeyed on towards Liaoning, and backward movements over many hundreds of years - westwards towards Qinghai and southwards to the Yangtze River - where the symbols are found on pottery and stamps in cultures from Hongshan to Han.

In the book, "Chinese Jade Carving", written by the world-renowned jade scholar, Prof. S. Howard Hansford in 1950 he expressed his opinion regarding the earliest emergence of Hetian jade (Khotan jade) in China at the end of Chapter III - Sources of Supply of the Jade Stone, p.56 as follows:

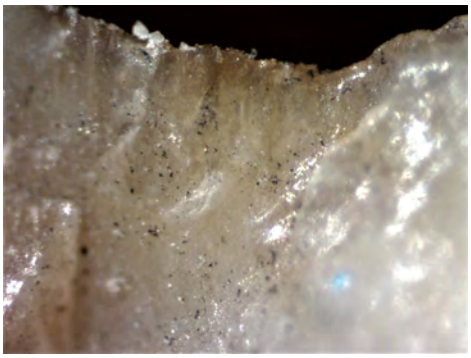
> In the light of all these considerations I feel that the weight of evidence is now in favour of Khotan being regarded as the source of the material of the most ancient Chinese jade carvings. There is a passage in the Book of History (Yu kung, Tribute of Yu), in which certain gem stones, believed to include jade, are mentioned as articles of tribute from Yung Chou. This is given as the name of a province of the kingdom of the Great Yu, founder of the legendary Hsia Dynasty, and is supposed to have corresponded to modern Shensi and parts of Kan-su. The passage has been adduced as testimony that these provinces were actually sources of production of jade. I believe they acquired this reputation just as Yun-nan did in recent times, and that they were merely the channel through which Khotan jade entered China in the course of a trade carried on from immemorial ages along the fringe of the Taklamakan Desert and through the Kan-su corridor.

Note: Quartz was often used as a Jade simulant in China in ancient times. 'Archaic jades' or 'guyu¨' - Margaret Sax, 'The identification of carving techniques on Chinese jade' (2003); 'The ancients did not make fine distinctions between true jade and its simulants' - The National Palace Museum, Taiwan. These comments will be expanded on later.

For an example of chalcedony used as a jade simulant excavated from Xinglongwa culture grave 'Tomb 108' see figure 1106 and associated text, comparing with the almost identical-looking silicified wood material, from which Chin beads are made, shown in figure 1107. 兴隆洼遗址是内蒙古及东北，距今约8000年. The site of Xinglongtun is found at Chifeng, Inner Mongolia and Northeast China, and dated c. 6000 BC.

The difference between Kunlun and Hetian jades

We investigate jades and their simulants in ancient China in greater depth later. Here we show two types of jade and compare them with the material - Triassic-age 225mya araucarioxylon silicified wood which were used to make the Chin beads.



Top: Hetian White & Green Jade, Ziyu, Xinjiang.

Bottom: Kunlun jade, Qinghai, Kunlun Mountains. Jade gallery, Henan Provincial Museum, Zhengzhou.

Images: https://www.flickr.com/photos/101561334@N08/10335124444/in/album-72157636655790555/
Images on the right are from Chin beads at 40x magnification.

Opening Points of Interest

We propose that we have six major supports to our theory of:
'Proto-Indo-Europeans > Qiang > Haka Chin.' with the first wave of Proto-Indo-Europeans arriving in China between 4000–3500 BC.

*Firstly, the legends of the 'Bead Goddess' and the white stone quartz worship
*Secondly, the oracle bones references to the Qiang and other written records (OBI PIE symbols section)
*Thirdly, the physical evidence in the form of the beads and the bronze belts.
*Fourthly, the science supported by DNA studies, referencing in particular the E-M84 haplogroup, originating in the Levant and found in the Chin population of Myanmar as well as Southwestern China.
*Fifthly, the vast numbers of the complex symbols found on pottery, stamp seals, bronze and other objects dated 10,000 –6000 BC from SE Anatolia/The Levant, traced through to Liaoning c. 3500 BC. Coincidentally, the symbols also reach the British Isles by 3000 BC with the symbols in many cultures including Cucuteni, LBK and Beaker. Also found with the Berber population, so powerful were their original meanings that they are universally recognized symbols of today, having spread world-wide.
*Sixthly, the combination of archaeology, typology, anthropology and science - all of which point to the beads - based on PIE images, being manufactured c. 2300 BC during the Machang phase of the Majiayao culture in China, and the bronze pieces produced later than this.

Here we present three quotes concerning the Qiang/Ch'iang movements:

> The presence of Qiang to the west beyond today's Qinghai and Gansu is sometimes overlooked in histories of the Xinjiang region. However, this chapter has fifteen Qiang references and indicates a 'Qiang route' from west of the Karakoram range over to the Kunlun, Altun and Qilian ranges and into Qinghai and western Gansu. Source: QIANG 羌 References in the Book of Han 汉 书 Part 2 (Chapter 79 to Chapter 99) by Rachel Meakin, 'Chapter 96: The Biography of the Western Regions (西域传第六十六)

It is probable that the early Ch'iang were not Tibeto- Burman speakers (as widely believed), but Indo-Europeans, and Chiang Yüan belonged to a clan that was Indo-European in origin. The Central Eurasian myth about her and her son, the ancestor of the Chou line, is thus not surprising after all.
Christopher I. Beckwith, Empires of the Silk Road, A History of Central Eurasia from the Bronze Age to the Present, 2009

At the legendary time when the Qiang people moved into Sichuan from Tibet, they placed white stones on every hilltop and crossroads, for they did not want to forget the route leading back to their original homeland. These piles of white stones also acts as a token of their affection for their homeland and the people they left behind at the same time. Upon arriving at the territory of the local Geji people, the Qiang fought a losing battle. Jirpol, witnessing the condition that they were in, instructed the Qiang to find a strong white stone and attach it to rattan sticks and fight with this weapon, tying some sheep wool to the neck of the stick as well. Victory was on their side, and the Qiangs began to look upon the white stones as gods to be worshipped.
羌戈大战 Gorkey Qiang Wars (geji): Legend of the WhiteStones
http://www.statemaster.com/encyclopedia/Qiang

We will explore how the oracle bone symbol 

became Jinwen 

Which in turn became Xiaoyan 

Finally becoming Jiang in modern Chinese 

Thus indicating why the Jiang clan believe they have a direct link via their ancestors to the ancient Qiang and the Yellow Emperor. Should our theories be correct, they are also linked to the Burmese Chin and their heirlooms and therefore the Proto-Indo-Europeans.

The Qiang's white stones are in fact quartz. The Chin beads are made from white silicified wood which has reached a quartz-like state. Fashioned as weapons the quartz would have been razor-sharp. This indicates the period described predates the Bronze Age, and before the Caucasian Tarim Basin mummies which were dated to at least 1800 BC. Were they therefore part of an incursion into China by Proto-Indo-Europeans? One that is so far unaccounted for along the Khotan - Hongshan jade route.

> 综上所述，我们有理由相信，木姐珠这一创世女神的崇拜的产生与羌族女性中心持续较长时间的社会组织有密切关联。 二、木姐珠崇拜：以女神为中心的偶生始祖崇拜
> 以上从女神崇拜的角度探讨了木姐珠崇拜的诸多问题，但我们细读木姐珠神话，可知木姐珠崇拜又不仅仅是女神崇拜的问题，木姐珠的女神形象是不同于其他民族的创世女神形象的。

The Qiang worship of the 'Beads Goddess' and her association with white quartz stones are fully explored in the study with original Chinese text and rough translation (excerpt shown above).

> Among first farmers, those of the Levant trace ~2/3 of their ancestry to people related to Natufian hunter-gatherers and ~1/3 to people related to Anatolian farmers. Western Iranian first farmers cluster with the likely Mesolithic HotuIIIb individual and more remotely with hunter-gatherers from the southern Caucasus and share alleles at an equal rate with Anatolian and Levantine early farmers highlighting the long-term isolation of western Iran. During subsequent millennia, the early farmer populations of the Near East expanded in all directions and mixed, as we can only model populations of the Chalcolithic and subsequent Bronze Age as having ancestry from two or more sources." Lazaridis et al. 2016, 'The genetic structure of the world's first farmers'

Note: we shall present our case for the spread of farming (and the symbols) due to the collapse of Çatalhöyük c. 5950 BC in later sections.

According to Lazaridis et al. (2016), "a population related to the people of the Iran Chalcolithic contributed ~43% of the ancestry of early Bronze Age populations of the steppe." Also, according to Lazaridis et al. (2016), these Iranian Chalcolithic people were a mixture of "the Neolithic people of Western Iran, the Levant, and Caucasus Hunter Gatherers." They also note that farming spread at two places in the Near East, namely the Levant and Iran, with Iranian people spreading to the Steppe and South Asia.

Marija Gimbutas, in relation to repeated symbols found on cult objects and pottery of Neolithic Europe noted:

> The main themes of the Old European ideology emerged, primarily through analysis of the symbols and images and discovery of their intrinsic order. They represent the grammar and syntax by which an entire constellation of meanings is transmitted. They reveal the basic world-view of Old European (pre-Indo-European) culture. The amazing repetition of symbolic associations through time and in all of Europe on pottery, figurines and other cult objects has convinced me that they are more than "geometric motifs" they must belong to an alphabet of the metaphysical.
> M. Gimbutas, The Language of the Goddess, 1989

Many of the symbols portrayed in Gimbutas' works are shown in our study (also occurring on the Chin beads and bronzes), but with a chronology that places them in Southeast Anatolia/The Levant thousands of years before they appear in 'Old Europe'.

> The earliest kurgans appeared during the 4th millennium BC among the Copper Age peoples of the Caucasus and soon afterward in the south Russian steppe.
> Encyclopedic Dictionary of Archaeology by Barbara Ann Kipfe, 2000

If the Kurgans spread from the Steppe westwards c. 4000 BC, then based on artifact symbols found on pottery, jade etc., it is difficult to imagine them being from the Proto-Indo-European homeland. Surely the symbols which are dated four to six thousand years earlier to the Southeast Anatolian/Levant area, which are found in a decreasing time-line westward across Europe, would have been replaced by Kurgan symbols. Instead, the Anatolian/Levant symbols dominated.

Our study follows the dispersal of farming with emphasis on the complex symbols which evolved in the Levant area from 10,000 BC, incorporated into pottery, paintings, stamp seals, clothing etc. We shall produce a trail of evidence based on archaeological, typological and anthropological discoveries as well as science based upon a new large-scale Chinese DNA study. This, by way of haplogroup M84, links the ancient people of the Levant with the modern Burmese Chin and Southwestern Chinese populations.

This leads us to hypothesize that the symbols were taken by the Proto-Indo-Europeans on their journeys, reaching Britain by 3000 BC and China by 3500 BC. To reach these areas at the pace of a few tens of kilometers per generation, as suggested by Heggarty (2013) the movement of people would have had to commence by 6500 BC. This indicates that the PIE homeland, purely in chronological terms, not involving linguistics, was the SE Anatolia/Levant area, and not the Steppe.

However, there are indications that the symbols played a part in oracle bone inscriptions. For more on this please see figures 525–570. Note: 41,956 images of oracle bone pieces were examined by us on the guoxuedashi.com website.

Despite finding for the Anatolian hypothesis, it is not without its faults. PIE contains reconstructed words for the wheel and wheeled vehicles, which were not invented until long after the agricultural expansion into Europe. We stress that linguistics is not part of our study. However, the following quote is well worth including here (longer excerpts are quoted later) source: http://www.sinoplatonic.org/complete/spp175_chinese_civilization_agriculture.pdf

> Many Old Chinese words have been thought of as coming from the native people, but it has been found that in fact they share common origins with Proto-Indo-European languages. This fact shows us where Huang Di’s nation actually came from.
>
> The Rise of Agricultural Civilization in China by Zhou Jixu 2006

Referring to Rachel Meakin's route for the Qiang into China, we show the possible direction along the South Silk Route (Figure 5). This can be compared with the known Silk Road routes (Figure 7). Some anomalies are the Hongshan ceramic (4700–2900 BC) and the Daxi ceramic (5000–3300 BC) from the Three Gorges area which places the symbols deep inside China at an early age. The Majiayao Culture area from which we find the symbols really start to impact, in particular the Machang phase, is highlighted (Figure 6).

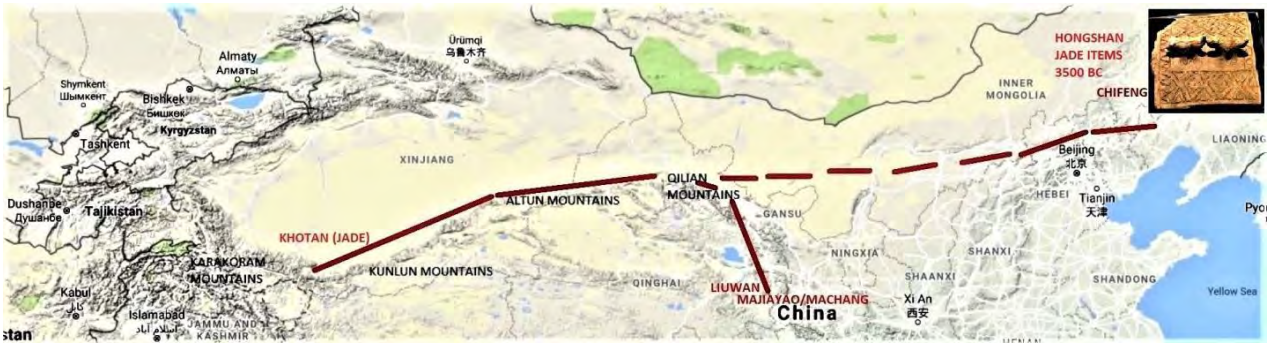


Figure 5. Proposed route of the Proto-Indo-Europeans along the Khotan-Liaoning Jade route. Adapted from Google images: https://www.google.co.uk/maps/place/Kunlun+Mountains

Figure 6: The Majiayao Culture highlighted in red. Adapted from: Pottery Production, Mortuary Practice, and Social Complexity in the Majiayao Culture, NW China (ca.5300–4000 BP) by Ling-yu Hung 2011
NB The Qiang today inhabit the mountains near Maoxian, 130 kms N of Chengdu.

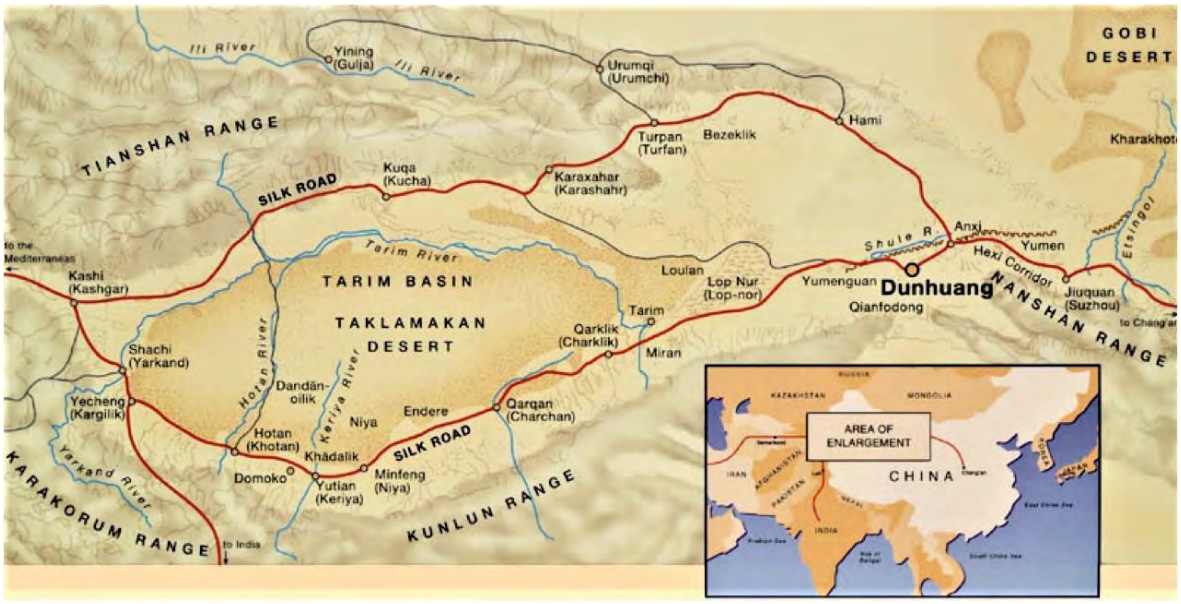


Figure 7. North and South Silk Road routes. https://silkroadtoronto.wordpress.com/silk-road-maps/untitled/

Further to the kneeling man image from Fu Hao's tomb, the symbol is on both the front and back of the piece. As proposed by experts, the figure may represent Fu Hao.

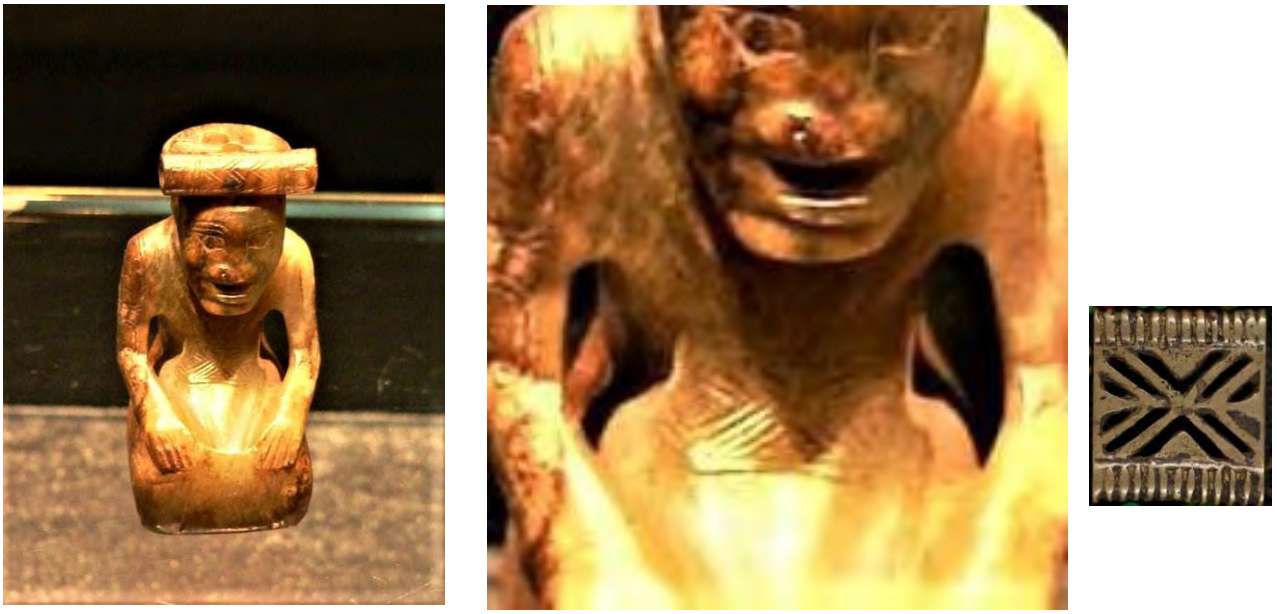


Figure 8.: Fu Hao Jade with Chin bronze piece for comparison, http://blog.sina.com.cn/s/blog_48228d9901000cbi.html:

Figure 9: Clearer images of the symbols on the back of the 7cm Fu Hao jade in comparison with the 'leiwen' image which appears similar to the one on the largest bead in our collection (25mm x 25mm)
http://beadcollector.net/cgi-bin/anyboard.cgi?fvp=/openforum/&cmd=iYz&aK=63443&iZz=63443&gV=0&kQz=&aO=1&i Wz=0

The preceding images indicate that the symbols continue around the waist of the figure. The interesting replica shown below suggests that the artist has a good understanding of the symbol and has replaced the original single symbol on the front with two separate pieces.

Figure 10

Figure 11

Figures 10 and 11. Replica of the Fu Hao figure in the form of a bead. http://beadcollector.net/cgi-bin/anyboard.cgi?fvp=/openforum/&cmd=iYz&aK=63443&iZz=63443&gV=0&kQz=&aO=1&iWz=0

Referring to figures 10 and 11 note the two separate symbols on the front, with bars at the top and bottom, being almost identical to the Chin belt pieces. The separate piece theme extends to the side of the figure. If we removed the cowrie shells on the Chin belt shown below (figure 12) the same effect would be achieved. Note the different patterns on the pieces indicating more than one source of manufacture.

Figure 12. Detail of Chin bronze belt

The following images are from the late nineteenth and early twentieth centuries and depict women from the Burmese Haka Chin wearing the bronze belts similar to that shown on the Fu Hao jade. This would represent a span of some three thousand years. We have no idea when or whether the fashion of the ancient Qiang changed to the predominance of women wearing the belts. Possibly it is a continuance of the matriarchal structure of ancient Qiang society. We expand on this aspect in Part 4 of our study.

Figure 13(a) Chin women wearing bronze belts and pumtek beads, early 1900s: http://folkcostume.blogspot.com/2020/04/overview-of-peoples-and-costumes-of_4.html

The way in which the belts were worn, constantly rubbing against clothing, would account for the extreme wear shown on the belts we obtained in 1991, some of which are shown in this study.

Figure 13(b): detail shows Chin woman wearing bronze belts and pumtek necklace, as well as another person wearing pumtek beads.
Plate 9 from Carey and Tuck's, The Chin Hills Vol 1, 1896

Figure 13(c) Chin woman wearing bronze belts and pumtek necklance c. 1900. https://mnch.uoregon.edu/collections-galleries/east-burma-collection

Figure 13(d): Chin women wearing bronze belts c. 1900. https://www.pinterest.co.uk/blackowlzw/kachinkayahkarenchinmonrakhineshan/

From the Ukraine to China via the Levant

An example of the chronological order of a particular symbol is given below. Marija Gimbutas (1989) thought the symbols on pottery etc. were indications of a language – "grammar and syntax of a kind of meta language". We believe that the direction of travel, chronologically is from the Ukraine in a southeastward movement. Commencing with artwork from c. 15000 BC (figures 13,14) moving to 10000—8800 BC Anatolia (figure 15a).

Figure 14(a)

Figure 14(b)

Figure 15(a)

Figures 14(a) and 14(b): Figurine from Mezine, Ukraine c. 15,000–12,000 BC. Mezinian landscape system (Late Upper Palaeolithic of Eastern Europe) by Lioudmila Iakovleva, elsevier 2016
Figure 15(a). Stoneware from Körtik Tepe, a Pre-Pottery Neolithic A site, tenth millennium BC. Uygarlığın Diyarbakır'daki İlk Adımları; The First Traces of Civilization in Diyarbakır; Die Ersten Stufen der Zivilisation in Diyarbakır by Vecihi Özkaya Aytaç Coşkun Nevin Soyukaya 2013

We have noticed some remarkable similarities between ancient Anatolian and Hongshan Culture artifacts. Compare the design of the tenth millennium BC jar shown in fig. 15(a). the fourth or late third millennium BC jar shown in fig. 15(b) and the Neolithic Korean jar 15(c).

Figure 15(b): Hongshan Cultre pot, Hongshan Culture Gallery, Inner Mongolia Museum, Hohhot, China.
Sourced from the excellent website of Gary Lee Todd, Ph.D., Professor of History, Sias International University, Xinzheng, Henan, China. https://www.flickr.com/photos/101561334@N08/19625143670/in/album-72157655619356548/

Figure 15(c): Neolithic Pottery, Neolithic Gallery, National Museum of Korea, Seoul
https://www.flickr.com/photos/101561334@N08/17729299340/in/album-72157653050704925/

The earliest symbol we came across was from the Blombos Cave dated to 77,000 BC. The next symbol we found was from the Mezin area of the Ukraine c. 18,000 BC. The following passage describes one of the Mezin artifacts (figures 19,20) bearing such a symbol:

> Among the early finds was a 20,000-yr old ornamented bracelet engraved out of mammoth ivory, and a second bracelet was found in 1956. Both have a magnificent design which can be found to this day on the embroidery of Ukrainian costumes. This pattern predates and is similar to the famous Greek 'meander' pattern. These two bracelets have been described by Okladnikov (1967: 102-103; our English translation) as ...authentic masterpieces of the bone-carvers art, causing surprise due to the fact that they were made with stone instruments, without access to a lathe, drills or chisels … Bone material for these ornaments had an exceptional aesthetic value … The aesthetic character of these decorations cannot be denied in cases where they had some magical significance. Neither magic, including the magic of numbers, nor the cult of the ancestors automatically had a direct relation to the rhythmical alternation and the symmetrical arrangement of the ornamentation.
> Irina B. Vavilova and Tetyana G. Artemenko, Ancient Astronomical Culture in Ukraine. 1: Finds Relating to the Paleolithic Era, Journal of Astronomical History and Heritage, 17(1), 29-38 (2014).

Figure 16

Figure 17

Figure 18

Figure 16. Detail from the Jianli stamp, China 4000-3000 BC. http://news.jznews.com.cn/system/2013/10/08/011209443.shtml
Figure 17. Chin bead, dated by authors to 2300 BC
Figure 18. Detail from Shang Dynasty pot c. 1200BC. https://bbs.artron.net/thread-2638121-1-841.html
Compare these with figures 19 and 20, possibly dated 14,000 years earlier

Figure 19

Рис. 5. «Шумящий» браслет.
1 – общий вид; *2* – отверстие в пластине; *3* – следы незавершенной работы при сверлении отверстия; *4* – прорезанный орнамент.

Figure 20

Figures 19,20. The Mezin Composite Bracelet, 18000 BC. Referred to by Vavilova and Artemenko in the previous quote as discovered in 1956 at Mezin.
Images: PALEOECOLOGY STONE AGE, L.V. Lbova , P.V. Volkov , D.V. Kozhevnikova , L.V. Kulakovskaya, (Л.В. Лбова, П.В. Волков, Д.В. Кожевникова, Л.В. Кулаковская) Institute of Archeology and Ethnography of the Siberian Branch of the Russian Academy of Sciences Akademika Lavrentieva 17, Novosibirsk, 630090, Russia.

The translation (Google): 'To the right and to the left of it are cut anti-levitating chevrons. Applying the ornament start-elk cutting through four concentric rhombuses (Fig. 5, 4)'.

Another mammoth ivory artifact from Mezin, dated 15000 BC is shown below. This carving depicts the cross-chevron symbol which we show spread through many cultures and is prevalent today all over the world. We propose that the Chin beads and bronze piece (figures 23-25) are based on this from a long-remembered image.

Figure 21

Figure 22

Figures 21,22: (via Google translation) 'objects found at the Mezinsky parking lot (on the right bank of the Desna River in the village of Mezin, Ukraine, 20–15 thousand BC)'; предметы, найденные на Мёзинской стоянке (на правом берегу реки Десны в селе Мезин, Украина, 20 – 15 тыс. до н.э.); https://cont.ws/@al-termezi/473861

Figure 23

Figure 24

Figure 25

Figures 23–25: Chin beads and bronze belt piece very similar in appearance to the Mezin piece (figure 22)

Figure 26a: Different angle of the mammoth ivory Mezin body tattoo stamp (?) Штамп для татуировки (?). Мезинская стоянка. http://artyx.ru/books/item/f00/s00/z0000059/st011.shtml

Compare the Ukrainian images 22 and 26 from 20,000-15,000 BC with the artifact found thousands of kms to the east in the Amur region of today's Russia 6000-3000 BC.

Figure 26b: A ceramic spindle with the image of a mask. Malyshevskaya culture 6000-3000 BC. *керамическое пряслице с изображением личины. Малышевская культура) compared to the much ealier Ukrainian artifact. https://elementy.ru/nauchno-populyarnaya_biblioteka/434736/Glinyanoe_sovershenstvo_amurskogo_neolita

'The discovery of such ancient ceramics on the Amur coast by many scientists was not immediately accepted. Only after one and a half to two decades, after the finds of fragments of vessels in other monuments of Osipov culture on the Amur (Hummi and Goncharka-1) [4], confirming our research, experts recognized the problem of ancient pottery in the Russian Far East as one of the priority and significant in archeology. Doubts disappeared that there could have been ceramics in the “Mesolithic” (transitional period) of the region.' Vitaly Egorovich Medvedev - Doctor of Historical Sciences, Head of the Neolithic Institute of the Institute of Archeology and Ethnography SB RAS (Novosibirsk)

Figure 26c: Map of the location of the main Neolithic monuments in the Lower Amur Region: Карта расположения основных рассматриваемых памятников неолита в Нижнем Приамурье: Number 7 represents the area where the spindle was found.

Figure 27

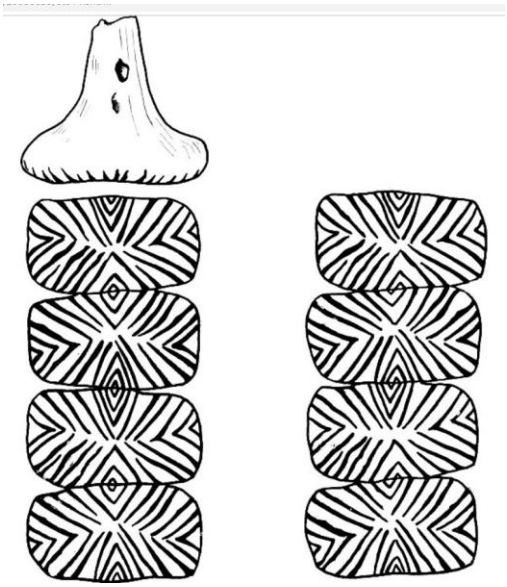


Figure 28

Figure 27: More mammoth ivory artifacts from Mezin c. 15000 BC. https://pikabu.ru/story/naydenyi_drevneyshie_muzyikalnyie_instrumentyi_v_mire_vozrastom_37000_let _4821202
Figure 28. Close up of the Mezin ivory. http://artyx.ru/books/item/f00/s00/z0000059/st011.shtml

Referring to figure 28 we obtained the following translation via Google translation:
'It is almost certain that such a ritual of tattooing could arise only in the Paleolithic time, when all the bone images of female deities were completely covered with a natural pattern of rhombuses inscribed into each other. We do not know on which category of objects this ornament was preserved in the Mesolithic (maybe weaving?), But it occupies a prominent place in the agricultural cultures of the Neolithic and Aeneolithic; they are covered with vessels, altars, bowls for sacred water, statues of goddesses, thrones of goddesses or priestesses, and just vessels for water.'

Our research indicates that the symbols were taken from the Ukraine sometime after 15000 BC. We looked for an explanation for this movement. As with our conclusion for the migration from Çatalhöyük which is explained elsewhere by us, the probable reason was due to climate change.

We referenced the work 'A History of Ukraine: Episode 2, The Ice Age' by Oleksandr Palii 2017, for the following information.

Apparently, the massive glacier that covered the Northern hemisphere began one million years ago, reaching the depth of several kilometers between 150,000–100,000 BC. Herds of mammoth traversed most of the Ukraine and were a good source of food and materials for humans inhabiting the region.

When the glacier began to melt during the twelfth and eleventh millenniums BC the mammoths became extinct in the Ukraine and moved out of the area. This was due to the winters becoming more severe, grass could not grow, and a source of food was lost during this crucial time. The gigantic lake that formed from the melting ice burst its banks c. 11,500 BC sending a giant mudflow down the Dnipro Valley to the sea.

Apparently, researchers think that mammoth fur became wet and froze, causing them to die. Other mammals such as the woolly rhinoceros also suffered this fate, whilst reindeer, elk and horses multiplied. There would still have been a food supply, but perhaps the hunters followed the mammals southwards.

In any event, there would have been upheaval in the region and may account for the movement of tribes which worshipped the symbols embodied on mammoth ivory artifacts, some of which have been shown by us. The tribes may have moved on to the Anatolian/Levant area, which is why we have been able to show a timeline for the development of the symbols, resulting in the expansion of them into the West and East after the breakdown of civilization at Çatalhöyük c. 5950 BC.

The following images (figures 29,30) are taken from the recent work: Gündem, C.Y ve Dağlı. M. (2018), Three early neolithic stone vessels from the Mardin museum. Hitit University Journal of Social Sciences Institute, 11(3), 1837-1845. doi: 10.17218/hititsosbil.403269. The vessels can be dated to the PPNA/PPNB contemporary with Körtik Tepe 10000 BC to 8800 BC and are clearly a development/continuation of the Mezin artifacts shown on previous pages.

Fig. 3: The stone vessel with the nested diamond motif. A - Decorated body. B – Decorated base (Height: 8.1 cm / Rim diameter: 6.4 cm / Body diameter: 9.1 cm / Base diameter: 5 cm.) (Photo, Mardin Museum Archive).

Figure 29

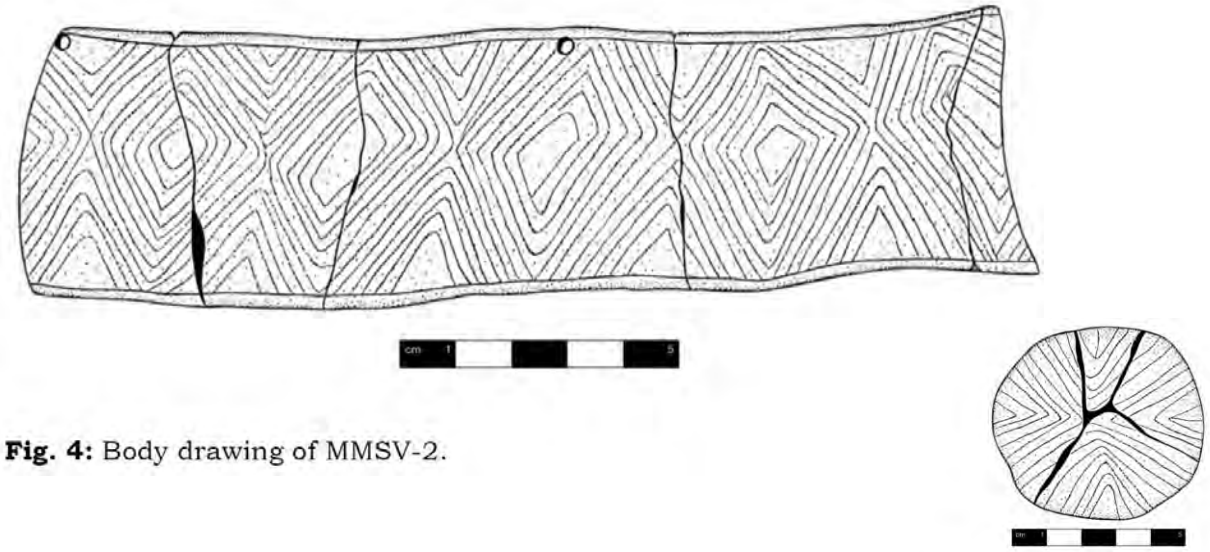
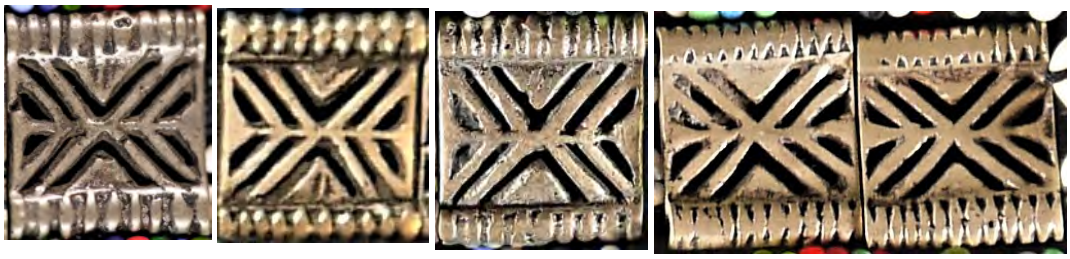


Fig. 4: Body drawing of MMSV-2.

Fig. 5: Base drawing of MMSV-2.

Figure 30

Note the familiar symbol, which is found on the base of the vessel, shown bottom right in figure 30. Compare with the Mezin artifacts and also the Daxi culture ceramic in figure 33.



Another example of this symbol, (figures 31,32) from the PPNA/PPNB at Kortik Tepe, is given in the work: Coşkun, Aytaç & Benz, Marion & Erdal, Yılmaz & M.M, Koroyuko & Deckers, Katleen & Riehl, Simone & Münster, Angelina & Alt, Kurt & Özkaya, Vecihi. (2010). Living by the water - Boon and Bane for the People of Körtik Tepe. Neo-Lithics. 2. 60-71. Note the symbols on the Daxi culture ceramic ball of 5000–3300 BC (figures 33,34) are similar to the symbols on the 10000–8800 BC Körtik Tepe artifact KTK'09.

Figure 31

Fig. 9 Decorated bone item with representations of scorpions, some kind of insect and possible representations of (cat-) fish found in Grave M13, A87.

Figure 32

Figure 33a

Figure 33b

Figures 33a,b: Daxi culture, Neolithic ceramic ball 5000–3300 BC.
http://www.gucn.com/Service_CurioStall_Show.asp?ID=10585700 (Neolithic terracotta balls 新石器时代红陶球)

This PIE symbol may have been present in China as early as the Tangjiagang Culture 汤家岗文化 4400 BC

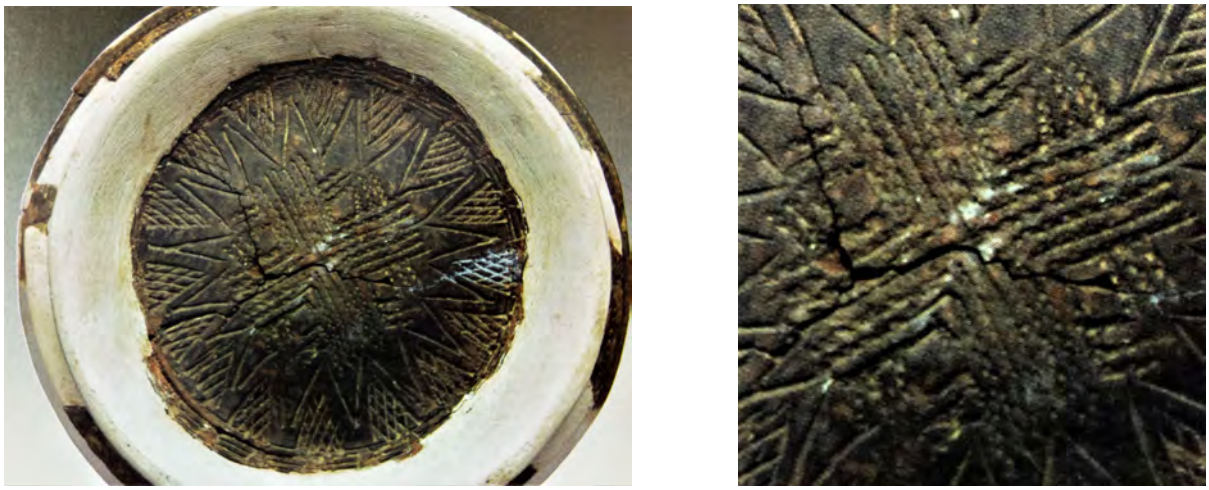


Fig. 34a: The sixteen-pointed star pattern on the outsole of the M103 unearthed in the first phase of the pre-Daxi Tangjiagang site c. 4400 BC 汤家岗遗址第一期M103出土碗外底十六角星纹
http://www.hnkgs.com/show_news.aspx?id=1839

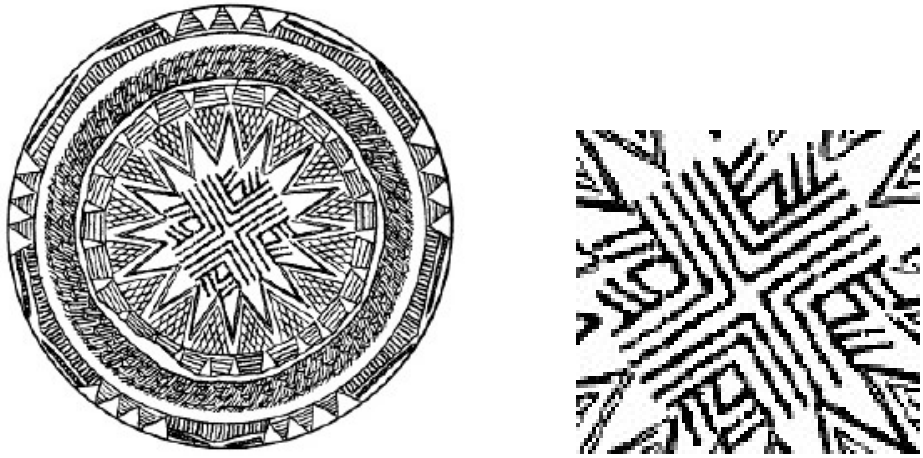


Fig. 34b: The sixteen-pointed star pattern on the outsole of the M103 unearthed in the first phase of the Tangjiagang site c. 4400 BC 汤家岗遗址第一期M103出土碗外底十六角星纹 Drawings from: http://blog.sina.com.cn/s/blog_eb4d47fb0102vyw5.html

Fig. 34c: Korean Neolithic pot, similar in style to comb-pattern pottery 4000-1000 BC. The method of engraving used to make this pot and the Tangiagang pot was probably with a sharpened bamboo stick. Source: www.pinterest.com (photo credit: Woojin Kim)

Figure 35

Figure 36

Figure 37

Figures 35,36. Bell Beaker pot. Images from: International Conference “Around the Petit-Chasseur Site” – Sion, Switzerland, Bell Beaker, 2500–2200 BC, from 'Effects of cultural contacts on the burial rites of the Bell Beaker – Csepel Group' by Anna Endrėdi, Proceedings of the International Conference “Around the Petit-Chasseur Site” – Sion, Switzerland, 2011.
Figure 37. Chifeng Hongshan ceramic detail, 4700–2900 BC, Chifeng Hongshan Culture Research Association. We consider this to be a very significant piece with PIE links.

Figure 38

Figure 39a

Figure 39b

Figure 38. Drawing of pot symbol from Çatalhöyük "Squat jars also occur (Fig. I2 : 11, 12), the first bearing a decoration of concentric lozenges resembling a pair of eyes." Description by James Mellaart, Anatolian Studies. Vol. 11. 1961
Figures 39a,b. Chin bead and bronze piece with the similar symbol as figure 38.

Tracing this symbol from the Ukraine, we found no further examples until the Kortik Tepe pieces. As will be shown in the study, the symbol proliferates over SE Anatolia/Levant from 10,000–6000 BC, and we find it reappearing in Hungary c. 5000 BC, and thence through LBK and Cucuteni cultures until it reached the British Isles c. 3000 BC. As can be seen from the Chifeng example, the symbol reached China sometime during the Hongshan culture, 4700–2900 BC - well before the Tarim mummies of c. 1800 BC. The symbol was so powerful that it was being reflected in the Bell Beaker phase.

Below are shown three pots from the Karanovo 1 culture 6200-5500 BC, Bulgaria, bearing the same symbol. All images are from: 3.5.1. Bulgaria - Neolithic, Eneolithic (VII-V thousand BC) http://www.za-balgarite.com/3.5.1.BalgNeolit-4.html

Fig. 40a

Fig. 40b

Figure 40a. Tulip carmice pot with painted decoration (Neolithic polychrome ceramic vessel from the village mound "Chavdar"). Chavdar, Kremikovtzi, Sofia, early Neolithic, 6200-5400 BC, Kremikovtzi culture [Nikolov 2006: 37, ceramic vessels:].
Figure 40b. Cup with white painted ornament from Sofia, Sq. Slatina (culture West Bulgarian painted ceramics), early Neolithic [Todorova 1993: 299-37]

Figure 40c. Ceramic bowl with painted decoration. Slatina, Sofia. Early Neolithic, Culture Karanovo I, approx. 6200-5500 BC [Nikolov 2006: 43].

We believe that the symbols survived from the Middle Stone Age to the present day because they represented a deep religious meaning. We are not alone in this, and a recent study of Arabian Holocene mustatils proposes a theory similar to ours. We quote from this study: Monumental landscapes of the Holocene humid period in Northern Arabia: The mustatil phenomenon, by Huw S Groucutt et al. 2020.

> Dr Huw Groucutt, one of the study's lead researchers, stated that "Our interpretation of mustatils is that they were ritual sites, where groups of people met to perform some kind of currently unknown social activities," according to the Max Planck Institute . The discovery of the painted stone sitting on a platform could suggest that rituals took place at these sites. Groucutt is also quoted by the Max Planck Institute as saying that "Perhaps they were sites of animal sacrifices or feasts." https://www.ancient-origins.net/news-history-archaeology/mysterious-stone-structures-0014141
>
> One fascinating example of material culture, a painted rock, was found at 27.385583 N, 39.378884 E (Figure 7). The object formed part of the top course of rocks on the interior edge of the southern platform of the mustatil, and was thus part of the finished, visible surface for people to see inside the space defined by the mustatil. While paintings are known in the rock art of northern Arabia, some using pigment of a similar shade, and petroglyphs of geometric motifs have been observed in the wider area, the pattern on the rock is not currently known from other rock art contexts. https://journals.sagepub.com/doi/full/10.1177/0959683620950449.

Above: Rock painting c. 5000 BC found on a mustatil from the southern margins of the Nefud Desert, northwest Saudi Arabia, which is described in the preceding text.

Shown on the next page (figure 41(a)) is a remarkable ceramic from the Hongshan culture with pig-like sculptures and complex designs (for the time) similar to those of the beads that will become apparent as this study progresses. It contains symbols dating to the Ukraine c. 18000 BC and certainly from Anatolia/Levant c. 6000 BC a) zig-zag b) cross and c) eye (as a combination) which may have been brought by PIE along the Khotan-Liaoning jade route c. 3500 BC. For an excellent video of a caravan route from there carrying jade see: https://www.youtube.com/watch?v=pXFm4QL6ZtQ

The ceramic is held by the Chifeng Hongshan Culture Research Association. If the dating is correct, i.e. to the Hongshan culture 4700–2900 BC, then our research indicates that Proto-Indo-Europeans brought the symbols with them to China at a much earlier date than Cherchen man in the Tarim basin (1800 BC). The symbols have also been found on ceramics from Xiapu county, dating to c. 2480 BC and Jianli county, China, dating to 3000 BC (see later pages). For a fuller description of this symbol see Marija Gimbutas' explanation later.

To add further weight to this being from the Hongshan culture and within the accepted dates of 4700–2900 BC, the importance of pig iconography is given by the following passage by Sarah M. Nelson:

> Pigs are prominent in the ceremonial and ritual iconography of the Hongshan culture, including jade pig-dragons found in high-status burials, a life-sized pig statue made of unbaked clay, and a mountain that resembles a pig. To attempt to link real pigs with the iconography, the place of actual pigs in the society is examined. Continuity of artifact types from sites 7000–3500 B.C. allows the assumption that pigs were initially important in the subsistence base. I suggest that pig iconography implies pig rituals, and that the pig rituals may have aided in the formation of an elite class. The elite are archaeologically manifested in the elaborate tombs, and their existence can also be inferred by the need for managers in creating the tombs and the artifacts within, as well as in procuring jade and possibly copper.
>
> Sarah M. Nelson, 'Ritualized pigs and the origins of complex society: Hypotheses regarding the Hongshan Culture'; in Early China Vol. 20 (1995)

Figure 41(a)

Figure 41(b)

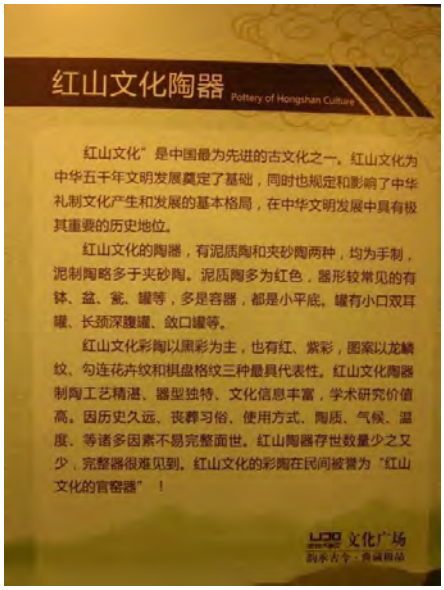


Figure 41(c)

Figures 41(a-c): Images from the Chifeng Hongshan Cultural Association. http://dp.pconline.com.cn/dphoto/list_2514862.html

Note: we have made many requests from both western and Chinese academics and archaeologists for further information on the ceramic but received no reply from anyone. It is hoped that a reader of this study may be able to throw more light on the item.

Other artifacts from the Hongshan culture also bear the symbol. Both are jade carvings of so-called ‘god-beasts’. The first one (figure 42) 红山文化玉人兽神像 is held at the Palace Museum, Beijing, dimensions 27.7cm x 11.7cm. The symbol is portrayed on the arm sleeves. Jade was (and still is) most valued amongst Chinese, both ancient and modern, and only the symbols with great meaning would have been painstakingly worked onto this precious material. For an in-depth article on figure 42 see: The Palace Museum: "Shanchuan Jingying - Ancient Jade Civilization in China and Mexico", The Forbidden City Press, 2012, and update from Xu Lin, of The Palace Museum at: http://www.cydfbwg.com/newsxy.asp?/891.html

Figure 42. Carving of the ‘Jade Beast’, The Palace Museum, Beijing. All images: https://kknews.cc/zh-sg/culture/agvmnz6.html

The other jade carving (figure 43) is held in Wengniute Banner, Chifeng City, Inner Mongolia. Dimensions are 18.2cm x 8.5cm. The Palace Museum jade (figure 42) has far more information available. It is difficult to find the same amount of information for figure 43. This is a pity as the symbol is even clearer on this artifact and helps to fully establish the fact that it was found as early as the Hongshan culture. Were it not for the fact that the artifacts were published/held by respected institutions we would not include them in our study. A full description for figure 43 can be found at: https://baike.baidu.com/item/红山文化玉人兽神像/19910074?fr=aladdin

Whilst note disputing the authenticity of this jade (being no experts), we advise caution with dating jade artifacts – especially those claimed as 'Hongshan'. Obviously, not all artifacts are recovered by archaeological methods. For example, farmers come across them many times, and they end up being bought by shops or individuals. Typology and microscope examination are the basics for authentication. There also appears to be a great deal of secrecy shrouding some of these objects.

Figure 43. 'Jade Beast' statue, Chifeng City, Inner Mongolia
https://baike.baidu.com/item/红山文化玉人兽神像/19910074?fr=aladdin

Figure 44. Han Dynasty funeral brick 205 BC–220 AD, Three Gorges Area
东汉“建初九年”双面装饰砖, https://bbs.artron.net/thread-1676422-1-1339.html

Figure 45. Authors' compilation of the Jianli stamp and Hongshan Ceramic

Figure 46. Chin bronze belt pieces and beads with similar pattern to the Jianli and Hongshan Ceramic.

We shall present many more examples of Han Dynasty funeral bricks, similar to those shown in figure 44, later.

The following refers to the stamp seal on the previous page. Discovered in Jianli county this item bears a strong similarity to the images on the Hongshan ceramic, as well as the preceding artifacts shown. From Chinese sources (via Google Chrome translation):

> Zhan Tao Tao, a professor of archaeology at Wuhan University, said that this is a typical Neolithic relic, a very rare pottery print, the print on the decoration may be " Family emblem symbol "or tribal" totem emblem ". (NB the authors of this beads study notice a certain resemblance to the stone platforms at Dongshanzui and Niuheliang sites- see later) Jingzhou City Museum archaeologist Wu Jiabi, participated in the Lion Rock Neolithic site excavation work. He believes that the pottery is indeed a Neolithic artifact, and the Shijiazhuang cultural sites found to be about 5,000 years of history. This pottery pattern, for the "geometric" pattern, is the Lion Rock pottery in the production of pottery on the carved ornamentation, beautification of a tool. In the Neolithic Age, the Lion Rock had the resources to make large quantities of pottery. At the mountain's foot, a lot of white, purple clay, was washed out of the river. Lion Rock and the nearby Yanglin Mountain, not only unearthed a large number of stone and pottery, also found a number of ancient kilns." The artifact was identified by the Wuhan University School of history and culture archaeological director Professor Chen Guantao as a typical Neolithic relic, from the Daxi culture, about 5000 years ago.
> http://www.cnchu.com/viewnews-147944.html

Another description of the Jianli stamp seal:

> 新石器时代“印章”出现 纹路清晰距今6000多年 :
> 荆州新闻网消息：玉玺想必大家都听说过，那是权力的象征。古时
> 的“玺”是作为个人信物使用，最早记录见于春秋时期。
> 秦始皇统一中国后，对印章作出了严格规定，皇帝之印称
> 为“玺”，大臣以下称“印”。现存我国最早印章见于商代，距今3000多年。可是最近在监利县白螺镇狮子山，民间文
> 化保护志愿者赖晓平发现了一个“印章”，距今已有6000多年。这个印章看上去像个蘑菇，高5.5厘米，圆顶直经9厘米，圆底直径4.6厘米，不瘪不缺，握在手上非常舒适。最令人惊喜的是，“蘑菇”上有纹饰，线路清晰。仔细观察，器物顶部内沿刻着一串“人”字纹，

像麦穗一样。柄底中间，印刻有四种图案，看起来像太阳、月亮、星星和云，中间用纵线和横线隔开，图案的外围也被一圈“人”字纹环绕。据赖晓平介绍，这是典型的新石器时代遗物。据了解，这是赖晓平在监利县白螺镇狮子山新石器时代遗址，东面一片泥水中发现的， 其中还有另一件陶器。

Translation of above via Google Chrome:

Neolithic era "seal" appears clear lines more than 6,000 years ago: Jingzhou News Network News: Yu Xi is known byeveryone, it is a symbol of power. The ancient “ 的 ” was used as a personal token and was first recorded in the Spring and Autumn Period. After Qin Shihuang unified China, he made strict regulations on the seal. The emperor's seal was called “玺”, and the minister was hereinafter referred to as “印”. The earliest existing seals in China were found in the Shang Dynasty, dating back more than 3,000 years. However, recently in the Lion Rock of Bailu Town, Jianli County, Lai Xiaoping, a volunteer of folk culture protection, discovered a “seal” that has been around for more than 6,000 years. The seal looks like a mushroom, 5.5 centimeters high, 9 centimeters across the dome, and 4.6 centimeters in diameter at the base of the circle. The most surprising thing is that the "mushrooms" are decorated with clear lines. Observe carefully that the inside of the utensil is engraved with a series of "human" characters, like wheat ears. In the middle of the bottom of the handle, there are four types of imprints that look like the sun, the moon, the stars, and the clouds. The middle is separated by vertical lines and horizontal lines. The periphery of the pattern is also surrounded by a circle of “human” characters. According to Lai Xiaoping, this is a typical Neolithic relic. It is understood that this was discovered by Lai Xiaoping in the muddy water in the east of Shizishan New Stone Age Site in Bailu Town, Jianli County. There was another pottery.
http://news.jznews.com.cn/system/2013/10/08/011209443.shtml
and other sources

Possibly the archaeologists may welcome a theory that involves a considerable movement of people from Persia to the limits of China as early as the close of the third millennium BC. Similarities in various artifacts and in the ornamentation of

> pottery of prehistoric Persia and Ancient China have been pointed out long ago. They formed the principal subject of Ernst Herzfeld's last important work, Iran in the Ancient East. After studying the comparative material illustrated in that volume, even one who cannot claim to be an archaeologist is driven to assert that some of the similarities are so remarkable, in their details and complexities, that independence is impossible.
> W.B. Henning, The First Indo-Europeans in History (Society and History, Essays in Honour of Karl August Wittfogel), 1978

The dispersal of peoples from Çatalhöyük.

We propose there is evidence that the bead and bronze belt symbols were developed in Southeast Anatolia. What made the inhabitants of this area move out in different directions? The culmination of many years' study has recently revealed the breakdown of society at Çatalhöyük.

The report compiled by Clark Spencer Larsen et al. of Ohio State University and recently published in June 2019 studied the remains of 742 individuals discovering "a compelling record of elevated levels of interpersonal violence" triggered by the stress of overcrowding. Apparently, the change from hunter-gatherers to farming during 7100–5950 BC presented insurmountable problems leading to disease and violence. The transition from nomadic peoples to city living was far from smooth, with as many as eight thousand inhabitants living in thirty-two acres. Evidence points to residents having to climb into their dwellings via the roofs.

However, it appears that the demise of Çatalhöyük was not due to the violence and disease but to climate change. The encroachment of desert conditions and land erosion meant that the inhabitants had to move elsewhere for better farming land and living conditions.

We consider that it would be natural to assume disparate groups, unable to get on with each other and perhaps with blood feuds, would set off in different directions thus accounting for the eastward and westward movements of the Proto-Indo-Europeans. In all probability groups would have departed in waves over different time periods and could account for the fact that by the time the various clans arrived in China became known as different 'Qiang' groups, some holding the symbols more important than others.

This could help explain the spread of farming theory and our proposal that their special symbols were taken with the PIE. Our study, centering on the symbols of the Chin beads and bronze belts, indicates that a large group of Proto-Indo-Europeans originally based in Southeast Anatolia/Northern Levant, such as the Guti or Proto-Tokharians, allied with the Tukri as suggested by Henning, migrated to China, becoming known as the ancient Qiang. They brought with them a set of special ancient symbols, incorporating them into all aspects of life. The Qiang migrated to Burma c. 221 BC, eventually becoming known as the Burmese Chin.

However, we believe the arrival of the Qiang in China took place as early as 4000 BC. This is based upon unearthed artifacts dating to Hongshan (4700–2900 BC) and Daxi (5000–3300 BC) cultures, which bear the symbols, becoming well established by the Majaiyao culture (3300–2000 BC). They are not simple designs but are almost exact replicas of symbols dating to the Ukraine 18000–15000 BC and SE Anatolia/Levant 10000–6000 BC. All indications point to a PIE homeland in SE Anatolia/Levant coinciding with the spread of farming. See later for possible routes and our wave of advance rough calculations for PIE to reach China by 4000 BC.

The links between the ancient Levant and today's Chin population has recently been confirmed by a large-scale Chinese survey (Yu-Chun Li et al 2014) revealing the discovery of the rare M84 DNA marker amongst the Burmese Chin and Southwestern Chinese. The MRCA dates to 7391 ybp. We also conclude that the beads and bronze belts are directly linked to the ancestors of today's Chinese population. As previously stated, the Qiang are described as "white men" in Oracle Bone Inscriptions, as deciphered by Wang Tao of the School of Oriental and African Studies, University of London in his 2007 paper 'Shang ritual animals: colour and meaning (Part 1) - (see later pages for H293 and for H1039) and the following excerpt (figure 47).

With regard to Shang human sacrifice, there is a controversial question concerning the reading of the "white man (*bairen* 白人)". In the Bin-group we read several inscriptions where the adjectival word *bai* 白 "white" is used attributively for humans. For example:

Heji: 1039
乙丑卜, ...貞: ...白人/燎白人
yichou/crack/ ... /divine/ ... /white/man/burn/white/man
Cracking made on *yichou* (day 2), ... divining: "... white men".
To make the burning rite of white men.

Heji: 293
壬子卜, 賓, 貞: 惠今夕用三白羌于丁. 用
renzi/crack/Bin/divine/*hui*/this/evening/use/three/white/Qiang/to/Ding/use
Cracking made on *renzi* (day 49), Bin, divining: "It should be this evening when three white Qiang-men who will be sacrificed to Ding." (Verification) Used.

Figure 47

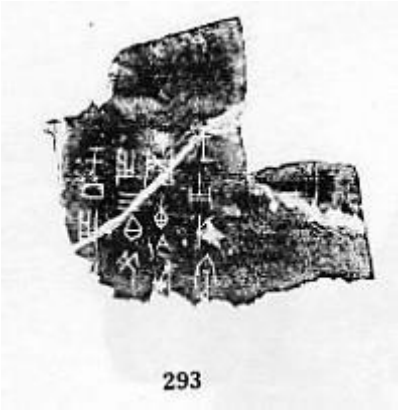


Figure 48. Heji 293
(guoxuedashi.com)

The importance of the ancient Qiang to the modern-day Chinese and Burmese Chin is supported by the following quotes:

> The Qiang have the same ancestors as the Han, who later became the largest ethnic group in China. So, for most Han tourists, visiting an ancient Qiang village is like calling on their ancestral brothers, who have maintained some semblance of an ancient lifestyle. The Qiang believe that everything in nature has a soul. They worship white quartz stones and place the snow-white stones on their houses to protect the family. Luo Jinyong, director of the Hanchuan Museum in Aba and a Qiang culture expert, 2016, http://usa.chinadaily.com.cn/2016-06/09/content_25662305_2.htm

> According to Professors Than Tun and Gordon Luce, the Ch'iang were not just the ancestors of the Chin but of the entire Tibeto-Burman group, and they 'enjoyed a civilization as advanced as the Chinese, who disturbed them so much that they moved south. (Than Tun 1988: 3) http://www.chro.ca/index.php/resources/articles/325-the-origin-of-the-chin ; and Lian H. Sakhong's 'Origin of the Chin'

There are many dinosaurs remains in Arizona and legends state that the petrified logs, used as arrows by Gods, were used to slay the dinosaurs. Something attracted the Native Americans to the fossils.

The ancient Qiang used this very difficult material, which had reached a quartz-like state, to fashion such small items as the beads. China famously has many dinosaurs remains. The Hopi and Navajo Indians of Arizona apparently lived in houses built from petrified wood - identical to the Triassic age silicified wood from which the Chin beads were fashioned 11,500 kms away.

Was this ancient memory carried to Arizona from China? Today, the Qiang still worship white quartz, considering it to have magical powers. White quartz pebbles are found in Qijia/Qiang graves in the Gansu-Qinghai area - see H. Chen and A. Underhill later.

Noteworthy of mention is the awe in which the Qiang and the Native American Indians hold petrified wood. In her book 'Fossil Legends of the First Americans ' Adrienne Mayor notes:

> Petrified logs of immense size were identified as the bones of Yeitso, a monster of Navajo myth; or as giant arrow shafts of Shinarump, the Wolfgod of Ute myth. On the Navajo Reservation in northeastern Arizona a few years ago, paleontologists were excavating the bizarre, five-horned skull of a Pentaceratops, a twenty-five-foot-long dinosaur of the Late Cretaceous with the largest skull of any land animal. An old Navajo man came up to see what they were doing. Taking one look at the creature, he uttered two words, “Monster Slayer,” and walked away.

Figure 49

Figure 50

Figure 49. Giant Triassic age silicified log, 225 mya, Petrified Forest, Arizona - 'Arrows that slayed the dinosaurs'. https://delange.org/PetrifiedForest/PetrifiedForest.htm)
Figure 50. Massive silicified log, Petrified Forest, Arizona. www.minitime.com/Giant_Logs_Trail-Petrified_Forest_National_Park-Arizona-attraction-photos

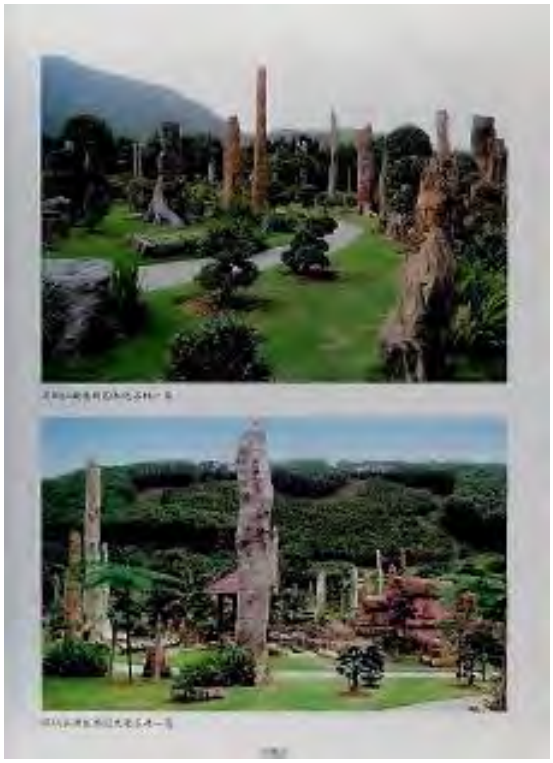


Figure 51

Figure 52

Figures 51,52. Images of Chinese petrified wood from: Petrified wood deposits Northeastern China; Shenzhen Urban Management Bureau, Botanical Gardens, Shenzhen, Shenyang Institute of Geology and Mineral Resources Ministry of Land.

Adrienne Mayor's reference to the Ute Wolf god, Shinarump draws us to such studies as the 1956 United States Department Of The Interior's 'Uranium Deposits At Base Of The Shinarump Conglomerate, Monument Valley, Arizona' by I. J. Witkind, Geological Survey Bulletin 1030-C. We will show that the presence of uranium in the silicified wood, which was used to fashion the Chin beads, is one of the methods bead experts use to judge the age of a genuine ancient pumtek bead.

Figure 53. Image from the Smithsonian article Climate Effects on Human Evolution of the Blombos Cave engraved piece of ochre, 77,000 BC
http://humanorigins.si.edu/research/climate-and-human-evolution/climate- effectshuman-evolution.

We propose that artifacts with symbols such as the above followed mankind's movement out of Africa. To support our claim of the importance of such symbols as engraved on the ochre (figure 53) we quote from the following article: https://www.newscientist.com/article/ mg23230990-700-in-search-of-the-very-firstcoded-symbols/

> This does not look like the start-up phase of a brand-new invention, (Genevieve) von Petzinger writes in her recently published book, The First Signs: Unlocking the mysteries of the world's oldest symbols (Simon and Schuster). In other words, when modern humans first started moving into Europe from Africa, they must have brought a mental dictionary of symbols with them. That fits well with the discovery of a 70,000-year-old block of ochre etched with cross-hatching in Blombos cave in South Africa.

(Referring to European cave art) For tens of thousands of years, our ancestors seem to have been curiously consistent with the symbols they used. This, if nothing else, suggests that the markings had some sort of significance. “Of course they mean something,” says French prehistorian Jean Clottes. “They didn’t do it for fun.” The multiple repetitions of the P-shaped claviform sign in France’s Niaux cave “can’t be a coincidence”, he argues.'

"The ability of humans to produce a system of signs is clearly not something that starts 40,000 years ago. This capacity goes back at least 100,000 years", says Francesco d’Errico from the University of Bordeaux, France.