

ORIGINS OF WRITING: MAGIC OR ACCOUNTANCY?

Christopher Josiffe

gef_investigation@hotmail.com

Introduction

It is striking to note that myths from many of the ancient world's cultures ascribe a divine or supernatural origin to the art of writing. Thus, Nisaba, the Sumerian goddess, was patroness of scribes and writing, as was the Babylonian Nabu. According to another Sumerian myth, *Inanna and Enki: the Transfer of the Arts of Civilization from Eridu to Erech* (translated by Kramer, 1972, pp.64-65), it is the god Enki who gave the arts of woodworking, metalworking and writing, (together with many other skills necessary for civilization) to the goddess Inanna, and thence to humankind. The Egyptian Thoth was said to be the inventor of writing, and the Egyptian word for 'writing' (*m.d.w-n.t.r*) may be translated as "the speech of the gods". According to the Norse tradition, Odin hung on the world tree Yggdrasil for nine days, and by this ordeal was granted the secret of the runes, which he then gave to humankind. The Irish deity Oghma is associated with the invention of writing, the Ogham alphabet being named after him. The mythical Chinese god-king Fu Xi is credited with the invention of writing, as is Brahma, who, in the Hindu tradition, is said to have given the secret of writing to humankind. Gelb (1952, p.252) noted: "Everywhere, in the East as well as in the West, the origin of writing is ascribed to a divinity."

This article will seek to demonstrate that, whilst the origins of the Sumerian writing system are closely connected to an emergent trade economy (and thence the need for a written method of accounting), there may have been alternative driving forces – namely, magico-religious imperatives - which led to the development of other ancient writing

systems. Early Chinese ('oracle-bone') scripts, and the 'Old European' script of the Balkan Vinča culture, will be examined.

To begin with, it would perhaps be as well to establish what is meant by 'writing'. Gelb (1952, p.11) differentiated between what he styled the "*semasiographic* stage of writing (expressing meanings and notions loosely connected with speech) and the *phonographic* stage (expressing speech)". He argued that general linguists, having defined writing as a method of recording spoken language by means of certain marks (whether they be on clay, stone, wood, paper etc), and seeing such a method as being a faithful representation of its spoken equivalent, were unable to appreciate the development of writing from its earliest stages. They failed to understand that such a definition could not be applied to writing at its very earliest stages, where the marks only loosely approximated the spoken language. Similarly, he criticized philologists, who (he claimed) believed that writing, even after the introduction of phonetization, was still used to record both *sounds and ideas*. In fact, Gelb claimed, once humankind had established a method of *exactly* recording spoken speech in a written form, writing then lost its independent character and became 'simply' a substitute for speech.

It follows from this that Gelb regarded certain ideographic systems (such as that of North American Indians) as not being 'proper' writing as such, if defined as a system which faithfully represents speech phonetically. He differentiated between what he calls 'primitive' writing systems and more sophisticated ones, by looking for a 'full phonetic system'. But the mere appearance of some sporadic phonetic elements (e.g. Yoruba cowrie shells) is not on its own evidence of a 'high level'. Neither is a system's sophistication and elaboration evidence on its own of its being 'true writing'. Gelb argued (1952, p.56) that whilst the Mayan and Aztec systems are on a 'higher level' than their North American counterparts, they were, nevertheless, not 'true writing', since they lacked the full phonetic element:

"The best proof that the Maya writing is not a phonetic system results from the plain fact that it is still undeciphered. This conclusion is inescapable if we remember the most

important principle in the theory of decipherment: A phonetic writing can and ultimately must be deciphered if the underlying language is known.”

However, it should be noted that the Mayan languages are still spoken in the present day, and are therefore “known” languages. Furthermore, it is no longer the case (as it was in 1952) that the Mayan script remains undeciphered; the last 40 years have seen major breakthroughs, following, in particular, the academic conference *Mesa Redonda de Palenque*, held at the Mayan site of Palenque in 1973. It is now possible to read and understand the majority of Mayan writings. These successes were kick-started, ironically, by a work published in 1952, Yuri Knorozov’s *Ancient Writings of Central America*.

The general thesis of Knorozov’s paper was that early writing systems such as Egyptian hieroglyphs and Sumerian, hitherto believed to be predominantly logographic or even ideographic in nature, were in fact possessed of a significant phonetic component. The Mayan system is now known to be a logosyllabic one, that is, an individual glyph may represent either a word or a syllable. But it is the phonetic element which conforms to Gelb’s criteria of ‘true writing’.

Hooker (1990, p.6) restated the point that pictographs in themselves do not constitute writing as such: “Pictographs have no linguistic reference of any kind; they depict an event, or convey a message, by means of a series of drawings. Such a medium can hardly be called writing.” Nevertheless, he does appear to part company with Gelb, who drew a sharp distinction between what he termed ‘primitive’ and ‘complex’ systems. Hooker (ibid) wrote that “so-called ‘primitive’ societies using pictographs may be just as complex in their modes of thought as users of other methods but it is a different order of complexity” and argued that pictograms were developed mainly amongst hunting or farming societies (e.g. North American Indians), whereas the ‘other methods’ tend to develop in urban societies with more advanced technologies (e.g. Sumer). Whether pictograms may be regarded as the precursors to writing proper, or whether logograms developed independently of pictograms is still a matter for debate. Hooker noted that the Egyptian (1st Dynasty; c. 3,100 BC) Narmer Palette features both. It is interesting to note

that, in his research into the earliest writing of Mesopotamia (4th millennium BC: Uruk IV site), Falkenstein (1936) observed that purely pictographic signs were rarely employed; ideographic-abstract signs being far more common.

The earliest stages of the Sumerian system have been subjected to close scrutiny, and it is now generally accepted that – following Denise Schmandt-Besserat’s pioneering studies – the need for a means of accountancy was a determining factor in the origin of Mesopotamian written language.

Mesopotamian writing systems & Schmandt-Besserat

Schmandt-Besserat is strongly associated with the economic theory of writing origin, following her investigations into the clay tokens which are found in such profusion throughout the ancient Near East. Amiet (1966) had first proposed the idea that these tokens represented some form of recording system, but Schmandt-Besserat went on to develop and expand this theory. She described (1992, pp.7-8) finding these tokens, by chance, amongst:

“...Near Eastern archaeological clay collections dating from 8,000 to 6,000 BC stored in museums of the Near East, North Africa, Europe, and North America...[where] I...came across a category of artefacts that I did not expect – miniature cones, spheres, disks, tetrahedrons, cylinders, and other geometric shapes. The artefacts were made of clay...some were in the shape of animals, vessels, tools and other commodities...I sensed that the tokens were part of a system because I repeatedly found small and large cones, thin and thick disks, small and large spheres, and even fractions of spheres, such as half and three-quarter spheres. But what were they for?”

She also examined a hollow clay ‘tablet’, dated to the second millennium BC, discovered at Nuzi, a site in northern Iraq, which bore a cuneiform inscription, reading:

Counters representing small cattle:

21 ewes that lamb

6 female lambs
8 full-grown male sheep
4 male lambs
6 she-goats that kid
1 he-goat
3 female goats
The seal of Ziqarru, the shepherd
(Rudgley, 1998, p.50)

Upon further inspection, the object was not a tablet, but rather, a clay envelope that contained 49 clay counters. This sum corresponded to the total number of animals inventoried in the inscription on the outside. It then became clear to Schmandt-Besserat that this constituted some form of accounting system, and she connected the counters found inside the envelope with those tokens found in huge quantities all over the Middle East and Turkey. Over the next 15 years, she made this her main area of study, setting out a large body of supporting evidence for her theory that this system of accounting tokens was the precursor for both the earliest forms of writing (the Uruk archaic texts) and of a written numerical system.

She differentiated between two types of token, the first being those more simple forms, dating from c. 8,000 to 4,400-4,300 BC, which she termed *plain tokens*, nearly always composed of clay, between 1 and 5 centimetres wide, and forming geometric shapes such as spheres, cones, disks and so on. The second type, termed *complex tokens*, were of a later date, beginning to be created from 4,400 BC onwards.

The plain tokens were associated with commodities, so that the conical type of token represented a measure of grain, the *ban* (approximately a litre), and the sphere, a larger measure of grain, the *bariga* (approximately a bushel). Similarly, the cylinder represented a domestic animal, the tetrahedron, a unit of labour, and so on. The complex tokens she assigned to finished products as opposed to raw materials, so that incised cones, ovoids

and rhomboid tokens represented bread, oil and beer respectively (Schmandt-Besserat, 1979).

Schmandt-Besserat saw these two types of device as leading to a duality in the subsequent writing system. Plain tokens were contained within a clay envelope, which was in turn impressed with tokens. This, she argued, evolved into a representation of the *quantity* of items being counted, i.e. numerals. Complex tokens were hung on string with an accompanying *bulla*, which was itself inscribed with a stylus (the incised nature of the complex tokens making them unsuitable to be impressed onto clay). The ensuing pictographs represented the *nature* or *quality* of the items being counted; these in turn, she argued, led to the development of phonetic signs. At some time around 3,500-3,100 BC, a further development occurred, whereby “the accountants realised that the notation on the outside of the envelope made the tokens and the envelope itself redundant” (Rudgley, 1998, p.54). In other words, a tablet, suitably impressed or inscribed, would serve the same purpose; there was no need for the tokens themselves.

It should be stated that there has been some criticism of Schmandt-Besserat’s theories. Jasim & Oates (1986), whilst not disputing the validity of her interpretation, regarded it as being over-generalized, in the sense of its universal application across the entire Near East, when the evidence so far only points to her thesis being valid for certain localized sites such as Susa: “Certainly, there was no ‘universal’ system” (p.351). They also suggested that the tokens may have had different functions from those proposed by Schmandt-Besserat, noting that at Tepe Gawra, a child’s grave contained a set of alabaster spheres, implying a gaming function, and that another tomb was found to contain *only* marble spheres, as grave goods, implying high status objects. They asserted that:

“...we cannot assume comparable function for all small geometric objects; certainly they are not all ‘accounting tokens’, though ceremonial or ritual symbols may have had an economic derivation.” (p.352)

Whilst we may attempt to make a sharp distinction between an 'economic' and 'ritual' usage, Jasim & Oates made the sensible point that "the two functions are not necessarily as distinct as our terminology implies." (p.355)

Nevertheless, perhaps as a result of Schmandt-Besserat's undoubtedly exhaustive ancient Near East research, an economic origin is sometimes regarded as being the sole cause for the development of *any* written system *anywhere* in the world. As Powell (2009, p.63) observed:

"The undoubted economic character of the protocuneiform tablets has coloured general histories of writing, suggesting that all writing has appeared in response to economic behaviour."

In opposition to such a view, Powell pointed out that Mesoamerican writing systems were developed in order to glorify its rulers, as may also be said of early Egyptian writing, and that the earliest Chinese writings were oracular in character.

Shang 'oracle-bones'

The Chinese 'oracle-bone' inscriptions of the Shang dynasty (1,751–1,111 BC) constitute the earliest known writing system in East Asia, and form the basis of all later forms of Chinese writing. The so-called 'oracle-bones' were, in fact, either turtle shells, or the shoulder bones of oxen, and were employed in the forms of divination known as plastromancy, or scapulimancy, respectively.

These shells or bones would first be cleaned and prepared so as to create a flat surface. Indentations would then be bored into the surface at regular intervals. The shells or bones would then be subjected to intense heat by means of a heat source being inserted in one or more of the holes. This heat would induce stress fractures on the surface; the ensuing patterns would then be interpreted or 'read' by the diviner. It has been argued (e.g. Marshall, 2001) that there is a connection between the 'oracle-bones' and the 3,000-year-old Chinese *I Ching* or 'Book of Changes', used to this day by millions for the purposes of

divination or for advice of a philosophical nature. Certainly, the similarity between those regular patterns produced on the 'oracle-bones' by the process described above, and the broken or unbroken lines which make up the hexagrams of the I Ching, is indeed a suggestive one.

This pyromancy was a relatively widespread form of divination, being attested throughout much of Asia and also in North America. The practice is perhaps very old, but the earliest evidence in China dates back to around 3,500 BC (at Fu-ho-kou-men in Liaoning), where the fractures were random. The Shang dynasty's innovation was to produce more regular patterns by means of the drilled holes. The other singular factor is that amongst all the worldwide instances of such pyromantic divinatory practices, only the Shang Chinese made a written record of their divinations, by carving signs into the oracle-bones themselves.

The divination process would begin with the shell or bone being anointed with blood, and inscribed with the diviner's name and the date, in a process known as the 'preface'. The subject of the divination would then be posed. Typically, enquiries would be concerned with the health of the king and members of his royal family; the outcomes of forthcoming military endeavours; the prognosis for that year's harvest, and so on. These enquiries were directed at ancestors as well as gods (Keightley, 1978).

Although the characters were mostly carved into the shell or bone, there are a few instances where the writing has been drawn onto the surface in red or black ink, using a brush. Keightley (1989, pp.182-184) observed that there is relatively no aesthetic component to the brush-writing:

"...the aesthetic influence of the brush appears to have been minimal; the brush-written script looks stiff and angular, resembling the carved script. That the Shang scribes could have written all their inscriptions with a brush but chose not to do so raises the interesting question of why they expended considerable time and labour to carve the characters into the bones. One cannot be sure of the answer, but two facts are suggestive. First, the

diviners also carved out some of the cracks as well, rendering them deeper and more visible, and second, the diviners frequently filled the incised graphs and the cracks with red- or black-coloured pigments. These practices suggest that the carving itself served some aesthetic function - permitting the colouration of the writing – and that it may also have served some magical function in which the actual carving, by establishing a sympathy between the crack and the record, helped to “fix” or induce the desired event.”

So the act of carving the signs itself was somehow part of the magico-ritual process.

As regards the nature of the script itself, Bagley (2004, p.198) stated quite unequivocally that it was to be regarded as ‘true writing’ and not just a set of simple pictograms:

“As to the script, specialists are agreed that it is full writing at the moment when we first encounter it; that is, a Shang scribe could probably have written pretty much anything he could say.”

Similarly, Bottéro (2004, p.258) stated that “the Chinese script is obviously an original system of signs created to record an ancestral form of the Chinese language”, and, whilst pointing out the fact of its origin being problematic, still regarded the Shang ‘oracle-bone’ script as being, if not the first, then one of the very earliest such:

“First, it is hard to find any social requirements for writing prior to the Shang dynasty...Second...the graphic style of the Shang script, with its rather pictographic shape, strongly suggests a writing close to its first steps or its beginning...” (ibid).

So, until such time as earlier examples of archaic Chinese writing are discovered, it would seem to be the case that the ‘oracle-bone’ script appeared fully-formed during the Shang period.

Keightley (1989, p.184) noted the “considerable continuity” between the Shang signs and those of later Chinese scripts:

“Literate Chinese of today, untutored in oracle-bone script, would probably find much of it incomprehensible at first glance...but after only a few moments of study they would begin to identify some of the early graph forms that preceded those of the modern script.”

A pattern of development may be observed when one compares the Shang characters with those of the later Western Chou (‘greater seal’) script, the Eastern Chou (‘lesser seal’) script, and finally, the modern forms.

Keightley (1989, p.195) also suggested that “social or technological activity in the late Neolithic” may have led to the development of a writing system – the need for measurement and calculation for constructing pots, and compared this with Renfrew’s argument (1972) of a similar imperative in the Mediterranean:

“Writing in the ancient Aegean seems to have arisen partly to assist in problems of mensuration and calculation. The archaeological evidence suggests that it was indeed the cultures of the Neolithic East that were primarily concerned with such problems. For componential pot construction implies attention to scale and measurement, particularly when three-footed vessels are involved, which must be made of equal size. The parts – legs, handles, spouts, lids – have to be measured so that they will fit the vessel body...”
(Keightley, *ibid*)

The present writer finds this argument unconvincing. Would such a requirement as measurement – admittedly important - have been the driving force for the creation of an entire writing system, rather than just a numbering system? Rather, it would seem more logical to view the oracle-bone characters as being the precursors of later Chinese scripts, and to regard early literacy in China as having been driven by the imperative of magico-ritual demands, namely divination – and as Keightley himself observed, literacy was employed for divinatory purposes 500 years before it was put to any more ‘practical’ use.

‘Old European’

Another writing system, whose origins may also lie not in economic but in religious practices, is the 'Old European' script espoused by the archaeologist Marija Gimbutas, and by later writers. It must be emphasized that the signs (found on pottery, and upon clay tablets) which are claimed to be 'Old European', are by no means universally accepted to be writing. Even if this sign system *is* accepted as being a written language, it is, as yet, an undeciphered one. But, as this article will hope to demonstrate, the work of Gimbutas, Winn and Haarmann builds a strong case.

The discovery, in 1961, of three inscribed clay tablets in a sacrificial pit at Tărtăria, near Cluj, Transylvania (now in Romania), ascribed to the Neolithic Vinča culture, was a perplexing one for prehistorians. Hitherto, the consensus had been that all technological and other innovations had arrived in Europe from the Near East, via diffusion (Childe, 1925, 1929). It was recognized that Neolithic cultures (e.g. the Vinča, Tisza, and Karanovo cultures) in the Balkans were the earliest in Europe to have employed techniques of metallurgy – using copper at c. 5,000 BC - but these techniques were thought to have been developed first in the Near East. Similarly, writing systems were regarded as having first arisen in Mesopotamia. So the discovery of the 'Tărtăria tablets' and their having being radiocarbon-dated to 5,500 BC, clearly conflicted with a Near East origin, given that Uruk IV proto-writing evolved in the later 4th millennium BC.

It should be pointed out that the early date ascribed to the Tărtăria tablets has been challenged, on stratigraphic grounds (Zanotti, 1983). But these inscriptions were by no means the only ones to have been discovered in the Balkans region. Clay tablets, bearing incised signs, found at two Bulgarian sites, Gradeshnitsa and Karanovo, were in both cases radiocarbon-dated to 4000 BC at the latest.

Regarding these incised signs, Renfrew (1999, p.193) observed:

“More than 200 examples have been described from the important settlement of the Vinča culture at Tordos in Romania. Some of them are very simple – just a few strokes on the base of a pot, or a straightforward cross; others show more complicated motifs.”

Whilst the simpler forms might be thought to have been potter's marks, it was these "more complicated motifs" that aroused the interest of Gimbutas, described by Renfrew (1999, p.193) as "the leading American authority on the prehistory of eastern Europe..." She used the evidence of widespread incised signs found at these early Balkan Copper Age sites, together with accomplished sculptures, mainly depicting female figures - upon which signs were often inscribed - to posit a sophisticated matrifocal Old European Neolithic culture in existence between c. 7,500 and c. 3,500 BC.

Certainly the figurines are predominantly representative of the female form. Markotić (1984) stated that, of 558 figurine discoveries attributed to the Vinča culture, 541 depicted females. Whether these figurines represented goddesses or ordinary human females is uncertain, although Gimbutas (1991, p.308) insisted that these objects were religious in nature:

"Votive offerings – gifts to the divinity in accordance with a vow, a wish, or desire – inscribed on religious objects usually found in clusters or rows, are characteristic finds of the Neolithic and Copper Ages, particularly in east-central Europe."

Whilst noting that: "the invention of a script some eight thousand years ago has seemed so unthinkable that to this day the possibility is ignored and its evidence given very little attention" (1991, p.308), Gimbutas went on to declare that:

"Although the Sumerians are generally thought to be the inventors of written language, a script in east-central Europe appeared some two thousand years earlier than any other that has yet been found. Unlike Sumerian script, the writing of the Old Europeans was not devised for economic, legal or administrative purposes. It was developed, instead, from a long use of graphic symbolic signs found only within the context of an increasingly sophisticated worship of the Goddess. Inscriptions appear on religious items only, indicating that these signs were intended to be read as sacred hieroglyphs." (ibid)

These claims may seem incredible to some, but it should be noted that Gimbutas, although the first to portray the many archaeological finds in the Balkan region as being representative of a coherent whole Old European civilization, is not alone in her claims. Winn undertook what is still the most comprehensive study of the Vinča signs for his 1973 dissertation (later published in 1981). It features an extensive sign catalogue, incorporating hundreds of examples from 50 sites identified as belonging to the Vinča culture. 210 basic sign types were identified (Winn, 1981, pp.60-65), which could be subdivided into 18 categories, and further classified as belonging to five core signs – (1) a straight, unbent, unbroken line; (2) two straight lines intersecting at the centre; (3) two lines intersecting at one end; (4) a dot or stipple; and (5) a curved line.

The signs - inscribed on pottery, figurines, spindle whorls, and other more unusual objects, sometimes unidentifiable - were sometimes found in isolation, or as part of a sign group. Arguing against an identification of isolated signs as mere potter's marks, Winn (1981, p.13) noted:

“Isolated signs are found more frequently on pottery, but they may also occur on figurines, rarely on spindle whorls and occasionally on other subjects. Some of the basic sign types appear restricted to figurines and/or whorls. Therefore, these signs cannot be identified as mere pot marks.”

Winn (1981, p.14) also distinguished between mere decorative, aesthetic elements found on the objects, and the signs proper: “A distinction has been made between decoration and signs on the basis of their integration into overall ornamentation or independence from decoration”. He claimed that it was easy to tell which was which, although in some cases, a few decorative elements resembled signs (e.g. the ‘M’ sign, to which Popović and Gimbutas ascribed a religious meaning). He theorized that these had more than just an aesthetic value, with a symbolic meaning also, such that they may have formed the basis for the later origin of the signs proper (1981, p.12): “In a minority of cases the signs may be influenced by decorative prototypes, as there are certain decorative elements which

may be related to the origin of signs.” Interestingly, one decorative element identified by Winn, organized or deliberate scratch marks, was found in abundance at one site, Jela (in modern Croatia), at the very northwest limit of the Vinča culture’s sphere of influence. He suggested that these scratch marks had been made as mimicry of the signs themselves, in imitation of an admired culture (one thinks of Romano-British coinage, where British chieftains sought to emulate Roman coins, reproducing the design whilst not understanding the script).

Winn (1981, p.76) also observed that the signs were inscribed on various parts of the objects: on the rim or upper body; on the lower side near the base; and on the base itself. In his catalogue, these various locations formed a further means of classification. It was noted that certain signs, or groups of signs, tended to be found on certain parts of the objects. For example, the Tordos signs were found to occur “in very high proportions on the base” whereas pictograms were found “principally on the body” of the objects:

Arguing against their identification as mere potter’s marks, he wrote (p.79):

“It is difficult to understand why more complicated signs...should be placed on the base. The general view, of course, has been to dismiss them as proprietary marks, but in my estimation this is an over-simplification. Certainly, some may be proprietor’s marks, but this view does not provide an adequate explanation for the majority of recurring signs. These signs are noted at various sites and do not seem to be intuitively distinguishable for such a basic purpose as ownership, where owners could hardly be cognizant of identical signs elsewhere, unless the identity was entirely the result of chance or there were certain standardized signs, which then must have had an attached concept with which the owner was familiar when he utilized the sign as a pottery mark.”

Instead, Winn maintained that the above observations denoted “purposeful distinctions in sign usage and, therefore, an intention to communicate something meaningful”, concluding (p.235) that the signs form a “conventionalized and standardized” semiotic system, rather than individual signs being merely discrete magical symbols (p.267):

“The suggestion that the signs represent nothing more than magical marks is untenable, although some simple signs, particularly on pottery vessels, may have been inscribed as part of magical formulae. The evidence shows deliberate sign usage at various sites according to object and function; this usage over space and time illustrates its meaningfulness in the world view of the society.”

Whilst the system could not be termed ‘true’ writing, on account of insufficient attestations of group sign repetition, Winn nevertheless argued against its being, fundamentally, a pictographic one – the majority of signs being abstract linear ones which occur alongside earlier pictographic signs, which in turn have been observed in isolation, at the earlier Tordos site. Thus the Vinča system may have developed from an earlier pictographic one, much like the development of Sumerian logograms and syllabograms.

Regarding the origin and source of the Vinča signs, this has been the source of much debate. Following the discovery of incised signs from the Tordos site in 1879 (during Zsófia Torma’s excavations of this very large site, yielding some 10,000 objects, from 1875-1891), and others found during the first Vinča excavation by M. Vasić in 1908, it was the general view that the script must have arrived in the Balkans by means of diffusion from elsewhere. Torma (1889) argued for an Assyro-Babylonian influence. The prevailing view at the turn of the nineteenth century was that early Troy and early Dynastic Egypt shared a common script. Vasić (1908) argued firstly for a Trojan influence, and then later suggested (1957) that there had been an Ionian colony at Vinča. And the enormously influential V. Gordon Childe (1927, p.83) claimed “an ethnic connexion between the first settlers at Vinča and the peoples of the Aegean”, also noting (p.88) analogies between the cultures of predynastic Egypt, Troy, and Vinča.

However, the application of C-14 radiocarbon dating techniques in the 1950s, which gave a date of 4,240 BC to the earliest Vinča finds, meant that such ‘diffusion’ theories of origin were untenable, the earliest date for the foundation of Troy being at least 1,000 years later. Whilst the implications of these startling dates were still being assimilated, the

discovery in 1961 of the three Tărtăria tablets added further controversy. The excavator, N. Vlassa (1963) drew attention to the Tărtăria signs' similarity with those of the Uruk IV and Jemdet Nasr tablets (late fourth to third millennia BC), a view with which Falkenstein agreed (1965). Vlassa claimed the earliest level of the Tărtăria site to be no older than 2,700 BC, this making a Mesopotamian origin tenable. Other writers such as Popović (1965), Hood (1967) and Makkay (1969) concur. Popović, taking a similar view to Gelb, does not regard the Balkan civilization to be sufficiently advanced as to develop a system of writing, and thus claims a Sumerian origin. Hood also adheres to a Childe-like diffusionary theory, arguing that the magico-religious attributes of the Vinča signs may have resulted from religious conversion via Near East influences. And Makkay (1969, p.14) compiled a list which compared Vinča signs with those of Mesopotamia, admitting that he is compelled to make such Near East connections for want of any possible European influences. Nevertheless, the Tărtăria signs aside (which this writer considers to be something of a red herring, on account of their debatable date (see Zanotti, 1983) and similarity with Jemdet Nasr/Uruk IV pictograms), there is clearly a problem for an *ex oriente lux* argument, given that C-14 dating ascribes a date of 4,240 BC to the earliest Vinča finds. Indeed, with radiocarbon calibration (the method by which a more accurate date may be found), an additional 500-800 years must be added, so that the dates are pushed back still further! Accordingly, we are faced with a well-established Balkan civilization flourishing in the 5th millennium BC, reaching its pinnacle around 4,000 BC, with its decline or destruction coming some time in the 4th millennium.

As noted above, Winn argued that the Vinča signs were derived from five core elements. Noting the prevalence of such signs as the zigzag or meander, the spiral, and the cross or X, he further noted (1981, p.237) that "such signs/motifs can be considered symbolic: fertility, good fortune or welfare, duty, water, etc...The association of such symbolic decoration with figurines is clear". Gimbutas (1991, p.314) claimed a Palaeolithic provenance for certain core Vinča signs:

"Independent abstract signs, not pictographs, such as V, X, and Y, originated during the Upper Palaeolithic. A number of them, engraved on stone, bone, and antler, continued

through the Mesolithic into early phases of the Neolithic. In Old Europe and Anatolia they consistently recur on ceramics in various arrangements: duplicated, triplicated, multiplied, inverted, opposed, and associated with meanders and parallel lines. Some signs are continuous from the Upper Palaeolithic Gravettian and Magdalenian cultures into the Neolithic, Copper Age, and even early Bronze Age of Europe and Anatolia, a span of 15,000 years.”

She further attributed religious meanings to these signs; thus, the V sign was said (1991, p.315) to derive from the vulva or pubic triangle, “one of the earliest symbols known from prehistoric art...Its repetitiveness in homologous contexts speaks of its central role in the symbolism surrounding certain aspects of the Goddess.” One might, at this point, note this sign’s similarity to the Sumerian sign for ‘female’ (‘MUNUS’; Labat, 1948, no.554), although it should be noted that I am not arguing here for diffusion, an Old European influence on Sumerian; rather, that such elementary signs may have had an independent origin in different parts of the world at different periods.

Noting (p.315) that “multiple V’s or chevrons appear consistently on both articulate and schematic effigies of the Bird Goddess, and on objects associated with her veneration, such as ornithomorphic vases...”, Gimbutas observed (p.316) that:

“Examination of the repertory of symbols on figurines leads to several observations. Signs surrounding the image of the Bird Goddess, for example, (such as V’s and chevrons combined with X) identify her, while V’s associated or connected with meanders, zigzags, or parallel lines emphasize her intimacy with the aquatic life-giving sphere, suggesting her function as a giver of moisture and life waters...I believe that the Old European sign system developed into a script from extensive use of very ancient symbolism. It is possible that certain symbols could have had a phonetic sound much earlier than the 6th millennium B.C.”

One might note that the Sumerian sign for ‘water’, (‘A’; Labat, 1948, no. 579) in its very earliest forms (e.g. Jemdet Nasr or Uruk IV periods) resembles a zigzag. Rudgley argued

that the zigzag's association with water had a very early origin (1991), citing Marshack's (1972, 1976) detailed examination of deliberate marks found on Upper Palaeolithic animal bones – in particular, the discovery of a zigzag on a fragment of bone found at a Mousterian site (Bacho Kiro, Bulgaria), suggesting a possible Neanderthal date.

Naturally, the idea that writing may ultimately have a Palaeolithic origin is very problematic, and has met with opposition by some in the academy. Forbes and Crowder (1979, p.359) wrote:

“The proposition that Ice Age reindeer hunters invented writing fifteen thousand years ago or more is utterly inadmissible and unthinkable. All the data that archaeologists have amassed during the last one hundred years reinforce the assumption that Sumerians and Egyptians invented true writing during the second half of the fourth millennium. The Palaeolithic-Mesolithic-Neolithic progression to civilization is almost as fundamental an article of contemporary scientific faith as heliocentrism. Writing is the diagnostic trait, the quintessential feature of civilization. Writing, says I. J. Gelb, ‘distinguishes civilized man from barbarian’. If Franco-Cantabrians [i.e. Ice Age European peoples] invented writing thousands of years before civilization arose in the Near East, then our most cherished beliefs about the nature of society and human development would be demolished.”

This is not to say that a Neolithic origin is any less controversial! Winn himself was unable to bring himself to describe the Vinča signs as true writing – hence, when his 1973 dissertation, *The Signs of the Vinča Culture* was published in 1981, it was titled ***Pre-Writing in Southeastern Europe: The Sign System of the Vinča Culture*** [my bold]. Winn was unable to determine the Vinča system to be a logographic one, due to the insufficient attestation of long strings of signs - whilst qualifying this with the cautious remark (1981, p.238) that “the system may be partially logographic, i.e. some of the signs may represent words or concepts.” Neither was he able to describe it as a phonemic one, and therefore concluded that it was a system of pre-writing rather than writing proper.

In a linguistic study, Haarmann (1995) examined the Vinča sign system, in comparison with those of ancient Mediterranean civilizations such as that of Crete - Linear A & B - and the Cypro-Minoan script. He noted Winn's refusal to ascribe 'true writing' status to the Vinča signs, but pointed out Winn's adherence to an American definition of writing (Haarmann, 1995, pp.31-32): "[i]n American terminology, "true writing" or "full writing" is reserved to mean 'phonetic writing of some sort'" He suggested that instead of 'pre-writing', the term 'nuclear writing' be used to describe early writing systems which, whilst essentially logographic, were not yet phonetic.

Haarmann (1995, p.28) believed that the Vinča signs comprised a 'sacred script', a genuine writing system, albeit one as yet undeciphered:

"The close relationship to objects which were used in burial rites or magico-religious rituals, that is, votive offerings and cult vessels, and the presence of inscribed objects with a potential usage such as offering gifts in the residential areas of the Chalcolithic settlements is indicative of a sacred function of the Old European script."

Renfrew (1999, p.204) refused to ascribe to the Vinča signs the status of 'true' writing:

"To call these Balkan signs 'writing' is perhaps to imply that they had an independent significance of their own, communicable to another person without oral contact. This I doubt."

Rather, he compared them to the signs on the *rongorongo* wooden tablets of Easter Island (sacred objects surrounded by taboos), which, he argued, functioned as mnemonic aids for religious chants within an essentially oral tradition, citing Metraux (1957, p.206):

"The *rongorongo* of Easter Island bards used staves to augment the effects of their recitations. On these staves the engraved sacred symbols, like the notches on the staves of the Maori orators, may originally have been aids to memory; later the decorative or mystic aspect of the symbols gained over their pictographic significance...We may

suppose that the signs were arbitrarily associated with chants, each symbol representing a significant word, a phrase, a sentence or even a verse.”

In a comparison with the Vinča script, Renfrew (1999, p.204) argued that the *rongorongo* tablets demonstrate how an elaborate sign system might arise in a “relatively small society, which, despite its hierarchy, had no permanent central bureaucracy, and no full-time specialists.”

However, he also suggested that, further comparing the *rongorongo* tablets with the Vinča script, we may infer the latter to have had mnemonic value only, rather than being anything so sophisticated as ‘true writing’ by which ideas might be communicated to any other party who was able to understand the script. And, citing those Vinča signs that are found inscribed on pottery, Renfrew compared them with potters’ marks from other cultures and periods, for example, those of Phylakopi in the Cyclades, c. 2,000 BC. These, he argued (1999, p.204), were merely a “private code, significant only to the potter who made [them]...carrying a meaning only at the moment they were made.” This seems an unfair comparison, when one recalls Winn’s extensive catalogue of the Vinča signs; from the thousands of occurrences found in museums in Europe and the US, he identified recurring attestations of 210 signs, which themselves could be analysed as belonging to one of five core sign groups. Further, these signs had been found at sites with a wide distribution throughout the Balkans region, not one single local area. Clearly, the Vinča signs were not merely a “private code.”

By way of contrast, Renfrew (1999, p.204) noted that “the writing of the Near East, like that of Crete, grew up in another context, that of the emerging palace economy, with the need to record in- and out-payments and to indicate ownership.” In such an emerging trade economy, the need for written signs which form a codified system which may be readily understood by others, without the need for oral explication, is clear. The agricultural society of the Vinča culture had no such economic imperative, and as Renfrew pointed out (*ibid*), in terms of archaeological discoveries, “there is no evidence for a redistribution system like that of early Bronze Age Greece, where the seals and sealings

were functional objects of real economic significance.” Instead, the inscribed figurines and tablets of the Vinča culture:

“...testify to a very real absorption in religious affairs: and it is in this context that the signs on the tablets and plaques have to be understood. I suggest, indeed, that this “writing” emerged in a religious context, not an economic one.”

Thinking of the Vinča signs as mnemonic devices, *aides-memoires* for participants in religious ceremonies (as per the Easter Island *rongorongo* tablets), Renfrew compares them with Navaho sand paintings, which were designed according to strict conventions and laden with symbolism, were made specifically for use in a ceremony, after which they were destroyed. Had they, he suggested (p.204): “...been in a permanent medium they would have been – like the Balkan tablets – enduring repositories of symbolic information, indeed a form of writing.” So the Vinča signs may also be a ‘form of writing’, although:

“...while we can agree with the Bulgarian scholar Vladimir Georgiev that these Balkan signs had an independent origin and held a real meaning for those who made them, to talk of writing, without careful qualification, may not be appropriate.”

Renfrew’s refusal to view the Vinča signs as comprising a script has been criticized (Haarmann, 1995, p.77), on the basis that “his opinion was based on scarce iconic material in the first place, and [that] he [had] inspected only a few specimens of Old European writing then known.” Winn’s investigation, involving the analysis of thousands of inscribed figurines and other objects, was far more rigorous. Perhaps Renfrew hesitated to talk of the Vinča signs as being ‘true writing’, because of the fantastical and unacceptably unorthodox implications of a writing system from Europe which pre-dated that of Mesopotamia by several thousand years.

The language spoken by these Neolithic Balkan peoples is totally unknown to us today. It was not an Indo-European language, since, according to Gimbutas’ hypothesis, Kurgan invaders from the Russian steppe first brought an early Indo-European language to

Europe, when they over-ran the Balkans and displaced the 'Old European' civilization and peoples. (For a geneticist's findings which lend support for this theory, see Cavalli-Sforza, 1997). We are thus unable to map the Vinča signs (as written language) against a spoken counterpart. Therefore, Gelb's distinction between a '*semasiographic* stage of writing (conveying meanings and concepts loosely connected with speech) and *phonographic* stage (expressing speech) is inapplicable – since we are unable to say whether the signs merely conveyed certain ideas and notions that were expressed by the spoken language, or whether they directly expressed speech (e.g. phonetically). It will be recalled that Gelb would only ascribe the status of 'true writing' to a phonetic system. It does seem unlikely that the Vinča signs are phonetic representations of a spoken language; there do not seem to be sufficiently lengthy 'strings' of signs (as one observes in, for instance, Sumerian tablets), so are they more likely to have been pictographic or ideographic in character?

Again, one recalls Hooker's argument that a purely pictographic system is not 'true writing', since it depicts an event or message by purely visual means, rather than referring to any linguistic content; this also reminds us of Falkenstein's observations (1936) that the earliest Mesopotamian signs (at Uruk IV) were seldom pictographic in character. Whilst we cannot be certain, it would seem likely (for the reasons stated above) that the Vinča signs are pictographic or ideographic, rather than syllabographic. Nevertheless, Hooker refused to follow Gelb's lead in distinguishing between 'primitive' and 'complex' writing systems. He argues that pictograms were developed mainly amongst hunting or farming societies. So, in this sense we may claim a highly developed 'order of complexity' for the Vinča system, whilst not according it the status of writing. Hooker wrote (1990, p.6) that "so-called 'primitive' societies using pictographs may be just as complex in their modes of thought as users of other methods but it is a different order of complexity", arguing that pictographic systems tended to arise in hunting or farming societies rather than urban ones – like the Balkan 'Old European' civilization.

Conclusion

As noted above, there is disagreement as to whether the Vinča signs may be regarded as constituting 'true writing' or not. Winn ascribed to them the status of 'pre-writing', and

Renfrew, by way of comparison with the *rongorongo* tablets, suggested that their function was a mnemonic one, an *aide memoire* for oral religious practice. Haarmann and Rudgley, however, insisted that the signs were a fully-fledged - if as yet undeciphered - writing system.

It should also be stated that Gimbutas has been criticized in some quarters. Such criticism tends to focus on the speculative nature of her theories - based on an 'archaeo-mythological' approach - which posited the existence of a peaceful, artistic and matrifocal 'Old European' civilization. Partly because the script (if it is indeed a script) remains undeciphered, it could be asserted that her ideas concerning the wider 'Old European' culture lack foundational evidence to support them (although see Cavalli-Sforza, 1997). In addition, it has been argued that her theories were motivated by a desire to promote a feminist agenda (e.g. Hayden, 1986; Sommers, 1995), although for stout rebuttals of such criticism, see Christ, Goldenberg & Spretnak (all 1996).

However, whether or not one accepts the existence of the 'Old European' civilization as described by Gimbutas, the existence of a Vinča sign system is surely incontrovertible (following Winn's rigorous and scholarly analysis).

Notwithstanding the above controversies, Winn, Renfrew and Haarmann are all in agreement that the signs originated in a ritual-ceremonial-religious domain, rather than an economic one. The same may also be argued as to the development of early Chinese scripts, namely, that the motivation was magico-religious in essence (i.e. divination) rather than economic. For this reason, both Renfrew and Haarmann compared the Vinča script with that of the 'oracle-bones'. As noted above, the act of carving the 'oracle-bone' signs itself was a part of the magico-ritual process, so perhaps a tentative analogy might be drawn with the Vinča signs - particularly those carved on figurines which apparently depict goddesses.

However, until such time as a Rosetta stone equivalent is discovered, bearing the Vinča characters alongside those of another (known) script, the former will continue to remain

the subject of speculation as to their nature and meaning. But, whether we accept the Vinča script as being 'true writing' or not, it is, I believe, reasonable to regard religion rather than economics as the driving force behind the 'invention' of the signs. As Winn (1981, p.255) concluded:

"In the final analysis, the religious system remains the principle source of motivation for the use of signs. The thousands of [inscribed] excavated figurines impressively demonstrate the cardinal role of domestic ritual in Vinča society."

END

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