

ANCIENT EGYPTIAN HIEROGLYPHS IN SHANG BRONZE INSCRIPTIONS

by

Steve Mitchell

Summary

A comparison of 39 Egyptian hieroglyphic determinatives with the oldest known version in Shang bronze script reveals a remarkable similarity of graphic shape and meaning. Out of the 39 hieroglyphs selected only 20 Shang characters with same or similar meanings were traceable but of these 18 made an exact match. As this represents nearly half of the total it argues for a higher than chance probability that these matches could not have arisen coincidentally. This article sets out the methods used and briefly discusses each matching pair and attempts, briefly, to set them into a historical and cultural context.

THIS ARTICLE describes a theoretical exercise devised to examine the possibility of cultural diffusion between ancient Egypt and ancient China. The author had noticed that certain Chinese bronze graphs were similar to Egyptian hieroglyphs and wanted to see whether there might have been cultural contact at some point in the past. A test was then devised to show that mere chance or simple co-incidence was not in play. The method used to test the hypothesis that Shang script was related to Egyptian hieroglyphs is described below.

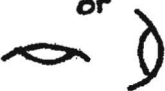
After much trial and error a table of 39 Egyptian determinatives was selected. This table was published in D. Diringer's "The Alphabet" (Diringer, Vol 2, 40) and has been supplemented by further examples, taken from the same publication, of the most ancient version of a particular hieroglyph –

see Figure 1. Then a search of primitive Chinese characters was undertaken using Wieger's "Chinese Characters" (Wieger) – see Figure 2. When a match was made, a further search of Diringer was also undertaken to reveal the most ancient Chinese version of that character. The final match was then made between the most ancient forms that were available. Before proceeding to the results it is worth describing the sources used and some of the difficulties and limitations of the technique.

DIRINGER'S opus was chosen because it is up to date and is widely considered to be authoritative avoiding as it does some of the more extreme or abstruse points of view held by Egyptologists and Linguists alike. Most of the forms found in Diringer are of the written form of the hieroglyphs known as hieratic script. There is no difference in meaning

Figure 1 A table of ancient Egyptian hieroglyphic classifiers

From David Diringer: *The Alphabet Vol II* pg 40

1 Heaven, sky, ceiling, what is above 	2 Night sky, darkness, night 	3 a storm, hurricane 3 b rain or dew 	4 sun, Ra, day, time 	5 shine, rise, being of light 
6 moon, month 	7 star, morning star, hour, time for prayer, pray 	8 flourish, blooming, year, time, last year of a king's reign 	9 foreign country, desert 	10 mountain 
11 island 	12 city, town 	13 Nome, district 	14 water, watery mass of the sky 	15 skin, hide 
16 worm 	17 plant, dried up, vegetable, 	18 field, garden 	19 grain, corn 	20 man, 1 st person singular 
21 woman, 1 st & 2 nd person singular 	22 god or divine person 	23 pray, adore, worship, entreat, praise 	24 high, lofty, exalt, make merry 	25 to see 

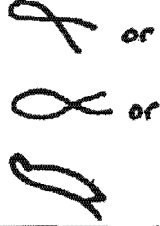
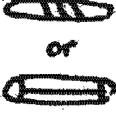
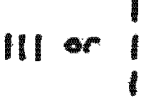
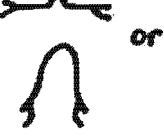
26 to weep, tear, grief 	27 hair (of men and animals), bald, lack, want, colour, complexion 	28 phallus, front, male, masculine, procreate 	29 women, goddessess, cities 	30 sweet, pleasant 
31 incense 	32 roll of papyrus, tie up, bind together, come to an end 	33 roll of papyrus (tied round the middle), book, deed, document, register, group together, abstract ideas 	34 cartouche 	35 pair of tallies, count, tally, reckon, pass by, depart 
36 bread, cake 	37 sign of plural 	38 negation, no, not, nothing, lack, want, need 	39 hom 	

Figure 2 A table of primitive Chinese characters

From Dr L Wieger *Chinese Characters* 1927 (W) Also from David Diringer *The Alphabet* (D)

1 heaven  Lesson 34H (W) Mi to cover  Lesson 1A (W)	2 Ming darkness  Lesson 34G (W)	3 Yu rain  Lesson 1B (W)  Ancient (D)	4 Jih sun, time  Lesson 143A  Ancient (D)	5 Hao shining  Lesson 143D (W)
6 .Yueh moon  Lesson 64A (W)  Ancient (D)	7 Hsing stars, essence of matter  Lesson 79F(W) See 19	8	9 Shan mountain(s)  Lesson 80A (W)  Ancient (D)	
11 chou island  Lesson 12A (W)	12	13	14 Shui water  Ch'uan river  Lesson 125A & 12E	15
16 Hui worms  Lesson 110A (W)	17 Hui plants, vegetables  Lesson 78F (W)	18	19 See 7 and notes in text.	20 jen man  Ancient (D)
21 Nu girl, 2 nd person sing.  Lesson 67A  Ancient (D)	22	23	24 Ta high, lofty, great  Lesson 60A (W)	25 Mu human eye  Lesson 158A (W)  Ancient (D)

26	27 Mao hair, fur  Lesson 100 A (W) Shan hair, feathers  Lesson 62A (W)	28	29	30
31	32	33	34	35 Wu five  Lesson 39A (W)
36	37  three Ancient (D)	38 Fei abstract idea of opposition, no, negation, not so,  Lesson 170A (W)	39	

Classifier groupings: *kindred, houses, utensils, music, heaven, earth, mounds, hills, water, plants, trees, insects, fishes, birds, wild animals, domestic animals.* [*Italics indicate that the same classifier grouping exists in ancient Egyptian.*]

between the two forms, sculpted or written, and the term hieroglyph can be used interchangeably with hieratic without loss of meaning. It is interesting to note that there is vastly more variability between written versions of the same sign (Goedicke) and that many of these Egyptian hieratic signs are indistinguishable from its Chinese counterpart. What is more the earliest hieratic script was written vertically from right to left. Many early papyrii bare such an uncanny resemblance to some forms of modern Chinese script that, superficially at least, one might be uncertain as to which language it is – see two examples illustrated at Figure 3. With the disappearance of vertical hieratic the script, the form changes sufficiently so as to be clearly recognisable as Egyptian. This fundamental change takes place at roughly the same time as Shang bronze script makes its appearance in China – a point returned to later on.

WIEGER ALTHOUGH originally published nearly a century ago has not been superseded and is still available in reprint. It is limited in as much as it only deals with the development of primitive written characters from earlier bronze forms. The growing corpus of inscribed bones and shells have only become available during the second half of the twentieth century. From a limited inspection of this divinatory material the author has not been able to detect any difference in surface appearance to the bronze dedicatory repertoire described in Wiegier. For the purpose of this exercise it is assumed that there is no difference in meaning between the moulded bronze graph and an inscribed bone or shell graph of the same shape. The spoken sound made by each sign, whether Egyptian or Chinese, is ignored for the purpose of this exercise.

The accompanying tables refer to D for Diringer and W for Wiegier. When Wiegier is referred to then it is accompanied by a further reference to the Lesson and the Lesson

number in which Wiegier discusses each primitive or group of primitives.

FOR CLARIFICATION, a determinative is a specialised graph that determines or classifies an associated group of graphs with similar attributes. Although the Egyptian forms are called ‘determinatives’ and the Chinese forms are called ‘classifiers’ they are both identical and interchangeable terms. For instance in both Chinese and Egyptian the sign for water classifies or determines all watery objects. To simplify matters only the term ‘classifier’ will be used for the remainder of this article. It is worth noting that some authorities cite many other Egyptian classifiers. For instance the sign for pyramid is sometimes described as a classifier, but as it only classifies itself then it serves no useful purpose here. Wiegier lists 224 Chinese primitives of which some 214 form the modern radicals. The radical can be considered as a classifier. Therefore not only are there more classifiers in Chinese but they also fall under 16 broad groupings which are listed below. Those written in *italics* correspond to Egyptian equivalent. For simplicity sake the full table of Chinese radicals is omitted.

Chinese classifier groupings:
kindred, houses, utensils, music,
heaven, earth, mounds, *hills*, *waters*,
plants, trees, insects, fishes, birds,
wild and domestic animals.

Discussion:

IN COMPARING the tables at Figures 1 and 2 the author has analysed the degree of correspondence between each pair. Any matches are then described as either Perfect or Close and are listed below. Some pairs are more difficult to match and these are discussed separately. However, before entering this detailed analysis it worth noting that Diringer’s list of 39 Egyptian classifiers could be modified by removing those signs

Figure 3

Chinese and Egyptian script comparisons.

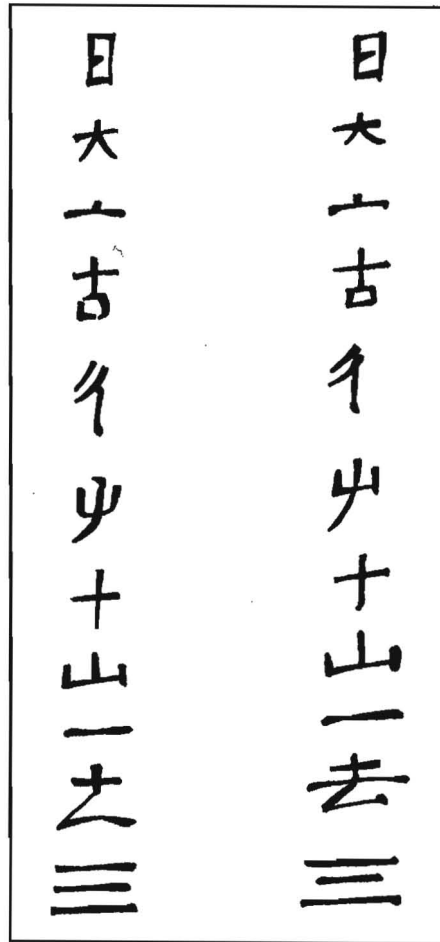


Figure 3 a

The left hand column is hieratic signs taken at random from the Hatnub pyramid graffiti series, First Intermediate Period – Dynasties 8 to 10: c2100 BC (Goedicke). They have been matched against modern Chinese characters written in the Hsing-shu style (Diringer). The selection was arbitrary. Although only graphic similarity was used as a selection criteria, 4 and possibly 5 in number also matched for meaning. This was arrived at entirely by chance.

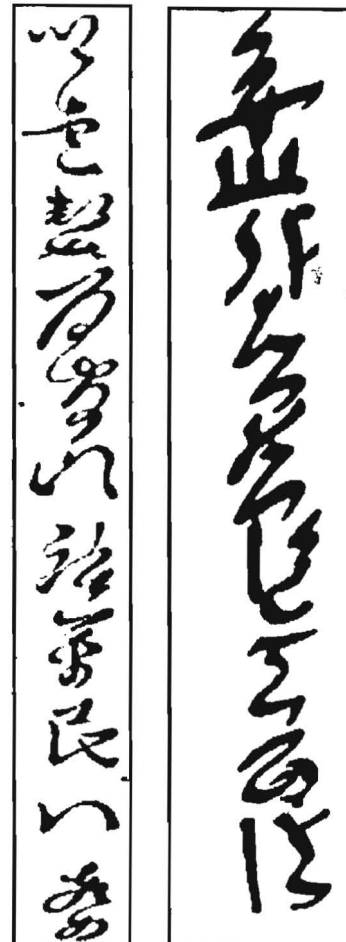


Figure 3 b

The left hand column is an example of modern Chinese written in Ts'ao-shu style (Diringer). The right hand column is ancient Egyptian hieratic from the Berlin Papyrus – Middle Kingdom: c1900 BC (Diringer). There are superficial graphic similarities. Both are written vertically and from right to left: a feature common to Chinese script from around 2500BC until 1900BC.

for which there is no known cultural parallel in China. For instance number 13, Nome is a purely Egyptian invention based as it is (and shown graphically) on the administrative division of the Nile valley. The removal of 13, Nome; 32, roll of papyrus; 33, book (roll of papyrus tied about its middle) and 34, Cartouche therefore reduces the list to 35 hieroglyphs for comparative purposes. This would, of course, raise the percentage of matching pairs to the total but this has been rejected in order to present the most conservative picture possible.

Perfect matches: the following 14 pairs are considered to be exactly matched and need no further discussion except for 9, Mountain.

1	Heaven
2	Rain
3	Sun
6	Moon
9	Mountain
14	Water
16	Worm
17	Plants
20	Man
21	Woman
24	High
25	Eye
27	Hair
37	Three

Note: 9 Mountain: you will notice that pair 9 only match in graphic form and not in meaning. However, Egyptian 10, for which there is no matching pair in Chinese is very close in graphic form and is identical in meaning to Chinese 9. This is because in ancient Egyptian 'mountains' came to mean 'foreign lands' and thus by extension a 'mountains person' meant 'a foreigner'. In Chinese there is no distinction between singular and plural but in Egyptian this distinction was made thus isolating the separate meanings, mountain and foreigner. Again it could be argued that 10 Foreigner could be omitted thus enhancing the final

percentage score of matching pairs but this has been rejected for the reason cited above.

Close matches: the following 4 pairs are considered to be close matches and are discussed briefly in the notes below.

5	Shining
11	Island
35	Five/Pair of Tallies
38	Negative

Notes:

Chinese 5, Shining breaks down into three components: the Sun (as in 4), the suns rays immediately below it shining down on to a man (men). This last element, which is typically Chinese is missing from Egyptian 5 which shows merely the sun and it's rays.

Chinese 11, Island is graphically a more elaborate version of it's Egyptian pairing.

Chinese 35 is interesting as its meaning, the number five, is supposedly derived from the act of counting by tallies.

Chinese 38 has the associated meaning of the abstract idea of opposition. This finds it's graphic match with Egyptian 38 as well as sharing the meaning of negative or negation.

Difficult pairs: these pairs are not scored as matches and are discussed below.

Chinese 2, Night (in the sense of darkness) has a superficial graphic resemblance to its Egyptian pairing. The upper element is a variant of 1 Mi-cover, which is often used instead of I - heaven to mean heaven. This would therefore correspond to the top element of Egyptian 2. However, the lower element of Egyptian 2 is Egyptian 7, Star. The meaning 'night sky' is shown as a star hanging in heaven. The Chinese version depicts a sun covered up for the 12 hours of darkness. Although there are some similarities this has not been included as a close match.

Chinese 7, Stars is distinctly different to its Egyptian counterpart. However, the top

Figure 4 A comparison of the historical development of Egyptian and Chinese writing
From Wiegner and Diringer

Technology	China	date	Egypt	Technology
	Fu-hsi and Ts'ang-hsieh invent writing	4000	Thoth invents writing	
		3500		
		3000	Hieroglyphs appear	Monumental script on stone (hieroglyphs) and fibre-tip (brush-pen) on papyrus (hieratic script)
	Emperor Huang-ti codifies writing for communicating orders to his Mandarins	2500	Hieroglyph canon introduced	
			Vertical hieratic disappears	
		2000	Rebus introduced in Middle Kingdom	
Incised oracle bones and cast bronze	Earliest graphs appear in Shang dynasty	1500		
	1800-1200BC		Horizontal hieratic used for sacred and secular	
'fountain pen' on bamboo slats	Catalogue of Greater Seal characters	1000		
	Classifiers introduced	500	Demotic script widely used	
	Catalogue of Lesser Seal characters	0		Monumental writing on stone disappears
	Phonetic component introduced	500	Greek script replaces demotic. Hieroglyphs disappear.	
Brush on paper	Rebus phonetics classified by rhymes	1000		
		1500		
	K'ang-hsi dictionary	2000		

element consisting of three small circles matches that of Egyptian 19, Grain. This is interesting because the other meaning of Chinese 7 is 'essence of matter' which is shown graphically in the top element as three seeds or pieces of grain. A close match has not been scored for this pair.

THIS THEN leaves a further twelve of the Table shown in Figure 2 that cannot be found. It does not mean that their pairings does not exist; merely that it is beyond the ability of the present author to discover them.

Conclusions:

Fourteen pairs have been shown to be identical or if not, to match almost exactly. A further four pairs are close enough matches to be considered for inclusion in the total. The remaining two pairs have been excluded from the total despite certain tantalising similarities. Twenty-one pairs have not been matched for one reason or another.

In total 18 matches have been made out of a possible 39 – a percentage score of 46. Arguably, this is well above chance and therefore proves a connection of some sort between ancient Egypt and China.

THE QUESTION of how Egyptian hieroglyphs became part of the Chinese lexicon remains to be answered and must be dealt with elsewhere. The historical context of both scripts has been long established by others and their cultural and technological histories can be reasonably compared without

controversy. This comparison is set out graphically in Figure 4. The most notable feature is the apparent temporal discontinuity circa 2000BC touched on above. It shows that within a relatively short space of time Egyptian vertical hieratic disappears at the same time that Shang bronze script first appears. Until now this may have been regarded as merely an unusual co-incidence. The results of the test summarised in this article must surely challenge this view and seeks to show that this apparent synchronicity could be caused by intercontinental contact.

Abstract:

THE PERFECT or close match of 46% of the total possible matches between the corpus of ancient Chinese Shang bronze graphs and Diringer's Table of 39 Egyptian classifiers is high enough to be beyond chance. Even if the 39 Egyptian classifiers were compared against all 214 Chinese classifiers, then 18 matches represents nearly 7.5% of the Chinese total; a percentage that is statistically significant.

This then poses the central question of "How could this have arisen"? The article makes no attempt to answer this but, nevertheless, does point to the synchronous event in which vertical hieratic script disappears from Egypt and Shang bronze script first appears in China. The further unanswered question then posed is – "Can this synchronicity really be coincidental"?

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The drawings in Figure 1 are copied from Diringer (see above). The drawings in Figure 2 are copied from Diringer and Wieger (see above). The drawings in Figure 3 are copied from Diringer and Goedicke (see above).

Correspondence address:

Steve Mitchell
Berkeley Cottage
Sibbertoft
Market Harborough LE 16 9 UF
UK

~~e-mail: steve@berkeleycottage.co.uk~~