

# The Origins of the Chinese Writing System: Explorations in Linguistic Archeology and Sociolinguistics

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## Outline

1. A bird's eyeview of the Chinese writing system
2. Supporting evidence for transition from graphic symbols to writing system
  - a. Physical Archaeology –Keightley, 1989
  - b. Environmental Archaeology – Demattè, 2010
  - c. Linguistic Archaeology– Tsou, 1981
3. Implications and other support
4. Concluding remarks
5. References

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## Abstract

Based on the discovery of oracle bones inscriptions, there is strong evidence for a mature Chinese writing system and an associated literacy tradition by 12C BC. [Keightley]. These inscriptions were used for mostly divinational and ceremonial purposes and they followed the earlier discovery of pottery marks and even earlier rock carvings. However, 12C BC is often recognized as a watershed mark in the development of the written language and the Chinese Writing System because the earlier archaeological finds could not confirm the Chinese character's active use as a literacy agent. Furthermore, the possible dating of the origin of the Chinese writing system has attracted only scant attention until recently (Demattè, 2010), as is the case with the sociolinguistic analysis of the unique Radical system underlying the Chinese characters [Tsou, 1981].

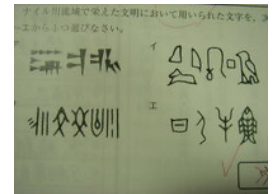
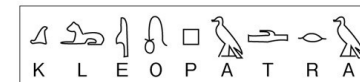
We propose to re-examine the internal structure of the Chinese writing system and what light could be shed on its origins. We base our analysis on the 540 radical system, first codified by Xu Sheng about 2 millennia ago, and the subsequently revised 214 radical system 1800 years later during Qing Dynasty.

We consider the significance of the strong evidence of social structure such as matriarchy as well as the additional changing saliency in the underlying taxonomy of fauna and flora, including animals such as elephant/mammoth. Furthermore, drawing on more recent archeological finds we propose that the Chinese writing system was well developed long before the appearance of the oral bone inscriptions in 12C BC and very likely prior to the end of matriarchy in China, and examine how the Rebus Principle in written communication has contributed to the maintenance of the morpho-syllabic Chinese Writing for an unprecedented long duration. BKT 2023.11 2

## Different graphic symbols from Four Ancient Civilizations



- Ancient Egypt
  - Egyptian Hieroglyphs
- Mesopotamia
  - Sumerian Writing
- Ancient China
  - Chinese Characters
- Indus Valley Civilization
  - Harappan Script



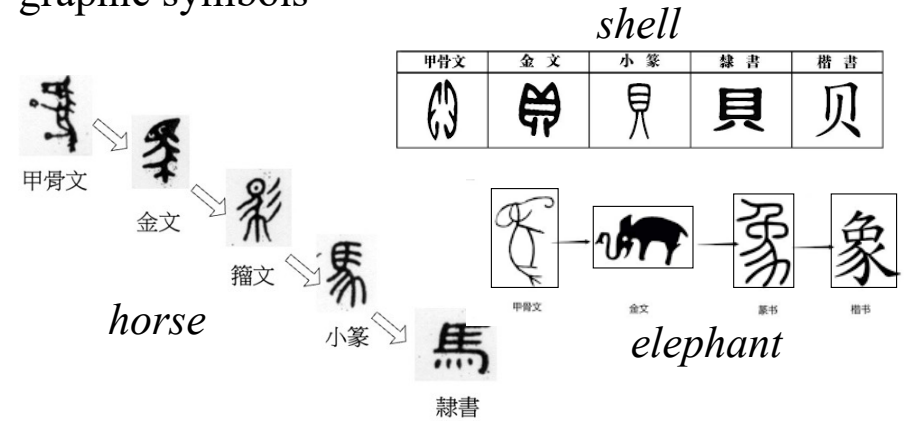
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# 1. The Chinese writing system

## 1.a Chinese oracle bone inscriptions



## 1.b Evolution of Chinese linguistic signs from graphic symbols

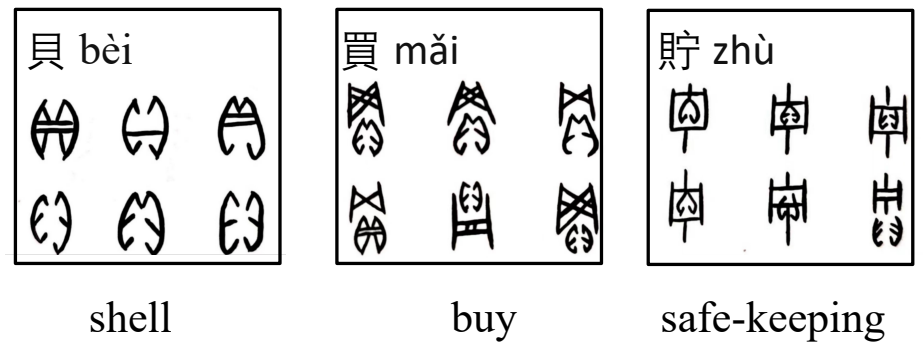
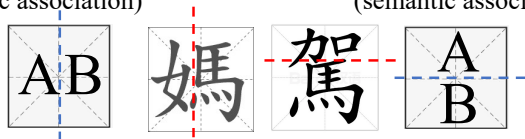


## 1.c Chinese logographic radicals and writing system

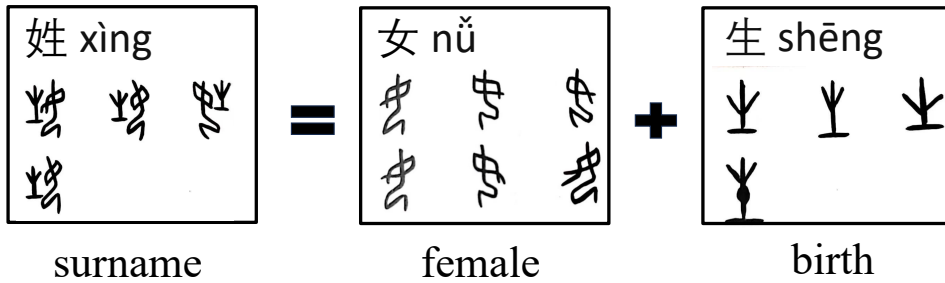
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|--|---|
| <p><b>A. Phonetic component</b></p> <ul style="list-style-type: none"> <li>1. 媽 ma "mother"</li> <li>2. 嗎 ma "question marker"</li> <li>3. 罵 ma "scold"</li> <li>4. 碼 ma "marked, chops"</li> <li>5. 媽 ma "residual prefix for insects"</li> </ul> | <p><b>B. Semantic component</b></p> <ul style="list-style-type: none"> <li>6. 駘 tai "inferior horse"</li> <li>7. 驥 ji "stallion"</li> <li>8. 駕 jia "to ride, yoke, or harness"</li> <li>9. 駒 ju "gelding"</li> <li>10. 驢 lu "donkey"</li> </ul> |
|--|---|

A. REBUS Principle (phonetic association)

B. REBUS Principle (semantic association)



## 1.d More examples of signs and Chinese logographic radicals



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1	「牛」(ox)	
2	「羊」(sheep)	
3	「象」(elephant)	
4	「魚」(fish)	
5	「豬」(pig)	
6	「蟲」(insect)	
7	「鳥」(bird)	
8	「女」(female)	

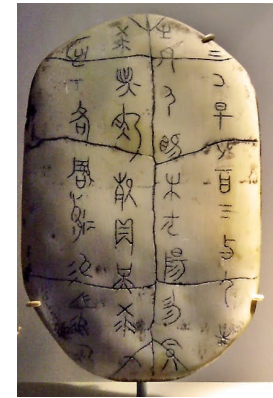
9	「人」(human)	
10	「禾」(grain)	
11	「日」(sun)	
12	「月」(moon)	
13	「貝」(shell)	
14	「手」(hand)	
15	「山」(mountain)	
16	「母」(mother)	

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## 2. Supporting evidence for transition from graphic symbols to writing system

- Physical Archaeology –Keightley, 1989
- Environmental Archaeology – Demattè, 2010
- Linguistic Archaeology– Tsou, 1981

### 2a. Physical Archaeology



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## 2b. Environmental Archaeology

1.	be international and form structurally coherent whole with distinctive shapes and systematic use
2.	fit into a logical developmental frame and show some morphological relationship with Shang bronze or bone scripts
3.	form a regional system that expands with time
4.	appear at a time of relative socio-political complexity

*complex social structure necessitated written record and literacy*

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## 2.c.1. Linguistic Archaeology

A content analysis of Chinese logographic radicals

1. Nature	a) The elements	8(7)	4. Man	d) Mortality and beyond	10
	b) Terrestrial/Geography	6		(i) Life cycle	5
	c) Extra-terrestrial	2		(ii) Supernatural/Worship	5
	d) Mineral	3		e) Agriculture	7(3)
	e) Time/Periodization	2		f) Food	9(6)
2. FLora	a) Cereal/Grain	4		g) Clothing (and ornaments)	9
	b) Botanical/Agricultural product	8(7)		h) Dwelling	6
3. Fauna	a) Animal	17		i) Locomotion/Transportation	13(12)
	b) Body parts exclusively from animal	8		j) The faculties	28(27)
4. Man	a) Organs and body parts	19(17)		(i) Sight and color	8
	b) Human	11(9)	(ii) Smell and taste	3	
	c) Implements	28(23)	(iii) Perception and measurement	17(16)	
	(i) For survival (weapons)	9	k) Socialization	11(7)	
	(ii) For livelihood (tools/utensils)	19(14)	l) Communication	10(8)	
			m) other human activities	9	

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## 2.c.2 Systemic Variations: Comparison of Kinship Term

I. 婆 po grandma	妯娌 "a deceased mother"	爺 ye grandpa
姥 lao grandma	娣 "sister"	父 fu father
媽 ma mother	妹 "sister"	爸 ma father
娘 niang mother	姪 "nephew" (from brother)	伯 bo paternal uncle (o)
姨 yi aunt		叔 shu paternal uncle (y)
兄 xiong brother (o)		兄 xiong brother (o)
弟 di brother (y)		弟 di brother (y)
姐 jie sister (o)	嫁 jia marry (take)	
姊 jie sister (o)	娶 qu marry (take with)	
妹 mei sister (y)	婿 xu son in law	
	媳 xi daughter in law	
	媒 mei match - maker	
	婚 hun marriage	

The issue of 「女」 (Female)		「男」 (Male)	
「女」: more than 200 associated characters		「男」: only 「男」 Man, [甥]Nephew, [舅]Maternal Uncle	
「女」 ~ 母 Mother		「又」 ~ 父 Father	

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## 2.c.3 Systemic Variations: Comparison of Surnames

Mythical kings (Prehistoric)

- 姜 for 神農 (Shen Nong)
- 姬 for 黃帝 (Huang Di)
- 姁 for descendants of 黃帝 (Huang Di)
- 姚 for 虞舜 (Yu Shun)

母系社會  
matrilineal society

父系社會  
patrilineal society

始 "origin"  
姓 "surname"

*cultural and cognitive significance underlying the writing system*

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### 3. Implications and other support

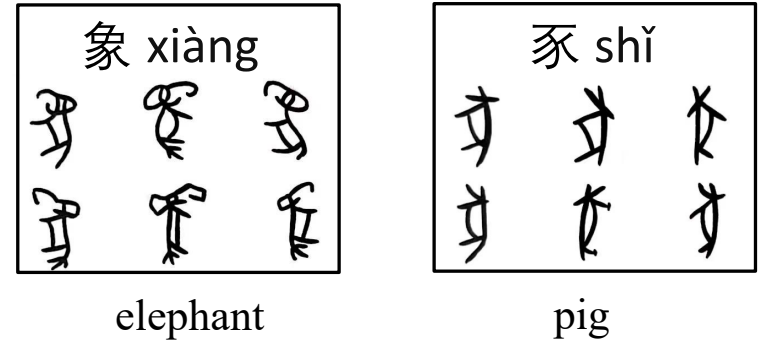
#### 3.a. Burial Practices(Dawenkou)



Jiahu skeletons  
6500 – 6200BC

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#### 3.b. Logographic convergence



elephant

pig

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#### 3b. 「女」 words of negative connotations

「妒」	envy
「奴」	slaver
「妓」	prostitute
「婪」	greedy
「嫖」	go whoring

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#### Concluding remarks

1. Physical evidence of oracle bones from about 3 thousand years ago showed a well-developed system of Chinese characters
2. Inference can be drawn from the societal needs for record keeping through a written tradition and a nascent writing system in the earlier Dawenkou culture
3. The Chinese logographic writing system reflects the unusual cognitive and cultural saliency of females over males

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## Concluding remarks

4. One possible explanation is that the Chinese logographic system had its origins at a time when there was greater saliency for females than males or when matriarchy remained prominent as in the Dawenkou culture.
5. This indicates that Chinese writing could well have developed in parallel with cultures such as the Dawenkou culture (4100 BCE- 2600 BCE), and so before the currently held view.

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