

Prediction and Predictability
in Early Chinese Divination Terminologies

(Wolfgang Behr, University of Zurich)

1. “Chinese”: phonological periodicization of Chinese

ABBREV.	PERIOD	SUBPERIOD(S)		TIME	CORRESPONDING DYNASTIES
[PPC]	Pre-Proto-Chinese 前上古漢語			ST < > PC	(Neolithic)
[PC]	Proto-Chinese 遠古漢語			-? ~ -1600	(Neolithic ~ Xia 夏)
[OC]	Old Chinese 古漢語			-1600 ~ +200	商 ~ 漢
[EOC]	(Karlgren's "Archaic Chinese")	Early OC 早期古漢語		-1600 ~ -1100	殷商
[MOC]		Middle OC 中期古漢語		-1100 ~ -200	周秦
[WZC]			Western Zhōu MOC	-1100 ~ -800	西周
[CQC]			Chūnqiū MOC	-800 ~ -480	春秋
[ZGQC]			Zhànguó-Qín MOC	-480 ~ -200	戰國 ~ 秦
[LOC]		Late OC 晚期古漢語		-200 ~ +200	漢
[WH]			Western Hàn OC	-200 ~ +20	西漢
[EH]			Eastern Hàn OC	+20 ~ +200	東漢

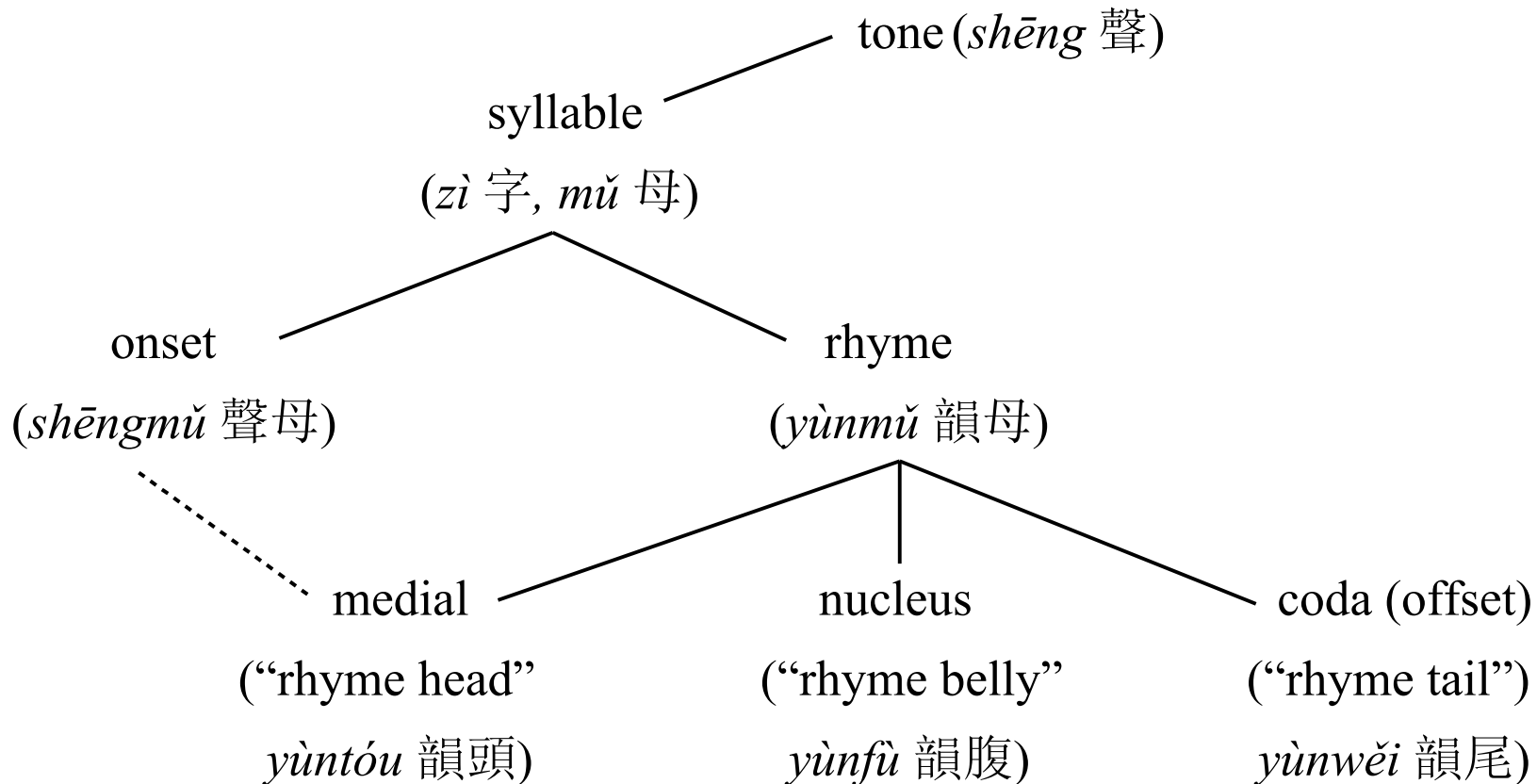
Classical Chinese

(ct'd.)

ABBREV.	PERIOD	SUBPERIOD(S)		TIME	CORRESPONDING DYNASTIES
[POC]	Post-Old Chinese 後古漢語		↓	+ 200 ~ +420	三國~魏晉
[MC]	Middle Chinese 中古漢語		↓	+420 ~ +1150	南北朝~北宋
[EMC]	(Karlgren's “Ancient Chinese”)	Early MC 早期中古漢語	閩 Min	+420 ~ +700	南北朝、隋、 早唐
[LMC]		Late MC 晚期中古漢語		+700 ~ +1140	中、晚唐、 五代、北宋
[M]	Mandarin 官話			+1140 ~ present	南宋~現在
[EM] (PMM)		Early M 早期官話 Proto-Macro-M 前宏官話)		+1150 ~ +1400	南宋~元
[LM]		Late M 晚期官話		+1400 ~ +1650	明
[MM]		Modern M 現代官話		+1650 ~ present	早清~現在

1.1 Modern Chinese Syllable structure

a. Traditional analysis of the syllable in Chinese



b. the maximal syllable in Modern Chinese

(subscripts count the number of *phonetic* (supra)segments attested in each position)

$$T_{4/0} + [\sigma (C_{23}) (G_4) V_9 (V_5) (C_4)]$$

c. the syllable structure of Modern Standard Chinese

TONES (4) 1 [55], 2 [35], 3 [214] > [21], 4 [51]; (0) [L, M, H]

ONSETS (24) Pīnyīn [IPA] 例字

PLACE	-aspirated	+aspir.	+nasal	+fricative	+vd., +cont.
LABIAL	<i>b</i> [b̚] 巴	<i>p</i> [p ^h] 怕	<i>m</i> [m] 門	<i>f</i> [f] 飛	<i>w</i> [w],[u] 溫
ALVEOLAR	<i>d</i> [d̚] 大	<i>t</i> [t ^h] 太	<i>n</i> [n] 南		<i>l</i> [l] 落
SIBILANT	<i>z</i> [ts̚] 資	<i>c</i> [ts ^h] 存		<i>s</i> [s] 所	
RETROFLEX	<i>zh</i> [dʒ̥] 知	<i>ch</i> [tʂ ^h] 產		<i>sh</i> [ʂ] 事	<i>r</i> [ɹ] 人
PALATAL	<i>j</i> [tɕ̚] 結	<i>q</i> [tɕ ^h] 七		<i>x</i> [ɕ] 西	<i>y</i> [j] 基
GUTTURAL	<i>g</i> [g̚] 歌	<i>k</i> [k ^h] 苦		<i>h</i> [χ] 黑	<i>∅</i> [ʁ],[ʔ] 安

(c’td.)

RHYMES (35)

<Pīnyīn> / [IPA: **glides**, **nuclei**, **codas**]

(i)	e	a	ei	ai	ou	ao	en	an	eng	ang	er
i	ie	ia			iu	iao	in	ian	ing	iang	
u	(u)o	ua	ui	uai			un	uan	ong	uang	
ü	üe						ün	üan	iong		

(J)	u Λ	A	ei	ae	oω	ao	ən	an	Λŋ	aŋ	ɛɹ (ɐ̃)
i	i ε _{<}	iA			i oω	i ao	in	i ɛn	iN	i aŋ	
u	u o	u A	uei	uae			u ən	u an	ωN	u aŋ	
y	y ε _{<}						y iN	y an	y ωN		

1.2 Old Chinese syllable structure (BAXTER AND SAGART 2011)

a. segments

PREINITIAL C_p (7): *s-, *p-, *t-, *k-, *m-, *N-, *r- (?*q-)

ONSET C _o (36):	*p-, *p ^h -, *b-; *m-, *m̥-	LABIAL
	*t-, *t ^h -, *d-; *n-, *n̥-	DENTAL
	*ts-, *ts ^h -, *dz-; *s-	DENTAL-SIBILANT
	*l-, *l̥-; *r-, *r̥-	LATERAL/RHOTIC
	*k-, *k ^h -, *g-; *ŋ-, *ŋ̥-	VELAR
	*k ^w -, *k ^{wh} -, *g ^w -, *ŋ ^w -, *ŋ̥ ^w -	LABIOVELAR
	*q-, *q ^h -, *G-	UVULAR
	*q ^w -, *q ^{wh} -, *G ^w -	LABIOUVULAR
	*ʔ-	LARYNGEAL
	*ʔ ^w -	LABIOLARYNGEAL

MEDIAL/INFIX	C_m (1):	*-r- / * < -r- >
NUCLEUS	V (6):	*-i-, *-ə-, *-u-, *-e-, *-a-, *-o-
CODA	C_c (10):	*-p, *-t, *-k; *-m, *-n, *-ŋ; *-r, *-j (< *l); *-w, * ^w k
POST-CODA	C_{pc} (1):	*-ʔ
SUFFIX	C_s (6):	*-s, *-ʔ, *-n, *-k, *-t, *-j, (?*-ŋ)

b. suprasegments

- i. π : Prosody **a (A) : b (B)**, [\pm pre-pharyngealised] ($C^fVC \sim CCVC$) ...
- ii. \mathfrak{a} : syllabification, i.e. *schwa*-epenthesis in loosely attached (iambic) onset clusters: $*P\mathfrak{a}(-l-)CoV-$

c. tonogenesis (rough scheme)

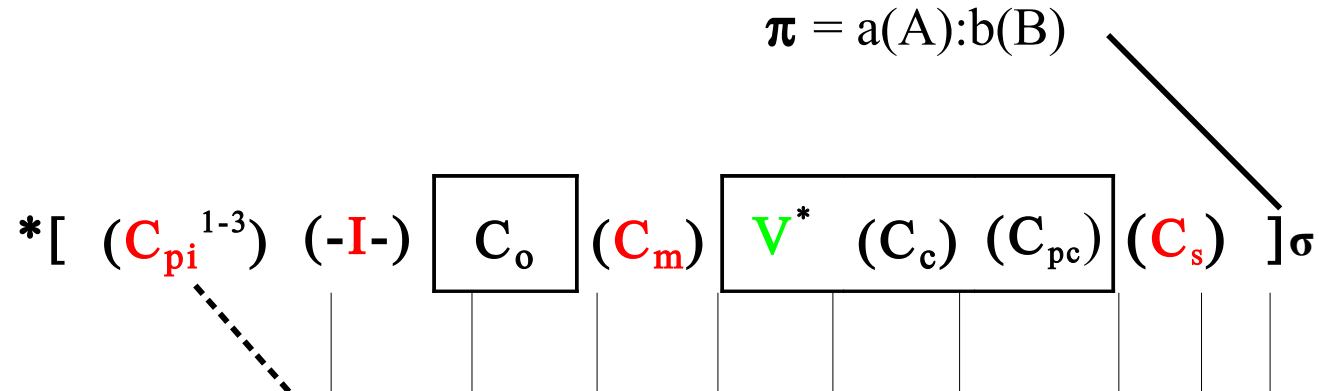
- | | | |
|------------------------------------|---|--|
| ① MC <i>píngshēng</i> 平聲 “even” | < | $C_f = *-\emptyset, *-m, *-n, *-ŋ;$
$*-r, *-j < *-l, *-w$ |
| ② MC <i>shǎngshēng</i> 上聲 “rising” | < | $C_f = *-\text{ʔ}$ |
| ③ MC <i>qùshēng</i> 去聲 “departing” | < | $C_f = *-s$ |
| ④ MC <i>rùshēng</i> 入聲 “eintering” | < | $C_f = *-p, *-t, *-k (-*^wk)$ |

d. OC root structure

- lexical root marked by boxes
- colored positions represent morphologically relevant slots

prosody:
inflection:

segments:



\Rightarrow *epenthesis:* $\text{ə} = \text{schwa-epenthesis (after iambic pre-initial)}^{\S}$

* It is possible that OC had remnants of qualitative ablaut (apophony) (PULLEYBLANK 1965, BEHR 2002, which could also be reinterpreted as infixation of *-ă- (PULLEYBLANK 1989) in pre-proto-OC.

\S Infixation (-I- / -C_m-) position depends on presence/absence of other prefixes..

e. information load of the syllable in Old vs. Modern Chinese

(1) ZHÀO YUÁNREN 趙元任 (1892-1982): The story of Mr. *Shī*

i. TEXT

0 施氏食獅史

1 石室詩士施氏嗜獅。

2 誓食十獅，

3 氏時時適市視獅。

4 十時，適十獅適市。

5 是時，適施氏適市，

氏視是十獅，

6 恃矢勢，使是十獅逝世。

7 氏拾是十獅屍，適石室。

8 石室濕，氏使侍拭石室。

9 拭石室，氏始試食是十獅屍。

10 食時，始識是十獅屍，

11 實十石獅！試釋是事…

ii. MSM PRONUNCIATION

Shī shì shí shī shǐ

shí shì shī shì Shī-shì shì shī.

shì shí shí shī,

shì shíshí shì shì shì shī.

Shí shí, shì shí shī shì shì.

Shì shí, shì Shī-shì shì shì,

shì shì shì shí shī,

shì shǐ shì, shǐ shì shí shī shì shì.

Shì shí shì shí shī shī, shì shí shì.

Shí shì shī, shì shǐ shì shì shí shì.

Shì shí shì, shì shǐ shì shí shì shí shī shī.

Shí shí, shǐ shì shì shí shī shī,

shí shí shí shī, shì shì shì shì ...

- **92** graphs total
- **31** different graphs
- **4** tonal differentiated syllables
- **1** segmentally differentiated syllable

iii. translation:

0 The story of Mr. Shī eating a lion

- 1 Mr. Shī, poet from the “Stone Chamber”, craved lions.
2 Since he had sworn that he would eat ten lions,
3 he went from time to time to the market to look for lions.
4 At ten o’clock, ten lions really went to the market.
5 At that time, just when Mr. Shī went to the market,
he saw the ten lions, and,
6 assuming the position of an archer, caused the ten lions to
pass away (=killed them).
7 He assembled the corpses of these ten lions and went into
the “Stone Chamber”.
8 Since the “Stone Chamber” was moist, he first had it wiped by a servant.
9 When the “Stone Chamber” had been wiped, he first set out to eat these ten
corpses of the stone lions.
10 And it was only at the time of his meal when Mr. Shī became first
aware that these lions —
11 were in fact stone lions! Now you try to explain that ...
-



iv. OC *reconstruction

- 0 ɭaj k.deʔ mə-lək srij s-rəʔ.
- 1 dak s-tit s-tə m-s-rəʔ ɭaj k.deʔ gij-s srij.
- 2 m-tat-s mə-lək t.gəp srij,
- 3 k.deʔ N-tə N-tə s-tek C.dəʔ N-kij-s srij.
- 4 t.gəp N-tə, s-tek t.gəp srij s-tek C.dəʔ.
- 5 deʔ N-tə, s-tek ɭaj k.de-q s-tek C.dəʔ, k.de-q N-kij-s deʔ t.gəp srij,
- 6 dəʔ ɭijʔ ɳet-s, s-rəʔ-s deʔ t.gəp srij N-tat-s ɭap-s.
- 7 k.deʔ dəp deʔ t.gəp srij ɭəj, s-tek dak s.tit.
- 8 dak s.tit q^hip, k.deʔ s-rəʔ-s N-təʔ-s ɭək dak s-tit.
- 9 ɭək dak s-tit, k.deʔ ɭəʔ ɭək-s mə-lək t.gəp srij ɭəj.
- 10 mə-lək N-tə, ɭəʔ s-tək deʔ t.gəp srij ɭəj,
- 11 mə-lit t.gəp dak srij! ɭək-s ɭak deʔ m-s-rəʔ-s ...

- roots: 22 , **no** homophones !

f. OC syllable complexity

	STRUCTURE	C	MSM	OC	GLOSS
MONOSYLL.	CpiCoVCc	樸	<i>pú</i>	< *p ^h ₁ rok	‘unworked wood’
	CpiCoVCcCs	四	<i>sì</i>	< *s ₁ ij-s	‘four’
	CoCmVCcCs	化	<i>huà</i>	< *ŋ ^w ₁ -r-aj-s	‘change’
	CpiCoCmVCpcCs	事	<i>shì</i>	< *m-s-rəʔ-s	‘serve’
	CpiCiCoVCc	密	<i>mì</i>	< *mr-lit	‘dense’
	CpiCiCoVCcCs	黽	<i>mǐn</i>	< *mr-liŋ-ʔ	‘toad’
	CpCoCmVCcCpc	橫	<i>hèng</i>	< *N ¹ -k ^w raŋ-s	‘wayward’
SESQUISYLL.	Cpə-CoVCc	林	<i>lín</i>	< *Cə-ləm	‘wood’
	Cpə-CoVCcCpc	路	<i>lù</i>	< *Cə ¹ -lak-s	‘street’
	CpiCpiə-CoVCc	雖	<i>suī</i>	< *s-tə-wuj	‘even if’ (conj.)
	Cpiə-CoCiVCc ~ CpiəCi-CoVCc	被	<i>pī</i>	< *mə-praj ~ < *mər-paj	‘open’ (of hair)

g. currently discussed functions

(PULLEYBLANK 1999, 2000, SAGART 1999, ZHENG-ZHANG 2001, SCHÜSSLER 2002, 2007, PAN WUYUN 2002, JIN LIXIN 2002, GASSMANN & BEHR 2005):

	TYPE	REC.	BASE	FUNCTION(S)	GOAL	NO.
i.	PREFIX	*s-	[Vt]	applicative (valency increasing)	[Vt]	1.
			[Vt>N]	directive, exoactive	[Vt]	2.
			[V>N]	inchoative; transfer into state of the verbal base	[V]	3.
			[V]	deverbal	[N]	4.
			[N]	denominal	[V]	5.
		*N-	[V]	intransitive, decausative	[V]	6.
				(valency decreasing)		
		*m-	[V>N]	controlled, volitional	[V]	7.
			[V]	deontic, imperative, injunctive	[V]	8.
			[V>N]	<i>nomina agentis</i> ; body part marking	[N]	9.
			[N]	marking animals, (esp. insects)	[N]	10.

TYPE	REC.	BASE	FUNCTION(S)	GOAL	NO.
	*p-	[X]	(unknown)	[X]	11.
	*t-	[V]	stative	[V]	12.
		[V]	unintentional (esp. body movements)	[V]	13.
		[V]	intransitive	[V]	14.
		[N>V]	abstract, non-countable (mass nouns, generic nouns)	[N]	15.
		[V]	color marking	[V]	16.
	*k-	[V]	imperfective?	[V]	17.
		[N]	concrete, countable	[N]	18.
	*q-	[X]	(unknown)	[X]	19.

	TYPE	REC.	BASE	FUNCTION(S)	GOAL	NO.
ii.	INFIX	*-r-	[V>N]	repetitive, iterative, intensive	[V>N]	20.
			[V>N]	distributed, multi participant	[V>N]	21.
			[N>V]	dual, paral; kollektive	[N]	22.
	(*-ǎ-	[X]	(ablaut?)	[V>N]	23.)

	TYPE	REC.	BASIS	FUNKTION(S)	GOAL	NO.
iii.	SUFFIX	*-s	[V]	deverbal, patient nominalising	[N]	24.
			[V]	exoactive, directive	[V]	25.
			[V]	(medio-)passive, perfective	[V]	26.
			[V, NUM]	adverbial	[ADV]	27.
		*-ʔ	[N>V]	endoactive	[V]	28.
			[N]	intimate (body parts, relatives, immediates surroundings)	[N]	29.
			[V]	instrumental	[N]	30.
			[PRN, NEG]	nicht-clitic, non-attributive	[PRN, NEG]	31.
		*-k	[PRN>V]	distributive	[PRN]	32.
		*-j	[PRN, NEG]	non-clitic, non-attributive	[PRN, NEG]	33.
		*-n	[V]	durative, continuative	[V]	34.
		*-t	[V]	benefactive, applicative	[V]	35.

TYPE	REC.	BASIS	FUNKTION(S)	GOAL	NO.
		[V]	punctual, resultative	[V]	36.

2. Early Chinese bone divination

2.1 **scapulas** (sheep, pig, cow, deer etc.), prepared for scorching or with burn marks: 7-5 k B.P., found in the Northern Chinese neolithic, e.g. in

- Hénán 河南: Xīchuān 淅川, Xiàwánggāng 下王岗 culture, a period III Yángshǎo 仰韶 site (Hénánshěng Wénwù Yánjiū suǒ ed. 1995)
- Gānsù 甘肅: Wǔshān 武山, Fùjiāmén 傅家門 culture, a Mǎjiāyáo 馬家窑, Lower Shíling 石岭 type site (Kǎogǔ 1995.4)
- Inner Mongolia 内蒙古: Bālín Left Banner 巴林左旗, Fùhé(gòumén) 富河(沟門) culture (Liú Guóxiáng, Běifāng Wénwù 2006.2)



2.2 **plastrons**, combination with “divination marks” (?)

- Hénán: Lèihé 漯河 municipality,
Wǔyáng 舞陽 district: Jiàhú 賈湖
culture (9-7.7 k B.P.)

(河南省文物考古研究 1999)



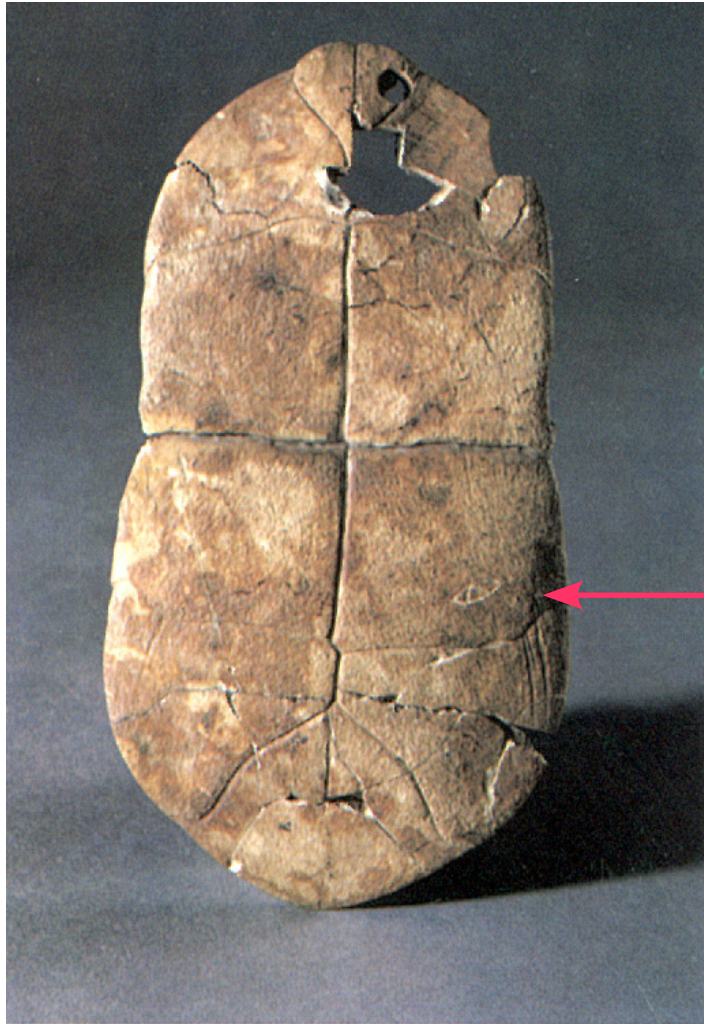
Figure 1. Map showing the location of Jiahu.

Jiàhú pottery:



Jiàhú excavations (in 2004)





Jiàhú divination plastron & marks (*Nature* 2004)



2.M344 : 18 龟腹甲
契刻原始文字

1. 龟腹甲 (M344:18)



3. 龟甲 (M344:18)



4. 龟腹甲刻符 (M387:4)



5. 龟腹甲片刻符 (M335:15)

2.3 ancestral to Yīn-Shāng divination?

a. hollow placement



b. crack notations

(一, 二, 三, 四, 五)

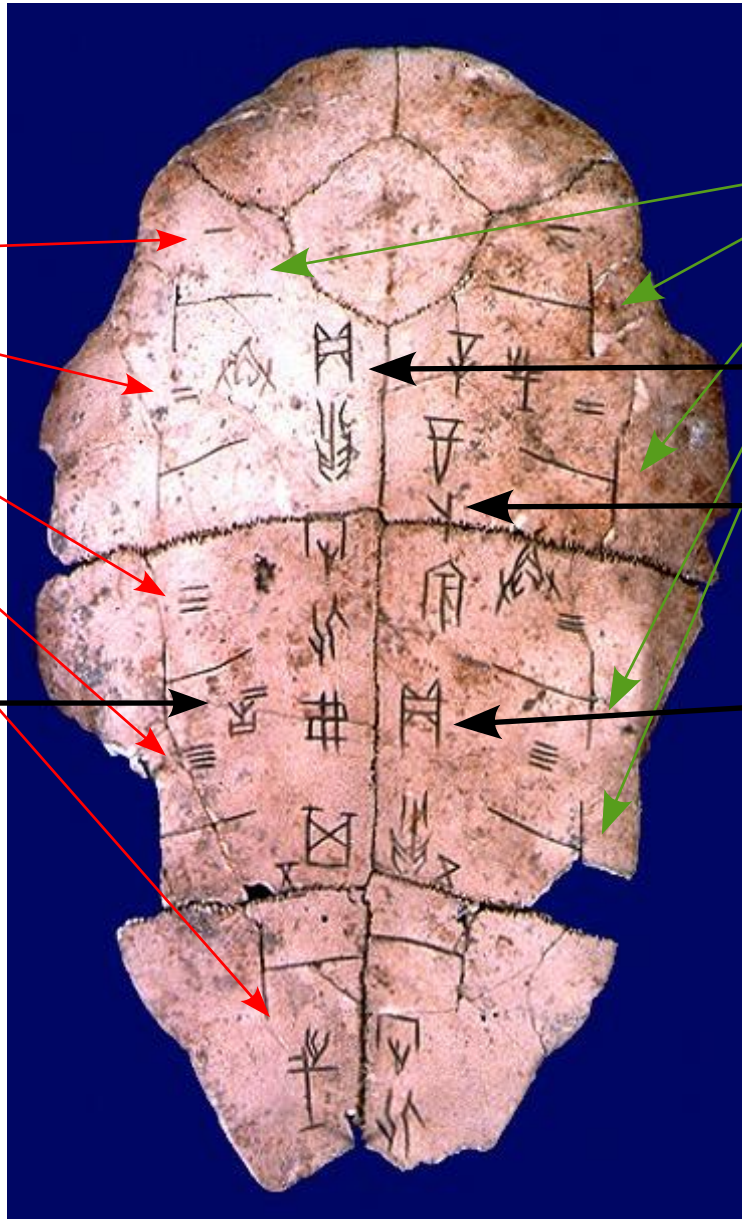
c. verification

(二告)

d. 卜 cracks

e. 卜 graph

f. 貞 graph



3. Early divination terminologies: etymology, semantic field

- (2) 占人掌占龜，以八筮占八頌，以八卦占筮之八故，以視吉凶。凡卜筮，君占體，大夫占色，史占墨，卜人占坼。凡卜筮，既事，則系幣以比其命。歲終，則計其占之中否。 (Zhōulǐ 3.128; cf. Biot II: 49)

“The diviners are in charge of consulting the turtle. Using eight milfoil stalks they consult the eight indications, using the eight line combinations they consult the eight bases of the milfoil stalks, thereby recognizing auspicious (‘solid’) and inauspicious (‘nefarious’). Whenever they perform bone cracking and milfoil stalk divination, the ruler consults the *structures*, the magnates consult the (outer) *manifestations*, the marking-officials consult the *burn hole*, and the crack-makers consult the *fissures*. Whenever they perform bone cracking and milfoil stalk divination, and their task is accomplished, they assemble the sacrificial presents in order to compare their *mìng* (‘fate’). At the end of the year, they calculate whether their consultations turned out to apply or not.”

(3) Zhèng Xuán's 鄭玄 (127-200) commentary:

體，兆象也。色，兆氣也。墨，兆廣也。坼，兆豐也。體有吉凶，色有美惡，墨有大小，坼有微明。

尊者視兆象而已，卑者以次詳其餘也。周公卜武王，占之曰：‘體，王其無害。’凡卜象吉，色善，墨大，坼明，則逢吉。

“*Structure* refers to the delineation, *manifestation* refers to the vapours, *burn hole* to the width, *fissure* to the scissures of the omen signs. *Structures* may be auspicious or inauspicious, *manifestations* may be good or bad, *burn holes* may be big or small, *fissures* may be subtle or prominent. The revered (i.e. the rulers) limit themselves to recognizing the manifestations of the cracks, the commoners act as seconds, detailing the rest of it. The Duke of Zhōu performed bone divination for King Wǔ, consulted [them] and said: ‘According to the *structures*, the king is likely not to encounter evil.’ Whenever one performs bone divinations, when the delineations are auspicious, the manifestations good, the burn hole is big, and the fissure is clear, one encounters auspiciousness.”

3.2 *bǔ* 卜 ‘burst, pop’

< MC **puwk*

< OC **p^fok*

3.2.1 OBI forms (Liú Zhāo et al. 2009, XJGWB, s.v.)

𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
西周 H11:65	花東 61 子組	黃組 合 39410	何組 合 26907 正	無名組 合 31676	出組 合 24284
𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
西周 H11:52	黃組 合 39412	何組 合 30766	無名組 合 30380	出組 合 24287	出組 合 24287
𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
西周 H31:3	午組 合 22048	何組 合 31686	無名組 合 30381	出組 合 24366	出組 合 24366
𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
西周 H11:38	午組 合 22047	何組 合 27423	無名組 合 28957	無名組 合 31669	無名組 合 31669

𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
歷組 合 32677	賓組 合 13399 正	白組 合 20451	賓組 合 17673	自組 合 21404	賓組 合 5331
𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
出組 合 22920	賓組 合 17673	自組 合 21404	歷組 合 34676	賓組 合 5331	賓組 合 5331
𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
出組 合 23143	歷組 合 34676	賓組 合 5331	歷組 合 32330	賓組 合 5331	賓組 合 5331
𠂔	𠂔	𠂔	𠂔	𠂔	𠂔
出組 合 24241	歷組 合 32330	賓組 合 5331	歷組 合 32330	賓組 合 5331	賓組 合 5331

3.2.2 early glosses

(4) 卜：灼剥龜也，象灸龜之形。一曰象龜兆之從橫也。（…）

“*p^ɿok (to ‘burst-divine’) means to (repeatedly) cause a turtle (plastron) to burst using fire. (The character) represents the shape of a burnt turtle. According to one opinion, it represents the vertical and horizontal (lines) of the turtle’s cracks.” (*Shuōwén* 卜部, #2064)

- same root, infixes for repetitiveness:

剥 *bō* < *baewk < *p^ɿ<r>ok ~ *mə-p^ɿ<r>ok ‘cut, flay, peel’

(5) 剥：裂也。从刀从录。录，刻割也。录亦聲。𠂔，剥或从卜。

“*p^ɿ<r>ok ~ *mə-p^ɿ<r>ok means ‘to tear apart’; derived from 刀 (‘knife’) and 录 (‘seize’), 录 (*-^ɿrok) is also phonophoric. 录 means to incise and cut (The ancient character form of) 剥 is alternatively derived from 卜 (*p^ɿok ‘burst, pop’).” (*Shuōwén* 刀, #2763)

- “aural” connection already recognized by Guī Fù 桂馥 (1736-1895):

(6) 卜、剥聲相近。

“*bǔ* and *bào* are close in sound.” (cf. Liú Jūnjié 1999: 68)

- belonging to the same root:

(7) 攴: 小擊也。从又卜聲。 (...) (*Shuōwén* 攴部, #1985)

“*p^hrok means ‘to strike a little’; derived from 又, *p^ʰok is phonophoric.”

- early paronomastic glosses hint at onomatopoetic word formation:

(8) 卜，赴也，爆見兆也。 (*Báihǔtōng* 白虎通, 龜蓍篇)

“To burst-divine [$*p^fok$] means ‘to solemnly announce’ [$*p^h(r)ok-s$], (i.e.) to view a crack after exploding [$*p^f_r[o,a]^wk$].’

(9) 卜，赴也，赴來者之心。 (*Jià Gōngyán* 賈公彥, 7th c., on 周禮, 序官)

“To burst-divine [$*p^fok$] means ‘to solemnly announce’ [$*p^h(r)ok-s$], to announce the spirit of what is coming.”

- cf. also 訃 *fù* < $*pjuH$ < $*p^hok-s$ ‘anounce a death’, a Hàn word:
*-s-excoactive/directive of the same root: ‘to break to someone’

- Sino-Tibetan parallels (or maverick proto-form?):

PLB $*^HNphök \sim *^H?pök \sim *^L?pök$ ‘explode, pop’ > WB *pok* ‘go off’,
phok ‘fire (a gun)’, Lushai $^Fpuak / ^Lpua?$ ‘to explode, burst, pop’,
Mru *pok* ‘to burst’, Jingpo $^{55}p^hok$ ‘to hit’, $^{33}bo?$ < ^{31}bok ‘erupt, burst
out’, Lepcha *bu* ‘to burst (vessel); crack, split’ (EDOC 173)

3.3 zhān

< MC *tsyem

< OC *tem









































‘observe cracks (on oracle bone); prognosticate’ (?)

five forms:

占 ~ 𠄎 ~ 𠄏 ~ 𠄐 ~ 𠄑





3.3.1 OBI forms

(Liú Zhāo et al. 2009, XJGWB, s.v.)

					占				
									
黃組 合 37846	黃組 合 38731	黃組 合 37664	黃組 合 39349	賓組 合 12530	賓組 合 584 甲反	賓組 合 655 甲反	自組 合 21411	自組 合 19886	自組 合 19886
									
子組 花東 227	黃組 英 2543	黃組 合 35347	黃組 合 39357	賓組 合 6057 正	賓組 合 11484 正	賓組 合 454 正	賓組 合 367	自組 合 20333	自組 合 20333
									
子組 花東 241	黃組 英 2503	黃組 合 36482	黃組 合 39360	賓組 合 7139	賓組 合 12317 反	賓組 合 137 反	賓組 合 140 正	何組 合 28170	何組 合 28170
									
	黃組 合 37832	黃組 合 36593	黃組 合 39377	黃組 合 39346	賓組 合 12532 正	賓組 合 583 反	賓組 合 562 反	自組 合 20153	自組 合 20153

- non-卜 part = *jiān* 肩 , characters should be transcribed as *肩_占 etc., cf.

< MC **ken* < OC **k^fen*
 (: not phonophoric)

肩															
	自組 合 20576 正		歷組 合 35178		賓組 合 4855		賓組 合 13921		賓組 合 13885 正		賓組 合 795 正		賓組 合 6597 正		
	自組 合 21035		歷組 合 3518		合補 賓組 4638		賓組 合 97 正		賓組 合 13887		賓組 合 1677 反		賓組 合 1578		
	自組 合 21036		歷組 合 35200		自歷問 合 20170		賓組 合 98		賓組 合 13891		賓組 合 13871		賓組 合 13918		
	賓組 合 709 正		合補 歷組 38 正		歷組 合 35166		賓組 合 4855		賓組 合 1393		賓組 合 13874 正甲		賓組 合 223		

a. diviner group preponderance (Qiú Xīguī 2002) of different forms

• *functionally* equivalent with 占 in OBI:

i. 賓組: 王𠩺𠩺

ii. 出組: 王𠩺𠩺 (formerly misread as: 禍, 骨, 淚, 卜 etc.)

iii. 歷組: 王𠩺 (a ligature of 王占𠩺?; *𠩺𠩺 once in *Héjī*)

iv. 黃組: 王𠩺 (an abbreviation of iii.?)

b. early glosses: WF-connection ‘visual’, ‘written’

- within the *xiéshēng* series

- (10) 占：視兆問也。从卜从口。(Shuōwén 卜部, #2069):
“*tem means ‘to inquire about by looking at crack manifestations’;
derived from 卜 (‘burst-divine’), and from 口 (‘mouth’).”
- (11) 筭：折竹筭也。从竹占聲。潁川人名小兒所書寫為筭。
(Shuōwén 竹部, #2964)
“*t^sep means to break off bamboo branches; derived from 竹
(‘bamboo’), 占 (*tem) is phonophoric. The people from Yǐngchuān
call what is written by little children *tem.”

- (12) 籥: 書僮竹筥也。从竹龠聲。(Shuōwén 竹部, #2877)
“*le^wk means the bamboo writing beaker of school pupils;
derived from 竹 (‘bamboo’), 龠 (*le^wk) is phonophoric.”
- (13) 帖: 帛書署也。从巾占聲。(Shuōwén 巾部, #5861)
“*t^ɿep means to submit to writing on silk; derived from 巾 (‘cloth’),
占 (*tem) is phonophoric.”
- (14) 覘: 窺也。从見占聲。
(Shuōwén 見部, #4568)
“*t^hem means ‘to spy upon’; derived from 見 (‘to see’), 占 (*tem) is
phonophoric.”

(15) 占者，覘也。星辰飛伏，伺候乃見。登觀書雲，故曰占也。

“*zhān* (‘observing’) means ‘to look after’. Stars and planets are sometimes flying along, sometimes hiding,, such that one has to wait to finally catch their sight. (Duke Xī of Lǚ] stepped upon the observation platform and had the (forms and movements of the) clouds documented, this is why we speak of ‘observing’). (*Wénxīn diāolóng* 25.77)

- but notice second reading: *zhàn* < **tsyemH* < **tem-s* ‘to transmit orally’ (口授) and ‘be in the possession of, to dominate, reign over’ (占有 = 佔), two seemingly exoactive-directive and mediopass-perfective secondary derivations of **tem*.

c. related to 瞻 *zhān* ‘to look at, gaze’ ?

- cf. already

(16) 睞、睞、闕、眈、**占**、伺，視也。凡相竊視南楚謂之闕，或謂之睞，或謂之眈，或謂之**占**，或謂之睞。睞，中夏語也。闕，其通語也。自江而北謂之眈，或謂之覩。凡相候謂之**占**，**占**猶瞻也。 *Fāngyán* 10.45)

- i.e.: 占 (*tem), a Southern Chǔ dialect word, also pronounced 眈 *tam (?) north of the Yangtze. ... “***tem is used like 瞻**” (‘to look at, gaze’).
- but (contra EDOC 604, < *tiam, to account for *-a-/*-e-), this is a Hàn paronomasia, no true etymology, since:

瞻 *zhān* < *tsyem < *t.**qam** !


d. Táng Lán (《天壤閣甲骨文》 1942):

- (17) ‘王𠂔曰’ 讀為 ‘王繇曰’。然𠂔讀為卜，卜、占音轉。
“The king (i.) is read as ‘the king prognosticated’, whereas (ii.) is read as 𠂔; 𠂔 *bǔ* and *zhān* 占 are transformations of the same sound.

- the latter impossible, since:

- (18) 𠂔：卜以問疑也。从口、卜。讀與稽同。(《Shuōwén》 卜部 , #2066)
“*k^fi means to ‘burst-divine’ in order to inquire about a doubt; derived from 口 (‘mouth’) and 卜 (‘burst-divine’); read identical with 稽 *jǐ* (< *kej < *k^fi).”

e. Qiú Xīguī (2002):

-  is the pictographic predecessor of 兆, it is the representation of 卜 on a shoulder blade
- 占 and 兆 are phonetically related by a ‘labial transformation’
(宵談對轉): 兆 *zhào* < **drjewX* < **lraw?* :: 占 *zhān* < **tsyem* < **tem*
- 𠄎, the graph occurring for ‘to divine’ in the Zhōuyuán 周原 bone inscriptions is a secondary phoneticization of 兆, cf.

(19) 𠄎: 卜問也。从卜召聲。(Shuōwén 卜部, #2070)

“**daw?* > **dzyewX* means to ask by ‘burst-divination’; derived from 卜 (‘burst’), 召 (**daw?*) is phonophoric.”

- 𤁔, is another (Hàn) secondary phoneticization of 兆, cf.

(20) 𤁔: 灼龜坼也。从卜; 兆, 象形。兆*, 古文𤁔省。(*Shuōwén* 卜部, # 2071)

“*lraw? > *drjewX means to apply heat to the turtle fissures; derived from 卜 (‘burst’), and from 兆 (*lraw?, ‘crack’), pictographic.

*兆 is an abbreviated ancient form of 𤁔.”

- later forms of graphs with 兆 as the apparent phonetic are in fact written with an abbreviated form of *shè* 涉 *dzyep < *dep!

Conclusions on etymology:

- 卜 is an onomatopoetic verb, referring to the aural aspects of bone divination
- 兆 refers to a noun (‘crack on bone’), also written as 𠄎, 𠄏, from which a denominal verb 占 was derived through nasal suffixation.
- it is unrelated to the verb 瞻 *zhān* ‘to look at, gaze’
- the verb has etymological connections to 繇 *yáo* **yew* < **law*, the term used for divination spells and sayings in the *Zuǒzhuàn*
- only in Hàn period dialects could this be interchanged for the hexagram type divination graph 爻 *yáo* < **haew* < **N-k¹raw*

