“The Evidence for Scribal Training at Anyang.”
(uncorrected final proof)

To appear in: Writing and Literacy in Early China, edited by Li Feng and David Prager Branner, University of Washington Press.
CHAPTER 6

The Evidence for Scribal Training at Anyang

Adam Smith

Abstract

The divination workshops at Anyang are the only late second millennium B.C.E. institutions from which we have evidence of the routine and intensive use of writing. These workshops trained their own scribes, and the remains of that training process – including the so-called xìkè 習刻 (“practice engraving”) inscriptions – have been repeatedly found at Anyang since the earliest excavations. Several authors have concluded that the trainees were previously fully literate and were learning to engrave on bone. This paper surveys the evidence and concludes that this is unlikely to be correct: scribal trainees in the divination workshops were acquiring the rudiments of literacy for the first time. That conclusion is compatible with a model of late second millennium Chinese literacy that sees writing as largely confined to the activities of a small number of individuals in the immediate entourage of the Shang kings.

Writing and Scribal Training at Anyang, and Their Mesopotamian Parallels

Determining the functional, geographic and social range of literacy during the Anyang period (c. 1300-1050 B.C.E.) remains a difficult problem. The same could be said for literacy during the preceding five hundred years (if there was any at all) and subsequently during the Western Zhou and Spring and Autumn periods. Evidence for late second millennium Chinese literacy is overwhelmingly dominated, numerically speaking, by records of divination from inside the moated elite enclosure at the Late Shang site complex at Anyang. Does this salience of the divination record among

---

1 The author would like to thank two anonymous reviewers, Lothar von Falkenhausen, Adam Schwartz, Ken-ichi Takashima, Crispin Williams and the organizers and participants of the Columbia Early China Seminar for their contributions to this paper. Research was supported by the Cotsen Institute of Archaeology, UCLA, and a Henry Luce/ACLS East and Southeast Asian Archaeology and Early History Dissertation Fellowship (2006).
attested text genres tell us something about the uses to which literacy was put? Or is it an accident of preservation and discovery?

There are many approaches to the question of literacy during the Anyang period, but one can simplify matters by considering where a particular theory of Shang literacy falls on a continuum between the two imaginary extreme viewpoints. The first extreme conceives the Shang world having a population of over a thousand literate individuals, deploying their skills not just at Anyang but at relatively minor centers also, managing the flow of raw materials, grain and manufactured goods, communicating royal pronouncements, transmitting diplomatic correspondence to neighboring kingdoms, and registering the population of Henan, Hebei and Shandong for the purposes of taxation, forced labor and military service. The other extreme imagines a literate population of less than a dozen individuals, all in the immediate entourage of the Shang king and his family, based at Anyang but participating in excursions outside, and preoccupied with documenting divination, scheduling sacrifices, and occasionally labeling ritual implements and expensive gifts. I will refer to these extremes as the “maximal” and “minimal” hypotheses for Late Shang literacy.

Drawing extensively on previously underexplored parallels with other early traditions of literacy, Robert Bagley has recently articulated an account of Chinese literacy in the second millennium that lies closer to the first, maximally-literate extreme than to the minimal. In my PhD dissertation, I attempted to sketch and find support for an alternative point of view lying closer to the extreme of minimal literacy. Despite my continuing enthusiasm for the latter account, I do not consider the question at all close to being resolved. Exploring the detailed implications of the two competing hypotheses, and testing them against the evidence that is available to us, should continue to motivate research. It goes without saying that the continued

---

2 See Bagley, “Anyang Writing,” pp. 190-249.
3 See Smith, “Writing at Anyang.”
and growing preponderance of divination records on bone and shell is not, in itself, simple evidence one way or the other. Each hypothesis accounts for that preponderance in different ways. Instead, we need to seek out evidence that is accommodated and explained better by the implications of one hypothesis than by those of its competitor. I propose that the evidence relevant to scribal training is more in keeping with the minimalist account. The evidence is also of considerable intrinsic interest, and has previously attracted less attention than it deserves.

Bagley states that we lack “the smallest archaeological clue to how Wu Ding’s diviners acquired their literacy.” This is to make an implicit claim about the nature of what are known in the Chinese-language literature as xíkè bǔcí 習刻卜辭, or ‘practice-engraved divination records’ that are abundantly attested in the published corpora. We will assess this implicit claim below. “We depend on comparative evidence,” Bagley continues, “to remind us that literacy is the result of schooling.” The comparative evidence he adduces includes the curricular use of “myths, hymns to gods and kings, and dialogues,” and accounts of Mesopotamian school life including Kramer’s well-known “Schooldays” translation. The claim, then, is that since the cuneiform tradition in Mesopotamia had schools (in the narrow sense of a building housing specialist instructors and offering a curriculum based around literary texts), so too did Anyang. According to Bagley, the absence of any remains of written exercises from such an institution is to be explained by – and indeed taken as evidence for – the massive failure-to-preserve of Anyang-period writing on perishable media, as required by the maximal model of second millennium Chinese literacy.

4 See Bagley, “Anyang Writing,” p. 221. Since diviner names occurring in divination records do not correlate one-to-one with the writing styles of the records, we know that it was not consistently the diviners (in the conventional sense of zhēnrén 贞人) who inscribed the records of their own divinations. See Keightley, Sources of Shang History, pp. 48-49. Strictly speaking, we have no evidence that diviners (in general) were literate at all. Below, however, I will make a tentative identification between a named diviner and a scribal trainee.


The problem with this line of argument is that it compares evidence from very different points in the evolutionary history of the two literate traditions, and so generates a potentially misleading comparative expectation. The depiction of the Mesopotamian “tablet-house” in “Schooldays,” for instance, postdates the first attestation of cuneiform literacy by considerably more than a thousand years. It thus invites comparison with the Han period rather than the Chinese second millennium. Exact parallels are readily found in the biographies of Han literati preserved in transmitted literature. See, for instance, the account of Wang Chong’s education in the early first century A.D. He joined over a hundred other children in a local “writing hall” (shūguān 書館) at eight, where ugly writing “earned a whipping,” before advancing to the study of difficult old literary texts and then an administrative career. Do we have any good reason to think that the comparative parallel holds good for the earliest attested stage of Chinese literacy?

Sumerian literature, as Bagley notes, “has come down to us in the form of schoolboy exercises.” However, it has done so primarily as the debris of Old Babylonian (2000-1600 B.C.E.) scribal education, and not from scribal training activities of the Late Uruk period (late 4th millennium), the period when cuneiform is first attested. Again, the Old Babylonian materials are a fruitful source of expectations about the developed state of literate and literary education during the Han period, expectations that are substantially fulfilled by what is known about the place of the Shijing, the Shangshu (Book of Documents) and Warring States literature in the higher scribal curriculum. But unless we have reason to think that the earliest literacy in China predated the Anyang period by close to a millennium, we should be

---

8 See Lunheng 论衡 (“Zi Ji” 自紀) (Sibu beiyao edition) (Taipei: Zhonghua shuju, 1965), 30, p.1. For schools and the transmission of literacy during the Han period, see Robin Yates, “Soldiers, Scribes and Women: Literacy among the Lower Orders in Early China,” this volume, pp. XXX.
9 Bagley, “Anyang Writing,” p. 221.
10 Niek Veldhuis, Elementary Education at Nippur: The Lists of Trees and Wooden Objects (PhD Diss., University of Gröningen, 1997), section 2.3-2.4, pp. 23-67.
suspicious of arguments about the form that Anyang scribal training took that are based on Old Babylonian parallels.

If we were to take the evidence for scribal training from the Late Uruk period as our point of Mesopotamian comparison, we would derive a different set of expectations. The Late Uruk period provides no evidence for the existence of schools, in the sense of institutions where specialist instructors taught writing away from the context of its everyday use. Nor is there any sign of a curricular role for “myths, hymns to gods and kings, and dialogues.” Rather, Late Uruk “school texts” (if we want to force that name on them) are very narrowly focused on the founding genre of the cuneiform tradition, viz. the administrative accounting text.

Englund describes several examples of practice accounting texts from Uruk.\(^\text{11}\) The lexical lists are the most frequently-discussed texts with a possible pedagogical function.\(^\text{12}\) Although they are likely to have been elaborated beyond the needs of everyday administration as part of what Veldhuis refers to as their compilers’ systematizing “drive to be complete,”\(^\text{13}\) their categories – official titles, vessels and their contents, manufactured objects, livestock and other animals, and place names – are nevertheless those required for contemporary bookkeeping. Perhaps most remarkable is the so-called Word List C, of which 56 (fragmentary) witnesses survive from Uruk.\(^\text{14}\) The text is organized around two verbatim presentations of a mundane list of quantified commodities: 5 units of salt, 5 ducks, 1 suckling calf, 4 metal knives, 10 units of milk, and so forth. The habituating repetition of this text by trainee accountants propelled its conservative replication through the curricula of the Early


\(^{14}\) Of the thirteen multiply-attested (i.e. standardized) lexical texts in proto-cuneiform, “Word List C” is third in frequency, after the “Professions” list (Lu A), and the “Vessels” list; see Veldhuis, “How Did They Learn Cuneiform?” p. 186.
Dynastic and Ur III periods, into the Old Babylonian, transforming the elementary scribal exercise into “a piece of venerated [and “rather opaque”] traditional knowledge.”¹⁵

If we were to assume Anyang literacy, the earliest attested stage of Chinese writing, could be better approximated by the earliest attested stage of cuneiform literacy than by the activities of the Old Babylonian scribes, we would expect Anyang scribal training to be tightly focused on techniques for learning a narrow range of text genres around which the writing system first evolved. If Chinese literacy first emerged in the context of the routine performance by Shang kings of sacrifice, divination and elite gift exchange, as the minimalist account of early Chinese literacy sketched above proposes, we would expect trainee scribes to concentrate on directly relevant text genres. We would be surprised to find a curriculum with a free-floating scholastic rationale, dominated by literary texts.

Drawing a simple analogy between literacy at Anyang and the Late Uruk period is itself not unproblematic, of course. In contrast to the case of proto-cuneiform, whose emergence from precursor non-literate accounting techniques can be traced with considerable chronological precision, we don’t know exactly how long writing was in use prior to the reign of Wu Ding. The Anyang inscriptions’ widespread use of phonetic determinatives in compound signs and complex natural-language syntax (both of which are absent from Late Uruk-period proto-cuneiform) certainly suggest the possibility of development from a prior script stage. Nevertheless, my point here is to stress the inadequacies of an Old Babylonian model for literacy acquisition at Anyang. Selecting a different point of comparison within the cuneiform tradition generates very different expectations.

¹⁵ Veldhuis, “How Did They Learn Cuneiform?” p. 196.
Anyang “Schools” and “Learning”

A number of recent works have summarized inscriptional evidence for the existence of “schools” at Anyang, sometimes suggesting that they may have been places for literacy training. Although my conclusions will be entirely negative, it is useful to review the evidence and its interpretation here, since in several cases the summaries are inadequate and misleading.

The evidence concerns usage in the Anyang divination records of various graphs related to the received forms 学 and 教. Since this range of graphic variation is not the issue here, I will for typographical convenience write all graphs in this group as 学. It is likely that many instances of these graphs are writing members of the word family that includes 学 xué ~ 孝 xiào ‘to learn; to instruct’.

HJ: 8304 and HJ: 16406, a pair of small Wu Ding-period plastron fragments with almost identical inscriptions in the same hand, are credibly taken as indicating that 学 can also write a noun, “school,” possibly referring to the construction of one (zuò xué 作學). In isolation, this is exceedingly weak evidence for a place of literacy training. Several of the above-mentioned authors omit to mention the inscription on TN60 in which 大 xué大學 appears to be a candidate location for an obscure ritual procedure, as an alternative to other public structures. Whatever the nature of this 大 xué, there is a prima facie case for lexical and cultural continuity with the 小 xué 小學 and 大 xué大學 of much later received literature. Some further support is provided by two Western Zhou occurrences of 小 xué, possibly referring to a place.


17 To avoid lengthy palaeographic descriptions of signs, I simply refer the reader to the literature collected in Gulin, see GL: 3230-3233.

18 For the procedure, see discussions under GL: 1036.
of education or training (JC2837, JC4324-5). Xué 學 could possibly be a noun in HD181 (wǎng xué 往學 ‘to go to the xué’) and in HD450 (rù xué 入學 ‘to enter the xué’), but these examples could equally be verbs (i.e. ‘to go to learn,’ ‘to go in and learn’). That is the limit of the evidence from Anyang for the use of xué 學 as or in a nominal phrase referring to an educational institution.

We must also exclude HJ: 3250, which provides no support for the existence of institutionalized literacy training, despite its being often mentioned in discussions of the issue. A loose transcription and partial translation of its divinatory proposition would be:

多子其延學疫，不遘大雨。If the Many Children continue practicing X, they will not run into heavy rain. 19

The only uncertain point of interpretation is the graph 疫, which I leave untranslated. 20 There is no hint, however, that this inscription concerns literate education. Anyang diviners’ concern with the prospects of rain is often connected with group activities performed in the open air, including rituals in ceremonial spaces. The concern in HJ: 3250 is probably whether rain will disrupt the practice of some such open-air activity.

This connection between the verb xué ‘to practice’ and group performances, specifically of dance or music, rather than literacy, is supported by records from Huayuanzhuang Dongdi (花園莊東地) of divination for a patron who was probably

---

19 “Many Children” is an indicator of kinship, not of age. It seems to include, but may not be limited to, offspring of the Shang king, who need not have been what we would think of as school-age children.

20 Adam Schwartz (personal communication) has cautioned me against taking 疫 as the object of the verb 學 ‘to practice’, on the basis of a comparison with HD: 181, where the two words occur in a different syntactic relationship. He tentatively suggests that 疫 may instead be a verbal complement, to be rendered something like ‘to practice to exhaustion’. 
one of the Many Children.  

For example, in five records (on HD: 487, HD: 336 and HD: 150), 學 writes a verb with shāng (?) 商 as its object. We don’t know what this shāng is, but Song Zhenhao has plausibly argued that it refers to a dance or musical performance.  

We also see divinations about “continuing to perform shāng” (yàn zòu shāng 延奏商, on HD: 86, HD: 150 and HD: 382), and about “dancing shāng” (wǔ shāng 舞商, on HD: 130). At one point, an inspection of the Child’s dance by Wu Ding is anticipated (“Ding will come to inspect Child dancing” Dīng lái shì Zǐ wǔ 丁 来視子舞, on HD: 183). The central theme of Song’s article is appealing: the importance attached to learning ritual music and dance that we see in inscriptions from Anyang and the descriptions of music and dance in elite education in early received literature represent a significant cultural continuity.

To summarize, the examples of 學 in the divination records, including HJ: 3250 translated above, are substantially focused on performance activities of that kind. A survey of Anyang inscriptions must firmly conclude that there is no evidence that the Shang elite received a literate “schooling,” and that no association can be made between the abundant instances of the graph 學 and literacy acquisition.

The Xíkè Practice Inscriptions as Evidence for Scribal Training

The xíkè習刻 inscriptions are a large and well-known subset of the inscriptions on divination bones and shells from Anyang, characterized by varying degrees of incompetent writing or other features that suggest that the scribe is not recording

---

21 The patron is referred to as zǐ 子 ‘Child’. For the identity of the patron, and his ancestry, see the discussion in Yao Xuan, Yinxu Huayuanzhuang dong di jiagu, ch. 3; Chen Jian 陳劍, “Shuo Huayuanzhang Dongdi jiagu buci de ‘ding’” 說花園莊東地甲骨卜辭的丁, Gugong bowuyuan yuankan 故宮博物院院刊 114 (2004.4), pp. 51-63.

divinations but rather learning or practicing the skills required to do so.\textsuperscript{23} The question is: which skills are being practiced? Is literacy itself among them?

\textit{Date tables}

There is a strong association between incompetent \textit{xīkè} handwriting and certain categories of text content, most prominently tables of \textit{gānzhī}千支 cyclical dates. Matsumaru Michio classified 156 occurrences of these date tables from \textit{Heji} according to how competent or otherwise the writing on them appeared, ranging from the “extremely immature” (which he labeled type A), through relatively inferior (B), to “normal” competence (C).\textsuperscript{24} For example, among 129 examples of Period V date-tables in \textit{Heji}, Matsumaru found 36 examples of type A hands, 68 of type B and 31 of type C (with several instances of hands of differing competence appearing on a single bone). He proposed that the type C date-tables were model texts for sight copying by students, and that types A and B were student copies, but without making any claim as to whether the students were acquiring literacy or merely engraving skills.

The first description of the \textit{xīkè} phenomenon was probably by Guo Moruo, in a 1937 annotated catalog. He described a \textit{xīkè} date table in the following terms:\textsuperscript{25}

\begin{quote}
The content [of CB: 1468=HJ: 18946] consists of the \textit{gānzhī} for days 1 to 10 engraved repeatedly. In the fourth line of text, the graphs are finely written and orderly, as though engraved by a teacher (\textit{xiānshēng} 先生) to serve as a model (\textit{fànběn} 範本). The rest are crooked and inferior, as though written by someone learning to engrave (\textit{xuékè} 學刻). This is no different from the method by which
\end{quote}


\textsuperscript{25} See CB: 1468.
today’s children practice writing (習字). Shedding light on the educational circumstances of three thousand years ago, it is of the utmost interest. Furthermore, interspersed within the columns written by the trainee are finely written graphs identical to those of the model, where presumably the attendant teacher took up the knife. Examples include the 辰, 午 and 申 of the second line, and the 卯, 巳 and 辛 of the third.

There are two ways of interpreting this inscription, either as the remains of literacy acquisition (as arguably Guo seems to be doing), or as the remains of engraving practice by someone already literate. According to the first interpretation, the trainee was learning to write 兢繸 dates. This would be a natural first exercise for a novice scribe. A 兢繸 date is a standard component of a divination record and many other text-genres, and the various uses of the 22 兢繸 signs make up almost a quarter of the total graph-count of one corpus for which precise counts are readily available.26 “Practicing one’s 兢繸” (習甲子) remained a byword for acquiring the rudiments of literacy into the medieval period,27 and 兢繸 tables are amongst the most poorly-executed examples of scribal training texts from the Han garrisons of the northwest frontier.28 According to the second interpretation, the previously-literate trainee already knew the 兢繸 signs (as any literate person would) and was simply using them as a starting point for learning the engraving technique.

Both interpretations are possible, but the second has become the consensus.

26 According to the electronic transcription of the Huayuanzhuang Dongdi corpus presented in Smith, “Writing at Anyang,” appendix II, 4014 graphs from a total of 16990 are written with signs from the 兢繸 repertoire. This includes usages of the 22 signs other than for dates and day-names (日名).

27 “Anyone who's ever recited the Jijiu or practiced his 兢繸 dates is wielding his writing brush and flourishing his literary talent, debating institutions and discoursing on the Way” (曾諷《急就》. 習甲子者，皆奮筆揚文，議制論道). See Jinshu 晉書 (“Xiahou Zhan liezhuan” 夏侯湛列傳) (Sibu beiyao edition (Taipei: Zhonghua shuju, 1965), 55, p. 2.

28 See e.g. Michael Loewe, Records of Han Administration, vol. II (Cambridge: Cambridge University Press, 1967), pp. 418-421; Gansusheng Wenwu Kaogu Yanjiusuo 甘肅省文物考古研究所, Dunhuang Han jian 敦煌漢簡 (Beijing: Zhonghua Shuju, 1991), items no. 841 (p. 251, pl. 80) and no. 1458 (p. 274, pl. 132).
Consider for example Zhang Shichao’s response to the remarks of Guo Moruo quoted above:\textsuperscript{29}

Prior to becoming engravers [of divination records], Shang people had to undergo a period of training. … the not inconsiderable number of practice inscriptions is proof of this. [Guo Moruo in his commentary on Cui: 1468] did not distinguish learning to engrave from learning to write, and thereby invited misunderstanding. … the handwriting styles classified as practice inscriptions [xíkè] merely reflect the circumstances of learning to engrave. Those who were being trained to engrave would have previously mastered literacy skills.

No evidence or argument is offered for the final claim. One is left to fill in the reasoning that lead to it, namely: that literacy during the Late Shang period was far more routinely performed on media other than those which are attested; that divination recording on bone and shell was an unusual specialization of literate practice that just happens to have been abundantly preserved; and hence that scribes would have first acquired the ability to write on “everyday” media and subsequently retrained as engravers if called upon to specialize. A number of other scholars have recently reached similar conclusions.\textsuperscript{30}

However, the learning-to-engrave interpretation leaves many questions unanswered that the learning-to-write interpretation deals with without difficulty. We will see below that the date-table is by no means the only category of trainee inscription, but why do trainees concentrate so much effort on producing this particular category of text?\textsuperscript{31} If they were learning the script for the first time, we could point (as we did above) to the foundational role that this set of signs played in divination record-keeping and literacy more generally. If they were already fully literate, should we not be surprised to see them spending so much time on just 22

\textsuperscript{29} Zhang Shichao 張世超, Yinxu jiagu ziji yanjiu: Shi zu buci pian 興墟甲骨字跡研究—師組卜辭篇 (Changchun: Dongbei Shifan Daxue Chubanshe, 2002), pp. 27-28.


\textsuperscript{31} The 156 date tables discussed by Matsumaru are by no means all the examples known. He was simply surveying the cases conveniently gathered together in the organizational scheme of \textit{Heji}. 

183
signs from a repertoire of many hundreds, perhaps several thousand, that they had supposedly already acquired? Why do trainees always write out the cycle of sixty in (full or partial) tabular form, and why do the presumed instructors always model it that way? Under the learning-to-engrave interpretation, it would be sufficient for a model simply to list the 22 signs, and for the trainee to copy individual signs repeatedly to fluency. Under the learning-to-write interpretation, the trainees are learning the sequence of sign pairs for the cycle of sixty for the first time, and so need to be repeatedly exposed to its combinatorial structure.

The most important questions that the learning-to-engrave interpretation struggles to answer satisfactorily are why the trainees seem to make errors that a previously literate person would be unlikely to make, and why the least competent among them seem to have so little sense about how to arrange a line of text on a surface.

Figure 6.1 HJ: 38058- Scapula fragment with date tables in trainee hands of varying competence (from Heji vol. 12, p. 4736)
Consider HJ: 38058. The group of graphs discussed below is shown highlighted in Fig. 6.1. The accompanying table contrasts these with the more conventional forms that appear in adjacent columns. At least two and perhaps three levels of competence appear on this scapula, each writing 10-day weeks from the cycle of 60 in vertical columns. The least competent are the columns on the left, where, poor motor skills aside, the scribe has

1. produced an unrecognizable 丑
2. missed out the horizontal stroke in 丙 on its first appearance, and inverted its ^-shaped component in its second (as also on HJ: 38106), and
3. rotated 寅 by 180°.

Some trainees producing date-tables also seem to have great difficulty in keeping to the conventions for consistent graph size and placement that otherwise characterize the contemporary script, and with which any literate person could be presumed to be familiar. Their inscriptions often show no ability to anticipate the space required for an orderly arrangement of text.

HJ: 37995 (Fig. 6.2: B), for instance, besides being incompetently engraved, shows an uncontrolled variation in the space occupied by individual graphs, from the tiny fourth 丁, to the greatly elongated signs 申 and 酉. As a result, the tabular arrangement departs from the orderly arrangement of its contemporary models in the Huang Group (黃組), in which graphs occupy similar amounts of space and matching 乾 signs are aligned in horizontal rows (cf. Fig. 6.2: A, and other examples in the range HJ: 37986-38114).

Consider HJ: 38072 (Fig. 6.2: C). In what appears to be the first attempt, on the right, to write out the first few terms in the cycle of sixty, the scribe has

1. written 乙, not as a three-stroke s-curve, but as an extended wiggle,
2. missed out one of the fingers of 丑, and
3. incorrectly permuted the order of 丙 and 寅, and
4. attempted to repeat the yín 寅, before giving up and starting again.

Figure 6.2  Date tables (top: disorderly trainee tables on HJ: 37995 (B) and HJ: 38072 (C), contrasted with model table on HJ: 37986 (A); middle: egregiously incompetent graphs on TN: 2661 (D); bottom: anomalies on TN: 2630 (E); from Heji, vol. 12, pp. 4718, 4720, 4739, and Tunnan, pp. 541, 574)

TN: 2661 (Fig. 6.2: D) is engraved with the gānzhī for the first 10-day week. It is executed in a dramatically incompetent hand with the exception of the first pair of signs, on the left, which are neatly written one above the other, presumably by an
instructor or more competent student. The first pair of signs by the student, for day 2, is not properly aligned, and the subsequent gānzhī pairs grow in size as the inscription proceeds, producing an impression of considerable naivety.

Consider TN: 2630 (Fig 6.2: E). This is an attempt by a scribe to write out the gānzhī terms for the first two 10-day weeks. Motor skills are fine, but

1. the first instance of wù 戊 is missing 3 strokes, appearing as  instead of

2. hài 亥 for day 12 is missing its horizontal strokes, appearing as  rather than the expected

3. day 11 (jiāxū 甲戌) is written as day 35 (wüxū 戊戌), and

4. the gan for day 15 (wù 戊 again) is missing two strokes:  

The concentrated occurrence on gānzhī date-tables of errors of this kind, which are not easily explained under the learning-to-engrave interpretation, implies that the date-tables are associated with the lowest rung of the ladder towards literacy.

An additional feature of trainee date-tables, also discussed by Guo Moruo (see CB: 1467=HJ: 38076), is the occasional systematic absence of horizontal strokes from graphs. In addition to disorderly attempts at the cycle of sixty, Guo’s example also has the gānzhī for days 1 to 4 in a secure-looking hand, but with all horizontal strokes systematically omitted. This phenomenon has been discussed many times, and a variety of interpretations proposed. The simplest way of accounting for the

34 For a survey of similar errors, see Li Minling 李旼姈, Jiagu wenli yanjiu 甲骨文例研究 (Taipei: Taiwan Guji Chuban Youxian Gongsi, 2002), pp. 107-114, 117-121.
35 For a comprehensive overview, see Li Minling, Jiagu wenli yanjiu, pp. 122-148. Li’s proposal that omitted strokes are “produced by negligence on the part of the scribe,” though perhaps adequate to
omission of horizontal strokes, though, would be as an attempt by the instructor to
demonstrate the stroke order – verticals before horizontals – that constituted the *de facto* standard for his or her writing style, and which presumably helped to minimize
the rotation of surface or knife. This interpretation of the missing horizontals is of
course compatible with both the learning-to-write and learning-to-engrave accounts
of the practice inscriptions. Nevertheless, it is a good illustration of the intimate
pedagogical interaction between trainees and their instructors.

To summarize, the density of errors and incompetent text arrangement in the *xīkè*
date-tables, provides a first line of evidence for interpreting visibly incompetent
engraving in this category as the work of marginally literate individuals.

*Simple formulae and sight-copying of divination records*

By learning only a small number of signs in addition to those in the *gānzī* set, a
trainee becomes able to write out complete divination records of a simple, formulaic
kind. We see many examples of insecure hands writing out versions of the *bǔxún* 卜
旬 ‘divining for the week ahead’ formula, which requires only five signs, all of high
frequency, in addition to the *gānzī*. Often these are syntactically incomplete or
jumbled in ways that would seem bizarre if the scribe were fully literate and merely
learning to engrave.

TN: 1034 is a largely intact scapula on which the *bǔxún* formula has been
repeated many times in an orderly but not fully fluent hand. On the far right-hand
edge of the published reproduction, the formula appears garbled as 壬卜未貞旬亡禍,
with the *bǔ* 卜 sign intruding between the date signs. The same error is repeated
verbatim in the middle of the scapula. Perhaps the trainee is visually copying his or

explain isolated instances in otherwise normal inscriptions, seems implausible as an account of the
systematic, visually salient omission of most horizontal strokes from an entire inscription. The most
impressive instance is the date-table HJ: 24440 (*Fig. 2.4* in Pankenier’s paper, this volume), which
must surely be connected with scribal training.
her own inscriptions. The scapula had been prepared for and used in divination, and at least some of the trainee inscriptions are likely to be records of divinations actually performed on the bone.

An excellent example of an instructor and a trainee writing a set of bǔxún records together is provided by HJ: 34945 (=JB: 760) (Fig. 6.3). Bǔxún formulae for days 40, 50, 60, 10, 20 run in orderly sequence up the edge of this scapula fragment. They are records of divinations actually performed on the bone, as the presence of crack-numbering indicates. The earliest record, for day 40, is in a fluent and fully competent hand, while the subsequent records are evidently inferior.

Figure 6.3  HJ: 34945- Scapula with bǔxún ‘divining for the week ahead’ records, of which the earliest (Day 40) is in a more competent hand than those that follow (from Heji, vol. 11, p. 4366).
Besides the *bǔxún* formula, simple and standardized hunting divinations were also features of the divination scribes’ early training. The scapula HJ: 35261 appears not to have been used for actual divinations, but is covered in more than a dozen repetitions of a simple hunting divination formula of which only the *gānzhī* date varies.

干支卜，逐麋，禽。
Day n cracking: If we pursue *mi*-deer, we will capture some.

TN: 2693 has two versions of a hunting divination record, neither associated with any divinatory cracks on the scapula. The hand is far from secure. The naive arrangement of the graphs and the nonsensical anomalies (the “rain” 雨 sign is omitted in one case, and the “field” 田 sign – for “hunt” – is omitted in the other) imply that this is less likely to be a previously literate individual learning to engrave than a novice scribe mechanically and inaccurately sight-copying a model.

辛未卜，王其[田?]，不雨。
Day 8 cracking: If the king [hunts?], it will not rain.

辛未卜，王其田，不[雨?]
Day 8 cracking: If the king hunts, it will not [rain?].

The learning-to-engrave interpretation provides no explanation for why previously literate scribes would spend time concentrating on these formulaically trivial, high-frequency patterns, nor for their frequent errors.

We have seen that *xīkè* inscriptions often were not practiced by individuals in isolation, but involved interaction with more competent hands, presumably those of instructors. This visual dependence on an instructor’s model, not just for engraving

---

36 Further fragments of a similar exercise, possibly in the same hand, are collected as HJ: 35262-35264.
technique, but also for sign forms and text content, is also hard to square with the learning-to-engrave interpretation. We observe trainees sight-copying models specially provided by instructors or simply copying actual divination records.

Consider for example the repeated attempts to get right the sign 亚, scattered with other xikè fragments around the proximal end of scapula TN2174. The trainee is attempting to reproduce the sign that occurs in a competently-written divination record towards the distal end of this bone. A scribe who knew this sign would not need to practice it in this way, and would not make such obvious errors in the geometry of the sign.

Figure 6.4  TN: 2731- Competently written model text with multiple inferior copies (from Tunnan, p. 587).
TN: 2731 (Fig. 6.4) shows a trainee attempting to reproduce a divinatory proposition, graph for graph. There are no signs of divinatory cracks or crack-numbers associated with the model, suggesting that it was deliberately written out for the purpose. Though evidently less competent, the trainee approximates the model with an adjacent column of text, and then rotates the bone 180° for a second attempt (curiously reusing the now-inverted “king” 王 of the first copy as the first graph of the second copy). Graphs grow in size and become increasingly disorderly as the trainee appears to tire of the effort. There are two errors in the copy that show the trainee to be reproducing visually unfamiliar symbols. The commonly-occurring “foot” 止 component in the third sign of the sequence has not been recognized, and appears in the copy as a visually misunderstood jumble of strokes.37 The fourth graph, has been misconstrued as two separate signs: 喜 and 羊, or at least is written as though that were the case. The same trainee’s copies of the model continue on TN: 2737, another fragment from the same pit.

HJ: 27042--A complex example of student copying

HJ: 27042 (Fig. 6.5A) is the most complex of all the scribal training objects from Anyang, and allows us to reconstruct the copying practices of scribal trainees in considerable detail.38 The item is an almost complete scapula, densely inscribed on both faces. It is a join of two fragments (Jia: 2692/2693 and Jia: 2880/2881) both excavated in 1929 from the so-called 大連坑. The divination records on

37 The sign in question is GL: 2307. For a clearer instance of the same sign in a similar inscription, cf. HJ: 28915 (= JB: 907).
38 For a fuller treatment of the object than can be provided here, including transcriptions and translations, see Smith, “Writing at Anyang,” pp. 320-342.
this bone are in a typical He Group II (何組二類) writing style. The dating of this style is confirmed by the appearance of the appellation Father Jia (父甲) in one of the practice inscriptions on this item. The inscriptions were thus produced in a workshop serving one of the royal patrons Kang Ding or Lin Xin. The divinations actually carried out and recorded on the bone were performed by Diviner He. Some of the practice inscriptions are copies of records of divination performed by He’s colleague, Diviner Zhu, or the royal patron.

Figure 6.5  HJ: 27042- Scapula (A) densely inscribed with a mixture of divination records (B) and trainee copies (C) (from Heji vol. 9, p. 3337)

39 Li Xueqin 李學勤 and Peng Yushang 彭裕商, Yinxu jiagu fenqi yanjiu 殷墟甲骨分期研究 (Shanghai: Shanghai Guji Chubanshe, 1996), pp. 139-173.
40 See K23 in Keightley’s table of the royal genealogy, Keightley, Sources of Shang History, pp. 185-187.
41 See K23a and K24 in Keightley’s table, ibid.
The scapula was first physically prepared for divination. The position of eleven hollows carved into the reverse can be clearly seen in the rubbing (HJ: 27042 反, not reproduced here). The six running along the left-hand side of the reverse I refer to here as Set 1, and the more centrally placed group of five as Set 2. The lowest hollow in Set 1 is only partially preserved, and it is almost certain from the crack-numbering that there was originally an additional seventh hollow below it that has been lost due to the break.

Fig. 6.5: B represents the positions of these hollows as if seen through the obverse, i.e. left-to-right mirror-reversed. Superimposed over these are the positions of the divination cracks, to the extent to which they could be made out on the rubbing of the obverse. All eleven (originally twelve) hollows appear to have been cracked in divination events. These divinations are recorded on the obverse by inscriptions arranged in the standard manner adjacent to the resulting cracks. Fig. 3B also shows the locations of the ten surviving records.

The inscriptions numbered 1-4 in Fig. 6.5B record a series of divinations performed by Diviner He on Day 50 concerning sacrifice of livestock. The original first inscription in this set, like the corresponding hollow on the reverse, is missing. It would have specified the recipient of the sacrifice and was located below the surviving inscription 1. I suggest below that inscription 17 (Fig. 6.5: C) is a trainee copy of this missing record, allowing us to identify this set of divinations as concerning sacrifice to Father Jia on Day 51, his name-day.

Inscriptions 5-7, corresponding to the remaining two hollows in Set 1, plus one or both of the pair of hollows at the bottom of Set 2, record a further bout of divination by He on Day 53 concerning sacrifice on Day 54. The recipient would have been specified in the broken section of inscription 5, the first in the series. It is likely that the recipient was Wu Ding 武丁, grandfather of the two kings that are candidate patrons for this divination bone, being sacrificed to on his name-day.
Inscriptions 8-10 record divinations by He on Day 57 concerning sacrifice to Female Ancestor Xin 妤辛 on her name-day, Day 58. The recipient is probably Fu Hao 娃好, wife of the previous recipient. The Day 57 series of divinations exhausts the supply of hollows on the bone.

At this point the scapula ceased to be a divinatory instrument and became a resource for scribal training, providing model texts (inscriptions 1-10) for copying and a surface on which to copy them. All inscriptions on this object besides the ten just discussed – 19 inscriptions or parts thereof on the obverse of the bone, shown in Fig. 6.5: C, and 13 more on the reverse, plus sundry isolated graphs – are trainees’ copies or instructors’ models (inscriptions 11 and 21). The grounds for this interpretation are as follows.

That the bone was used for practice of some kind is clear from the presence of the stray, obviously incompetent graphs labeled xikè by the Moshi editors. Inscriptions 27-29 also clearly could not be adequate records of divination (see below). Discounting the stray graphs, all inscriptions on the scapula formally resemble divination records to some degree, but since the intact bone probably had only twelve hollows, they can't possibly all be records of divinations performed on this bone.

The three series of divination records that can be matched to hollows (inscriptions 1-10) are grouped and arranged in a conventional, orderly manner by date, moving up through the two sets of hollows. The relationship between the dates and the relative positions of the remainder is haphazard – the result of filling in whatever space remained available. Inscriptions 14 and 15, for example, belong in the same group as 12 and 13; inscription 26 belongs in the same group as inscriptions 22-25; inscription 27 belongs in the same group as 28 and 29 (see Fig. 6.5: C). Given their placement, it is unlikely that these inscriptions could have been made sequentially on the days of the divinations they seemingly record.

Furthermore, the three series of actual divination records presented above do not contain any verbatim repetition of content: the first divination in each series proposes
the date, the sacrifice and the recipient, and the subsequent ones propose alternative
details. In contrast, there is substantial informationally-redundant repetition among
the other inscriptions, including exact repetition of content from inscriptions 1-10.

Finally and most importantly, all of the ten divination records (inscriptions 1-10)
are written in a thoroughly competent hand. The other inscriptions, though
approximating the same style, belong to an evidently less competent trainee hand.
The only exceptions are inscriptions 11 and 21 which as already mentioned are likely
to be instructor's models.

The training inscriptions on the obverse can be summarized as follows:

*Inscriptions 11 and 21.* These two adjacent inscriptions purport to be records of
divinations carried out on Day 59 and Day 1 by He’s colleague, Zhu. They are
competently written in what appears to be the same hand as items 1-10. However, in
neither case is an associated hollow present on the reverse of the bone, nor is any
crack or crack-number visible on the obverse. They are not records of divinations
performed on this scapula. Inscription 11 is copied verbatim five times in an inferior
hand on the obverse (inscriptions 22-26), and three more times on the reverse.
Inscription 21 is copied once immediately below (inscription 20) by an inferior hand.

*Inscriptions 12-15.* An inferior hand has produced verbatim copies from the set of
records represented by inscriptions 1-4, including a probable copy of the missing first
item in the set.

*Inscription 16.* This is a verbatim copy in an inferior hand of inscription 7.

*Inscriptions 17-19.* These appear to be student copies of records of divinations
performed by Zhu on Days 57 and 58. There is, however, no sign of the models and I
suggest that the trainee is copying from at least one other set of actual records besides
those on HJ: 27042.

*Inscription 20.* As already noted, this is a copy of model 21.

*Inscriptions 22-26.* As already noted, these are verbatim copies of model 11.

*Inscriptions 27-29.* These fragmentary beginnings appear to be copies of a record
for a divination by Zhu on Day 7. The model is not present on HJ: 27042.

The thirteen more or less formulaically complete inscriptions on the reverse are almost all purported records of divinations by Zhu concerning the king's “hosting” (bīn賓) of rituals to distant royal ancestors, and all are in a trainee hand. The models for these copies are not to be found on HJ: 27042, with the exception of inscription 11 on the obverse, discussed above. However, examples of records of precisely this kind of divination by Zhu, kept in the He Group II writing style, are plentiful among published corpora.42 As with inscriptions 17-19 on the obverse, we can assume that a suitable model would have been made available to the trainee.

Scribal training within the He Group divination workshop

HJ: 27042 was discovered together with many other inscribed scapula and plastron fragments produced by the institution for which Diviners He and Zhu, and the He Group II scribal hand(s) worked. The nature of these institutions employing diviners and scribes remains rather obscure, but I will adopt the term “divination workshop” as a label, reflecting their best-attested sphere of activity. What we do know about these institutions comes primarily from the sophisticated typologies of divinatory inscriptions from Anyang that have been compiled by Chinese scholars.43 These typologies and their supporting scholarship have shown that multiple such divination workshops could be in operation contemporaneously, each distinguished by its writing styles and documentary conventions, its set of named diviners, and its own locus of activity within the moated Xiaotun enclosure at the center of the Anyang site complex.

This is perhaps most readily illustrated for the divination workshops active during

42 Cf. HJ: 27086, 27177, 27508, 27645, 30548-30551, 30553-30558, 30572, 30788. HJ: 30542 (and perhaps 30384 also) was produced, I suggest, by the same trainee as the inscriptions on HJ: 27042 that we are discussing, by copying the same kind of model – the賓 graph is diagnostic.
43 Li Xueqin & Peng Yushang, Yin Xu jiagu fenqi yanjiu.
the reign of Wu Ding. For instance, during the latter half of that reign, the workshop responsible for the so-called Bin Group inscriptions (Bīn zǔ bǔcí宾组卜辞) was active in the “palace area” north of Xiaotun village, the Li Group (Lì zǔ歷组) workshop was active within and to the south of Xiaotun, and the recently-excavated Huayuanzhuang East Group (Huā dōng zǔ花东组 or Huā dōng zǐ zǔ花东子组) was being produced at a location on the very southern limit of the moated enclosure. The patron of the Li and Bin Group divinations was the Shang king, while the patron of the Huayuanzhuang East Group was one of his sons.44

The workshop that employed diviners He and Zhu, and the scribe(s) responsible for the He Group II style, whose respective roles in producing HJ: 27042 we were discussing in the previous section, was active two generations later than Wu Ding.45 As noted in the previous section, the pieces of HJ: 27042 were excavated from the so-called dàliánkēng, a group of excavators’ trenches covering an area of about 100 square meters.46 The same season of excavations recovered large numbers of bones and shells produced by the same workshop,47 inscribed in the He Group styles with records of divinations performed by He and fellow diviners, most frequently Peng 彭, Kou 口 and Da (?). The majority of these are records of entirely routine bǔxún ‘divining for the week ahead’ or bǔxī卜夕 ‘divining for the night’, with a minority of more complex records of sacrifice or hunting divinations. The majority of these records are competently, regularly and fluently written.

However, HJ: 27042 is by no means the only remains of He Group scribal training
activities from the *dàliánkēng*. The following examples are some of the more interesting and informative examples.

HJ: 26907 resembles HJ: 27042 in many respects. The obverse bears a mixture of real records of divination performed using the scapula and practice inscriptions by a trainee filling up the left-over space.\(^ {48}\) The real records consist of a set of five divinations about sacrifice to River (*hé̄*河), and five more (possibly related) about numbers of sheep. All are written in a very neat hand, with the exception of the preface to the first record in the first set. A trainee has been allowed to write out the beginning of the record – “Day six cracking, Peng divined…己巳卜彭貞…” – before returning the record to the more competent scribe for completion. For reasons that will become clear, I very tentatively suggest that in this and the following examples, diviner Peng was the trainee learning to write (and perhaps also learning to perform divination).

The remaining inscriptions on the obverse of HJ: 26907 are complex, fragmented and disorderly, and none of them is associated with cracks, crack-numbers or anything else to suggest that they are records of divinations performed on this bone. It is hard to be confident that they are all in a single hand, but the quality of the writing is consistently inferior to the neat calligraphy of the ten true divination records. Peng is named as diviner in two of these additional inscriptions.

The reverse of the scapula has a table of *gānzhī* in a student hand. Below that are what appear to be two records of “divining for the night” by the He Group diviner Da. Neither is a record of any divination performed on the bone, however, and scrutiny reveals that one is a model text and the other an inferior sight-copy. The manner in which the two elements that make up the sign *jīn* 今 have been divorced from one another in the copy suggest that the copyist was not used to writing this everyday sign on any medium.

\(^ {48}\) HJ: 26907 is a complex join of multiple fragments, originally published as *JB*: 2471, 2491, 2492, 2501, 2605 and 2606.
HJ: 26899 (=JB: 2695) is again similar. Five true divination records in a competent hand survive on the right side of the scapula, including one that names the He Group diviner Kou. Attempts at copying signs from these records are interspersed within them. A sixth true record runs down the left edge of the scapula. It has been carefully but imperfectly copied alongside.\(^49\) The remainder of the surface is again covered with complex but disorderly fragments. Some of the content (including a few low-frequency graphs) overlaps with that of HJ: 26907 discussed above, suggesting that the two items were produced as part of the same course of instruction.\(^50\)

HJ: 27543 (JB: 2698) is covered with a disorderly jumble of divination records each of which is written in two different hands. Each begins with the smaller, neater hand writing the usual preface, but on reaching the diviner name (Peng once again, note), a large and clumsy student hand takes over. There is no sign of cracks, crack numbers or the orderly arrangement one would expect from a real set of records.

On HJ: 31420 (JB: 2694), a competent hand has written a couple of prefaces for records of divination by He. Contrasting with these is a bùxún formula for day 30 naming diviner Peng in an evidently incompetent hand. There are no signs to indicate that the latter is a true divination record.

The following three items illustrate a single rather peculiar phenomenon. Each involves a bùxún formula naming Peng as the diviner, written out in an obviously immature hand, and with the complete sequence of graphs permuted in bizarrely nonsensical ways. HJ: 27220 (JB: 2407) writes the bùxún formula for day 40 precisely (and hence presumably deliberately) backwards, i.e. in ascending vertical columns. HJ: 27694 (JB: 2770) scrambles the formula for day 20, and writes wèi 未

\(^{49}\) The copy is not dramatically incompetent, but there are revealing anomalies. Most obviously, the vertical column of text is disrupted; jīn 今 is written straddling a crack; and the final yóu 尤 is written incorrectly, to resemble fù 父. Perhaps responding to this error, one of the contributing scribes has written an otherwise out-of-context and difficult-to-explain fù 父 among the jumble of graphs up at the proximal end of the scapula.

\(^{50}\) Note in particular the large and pictographically rendered shè 射 “shoot” and deer signs which appear without meaningful context on both HJ: 26899 and HJ: 26907.
incorrectly, to resemble 木. HJ: 28107 (JB: 2773) is another similar scrambling though the date is not fully legible.

I interpret the evidence for scribal training from the dàliánkēng, of which the above is merely a selection, to indicate that the membership of the He Group included, alongside the diviners and scribes, at least one trainee who was learning to engrave and perhaps to divine, but who was also certainly learning to write. Some of the more bizarrely anomalous (or perhaps playful?) behavior suggests a child. The repeated association of the diviner name Peng with these practice inscriptions suggests the possibility that Peng was the trainee.51

In support of that final contention, I invite the reader to survey the many examples of records from the dàliánkēng that name Peng in the preface. Unlike the examples we have just considered, the majority of these are cleanly and regularly written, and appear to be records of divination actually carried out on the bone. But in several instances, my subjective sense is that the single graph Peng 彭 is written in a different hand, inferior to the rest of the inscription, as though Peng were allowed to fill in his own name in a record made on his behalf by a more competent scribe. HJ: 31427 (JB: 2792) is one such example.

Model Texts and the Emergence of Textual Transmission

Among the examples of scribal training material discussed above, we have encountered many instances of trainees copying texts written by competent scribes, and several examples of competent scribes providing model texts for trainees. Recognizing the existence of these models and copies prompts several further questions. Are there further examples of models or copies within the published corpus from Anyang that have previously gone unnoticed? Does the notion of an

51 For Peng’s career as a diviner, which spanned several reigns, see Li Xueqin and Peng Yushang, Yinxu jiagu fenqi yanjiu, pp. 171-172.
instructional model – a text deliberately composed for a student to copy – help us explain features of inscriptions that hitherto have seemed puzzling? Did scribal training in the divination workshops at Anyang produce anything analogous to student texts from Uruk like the Professions List, or Tribute/Word List C, that were faithfully copied over many generations for what became self-sustaining scholastic reasons, long after they had become obscure and lost their original function had been forgotten? In this section I will tentatively sketch affirmative answers to these three questions, drawing on a hypothesis put forward by Matsumaru Michio.

Figure 6.6  HJ: 33208- Scapula with formulaically contrived practice text (from Heji, vol. 11, p. 4095)
HJ: 33208 (JH: 622, Fig. 6.6) is a largely intact scapula with what appear to be four divination records written on it. The writing is not obviously that of a novice hand. Nevertheless, the multiple, oddly oriented copies of the same quadruped pictogram that appear toward the distal end of the scapula are the first hint that this item is connected with scribal training. Four columns of text, ostensibly divination records, run down from the proximal end. However, their content is highly contrived. The prefaces date the records to days 1 to 4 of the 60-day cycle, with one record for each day. The divinatory propositions all ask whether, if the king were to proceed in a particular direction, the Lord of Such-and-such would meet with a particular (probably violent) fate. The wording of the proposition is identical in the four versions, except for the direction of the king's motion, which cycles through the four cardinal directions: east, south, west, and north.

I suggest that the permutation of preface dates and cardinal directions is entirely artificial, and that the four records constitute a scribal exercise. The interpretation as a scribal exercise is supported by the fact that none of the four ostensible divination records has any associated cracks, crack-numbers or hollows.52

A similarly artificial four-part text, cycling through the cardinal directions, appears on the well-known “Names of the Four Quarters and Winds” scapula, HJ: 14294. There are no signs of divination on the bone, and the columns of text are not even formally similar to divination records. They simply state what appear to be names for the four cardinal directions and their respective winds. The question of the purpose of this inscribed object naturally arises.

The names for the quarters and winds do appear embedded in actual divination records. I count eight examples, the most spectacular of which is the plastron HJ:

52 Wang Yuxin and Yang Shengnan interpret this as a xíkè inscription for similar reasons. See Wang Yuxin and Yang Shengnan, Jiaguxue yi bai nian, pp. 254-255. The absence of hollows from the reverse, and from all the other relevant examples discussed here can be confirmed by consulting the photographs of the previously undocumented reverse that have been made available online by the Institute of History and Philology, Academia Sinica; http://archeodata.sinica.edu.tw/, accessed on April 7, 2009.
14295 excavated in 1936 from the Wu Ding-period pit YH: 127 at Anyang.\(^{53}\) Hu Houxuan pointed out that these names of the quarters and winds appear in later received literature, in obscure, textually corrupt contexts. The “Yaodian” 堯典 chapter of the *Shangshu* preserves the names of the four quarters, in the guise of ethnonyms of peoples from the four cardinal directions. The *Shanhaijing* 山海經 preserves both the quarter and wind names, sometimes using formulae reminiscent of HJ: 14294.\(^{54}\) Although one is left with no doubt that these two texts do indeed preserve the same information as that contained in the text from Anyang, it is clear that a good number of “copying errors” had been introduced along the way, and that the original role of the text had been entirely lost in transmission.

Matsumaru’s contribution was to propose that HJ: 14294 had a function in scribal training. He was prompted towards this conclusion by a small, archaeologically unprovenanced, scapula fragment which he also published.\(^{55}\) The fragment bore partial remains of five inscriptions in a somewhat incompetent hand, three of which were ostensible divination records, one a *gānzhī* date-table, and one a sequence of five graphs from the “Quarters and Winds” text. The latter, according to Matsumaru, was likely to have been a reproduction of a model text like HJ: 14294. In light of the evidence explored in the present paper, particularly the evidence for copying of model texts, I suggest that Matsumaru is correct about the likely role of HJ: 14294 in scribal education, and that the replication of the “Quarters and Winds” text into received literature goes some way towards satisfying the comparative expectations generated by the Late Uruk student texts.

---


Conclusions

The characterization of practice inscriptions from Anyang as involving “meaningless repetitions of a graph” is misleading. Rather, they are a complex source of information about how scribes were trained at Anyang. Wang Haicheng notes that student exercises may be expected to be done “on the cheapest and most readily available stationery,” and that, cross-culturally, “student scribes used the same writing tools and surfaces as those used for everyday writing.” I agree, but draw an opposite conclusion to Wang, who implies that divination bones would have been an unlikely medium on which to practice literacy. In the Anyang divination workshops, the surface of bones and plastra was an everyday writing surface, quite literally. The divination record is the only text genre from the Chinese Bronze Age that we know was produced on a daily basis. Moreover, the reverse of a used scapula, or the uninscribed portion of the obverse, are byproducts of the divination workshops’ activities – they cost nothing at all – unlike bamboo slips, hair brushes and ink which require skill, effort and materials to produce. Used scapulae are an entirely natural choice for scribal training, especially if the scribe is being trained to keep divination records on that medium.

At least some of the practice inscriptions were produced by trainees who had no prior experience writing the Chinese script. They allow us to begin sketching the outlines of a curriculum that probably began with gānzī date-tables, moved on to

---

57 Wang, ibid., p. 326.
58 See Yao Xuan’s tables of synchronies for the Huayuanzhuang East inscriptions for evidence of the remarkable rate at which divinations documented in writing were being produced; see Yinxu Huayuanzhuang dongdi jiaju, appendix II. I have offered some reasons for modifying the estimate downwards slightly but agree with the overall high-frequency picture; see Smith, “Writing at Anyang,” pp. 285-300.
simple formulae like the *bǔxún* records which trainees could put to immediate use, and extended to copying a variety of more complex model texts, including actual divination records produced by practicing scribes as well as specially-composed models.

The training that we are able to observe seems to have involved intimate interaction with practicing scribes responsible for keeping divination records, and learning through informal imitation. Scribal trainees seem for the most part to have imitated the writing style of the models that they were copying. What we perceive now as considerable diversity among the styles used in contemporary divination workshops at Anyang may be a reflection of this “in-house” training. If the locations where trainee texts have been found are any guide to where they were produced, training took place at or in close proximity to where divination was performed and recorded. The exercise texts that we have looked at are focused on the acquisition of precisely the skills required to maintain divination records; there is no sign that the trainees were acquiring generalized literacy skills that could have been deployed to write a diversity of other genres.

What light is shed by the evidence for scribal training in the divination workshops on the choice to be made between the maximal and minimal hypotheses for late 2nd millennium literacy? Most importantly it weakens a prominent objection to the minimal hypothesis, an objection articulated best by Bagley, that such a hypothesis would provide no mechanism for the intergenerational transmission of the script. On the basis of the evidence presented in this paper, I argue that, at least in principle, the divination workshops at Anyang would have been capable of the independent transmission of literacy, whether or not there were any other frequent and routine uses of writing in the Late Shang world.

---

60 I have only reviewed the evidence from the *dàliánkěng*. Similar arguments could be built around the abundant *xìkè* materials from Xiaotun South 小屯南地; see Yao Xiaosui and Xiao Ding, *Xiaotun nandi jiagu*, pp. 197-206.

Nevertheless, the fact that some scribes seem to have been trained in the divination workshops does not by any means imply that all scribes were. The fact that they were trained to write divination records on bone does not mean that that was the only text genre or medium that they learnt. We know that brush writing and some precursor to the jiāncè 简册 (wood or bamboo documents) of later periods existed, though we have little idea to what extent they were used. As I have argued elsewhere, the best evidence for writing on jiāncè, presumably with a brush, points toward a role for them in keeping track of livestock awaiting sacrifice. In this paper I have used the term “divination workshop” as a convenient label for the institutions to which diviners and divination scribes belonged. However, it is likely that the institutions in question were the same ones that managed other aspects of the sacrificial cult to the dead kings, and also perhaps ritual and ceremonial activities more generally, since that is what the written record of Shang divination is all about. To the extent that these other activities involved writing – livestock accounts, for instance, or labels on valuable objects – we might expect the same scribal trainees also to be exposed to the relevant written genres.

In conclusion, then, I claim that the minimal model for late second-millennium Chinese literacy remains for the time being a creditable hypothesis, fully in keeping with what we know from existing evidence and what we should expect on comparative grounds about how writing may have functioned at its earliest period of attestation. The minimal hypothesis accounts well for the evidence of scribal training that we have been reviewing, and could comfortably accommodate the available evidence for writing on wood and bamboo as the product of activities by a handful of

62 Smith, “Writing at Anyang,” pp. 155-67. A second role for jiāncè is attested by what could be called the “chēng cè 稱冊 inscriptions,” divination records in which that particular two-character phrase occurs. This appears to involve the presentation or exchange of an important document of some kind between individuals of high status; Qi Wenxin 齊文心, “Shi du 'Zhi Jia cheng ce' xiangguan buci” 釋讀 “沚戛再冊”相關卜辭, in 2004 nian Anyang Yin-Shang wenming guoji xueshu yantaohui lunwenji, ed. Wang Yuxin et al, pp. 251-60.
literate specialists supporting the ritual activities of the Shang king and his immediate family.