TRANSLATIONS

AN INTERPRETATION OF THE DIVINATORY INSCRIPTIONS ON EARLY CHOU BRONZES

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(Editor's Note: In some instances the translators have rendered the terms Chou yi 周易 or Yi 易 as "Chou divination," "divination procedure," "divination," "system of divination," etc., because they believe such wordings capture the shades of meaning intended by the author. They believe he indicates by guillemets that he intends Chou yi to refer to the canonical book, and that aspects of some continuing tradition of techniques, either written or practiced, are intended in his text whenever Chou yi is left unmarked. The Editors of Early China have added the terms Chou yi or Yi in brackets so that readers may decide for themselves the appropriateness of these various renderings. In a few instances the translation differs from the published Chinese original because of emendations made by the Editors on the basis of corrections forwarded to us by the author.)

In Hsiao-kan-hsien 孝感縣, Hupei, during the year 1118 A.D. (the first year of the Chung-ho 重和 period under the Sung) six bronze vessels from the beginning of the Western Chou (roughly the time of Chao-wang 昭王) were unearthed. Among them, one, called the Chung ting 中鼎, had 𠂤 at the end of the inscription, which scholars were never able to interpret. In the thirties of this century, Kuo Mo-jo 郭沫若 stated that "the two strange graphs might be Chung's 中 lineage emblem (tsu huei 族徽)."[1] Bronzes of this type, bearing inscriptions including such strange "graphs," have also been preserved over the last three centuries in public and private collections, but they have not been the object of scholarly attention. In the spring of 1950, the Institute of Archaeology of the Chinese Academy of Sciences conducted excavations at the Yin-hsü site of Anyang, Honan, and the "Report" points out that "an oracle bone with three incised horizontal rows of small graphs" was found in the western division of Ssu-p'an-mo-ts'un 四盤磨村, and that "the wording did not conform to the standard divination texts."[2] In January, 1956, the Shensi Provincial Commission for the Administration of Cultural Artifacts discovered at the Western Chou site of Chang-chia-p'o-ts'un 張家坡村 near Ch'ang-an, one oracle bone with two incised rows of strange "graphs,"[3] and, a few months later, found yet another such piece. T'ang Lan 唐蘭, on the basis of these three oracle bones, brought together inscriptions on bronzes which included these types of "graphs," from the following vessels: the Chung yu fu ting 中𣪘父鼎, the Chin po kuei 董伯簋, the Hsiao fu kuei 效父簋, and the Chao yu 召卣. He came to the conclusion that these all were examples of writing, that "this writing is constituted from numerals used as graphemic units (tzu mu 字母)," and that it had been created by a national group antedating the Yin

(Text continues on p. 83)

TABLE I

编号	原文	释文	经卦	别卦
1			☳震 ☰乾	大壯
2			☰乾 ☳震	无妄[1]
3			☷坤 ☴巽	升
4			☵坎 ☳震	屯[2]
5			☴巽 ☰乾	小畜[3]
6			☷坤 ☲离	明夷
7			☰乾 ☷坤	否
8			☲离 ☵坎	未济[4]
9			☵坎 ☲离	既济[5]
10			☶艮 ☶艮	艮[6]
11			☶艮 ☴巽	蛊[7]
12			□□ ☰乾	□[8]
13			☳震 ☴巽	恒[9]
14			☶艮 ☵坎	蒙[10]
15			☳震 ☳震	震[11]
16			☷坤 □□	□[12]
17			☵坎	[13]
18			☴巽 ☳震	益[14]
19甲			☵坎 ☱兑	节
19乙			☴巽 ☵坎	涣[15]
20			☲离 ☵坎	未济[16]
21			☷坤	[17]
22			☴巽	[18]
23			☱兑	[19]
24			☶艮	[20]

Notes to table

1) For 1 and 2 see the Chang-chia-p'o oracle bones (Wen-wu ts'an-k'ao tzu-liao 1956. 3, p. 58). The original report stated: "This inscribed piece was made from a bovine scapula, which has been, for the most part, destroyed. . . On the back towards one side there are three round, drilled hollows, . . . the traces of burning are not clearly visible; while the face of the bone is covered with divining cracks. Near the cracks there are two rows of extremely finely carved graphs, one row running in the same direction as the length of the bone, the other in the direction of its width." The meaning of these last two statements is not entirely clear. Where scapulae were used as oracle bones at Yin-hsü they all are oriented with the socket on the top. The Chang-chia-p'o and Ssu-p'an-mo scapulae bearing the strange "graphs" are not the same in this respect: all the sockets are oriented to the left to facilitate holding them with the left hand while carving the graphs with the right. It is plain that 1 was carved being held upright, while 2 was carved horizontally.

2) For 3 and 4 see the Chang-chia-p'o oracle bones (K'ao-ku hsüeh-pao 考古學報 1957. 2, pp. 34-36, fig. 1).

3) Chang-chia-p'o oracle bone (Feng-hsi fa-chüeh pao-kao 灃西發掘報告, 1957, p. 111). The original report says: "Possibly this piece was made from the leg bone of a wild animal; the workmanship is rather crude. Two round hollows are damaged. On the face of the bone, corresponding to the position of the hollows, there are symbols, carved in strokes of extremely fine width, closely resembling writing."

4) 6 is carved upright, while 7 and 8 are carved upside-down: see the Ssu-p'an-mo oracle bones (Chung-kuo k'ao-ku hsüeh-pao 5, 1951, p. 56). Underneath 7, there are the two graphs, yüeh k'uei 曰魁 , and underneath 8, the two graphs, yüeh k'uei (wei) 曰隗 . Concerning the provenance of these bones, we refer to the statement of the original report: "In view of the overall state of the remains, it seems that this was the dwelling of someone who was engaged in carving practice." T'ang Lan 唐蘭 says, "The oracle bones from the sites of Feng 豐 and Hao 鎬 only use 𝌆 [for five], while the Ssu-p'an-mo oracle bones use 𝌅 instead. Possibly the form 𝌆 should be somewhat earlier. In the case of bronze vessel inscriptions, generally when the graph is written as ⋈ , it is a rather late form, apparently because the graph's shape had lengthened, it was turned over sideways."

5) Chou-yüan oracle bone No. 7, see "Shen-hsi Ch'i-shan Feng-ch'ü-ts'un fa-hsien Chou ch'u chia-ku-wen 陝西岐山鳳雛村發現周初甲骨文 ," Wen-wu 1979. 10, pl. 7, variant style graph 1. The original plate is printed upside down.

6) Chou-yüan oracle bone No. 81; see note 5 above, variant style graph 2.

7) Chou-yüan oracle bone No. 85; see Hsü Hsi-t'ai's 徐錫台 copy. Below the divinatory symbol there are the two graphs, yüeh ch'i 曰其 , and in another row, four graphs, x x chi yü □□ 既魚 .

8) Chou-yü oracle bone No. 90; see note 5 above. The upper part of the symbol is incomplete, lacking the top line.

9) Chou-yüan oracle bone No. 91; see note 5 above. The lower left corner is lost through damage, but based on the remaining strokes we can infer that the two lines are ⺆ (eight) and 一 (one).

10) Chou-yü oracle bone No. 177; see above note 5. In the above material, 1 through 8 are bones or scapulae; 9 through 14 are plastrons. And since plastrons and bones are part of plastro-scapulomancy, what they reflect are omen-taking by cracks, they are not numbers. These numerical strings are associated with yarrow stalk divination, and are arrived at through the numerical manipulation of yarrow [achillea]. The Chou li 周禮 under Ch'un kuan 春官 says of the Prognosticator (Chan-jen 占人 : "He is in charge of the eight yarrow stalk divinations and eight chants"; Cheng Hsüan's 鄭玄 annotation says: "That means to say that in the process of divining on the eight functions, he first had to use the yarrow stalk procedure to divine them." Since the same matter is the topic of both oracles, the lines of the divining symbol (kua yao 卦爻) are incised on the bone beside the cracks. As to the relationship between plastro-scapulomancy and yarrow stalk divination, Hang Hsin-chai 杭辛齋 states: "When plastromancy and yarrow stalk divination are used together, first burn the bone to seek out the cracks, then use this omen as a basis for the prognostication [by line symbols]; or first manipulate the stalks to obtain a line symbol, then mark the omen of the line symbol (kua-chao 卦兆) on the plastron, burn it and inspect the cracks, as a test for auspiciousness or inauspiciousness. There are also situations where plastromancy and yarrow stalk divination are employed simultaneously with disparate prognostications as the result. When the Tso Chuan reports, 'The plastromantic response was inauspicious, while the yarrow stalk procedure indicated an auspicious outcome. The Diviner said: The answer of the yarrow stalk procedure is inferior, that of the plastromantic is superior. It is best to follow the superior indicator,' we have

just such a case" (See Hsüeh yi pi-t'an 學易筆談 , part 2, ch. 2, "Shih-fa chan-lieh pien-huo" 蓍法占例辨惑. Since plastro-scapulomantic omens and yarrow stalk symbols are still not fully understood, I cannot discuss this problem at the present time, but will save it for another occasion.

11) Hsien 甗 vessel inscription. Only this single inscription is found, located beneath the rim on the back wall inside the vessel, and written very prominently. The vessel was excavated from an early Chou burial at Feng-ch'ü-ts'un 鳳雛村 .

12) Ting 鼎 vessel inscription. See Hsü Yin wen-ts'un 續殷文存 , A, p. 7. I suspect that the first and second lines did not come out cleanly.

13) P'an 盤 vessel inscription. See Hsü Yin wen-ts'un, B, p. 74. This p'an vessel is now in the United States. From the shape and decoration, it belongs to the early Chou. I have not examined the vessel, but I have heard that there is relief decoration on the bottom.

14) See the Chao chung yu 召仲卣 , in Hsi-ch'ing ku-chien 西清古鑒 , ch. 15, p. 32.

15) 昏 Chao yu 召卣 , Ku-kung collection, now in Taiwan; catalogued in San-tai chi-chin wen-ts'un 三代吉金文存 , ch. 12, p. 45. In the original inscription the graph Chao was written upright, while the divinatory graphs (kua-wen 卦文) were written upside-down. Thus inverted, they are unreadable; so I have now separated them into two strings (19a and 19b), the first upright and the second inverted to facilitate reference.

16) Fu Yi X ho 父乙 盉, lid inscription, in the Neiraku Bijutsukan, Japan. See Noel Barnard and Chang Kuang-yü 張光裕, Chung Jih Ou Mei Ao Niu so-chien so-t'a so mu chin-wen hui-pien 中日歐美澳紐所見所拓所摹金文彙編 , Taipei, 1978, vol. 8, p. 730, no. 1125.

17) X-X Fu wu yu 𠂤𠂤父戊卣 , see Shang Chou chin-wen lu-yi 商周金文錄遺 , no. 253.

18) Chung yu fu ting 仲斿父鼎, see San-tai chi-chin-wen ts'un 三代吉金文存 , ch. 3, p. 18. The inscription reads: "Father Chung-yu made this precious ting vessel 尊 ."

19) Chin po kuei 堇伯簋 , see note 18 above, ch. 6, p. 39. The inscription reads: "Chin Po made this travelling vessel 𠂤 ."

20) Hsiao fu kuei 效父簋 , see Huai-mi shan-fang chi-chin t'u 懷米山房吉金圖 , A, p. 22. The inscription reads: "The gracious king presented Hsiao-fu with three [strings of cowries?], which were used to make this precious vessel 𢦏 ."

21) 25 and 26 are at the end of the inscription on the Chung ting 中鼎 , see Hsiao-t'ang chi-ku-lu 嘯堂集古錄, A, p. 10.

22) P'an 盤 vessel inscription, see T'ao-chai chi-chin lu 陶齋吉金錄, ch. 3, p. 39.

23) For 28 and 29 see Yeh-chung p'ien-yü erh-chi 鄴中片羽二集 , A, p. 47, the pottery mold of a chüeh 爵 vessel.

24) Chou dynasty hu 琥 jade, see Li-tai chung-ting yi-ch'i k'uan-chih fa-t'ieh 歷代鐘鼎彝器款識法帖 , ch. 17, p. 192. The original interpretation "wu shih san 午十三 " is not correct. This piece is shaped like a tiger; some say it is a ritual effigy, others that it was a tally for dispatching troops. I suspect that this is also a case of using the divining symbol as a clan emblem.

25) 31 and 32 are marks incised on some of the bone and horn arrowheads excavated from the early Chou dwelling site at Chang-chia-p'o. See Feng-hsi fa-chüeh pao-kao 灃西發掘報告 , pl. 49: 11 and 12. Also, on p. 89 of this report, fig. 58, the graphs written on the bottom of a ceramic spindle whorl are divinatory symbols. As the incised lines are not clear, I have not included this item for the time being. While viewing the excavation work-area at Ch'i-shan in April, 1979, I saw many large tile slabs which may well bear this type of carving, but as I could only glance at them briefly I was unable to identify them. I hope that those who will write the report will pay attention to this issue and either confirm or refute this point.

and Chou. At the same time he believed that "from the fact that such lineage-emblems are retained in the bronze inscriptions at the beginning of the Western Chou, but are not to be found on the bronze vessels of Yin-hsü," one may "infer that this national group was from the Northwest, and perhaps retained some connection with the Chou tribal group."[4] The views of Kuo and T'ang are both most helpful for the further exploration of this topic. The materials on which T'ang based his work "included altogether only thirteen 'graphs' from plastron, bone or bronze inscriptions." This is not the total number, however, as one can find several more of these "graphs" in previous compilations of bronze inscriptions. In 1956, the Institute of Archaeology recovered an oracle bone incised with similar strange "graphs" during excavation at the Western Chou site at Chang-chia-p'o 張家坡, Feng-hsi 灃西.[5] T'ang was able to see this bone, but did not include it in his group of thirteen "graphs."

While I was engaged, from 1974 on, in editing the silk manuscript of the Chou yi 周易 unearthed at Ma-wang-tui 馬王堆, Ch'ang-sha, I enjoyed constant exposure to studies on Chou divination. In 1977, I was able to see the oracle plastrons from the Chou-yüan excavated at Ch'i-shan hsien 岐山縣, Shensi. Early in December, 1978, at the Chi-lin University Conference on Palaeography, I heard Hsü Hsi-t'ai's 徐錫台 lecture, "The Oracle Bone Inscriptions Unearthed from the Chou-yüan Highland" (Chou yüan ch'u-t'u chia-ku wen-tzu 周原出土甲骨文字) which included a section on strange "graphs," in which he stated, "about seven or eight bones, as well as a bronze hsien 甗 are also inscribed with these strange "graphs."[6] The audience was very interested, and somebody asked me what kind of graphs they were. So on the second day of the conference, I gave a lecture entitled "The Ancient Method of Divining by Yarrow-stalks and Wen-wang's Elaboration of the Chou Yi" (Ku-tai shih fa yü Wen-wang yen Chou Yi 古代筮法與文王演周易). At the time I had no books at hand and no way to prepare my material, so that I was not able to research the problem in detail. I pointed out, however, that the numerical strings involving three numerals in the bronze inscription were "simple kua" 單卦 (as in pa-kua 八卦 = eight trigrams) and that the numerical strings involving six numerals on the plastrons from the Chou-yüan were "double kua" (ch'ung-kua 重卦)(as in liu-shih-ssu-kua 六十四卦 = 64 hexagrams). I noted that in Chou divination [Chou yi] "old yin" (lao yin 老陰) and "young yin" (shao-yin 少陰) both count as yin, and that "old yang" (lao-yang 老陽) and "young yang" (shao-yang 少陽) both count as yang, and that although the numerical strings were elaborate, they merely constituted yin and yang lines. Then, transforming the numerals on the plastrons into yin and yang lines, I wrote out on the blackboard the hexagram meng 蒙, made up of the trigram k'an 坎 below and the trigram ken 艮 above; the hexagram ku 蠱, made up of the trigram sun 巽 below and the trigram ken above; the hexagram ken 艮, made up of the trigram ken both below and above; and the hexagram chi-chi 既濟, made up of the trigram li 離 below and the trigram k'an 坎 above.

I was taking part in the general excitement, and elated by the atmosphere of scholarly discussion at the meeting, but, in actuality, I was unable to resolve a number of questions. Only after returning to Peking was I gradually able to collect related material from oracle bones and bronze vessels, and to study it critically, the preliminary results of which I now present for all to examine. Because this is a new problem, a few matters require explanation, so that I have been unable to avoid some detail, and only in the latter half of the article do I come to the main question. If some of this is too tentative, then rather than relying only on my own opinion, I hope for corrections from my readers. I hope that, in the future, more new materials will come to light that will add to our knowledge and our method of inquiry in this area.

1. The Corpus of Divinatory Symbols from Oracle Bones and Bronze Inscriptions

To facilitate reference to the corpus of materials, I have assigned a number to each hexagram. At the same time, following the rule that an uneven number corresponds to a yang-line and an even number to a yin-line, I have written out the hexagram names according to the Chou yi to complete the data. [See Table 1.]

From the 32 items listed in Table I, several problems emerge. Items 17, 21, 22, 23, 24, 31 and 32 all comprise three numbers, which leads us to the inference that they represent three divinatory lines (yao 爻). Explicated according to the Chou yi they correspond to these seven trigrams: k'an 坎, k'un 坤, sun 巽, tui 兌, ken 艮, li 離, and ch'ien 乾. The remaining twenty-five items, apart from the fragmentary items 12 and 16, all comprise six numbers, which leads to the inference that they represent six divinatory lines, and we obtain in sequence these twenty-four Chou yi hexagrams:

Ta-chuang 大壯, Wu-wang 無妄, sheng 升, chün 屯, hsiao-ch'u 小畜, ming-yi 明夷, p'i 否, wei-chi 未濟, chi-chi 既濟, ken 艮, ku 蠱, heng 恒, meng 蒙, chen 震, yi 益, chieh 節, huan 渙, wei-chi 未濟, po 剝, pi 比, feng 豐, chung-fu 中孚, chien 漸, and kuai 夬.

Among these, wei-chi is duplicated, with, however, some discrepancy in the numerals. Beneath the symbols in 7 we find the graphs yüeh k'uei 曰魁; in 8, the graphs yüeh k'uei 曰隗, in 11 the graphs

yüeh ch'i 曰其 ; k'uei 魁 k'uei 隗, and ch'i 其 possibly represent primordial names for hexagrams none of which accord with the Chou yi, but unfortunately the remains are all too few.

2. Concerning the Interpretation of Several Numerical Symbols

These 32 items include altogether 168 numbers (numerical symbols) and arranged in order, counting from one to eight, the frequencies of occurrence are as follows:

Number		Frequency of occurrence
一	one	36
二	two	0
三	three	0
四	four	0
五	five	11
六	six	64
七	seven	33
八	eight	24

The number 六 shows the highest frequency, with 64 occurrences, the next frequent is 一 , with 36 occurrences, whereas 二 , 三 , 四 , all have 0 occurrences. This is a phenomenon which is definitely striking. In divining by line-symbols (chan kua 占卦) to foretell fortunes, or to determine auspicious occasions, it does not happen that odd and even, inauspicious and auspicious occur with uniform frequency, and ultimately one cannot have an absolutely even distribution. A disparity as great as this, however, is extremely difficult to explain. Again, while 二 , 三 , 四 do not occur at all, among the remaining five numbers there are three odd numbers and two even, so that odd and even are not evenly balanced. Insofar as in the treatment of yin and yang, according to the yi 易 divination procedure, yin and yang are not evenly matched, the question is, whether there is in the framework of the yi divination procedure any rationale to explain this. However, if we add up the frequencies of occurrence for the odd numbers, viz. 36 + 0 + 11 + 33 = 80, and also those for the even numbers, viz. 0 + 0 + 64 + 24 = 88, the two totals are not so far off. It becomes evident, therefore, that the numbers 二 , 三 , 四 , while they do not appear, are in reality still present, only that they are never formally introduced, but incorporated into the other numbers. By simple inference we have: 二 and 四 are included in 六 , and 三 is included in 一 . Why should this be so? My explanation is as follows: in the old script the numbers from 一 to 四 are made up of horizontal strokes; 一 二 三 三, written [vertically] from the top down, are easily compounded, so that it is difficult to tell them apart; therefore 二 , 三 , 四 , were virtually eliminated and incorporated into the adjacent odd or even numbers. Thus, we can see how the numbers 六 and 一 occur with such uneven frequency, and that 六 , in particular, has an absolute plurality. The fact that in divination by line-symbols eight numbers were actually used, but that in the end only five are a matter of record, shows that at the time in the observation of natural phenomena the main concern was with yin and yang, and that the concrete numerals were altogether insignificant. This was merely a first step toward simplification, by simply eliminating 二 , 三 , 四 and redistributing them under 一 and 六 ; but there were not as yet the yin-line (yin yao 陰爻 , --) and the yang-line (yang yao 陽爻 , —) as signs.

In the silk manuscript version of the Chou yi from Ma-wang-tui, Ch'ang-sha, probably written about 180-170 B.C., the yin- and yang-lines used to write the sixty-four hexagrams are identical with the broken lines -- and solid lines — used by later generations.

3. A Conjectural Schema of Yarrow Stalk Divination

How was yarrow stalk divination practiced in the Early Chou period? In what way were the numbers/numeric symbols, from 一 (one) through 八 (eight) derived? This is a fascinating question, but it is not easily answered/clarified. Among the books known to us which discuss the yarrow stalk method of Chou divination [Chou yi], the earliest, relatively, is the Shih yi 筮儀 appended to the end of Chu Hsi's 朱熹 Chou yi pen yi 周易本義 . The origins of this chapter may be traced back to the section beginning "The number of the grand total is fifty" in Part I of the Hsi-tz'u chuan 繫辭傳. However, in the Ma-wang-tui silk manuscript version Hsi chuan 繫傳 this section is not found. The sentence "For that is an invitation to robbers" (tao chih nao yeh 盜之撓也) is linked directly to the sentence "The Book of Changes contains a fourfold tao of the sages" (Yi yu sheng jen chih tao ssu yen 易有聖人之道四焉), and thus, compared to the text of the T'ang stone classics, the manuscript falls short by 204 characters (the missing text is chapter 8 in the Chou yi cheng yi 周易正義) and chapter 9 in the Chou yi Pen Yi 周易本義). From this it is evident that this chapter is a later addition. Moreover, the passage in the chapter Pu shih p'ien 卜筮篇 in Lun heng 論衡, which reads: "According to the text of the Yi [Yi 易], regarding the method of manipulating the stalks, they are divided into two portions to represent Heaven and Earth, they are counted through by fours to represent the four seasons, and the remainder is put aside to represent the intercalary month" etc., is in its entirety quite similar to the text of the above mentioned chapter Ta yen chang 大衍章 . Thus we can see that the Ta yen chang is a product of the middle period of the Western Han. Pushing the inquiry further back in time, we find no further clues and no reliable information on yarrow stalk divination. In practicing divination according to the Shih yi, it is very easy to come up with a stalk count of seventeen or twenty-one, and comparatively difficult to obtain a count of thirteen or twenty-five. Converting the numbers 13, 17, 21, and 25 into

divinatory lines (yao 爻) we find:

13 = 49 - 4 x 9 of old termed 九 (nine), constitutes "old yang" (lao yang 老陽) can change.

17 = 49 - 4 x 8 of old termed 八 (eight), constitutes "young yin" (shao yin 少陰) does not change.

21 = 49 - 4 x 7 of old termed 七 (seven), constitutes "young yang" (shao yang 少陽) does not change.

25 = 49 - 4 x 6 of old termed 六 (six), constitutes "old yin" (lao yin 老陰) can change.

"Old yang" and young yang are both yang, and old yin and young yin are both yin; therefore what was eventually written in the books is merely the two kinds of lines -- the solid line ⚊ and the broken line ⚋ . The numbers used in the 32 archaeological items presented above are 一 , 五 , 六 , 七 , 八 and, if we match these against 六 , 七 , 八 , and 九 , the three numbers 六 , 七 , and 八 are identical, but it is not easy to reconcile the use of 一 , 五 , and 九 (with the Shih yi). I once attempted to plot the yarrow stalk procedures in charts, but was not successful, the reason being that the numbers 一 to 八 occurred so often, and the discrepancy in the numerical values for 一 and 八 was too great. Faced with such a dilemma, I found no way to remedy the inconsistency.

Later than the Ta yen chang is the Tun-huang scroll Chou Kung pu fa 周公卜法 , which, includes only the line-symbols of Chou Kung 周公 , K'ung-tzu 孔子 , and Ch'ü Yüan 屈原 , etc., sixteen line-symbols in all, and is extremely simple and uncomplicated. It says, at the beginning of the scroll: "The divination methods employ counters, thirty-four . . . the upper on its side, the middle upright, the lower on its side, afterwards divide (ch'u 除 , count and discard) them by fours, with the remainders forming the line-symbols. Scrutinize the line-symbols intoning a chant, then determine the auspicious and the inauspicious."[7] Although this is a text of Middle Antiquity, the divination methods employed may date from a comparatively ancient period, so that we may use its methods to tentatively reconstruct a method of divination. The numerals employed by the Chou Kung pu fa are 一 , 二 , 三 , 四 (one, two, three, four), therefore, it is required to "later divide them by fours." The highest number used in our archaeological materials is 八 (eight), so we must adapt the method to divide by eights. The Chou Kung pu fa used thirty-four counters, a number utterly without basis in reason, so we suppose it was originally sixty-four, from which thirty were subtracted. Our reason for determining that they were sixty-four, is that, according to tradition, Fu Hsi 伏羲 devised the eight trigrams, and that the eight trigrams in turn were expanded into the sixty-four hexagrams. As for

(eight) being the key unit in Fu Hsi's numerical system, the Lü shih ch'un ch'iu 呂氏春秋 , Meng ch'un chi 孟秋紀 says: "Its Imperial Ruler is T'ai Hao 太皞. . . . its numerical emblem is eight"; and thus if we progress by units of eight, then 8 x 8 = 64 (八八六十四) becomes the "major limit"; it is not known, however, whether at the time there was the system of "progressing by units of ten" (a base-ten numerical system). Therefore we considered the numbers 100, 80, 50, etc., but accepted none of them. The Chou yi chapter Hsi chuan says: "The number of the total is fifty. Of these, forty-nine are used." Forever and always one piece of the total stalk count was set aside without any rational basis whatever. We observe that one ancient imitator of the Chou yi, Yang Hsiung 楊雄 in his T'ai hsüan 太玄 uses the numerals 一 , 二 , 三 , the total yarrow stalk count is thirty-six, with three being disregarded, so that he actually used a total count of thirty-three, which were counted through by threes. The numerals used in Ssu-ma Kuang's 司馬光 Ch'ien hsü 潛虛 are 一 through 十 , and his total of yarrow stalks is seventy-five, with five disregarded, so that seventy were actually used, counted through by tens. In my opinion what is meant by the statement "The total is fifty. Of these forty-nine are used" is that at the moment of divination the complete set of stalks was not taken up in order to manifest the unstable mutability of the numbers. Only afterwards did this practice crystallize into a fixed form. For regardless of whether one changes over to a count of thirty-six stalks disregarding six, or to one of seventy-five disregarding five, the number used was in all cases fixed, without the possibility of change. Nowadays we do not establish a set of stalks to be disregarded, but make use of the technique of "cutting the deck" (shang-p'ai 上牌),[8] to ensure randomness in the distribution of odd/even in the number of markers, thus allowing for greater flexibility. In this way, the sixty-four stalks are divided each time into four groups, with the first group being discarded and not used; only the second, third and fourth groups are separately counted through by eights, and the remainders recorded, which results in one trigram (kua 卦). After having derived the trigram, the total set of markers is collected and divided up once more, and another trigram is obtained. Two procedures altogether yield six divinatory lines (yao 爻), which amounts to one hexagram (ch'ung-kua 重卦). Let us experiment with this as follows:

Cut 1

Top	22 = 8 + 8 + 6	六 (six)	
Middle	24 = 8 + 8 + 8	八 (eight)	☳ 震
Bottom	17 = 8 + 8 + 1	一 (one)	

Cut 7

Top	11 = 8 + 3	(三) 一 (one)	
Middle	20 = 8 + 8 + 4	(四) 六 (six)	☶ 艮
Bottom	26 = 8 + 8 + 8 + 2	(二) 六 (six)	

Since in the archaeological materials 二 , 三 , and 四 do not occur, I have, following the previous

inference, subsumed 二 and 四 under 六 , and 三 under 一 . The hexagram obtained, according to the Chou yi, is hsiao-kuo 小過 , with ken 艮 below and chen 震 above. The Chou Kung pu fa does not make diagrams of yin- and yang-lines, but only utilizes 一二三四 , and to avoid confusion avails itself of this method of placing the counters: top ones on their sides, middle ones upright and lower ones on their sides, which, in the case of the Chou Kung hexagram, gives us the diagram ䷽ . We infer that in the Chou period this method did not exist, but the elimination of 二 , 三 , and 四 actually accomplishes the same purpose.

Plastro-scapulomancy and yarrow-stalk divination, in the situation where humankind is powerless to control the objective laws of nature, represents the hope to probe the intentions of the spirits with the aid of the permutations of certain kinds of signs. But when it comes to the question how to choose and to identify those signs, the various methods employed by the diviners are, after all, entirely controlled by humans, and no objective law nor any logical necessity is involved. As with any number of games, they are all in a sense arbitrary -- at many sites we see that sundry utensils for the Liu-Po 六博 game have been excavated, but we have no way of reconstructing how the game was played. Without instruction no one could guess the basic rules of chess or poker. Therefore, the divination method suggested here is merely a conjectural schema for the heuristic purpose of increasing our insight into those archaeological materials, but I cannot enter into the question of reconstruction.

4. The Question of the Line-symbols Subject to Transformation

The people of antiquity in divining by hexagrams frequently looked to the moving lines for the determination of the auspicious or inauspicious, and thus they used the "original hexagrams" (pen kua 本卦) and the "derived hexagrams" (chih kua 之卦). Where the Tso chuan 左傳 and the Kuo yü 國語 refer to yarrow stalk divination, we find a good number of examples.[9] The Chiao shih Yi lin 焦氏易林 of the Western Han supplies, for each hexagram, the transformed sixty-four hexagrams, and for the sixty-four hexagrams it gives their transformations into 4096 hexagrams, which can be considered as the limit in the development of such procedures. Our thirty-two archaeological items also involved hexagram transformations, but their proportion is not very large. Items 3 and 4 appear in the Chang-chia-p'o oracle bones and, following the Chou yi, they represent sheng going to chün (sheng chih chün 升之屯), with four lines moving: the trigram sun 巽 below is transformed to chen 震 with all lines changing, and the trigram k'un 坤 above is transformed into k'an 坎 , by changing only one line. Items 28 and 29 appear on a pottery mold for a chüeh 爵 -vessel; following the Chou yi they represent chung-fu 中孚 going to chien 漸 , with three lines moving: the trigram ken 艮 below is transformed to tui 兌 , with all lines changing, and the trigram sun 巽 above does not change. We can see that as the numerals are stacked up their lines are transformed into divinatory lines (kua yao 卦爻) in very good order. Going by the procedure of the School of Chou Divination [Chou yi], the hexagram transformations are extrapolated from the changes that the sundry lines in the hexagram have to undergo -- with some ease a yin-line is changed into a yang-line, or a yang-line changed into a yin-line. To look at our two examples, in the one set 3 and 4, the fourth line (counting from bottom up) 八 changes to 六 , both being yin-lines; in the set 28 and 29, the top line 五 changes into 一 , both being yang-lines. We know that this is not in agreement with the Chou divination [Chou yi]; it must be the outcome of taking the count by manipulating the yarrow stalks. Items 25 and 26 appear in the inscription on the Chung ting 中鼎 , where their top and bottom elements are linked, in contrast to the parallel arrangement of the two hexagrams in the two sets cited above; but from the numerical strings, however, one can see at a glance that two lines are moving (the fifth and the top line), and in the line of the Chou yi, this represents po 剝 going to pi 比 with the trigram k'un 坤 below not changing, and the trigram ken 艮 above transformed to k'an 坎 . From all three examples one can see that they show significant differences from Chou divination [Chou yi]; in Chou divination [Chou yi] 九 , 六 are changeable lines and 七 , 八 are unchanging lines. In our materials, however, 一 , 五 , 六 , 七 , 八 can all change, while there are no unchanging lines. Again, 1 and 2 both appear in the Chang-chia-p'o oracle bones; 1 is incised vertically, 2 is incised horizontally, thus also differing from the above three examples. When the numerical strings are transformed into line-symbols, then, according to Chou yi, 1 represents ch'ien 乾 below and chen 震 above, i.e., ta-chuang 大壯 ; and 2 represents chen 震 below and ch'ien 乾 above, i.e., wu-wang 無妄 . This naturally can be explained as four lines moving, representing ta-chuang going to wu-wang. It is better, however, to regard the two trigrams ch'ien and chen as exchanging places. This is what in antiquity was called two trigrams being inverted upside down (shang hsia chiao ts'o 上下交錯) i.e., what Yü Fan 虞翻 called "two-sided symbol change" (liang hsiang yi 兩象義) for which consult Ch'ien Ta-hsin's 錢大昕 chart Liu-shih-ssu kua liang hsiang i t'u 六十四卦兩象易圖).[10]

5. A Tentative Investigation of the Lien-shan

The Chou li 周禮 , under Ch'un kuan 春官 , says about the Great Diviner (T'ai-pu 太卜) (Cheng Hsüan's 鄭玄 annotation in parentheses): "He is in charge of the three systems of divination

(san yi chih fa 三易之法); the first is called Lien-shan 連山 , the second is called Kuei-tsang 歸藏 , the third is called Chou yi 周易 . For each, the canonic symbols (ching kua 經卦) are eight, and the derivations (pieh 別) are sixty-four. (For all three forms of divination [San Yi 三易], the number of line-symbols and derivations is the same, but their names and their prognostications differ. For each, the line-symbols are eight [i.e., 8 trigrams], and the derivations are that same number to the second power [i.e., 64 hexagrams].)"

This means that in ancient times there were three systems of employing yarrow stalks to prognosticate on line-symbols; each of these use eight trigrams, and for each the doubled trigrams amount to sixty-four hexagrams. The important difference of these three systems was that in each the names of the hexagrams were different. The differentiation of these San Yi 三易 is a historical event, their differences were brought about by historical and regional differences, but it is not a difference in the fundamentals. Huang-fu Mi 皇甫謐 explains in the Ti-wang shih-chi 帝王世紀 :

"Pao-hsi shih 庖犧氏 created the eight divinatory symbols [trigrams], Shen-nung 神農 doubled them up to make sixty-four symbols [hexagrams], Huang-ti, Yao, and Shun expanded upon this by the division into two [sic] forms of divination; then, among the Hsia, in deference to Yen-ti 炎帝 , it was called Lien-shan 連山 , among the Yin, in deference to Huang-ti 黃帝 , it was called Kuei-tsang 歸藏 , and Wen-wang 文王 developed the sixty-four symbols further, writing them by lines (yao 爻) of 九 (nine) and 六 (six), naming it Chou yi 周易 ."

The Chou yi has been continuously transmitted to the present day, but the line of the Lien-shan and the Kuei-tsang has long been broken. Today they exist in reconstituted editions.[11] Surviving fragments of the Kuei-tsang are still rather numerous, and they are of relatively early date. On the other hand, as there have been many forged texts of the Lien-shan since Sui and T'ang times, the surviving fragments are quite unreliable.

Lien shan is also written Lieh-shan 烈山 as in the Ti wang shih chi:

"Shen-nung shih . . . originally rose up at the Lieh-shan, and sometimes he is named after that; another name is K'uei-k'uei shih 魁隗氏. . . He squared the number of the eight trigrams, making full use of the substance of eight times eight to create sixty-four hexagrams."

Lieh-shan was Shen-nung shih's home, located, according to tradition, in the vicinity of present-day Sui-hsien 隨縣 , Hupei. As for the word K'uei-k'uei 魁隗 , we can find an earlier Han dynasty reference in the Hsiao ching kou ming chüeh 孝經鉤命決 (T'ai p'ing yü lan 太平御覽 ch. 135):

"Jen-ssu 任奴 was moved and conceived by a dragon and gave birth to Sovereign K'uei-k'uei 嵬魁 ." The original annotation states: "K'uei-k'uei 嵬魁 is the given name of Shen-nung." Wang Fu 王符 , in his Ch'ien fu lun 潛夫論 , chapter Wu te chih 王德志 states:

"When the Spirit Dragon first appeared, it happened that Jen-ssu was moved and she conceived. She gave birth to the Red Sovereign K'uei-k'uei 魁隗 who for his person was named Yen-ti 炎帝 , for his generational epoch was named Shen-nung 神農氏 , and for his dynastic filiation was named Fu-hsi shih 伏羲氏 ."

The Li shih 隸釋 ch. 1, quotes from the Ti Yao pei 帝堯碑 with the date the fourth year of the Hsi-p'ing 熹平 period of the Han (A.D. 175):

"The Sovereign Yao was a Sage King of the past. His ancestors descended from K'uai-k'uei 塊隗." Note that Yao 堯 was from the clan surnamed Chi 姬 , and his mother was from the Chiang 姜 clan, which was descended from Shen-nung 神農 . Although the four graphs, k'uei 嵬 , k'uei 魁 , k'uei 隗 , and k'uai 塊 , differ graphically, they are all linked by the phonetic element 鬼 (kuei) and their readings are closely similar. Thus k'uei-k'uei 魁隗 , k'uei-k'uei 嵬魁 , and k'uai-k'uei 塊隗 should all be one and the same expression, referring to Shen-nung. I can offer some explanation why Shen-nung was also called K'uei-k'uei shih 魁隗氏 .

The graphs on the Ssu-p'an-mo oracle bones are small and arranged horizontally, and in this respect they differ from the Yin-hsü oracle bones. On the basis of the shape of the graph 五 (five) T'ang Lan 唐蘭 , thinks that they are later than those from Chang-chia-p'o. They must be artifacts left by Chou people who moved in after the Chou victory over the Shang. The small graphs of the top three lines in 6 are carved upright, while in 7 and 8 they are carved upside down. Kuo Pao-chün 郭寶鈞 and Ch'en Meng-chia 陳夢家 both believe these graphs to have been written by someone who was practicing carving, and that they are phrases intended for carving practice.[12] We know that on Yin-hsü oracle bones we often find the first few lines of the table of cyclical signs (liu chia piao 六甲表) written as carving practice. On the Han strips of Chü-yen [Etsingöl] we also often encounter the first few sentences of the Ts'ang Chieh p'ien 倉頡篇 , or

the Chi chiu p'ien 急就篇 written for practice, as on Han dynasty tiles we regularly see the beginning section of the Ch'un ch'iu Kung yang chuan 春秋公羊傳 copied for practice.[13] All of these examples have been done by writing students, the circumstances being possibly almost identical. The numerals of 7, converted into divinatory lines (kua-yao 卦爻), constitute ch'ien 乾 and k'un 坤, while underneath the two graphs yüeh k'uei 曰魁 are written. The numerals of 8 thus converted into a line-symbol, yield li 離 and k'an 坎, and below this are written the two graphs yüeh k'uei 曰隗. Ch'ien, k'un, li, and k'an are important among the eight trigrams, in that they [are symmetrical and] do not change form [whether written] upright or upside down. To find them associated together in this fashion could not be due to chance, nor does it seem to be the result of consulting the yarrow stalk oracle. Rather they could possibly be the chapter headings of a book on yarrow stalk divination, inscribed here by someone as carving practice. K'uei 魁 and k'uei 隗 are probably the names of hexagrams, just as the Chou yi terms the two hexagrams as p'i 否 and wei-chi 未濟. Going by the ancient practice, k'uei 魁 and k'uei 隗 lined up at the head of a chapter could quite possibly constitute the title of that yarrow stalk divination book. As the Li chi 禮記 says in the chapter Li-yün 禮運 (Cheng Hsüan's annotation in parentheses):

"Confucius said: . . . I wanted to observe the way of Yin, so I went to Sung, but what was there was not sufficient to substantiate it. But I did obtain the K'un ch'ien 坤乾 there." (He obtained the Yin book of Yin and Yang; what still exists of this book goes by the title Kuei-tsang 歸藏.)

There has always been a saying that the Kuei-tsang opened with the two hexagrams, k'un 坤 followed by ch'ien 乾, and therefore was titled K'un Ch'ien 坤乾. If the divination system utilized in the Ssu-p'an-mo oracle bones actually put k'uei 魁, k'uei 隗 at the beginning, it could, by the same rationale, have the title K'uei K'uei. In Chou yi cheng yi 周易正義, ch. 1, No. 3: "Lun San-tai yi ming" 論三代易名 it is stated:

> "Note that in a number of books like the Shih p'u 世譜, Shen-nung is on occasion called Lien-shan shih 連山氏, and also, Lieh-shan shih 烈山氏; Huang-ti 黃帝 is on occasion called Kuei-tsang shih 歸藏氏. And as Lien-shan and Kuei-tsang are at the same time dynastic 'chononyms' (tai hao 代號), thus the divination of the Chou [Chou yi], in going by the name of Chou, is drawing on a place name from the Ch'i-yang area."

On the basis of K'ung Ying-ta's 孔穎達 statement, Lien-shan and Kuei-tsang were originally book titles, and both came to constitute dynastic designations. In keeping with these observations, we can infer that it was owing to the existence of the K'uei-k'uei 魁隗 that the Shen-nung shih of history was named K'uei-k'uei shih 魁隗氏. What then is K'uei-k'uei? It must have been an alternate name for the Lien shan, just as Kuei tsang is also titled K'un-Ch'ien 坤乾. The divinatory symbols seen on the oracle plastrons from the Chou-yüan 周原, on the oracle bones from Chang-chia-p'o, as well as in several bronze vessel inscriptions, all artifacts from the early Chou period, are closely similar in the divinatory lines (kua yao 卦爻) used; the outstanding feature is that none of them use the three numerals 二, 三, 四 (two, three, four) and in this way they all conform with the oracle bones from Ssu-p'an-mo. That is to say, they all are the K'uei-k'uei, and thus the Lien shan. These materials antedate the Chou yi, but they are not of the Chou yi. So when the Ti wang shih-chi states: "Wen-wang developed the sixty-four symbols further, writing them by lines of 九 (nine) and 六 (six)," the former statement should refer to the method of the so-called changing symbols (pien kua 變卦), which we have encountered in the previous section; for the latter development the time in question still did not fully provide the necessary conditions; its time was to come only after many more years had elapsed.

The foregoing discussion is merely a provisional investigation and analysis of the materials presently available. It is hoped that in the future there will be new discoveries which will enable us to move forward to either a confirmation or a refutation of these hypotheses.

6. Divination and the Foundation of Towns in the Early Chou Period

The preceding investigation of various issues had the single purpose to elucidate the divinatory symbols (yi kua 易卦) of the early Chou. Although the evidence for each of the points discussed is by no means exhaustive, still it seems to indicate without a doubt that the strange "graphs" are divinatory symbols. Below we shall discuss the divinatory symbols in bronze vessel inscriptions of the early Chou.

The early Chou experienced a quick transformation from a small polity into a large one, under conditions of rapid growth. This involved the foundation of a great many towns (yi 邑). Surviving written records are by no means few. The Mao shih 毛詩, section Ta ya 大雅 in the verses titled Mien 綿, narrates the circumstances of the Ancient Lord Tan-fu's 古公亶父 removal from Pin 豳 to Ch'i 岐 as follows:

"The Plain of Chou was rich and ample;

even the ch'in and t'u plants were sweet like
honey-cakes;
and so he started, he planned, he notched our
tortoises;
and so he stopped; he halted, he built houses
here."

[Mao no. 237; B. Karlgren tr., pp. 189-190]

It can be seen here that the Chou, prior to selecting a dwelling site and constructing their living quarters, first had to consult the oracle. The Shih chi 史記 in the Chou pen chi 周本紀 records this episode:

"(The Ancient Lord Tan-fu) then with his private dependents removed himself from Pin, forded the Ch'i 漆 and the Ch'ü 沮, crossed the Liang-shan 梁山, and halted at the foot of Ch'i 岐. The whole state of Pin came, supporting the old and leading the weak, and they all renewed their submission to the Ancient Lord at the foot of Ch'i. And when the neighboring states learned the news of the goodness of the Ancient Lord, they also submitted in large numbers. And the Ancient Lord discountenanced the ways practiced by the Jung 戎 and the Ti 狄 and constructed town walls, ramparts, halls and houses and also settled people separately in towns."

The phrase, "Settled people separately in towns" (yi pieh chü chih 邑別居之) shows that a good number of separate towns were established to accommodate the people peaceably. Now at the time the prestige of the "Ancient Lord" was great so that the people who sought refuge from trouble in submitting to him were numerous. Thus on the vast area of the Chou-yüan a large number of towns were established. Before the founding of a town, divination had to be conducted, as we read in the Mao shih 毛詩 section Ta ya 大雅, in the verses entitled Wen Wang yu sheng 文王有聲:

"The one who examined the oracle was the king;
He took his residence in the Hao capital;
The tortoise directed it, Wu Wang completed
it."

[Mao no. 244, B. Karlgren tr., pp. 198-199]

Hao-ching 鎬京 was situated in the area east of the Feng-ho 灃河 not far from present-day Chang-chia-p'o. This explains that when Wu Wang of Chou laid out the capital of Hao, he also had to practice divination. The Shang shu 尚書 in the Shao-kao 召誥 records that when Ch'eng Wang 成王 intended to take up residence in the town of Lo, he sent Shao Kung 召公 on an advance surveying mission:

"The grand guardian in the morning arrived at Lo, and took tortoise oracle about the site. When he had obtained the oracle, he planned and laid out the city."

[B. Karlgren tr., p. 48]

The Shang shu, in the Lo-kao 洛誥, records how Chou Kung repeatedly undertook surveys:

"I prognosticated about (the region of) the Li river north of the Ho; I then prognosticated about (the region) east of the Chien river and west of the Ch'an river, but it was (the region of) Lo that was ordered (sc. by the oracle). Again I prognosticated about (the region) east of the Ch'an river, but again, it was (the region of) the Lo that was ordered. I have sent a messenger to come (to the king) and to bring a map and to present the oracles."

[B. Karlgren tr., p. 51]

The Duke of Chou had already selected a site in the vicinity of the Li river north of the Huang-ho, but abandoned it upon an inauspicious prognostication; then he divined on a site east of the Lo, where people could be settled on a long term basis and made to work the land to support themselves. The site in question is in the area of the present-day Wang-ch'eng 王城 park west of the city of Lo-yang-hsien 洛陽縣. The Duke of Chou further divined upon a site east of the Ch'an, in the area of the old city of the Han-Wei period, to establish his secondary capital, and there "to remove the obstinate populace of Yin," and also to rely on the Lo river lands for subsistence. We learn from these materials that at the foundation of the regional centers (ti tu 地都) of Chou-yüan 周原, Feng-hao 豐鎬, and Lo-yi 洛邑, etc., there was in each case a preliminary site selection, and then the final determination by means of repeated divination procedures. At that time it was also necessary to construct, in the vicinity of the larger towns, a number of smaller towns to accommodate the subjugated populations as well as the surviving populations of Yin, and to integrate them in closed settlements, with their tribal elders in official positions. The Chou li, under Ch'un kuan 春官, says of the Yarrow Stalk Diviner (Shih jen 筮人) (Cheng Hsüan's annotation in parenthesis):

"He is in charge of the three forms of divination [San Yi 三易], making the differentiation between the terms for nine applications of yarrow stalk divination . . . another is called yarrow stalk divination of transfers (巫 i.e., shih keng 筮更) (keng, referring to the divination concerning the removal of centers and towns)."

[cf. Biot tr., II, p. 80]

Chia Kung-jen 賈公彥 in his explanatory notes remarks: "This transferring of centers refers to the lineage centers of Seigniors, Gentlemen, and Magnates (kung ch'ing ta-fu chih tu-yi 公卿大夫之都邑)." And the Cheng chih 鄭志 records Cheng Hsüan's answer to Chao Shang's 趙商 question:

"These tu-yi are small compared to the state capitals (kuo 國), therefore they use only the yarrow stalk divination. As in the case of Wu-wang's move to Lo, and P'an-keng's 盤庚 move to

Yin, plastromancy was used, and therefore the Great Plastromancer is the one to divine on the state act of "Great Removal."[14]

K'ung Ying-ta's Mao shih cheng yi 毛詩正義, section Wei Feng 衛風 about the verses Ting chih fang chung 定之方中 [Mao no. 50, cf. B. Karlgren tr., p. 33], offers an extended exegesis to the effect that "while in the case of the tu-yi they used yarrow stalk divination, in the case of a state center (kuo tu 國都) it was plastromancy." Thus it is a possibility that in the founding of a town, once the prognostication by line-symbol was performed, the name of the symbol was used to name the new town. This is not just speculation, however, since there is corroborative material in bronze vessel inscriptions. Apart from that of the Chung ting 中鼎, inscriptions in bronze vessel hoard no. 1 of the set of the Wei-shih 微史 clan bronzes discovered in 1976 at Fu-feng Chuang-pai 扶風莊白, Shensi, can clarify the point. Included among them is the inscription on the Shih ch'iang p'an 史墻銘:

雩武王既戈殷,微史剌且迺來見武王,
武王則令周公舍寓于周,卑處甬。

When Wu Wang had vanquished the Yin, the Illustrious Ancestor of the Wei-shih approached to see Wu Wang at audience; Wu Wang ordered Chou Kung to lodge him in Chou, to determine his dwelling place by yung.

And there is also the inscription of the Hsing [?] chung 興鐘:

雩武王既戈殷,微史剌且〔迺〕來見武王,
武王則令周公舍寓,以五十頌處。

When Wu Wang had vanquished the Yin, the Illustrious Ancestor of the Wei-shih approached to see Wu Wang at audience; Wu Wang ordered Chou Kung to lodge him, to determine his dwelling place by the fifty sung.

The introductory sentences in both inscriptions are analogous, and their meaning is as follows: At the time that King Wu overthrew the Yin, the ancestor of the Wei-shih family came to see King Wu; and King Wu then ordered the Duke of Chou to grant him a place as his residence. Shih Ch'iang 史墻 and Hsing [?]興 are likely to have been father and son and to have lived during the reigns of Kung Wang 恭王 and Yi Wang 懿王, which is over one hundred years removed from the time of Wu Wang. The narration of the event of the submission of their forefather to Wu Wang must be based on the documents in their own family record, which is why they are largely identical. Only the five graphs, yü Chou, pei ch'u yung 于周卑處甬 ("in Chou, to determine his dwelling place by yung") of the p'an-inscription becomes yi wu-shih sung ch'u 以五十頌處 ("to determine his dwelling place by fifty sung") in the bell-inscription, and here the different wordings must definitely be analogous in meaning. The graph ch'u 處 appears on both vessels in this place, with the meaning "dwelling place." The graphs yung 甬 and sung 頌 have nearly identical phonetic values and can be used interchangeably as loan graphs; as the bell inscription speaks of "fifty sung," we see that yung is not a place-name. She-yü 舍寓 means "to grant a lodging place," and this usage is identical in the phrase nai she yü ch'üeh yi 迺舍寓于厥邑 ("and granted lodging in that town") of the inscription on the Wu ssu wei ting 五祀衛鼎, as well as in she yü yi wu-shih sung ch'u ("granted lodging, determining the location by the fifty sung"). The phrase pei ch'u 卑處 also appears in the second paragraph of the inscription on the Hu ting 曶鼎 which says pei ch'u ch'üeh yi 卑處厥邑 ("determine a dwelling in that town"), the meaning being, to cause the person to take up residence in a given town. One can see that the graphs sung 頌 and yung 甬 both are analogous to yi 邑 (town) thus making yung to equal sung. The Chou li 周禮, under Ch'un kuan 春官, says about the Great Diviner (T'ai pu 太卜) (Cheng Hsüan's annotation in parenthesis):

"He is in charge of the three systems of crack-oracles (san chao chih fa 三兆之法, the first is called yü-chao 玉兆 [jade crack-oracle], the second is called wa-chao 瓦兆 [tile crack-oracle], the third is called yüan-chao 原兆 [high-plain crack-oracle]."

(The cracks, chao 兆, as the plastron is branded, break open because of the fire, and on the basis of their shapes, the prognostication can be taken.) The basic sets of the canonic crack-signs (ching chao chih pen 經兆之本) are one hundred and twenty for each, the chants (sung 頌) are one thousand and two-hundred. (Sung denotes oracular phrases chou 繇. In the basic corpus of the three systems, the number of the chou is the same; they only differ in the terms applied to the prognostications.)

The Chou li, under Ch'un kuan further says about Prognosticators (Chan-jen 占人) (Cheng Hsüan's annotation in parenthesis):

"He is in charge of plastromancy (chan-kuei 占龜) (The diviner also prognosticates from yarrow stalks, and where the text says, 'he is in charge of plastromancy,' what is involved is that yarrow stalk divination is the minor form, and plastromancy is the major form, while the emphasis rests on the major form.)

"By means of the eight yarrow stalk divina-

tions he prognosticates the eight chants (sung 公頌)." (This means that in divining the eight functions he first divines them by yarrow stalk divination. The mention of sung means that this is equivalent to plastromancy.)

"By means of the eight line-symbols he prognosticates the eight effects of yarrow stalk divination." (This says that for the eight functions he does not use plastromancy, but merely divines by yarrow stalks.)

"All this is done in order to probe into the auspicious or inauspicious."

What the Chou li refers to as chants (sung 公頌) is actually chou 繇 , a style of sung omen songs (ko yao 歌謠), which are drawn upon to interpret the line-symbols as to their auspicious or inauspicious meaning, and typologically similar to the oral instructions (k'ou-chüeh 口訣) and mantic verse (ch'ien-shih 籤詩) of the practitioners of occult arts in later ages. The hexagram texts (kua-tz'u 卦辭) of the Chou yi are accordingly called chou 繇 . At the opening of the scroll of the Chou Kung pu fa the word sung is used in the passage: "After carefully inspecting the hexagrams and intoning the chant (ko sung 歌頌) then one makes the determination of auspicious or inauspicious outcomes." Of these chants, there are sixteen, all having eight lines of four words, and thus typologically they resemble the sung omen songs (ko yao 歌謠). It is beyond question that to each one line-symbol belongs one chant, or conversely, one chant can stand for one line-symbol. And since the position of the graph sung 公頌 in the texts inscribed on the Shih ch'iang p'an 史墻盤 and the Hsing [?] chung 𠂤鐘 is analogous to that of yi 邑 [town], it is evident that the town in question is named after the divinatory symbol. Where the Hsing chung says yi wu-shih sung ch'u 以五十公頌處 ("determined the location by the fifty sung"), it means granting to the people involved a town named after the divinatory symbol and the words yü Chou, pei ch'u yung 于周卑處甬 ("in Chou, to determine the location by yung") on the Shih ch'iang p'an mean that he required them to take residence in one of the towns newly constructed in the Chou-yüan 周原 . Whether this wu-shih sung means "the chant number fifty" or if it involves fifty towns, is unfortunately not easy to ascertain.[19]

7. The Relationship Between Lineages and Towns

Kuo Mo-jo stated the opinion that the several strange "graphs" in the bronze vessel inscriptions are clan emblems (tsu hui 族徽), and at the same time pointed out that in the course of societal development the clan emblems shed their original definition and became dissociated from totemic emblems.[20] T'ang Lan likewise believed that the strange "graphs" in inscribed texts constituted from numerical expressions were clan emblems. Both are correct. The concept of shih 氏 in ancient historical documents is the "origin of collateral descendants," which is also termed tsu 族 . Since in the development of the Chinese language the trend has been for single morpheme units to become double morpheme units, there is no reason not to use the term shih-tsu 氏族 as in actuality this involves patrilinear lineages. The clan emblems as they appear in bronze inscriptions are, as we trace their original names, for the greater part what the Chou li, under Ch'un kuan Ssu ch'ang 司常 , in the formulation Chia ko hsiang ch'i hao 家各象其號 ("the families each use a symbol to stand for their appellations") and under Ta Ssu-ma 大司馬 in Chia yi hao ming 家以號名 ("families are named after their appellations"), refers to as hao 號 [appellations]; and so to be simple and realistic, we should call them chia-hao [familial appellations] 家號 .

Of the ancient texts that discuss the establishment of lineages, none surpasses the following passage from the Tso chuan 左傳 , under Yin-kung 隱公 , eighth year:

> "When Wu-hai 無駭 passed away, Yü-fu 羽父 requested for him a posthumous honorific (shih 謚) and a lineage [name] (tsu 族). And he consulted Chung-chung 衆仲 about lineage names. Chung-chung said in reply: When the Son of Heaven accords status to the virtuous, he bestows the clan name (hsing 姓), on the basis of [the ancestor's] birth; he endows with land and assigns [the toponym to serve as] the family name (shih 氏). The lords use the adult name (tzu 字) as the posthumous honorific, and hence in turn as lineage name (tsu 族). Where there is, over generations [a tradition] of merit in official service, the lineage will go by the name of office (kuan-tsu 官族), and with a [lineage] town it will be likewise."
>
> And so, he assigned the adult name as the family name Chan (Chan shih 展氏).

The most detailed explication of this passage is by Liu Wen-chi 劉文淇 in Ch'un-ch'iu Tso shih chuan chiu-chu su-cheng 春秋左氏傳舊注疏証 , p. 48-49, and also a very lucid analysis is found in Huang Yi-chou's 黃以周 Li shu t'ung ku 禮書通故 , ch. 8: Tsung fa t'ung ku 宗法通故 . These texts, however, are too lengthy to be quoted here. The tenor of the formulations in the Tso chuan passage which we have quoted above, serves to elucidate that the names of lineages as a rule cannot be separated from the allotment of lands given in fief, and that a given household, having settled down in a given town, can also naturally turn into a lineage named after its town. Specific examples abound, like the Fan 范 family

of the state of Chin 晉 in the Warring States period. The early ancestor Tu Po 杜伯 had, under Ch'eng Wang 成王 of Chou, been transferred to Tu and thus went by the family name Tu (Tu-shih 杜氏); Su 蘇 became Shih-shih 士師 [approx. "chief of staff"] and went by the family name Shih (Shih-shih 士氏); and Wu Tzu 武子 initially was granted Sui 隨, and thus went by the family name Sui (Sui-shih 隨氏), then in turn he was granted Fan 范, so that he went by the family name Fan (Fan shih 范氏).[21] It is evident that family names are the nearly automatic reflection of the town of residence.

To return to the inscription on the Chung ting 中鼎:

惟十又三月庚寅,王在寒𠂤(次)。王令大史兄(貺)裹土。王曰:中!茲裹人入史(事),易(錫)于武王作臣。今兄(貺)畀女(汝)裹土,作乃采。中對王休令,鬻父乙尊。惟臣尚中臣。

My exegesis of its meaning is as follows: "In this thirteenth month, on the day keng-yin the king was at the military encampment in the Han 寒 area. The king gave orders to the Grand Scribe for the bestowal of the lands of the 裹. The king spoke: Chung! These people of the 裹 tribe have submitted, and were granted permission to be serfs by King Wu. Now as reward we bestow on you the lands of the 裹, as your prebendary town (ts'ai yi 采邑). Chung, to recompense the king's gracious intention, had this vessel made as an offering to Father Yi (Fu Yi 父乙). Now the attached serfs are as ever to be serfs to Chung.  ."

This inscription is not supposed to be hard to read; the people of 裹, had submitted to Wu Wang 武王 of Chou, taking the name [and status] of subjects and paying tribute. Wu Wang gave his permission, and sanctioned the lord-subject relationship. When Chao Wang 昭王 on his southern campaign passed through this region, he called on his chancellor to put through the grant of the 裹 lands to Chung as a "town" from which to draw income. The last sentence makes clear that the original serfs on the 裹 lands still would be serfs to Chung.  , as we have already explained in this paper, are divinatory symbols. The inscriptions of the six vessels from An-chou 安州 are found in Hsüeh Shang-kung's 薛尚功 Li-tai chung ting yi-ch'i k'uan-chih fa-t'ieh 歷代鐘鼎彝器款識法帖,[22] and in Kuo Mo-jo's 郭沫若 Liang Chou chin-wen-tz'u ta-hsi t'u-lu k'ao shih 兩周金文辭大系圖錄考釋; apart from the Chung ting, none of the other five vessels shows these two divinatory symbols, nor do they record the matter of the ts'ai-yi 采邑. Thus it is evident that the divinatory symbols and these ts'ai-yi are not to be separated, and that the divinatory symbol is the name of the ts'ai-yi, which therefore comes to represent Chung's newly granted clan emblem.

The inscriptions in which the divinatory symbols occur are terse and archaic in their style of writing, so that a thorough inquiry into their meaning is not possible. Only the Chung ting inscription is of a somewhat greater length and its textual meaning is ascertainable. But although I have labored over it continually for fifty years, I still cannot presume to draw too many inferences. Since the discovery of the set of Wei-shih family bronzes, I again and again tried to draw clues from the inscriptions on the Shih ch'iang p'an and the Hsing [?] chung, and have collated this data with that on the Chung ting. Finally, I have begun to realize that the Chou named towns after divinatory symbols, and families after towns -- a fact on which the ancient historical writings are in general accord and without mutual contradiction, which is the reason I have ventured to publish it.

8. Further Remarks on the Bronze Hexagrams

Having discussed my views and the basis for them, I will now examine the divinatory symbols, and analyze briefly some points that have not been considered above.

15: the inscription on a hsien-鬳 vessel. As Hsü Hsi-t'ai explains, this hsien came from an Early Chou burial located in the SW corner of a palace building and overlying a burial of the time of Chou Ch'eng Wang; on top of it there was a burial from the latest stage of Western Chou, so that the stratigraphy is clear-cut. At present, this is the earliest bronze vessel bearing a divinatory symbol (yi-kua 易卦), possibly from the time of Wen-wang.

17: the inscription on a p'an- 盤; the single trigram is to be taken as a clan-emblem. Since divination on the basis of trigrams is indeterminate, I surmise we are dealing with the simplified form of an unmixed hexagram composed of twice the same trigram (as in 10 ken 艮 15 chen 震).

18: see the Chao chung yu 召仲卣 (Chou). The inscription on the lid and on the vessel both have the characters chao chung 召仲. Chao is a place name and represents the clan-emblem held originally by the person for whom the vessel was made; chung was added subsequently, as in Kuo chi shih 虢季氏 and Lu po shih 魯伯氏. is a town name, and also a clan emblem.

19: appears on the N chao yu 召卣. The

divinatory symbol written in the regular fashion represents, according to the Chou yi, tui 兌 below, k'an 坎 above, i.e., chieh 節 ; upside down it reads k'an 坎 below, and sun 巽 above, i.e., huan 渙 . In the school tradition of Chou Divination [Chou yi] these are called "upright symbols" (cheng-hsiang 正象) and "inverse symbols" (fu-hsiang 覆象) and are used in the interpretation of the significance of the hexagram.[23] When at the time of founding a town this hexagram was encountered, it became the name of the town. Chao is a place-name, and originally it was a clan emblem. 𠂤 is a subsequent addition.

20: see the lid-inscription of the Fu i x ho 父乙  盉 ; it is in raised script, without additional characters. The inscription of the vessel comprises three characters without divinatory lines. Fu-i 父乙 is the recipient of sacrifice, and  is a clan emblem. Among other vessels made for the very same clan we have such vessels as the Fu chi tsun 父己尊 (Yin-wen ts'un 殷文存 , A, p. 22), the Tso ch'ieh wu ting 作且戊鼎 (San-tai chi-chin-wen ts'un 三代吉金文存 , ch. 2, p. 36), the X-yu  卣 (San-tai chi-chin-wen ts'un, ch. 12, p. 57), the Tso-fu-kuei hsien 作父癸簋 (Shang Chou chin-wen yi-lu 商周金文遺錄 No. 103). Since they all have no divinatory symbols in addition to the graph  I surmise that  is the original emblem of the clan, and that 𠂤 represents the emblem assumed after a certain number of its branches settled at a new town.

21: see the X N fu wu yu  父戊卣, where we find one "simple symbol" (tan-kua 單卦 , i.e., trigram) lined up under a clan emblem; and the two graphs fu wu 父戊 which represent the object of sacrifice. Among the vessels made for the same clan, we find one chia 斝 and one p'ou 罍 , both without 𠂤 (Shang Chou chin-wen yi-lu, Nos. 287 and 518), which shows that the , as an infix in the clan emblem, is a newly added element.

22: see the Chung yu fu ting 中𠂤父鼎 ; 23: see the Chin po kuei 董伯簋 ; and 24: see the Hsiao fu kuei 效父簋 . In these three examples a "trigram" -- each one similar in structure -- is added at the end of the inscription. T'ang Lan remarks that "they are all written in the position of the clan emblem." In these three divinatory symbols, 五 (five) is written horizontally in a particular style which also occurs on the Chou-yüan oracle bones; it seems they signify some kind of occupation (yeh tzu 業字).

27: is the inscription on a p'an 盤 , in raised script. The decoration of the p'an corresponds to that of the K'o hsü 克盨 and the Yi kuei 伊簋 ,[24] therefore probably dating from the generation of Yi-wang 夷王 and Li-wang 厲王 . Thus it is the latest bronze inscription with divinatory lines known at this date. We know that clan emblems were handed down over the ages, possibly received by way of inheritance. We also know that, at that time, the foundation of a town also required divination; but whether or not the divinatory symbols were still used to name towns, I am not prepared to say.

Addenda

After the completion of this paper, I came across some materials the essentials of which are noted below. To accommodate the necessity of printing in horizontal lines, for a number of the divinatory symbols the numerical strings which are originally arranged vertically had to be reordered from left to right. This procedure is unsatisfactory; however it does resolve some typographical difficulties.

K'ao-ku 1961.2, "1958-1959 nien Yin-hsü fa-chüeh chien pao 年殷墟發掘簡報 ," p. 74, fig. 12, showing an ink-squeeze of a pottery inscription of which 2 is 七七八六六七 (chen 震 below, sun 巽 above, i.e., yi 益); 3 shows two "hexagrams" side by side, right 六六七六六八 (k'un 坤 below, chen 震 above, i.e., yü 豫), left 六六七六七五 (tui 兌 below, chen 震 , above, i.e., kuei-mei 歸妹). These are "changing hexagrams" (from yü going to kuei-mei).

K'ao-ku 1961.2, "Shantung P'ing-yin-hsien Chu-chia-ch'iao Yin-tai yi-chih 山東平陰縣朱家橋殷代遺址 ," p. 93, fig. 9: 8, showing a pottery inscription 一八八六一一 (tui 兌 below, ken 艮 above, i.e., sun 巽). Archaeological specialists have determined the three pottery vessels date to the late stage of the Yin period. These four divination symbols and the thirty-two introduced above in the article are completely homogeneous and compatible in terms of chronology, and thus they can be taken together as one corpus.

In 1979, during excavations at the site of Ch'ing-tun 青墩 in Hai-an-hsien 海安縣 , Kiangsu, bone and horn spoons, as well as antler ends were found with eight incised divinatory symbols, e.g., 三五三 三六四 (ken 艮 below, ch'ien 乾 above, i.e., tun 遁) and 六二三 五三一 (tui 兌 below, chen 震 above, i.e., kuei-mei 歸妹). Among the numerals used there are 二 , 三 , 四 , which are absent from the thirty-two archaeological items presented above, and this shows their more primordial character. These items represent the neolithic culture of the lower Yangtze basin, and regardless of their absolute date, must, in the development of divina-

tory symbols, belong to the earlier types. They may thus serve as the basis for investigation of the origins of divinatory symbols.

Over the last two years in the Chou-yüan 周原 in Shensi, we have seen the continued discoveries of a number of oracle texts. Among these, extremely large and comparatively late oracle bone pieces, bearing quite a few divinatory symbols were found east of the Ch'i-kou 其溝 in the territory of Fu-feng-hsien 扶風縣. The numerals used on them are in agreement with the oracle bones presented above, including, however, the 九 ; in the divinatory symbols which do include 九, we do not find the numeral 七 . This is very significant; however, the material is too scanty to allow us to solve the problem, or to draw more far-reaching conclusions.

In 1978, bamboo chips bearing divinatory symbols were discovered in a Ch'u 楚 burial dating from the Chan-kuo period, at the T'ien-hsing-kuan 天星觀 , in Chiang-ling 江陵 , Hupei. In every case two "hexagrams" appear side by side (which is the formal way of presenting "changing hexagrams"); there are altogether eight sets of sixteen hexagrams, and the numerals used are as follows:

numerals:	一 one	六 six	八 eight	九 nine	fragmentary
frequency of occurrence	37	49	5	4	1

二 , 三 , 四 , 五 , 七 , were all eliminated and subsumed under the heading of 一 , and 六. The 八 and 九 here seem to be a "revival," 九 being split off from 一 , since they can be distinguished graphically, and 八 is possibly derived from 六 . This then forms a precursor of the Chou yi; which finally emerged from a process of editing and revision.

In the forties, inscribed ceramic "double eared" kuan (shuang-erh kuan 雙耳罐) came from the Pan-yen 版岩 burial in Li-fan-hsien 理番縣 , Szechwan. Among these, one of the Ch'in period had the graph Li 李 written in li-shu (possibly denoting a lineage) outside of the left "ear," and 一八七一八九 (li 離 below, li 離 above, i.e., li 離) outside the right "ear." There is also a kuan from the Han period with 一六十 (ken 艮) outside the right "ear" (see Cheng Te-k'un 鄭德坤 Ssu-ch'uan ku-tai wen-hua 四川古代文化 , p. 58 and Harvard Journal of Asiatic Studies 9 [1946], plate 10. 4). The numerals used here include 九 and 十 , possibly explained on the basis of the Hsi-tz'u chuan 繫辭傳 A, ch. 9, "Heaven is 一 (one), earth is 二 (two), heaven is 三 (three), earth is 四 (four), heaven is 五 (five), earth is 六 (six), heaven is 七 (seven), earth is 八 (eight), heaven is 九 (nine), earth is 十 (ten)." So it is possible that the divination method reverted to the earlier practice of dividing the divination stalks by ten. In the Ch'in and Han period, the Chou yi had already reached its mature development, but in outlying regions such divination methods survived; whether or not we are here dealing with the Kuei-tsang 歸藏 must await further research.

In keeping with the custom of the archaeological profession that archaeological materials are not to be cited prior to their formal publication in formal reports, I have not used materials newly excavated by others. It seems, however, that the excavations at Hai-an 海南 , Fu-feng 扶風 , and Chiang-ling 江陵 have yielded an exceedingly large amount of material. Since it takes time to process them, the exact date of their publication is not known. After my work is printed, it may well be that some may refute me, or that others may draw on my work and add further developments. So it was my obligation to put forth all the knowledge available to me, in order to avoid needless misunderstanding and controversy. This is why I am giving my exposition in this form without further elaboration. I hope that after complete reports from the excavations at the sites mentioned have been published, I will be able to bring the whole of these researches together and to complete a monograph or full-length treatise to settle the whole question. I am grateful to all colleagues who have been helpful to me in this endeavor.

NOTES

1. Kuo Mo-jo 郭沫若 , Liang Chou chin-wen tz'u ta-hsi t'u-lu 兩周金文辭大系圖錄 , pl. 47, catalogue, p. 6, also K'ao-shih 考釋 , p. 16.

2. Kuo Pao-chün 郭寶鈞 , "Yi-chiu-wu-ling nien ch'un Yin-hsü fa-chüeh pao-kao 一九五〇年春殷墟發掘報告 ," Chung-kuo k'ao-ku hsüeh-pao 中國考古學報 5 (1951), p. 56, pl. 41:1.

3. "Ch'ang-an Chang-chia-p'o ts'un Hsi Chou yi-chih fa-hsien 長安張家坡村西周遺址發現 ," Wen-wu ts'an-k'ao tzu-liao 文物參考資料 1956. 3, p. 58; cf. also p. 40, figs. 1 and 2.

4. T'ang Lan 唐蘭 , "Tsai chia-ku chin-wen chung so-chien-ti yi-chung yi-ching yi shih ti Chung-kuo ku-tai wen-tzu 在甲骨金文中所見的一種已經遺失的中國古代文字," K'ao-ku hsüeh-pao 考古學報 1957. 2, pp. 34-36, fig. 1.

5. Feng-hsi fa-chüeh pao-kao 灃西發掘報告 (Wen-wu ch'u-pan-she 文物出版社, 1962) p. 111, pl. 63: 4, inscribed oracle bone.

6. Later he reworked his text into two separate articles, in Ku-wen-tzu yen-chiu 古文字研究 (Chung-hua shu-chü 中華書局, 1979), I, 184-203; the section on strange "graphs" was rewritten as "Hsi Chou kua hua t'an yüan" 西周卦畫探原, and submitted to the General Assembly held by the Chinese Archaeological Association (Chung-kuo k'ao-ku-hsüeh hui 中國考古學會).

7. Following the text in Chen-sung-t'ang Hsi-ch'ui mi-chi ts'ung-ts'an 貞松堂西陲秘籍叢. 1st ser. The Tun-huang shih-shih sui-chin 敦煌石室碎金 includes this text, but there are so many errors that it is altogether unusable.

8. "Cutting the deck" (shang-p'ai 上牌) was a technical term under the old society. After the four players sit down, the dealer shuffles the cards, and the lead player cuts the cards, after which everybody draws cards by turns. In the Tientsin dialect the phrase is ts'o-p'ai 錯牌. In the several kinds of poker, the deck must also be cut before dealing. Cutting the deck consists of moving the top portion of the deck to the bottom, but the cards are by no means discarded. Here, I am borrowing the term "to cut the deck" for this simulation of Chou divining practice, by first of all removing a small portion of the markers and setting them aside unused. In this way the distribution of odd vs. even for the markers was random, so that a wealth of line-symbols could come up. Otherwise, if the markers come up in a fixed pattern in odd numbers or in even numbers, then either way it can turn out that a majority of the line-symbols would never appear.

9. Cf. Shang Ping-ho 尚秉和, Chou yi ku shih k'ao 周易古筮考 and Chiao shih yi ku 焦氏易詁, app. Tso Chuan Kuo Yü yi-hsiang shih 左傳國語易象釋.

10. Shih-chia-chai Yang-hsin-lu 十駕齋養新錄, ch. 1. Also Hang Hsin-chai 杭辛齋, Hsüeh Yi pi-t'an 學易筆談, ch. 3, where evidence may be found in "Yang-ming shang-hsia wang-lai 陽明上下往來," "Pan-hsiang yü liang-hsiang yi 半象與兩象易," and other sections.

11. See in Yü-han shan fang chi yi-shu 玉函山房輯佚書: Lien-shan 連山, 1 ch., and Kuei tsang 歸藏, 1 ch. For the Kuei tsang also see the somewhat better edition in Yen K'o-chün's 嚴可均 Ch'üan shang-ku san-tai wen 全上古三代文.

12. For Kuo's opinion see Chung-kuo k'ao-ku hsüeh-pao 中國考古學報 5 (1951), p. 56; for Ch'en's, see his Yin-hsü pu-tz'u tsung-shu 殷墟卜辭綜述, p. 24.

13. For the table of cyclical signs (liu-chia piao 六甲表), see Yin ch'i ts'ui-pien 殷契粹編, No. 1465-1479, for the interpretation see the authors' preface. For the Ts'ang Chieh p'ien 倉頡篇 and the Chi-chiu p'ien 急就篇, see Chü-yen Han-chien shih-wen 居延漢簡釋文, ch. 4. 2, Hsiao-hsüeh-lei 小學類. In addition, among the recently discovered Han strips from Chü-yen, we find the text of the Ts'ang Chieh p'ien in a particularly complete state of preservation. The text of the first chapter of the Kung-yang chuan 公羊傳 on brick tiles, in draft script, was unearthed in Shensi during the thirties; I have see this in an ink-squeeze reproduction as well as in the collotype reproduction of the Hsi-ching shu-hua she 西京書畫社.

14. Cf. P'i Hsi-jui 皮錫瑞, Cheng chih shu-cheng 鄭志疏證, ch. 4.

15. Cf. Wen-wu 1978. 3, pp. 1-34; for the Shih ch'iang p'an 史牆盤, see pp. 14, 15, figs. 21, 22.

16. Wen-wu 1976. 5, p. 38, fig. 5.

17. Liang Chou chin-wen-tz'u ta-hsi t'u-lu k'ao-shih 兩周金文辭大系圖錄考釋 p. 97.

18. Tso Chuan 左傳, Min-kung 閔公 2nd year: "Ch'eng-feng 成風 heard the prognostic formulas (chou 繇) about Ch'eng-chi 成季." Tu Yü's annotation says: "Chou 繇, the prognostic formulas of the line-symbol oracle (kua-chao chih chan-tz'u 卦兆之占辭). Han Yü's 韓愈 "Nan-shan shih 南山詩" says: "Maybe, like a tortoise to crack in oracular lines, / Maybe, like a divining symbol to allot a prognostication," also referring to the "hexagram texts" (kua-tz'u) of the Chou yi.

19. In the inscription of the Wei-shih family bronze vessel set, one regularly finds 冊羊冊, which must be the clan emblem, on such vessels as the Che chia 折斝 and the Che kuang 折觥, or the Feng tsun 豐尊 and the Feng chüeh 豐爵; it also occurs on the Hsing [?] hsü 興𥫱; thus evidently it is still present in the Middle Chou as a stubborn survival. Perhaps where the bifurcation of clan branches is not very complex and profuse, and there are no subdivisions of the fiefs, the towns named after divinatory symbols may not appear among clan emblems.

20. "Yin yi-ming chung t'u-hsing wen-tzu chih yi

chieh 殷彝銘中圖形文字之一解," see Yin Chou ch'ing-t'ung ming-wen yen-chiu 殷周青銅器銘文研究, A.

21. CF. Ch'eng Kung-shuo 程公說, Ch'un-ch'iu fen chi 春秋分記, ch. 11.

22. Hsüeh-shih fa-t'ieh 薛氏法帖, in the edition carved for Chu (Chu k'o pen 朱刻本), ch. 9, p. 79: Chung tso pao ting 中作寶鼎; ch. 10, p. 89: Nan kung chung ting yi 南宮中鼎一; p. 90: Nan kung chung ting erh 南宮中鼎二; ch. 11, p. 102: Chao kung tsun 召公尊; ch. 16, p. 156: Fu yi hsien 父乙甗.

23. Cf. Shang Ping-ho 尚秉和 Chiao shih Yi-lin chu 焦氏易林注 and Chiao shih yi ku 焦氏易詁.

24. Cf. Liang Chou chin-wen-tz'u ta-hsi t'u-lu k'ao-shih 兩周金文辭大系圖錄考釋 pl. 128: K'o hsü 克盨; pl. 105: Yi kuei 仪簋.