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ON THE MARGINAL NOTES FOUND IN ORACLE BONE INSCRIPTIONS

(With special reference to the British Museum Collection) *

BY

WU SHIH-CH'ANG (吳世昌)

I. 'Shang-chi', 'chi', 'hsiao-chi'

On the Chinese oracle bones of the Shang Dynasty one often finds scattered characters or groups of characters, sometimes three in a line, more often two in a column, inscribed either separately beside the cracks caused by the heating of the bone or shell on the reverse side, or alongside the main inscriptions. As a rule these characters or groups of characters are smaller than the main inscriptions. Since they are not part of the oracular sentences, I shall call them, for lack of better term, 'marginal notes'.

These marginal notes can be divided into three classes: first, widely separated single characters, which are the numerals used to indicate the different parts of the bone or shell in order of the divination made on it; second, single characters or pairs of characters in a column, which interpret the crack marks as auspicious or otherwise; third, groups of three characters in a line, which describe the physical condition of the bone or shell after heat had been applied to it. Of these three classes the first is too obvious to require any explanation ¹⁾. The third will be dealt with under a

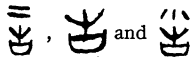
*) The bones in the British Museum are reproduced in facsimile drawings by Mr Frank H. Chalfant and published as part of *The Couling-Chalfant Collection of Inscribed Oracle Bones*, the Commercial Press, Shanghai, 1935. (Hereafter abbr. *Couling-Chalfant*) The drawings, however, are not always accurate. The reader should, if possible, check the inscriptions on the bones in the British Museum.

1) If the reader is interested in this problem, he is advised to read Mr Kuo Mo-jo's

separate heading. The second—sometimes loosely referred to as *ho-wen* (conjoined characters), is of far more frequent occurrence than the other two on the oracle bones.

There are altogether three different phrases in this class of marginal notes ¹⁾ and no consensus has hitherto been reached on their exact meaning. In the early stages of this branch of research most Chinese scholars apparently did not consider these small scattered characters important enough to merit serious study. Mr Wang Hsiang, in his compilation of a glossary of characters from oracular inscriptions in 1920 ²⁾, first used the term *ho-wen* to describe these phrases and enumerated two hundred and forty-three instances of such *ho-wen* with ninety-eight duplicates. In this list he reads the first and the third phrases as *shang-chi* ³⁾, meaning 'highly auspicious', and *hsiao-chi* ⁴⁾, meaning 'less auspicious', alongside *hung-chi*, meaning 'immensely auspicious' and *ta-chi*, meaning 'greatly auspicious'. But he fails to give any reason, either historical or etymological, for his reading. Mr Wang has since discontinued his researches on this subject and his books have been much ignored.

Fu-tz'ü T'ung-tsuán K'ao-shih, (郭沫若:卜辭通纂考釋. Tokyo, 1933. Hereafter abbr. *T'ung-tsuán*) II p.p. 4-7; also British Museum Collection of oracle bones nos. 1784, 1899, 1901, 1918, 1920, 1934, 1987, obverse side; hereafter there will be reference to numbers only.

1) They are , Fig. I. 1, 2, 3; cf. nos. 1510, 1523, 1525, 1535, 1542, 1550, 1584, 1592, 1593, 1601, 1602, 1609*, 1614, 1624*, 1629, 1651, 1666, 1670, 1686, 1700, 1703*, 1731, 1736, 1739, 1749, 1784, 1800, 1811, 1872, 1881, 1907, 1909, 1911, 1918, 1919, 1934, 1952, 1983, 1987. Those nos. with asterisks are inscribed with both genuine and spurious inscriptions.

2) Mr Wang's book, entitled *Fu-shih Yin-ch'i Lei-tsuán* (王襄:簠室殷契類纂. Hereafter abbr. *Fu-shih*) is arranged after the fashion of the *Shuo-wen Chieh-tz'ü* (說文解字). The *ho-wen* (合文) are listed in Appendix I, the *Fu-pien* (附編).

3) *Ibid.* *Fu-pien* p. 6b.

4) *Loc. cit.* p. 7a.

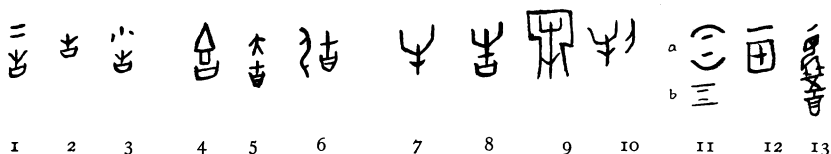



Fig. 1, 1. Brit. Mus. no. 1593. 2 no. 1550. 3. no. 1601. 4. no. 1537 rev. side. 5. no. 1664. 6. no. 1536. 7. no. 1622 rev. side. 8. no. 1888. 9. no. 1648. 10. no. 1886. 11. a) no. 1554. b) *Ch'ien-pien* IV 37.5. 12. *Ch'ien-pien* I 2.6. 13. *ibid.* II 13.7.

When Mr Shang Ch'êng-tsu followed Mr Wang's example and compiled his glossary *Yin-hsü Wen-tzû Lei-pien*¹⁾, he merely reproduced the decipherings of his tutors, Messrs. Lo Chên-yü and Wang Kuo-wei, without attempting any reading of these marginal notes himself. In 1933, when Yenching University published its collection of oracle bones²⁾, the names of five distinguished epigraphists were listed: Messrs. Jung Kêng and Ch'ü Jun min' as decipherers, Messrs. T'ang Lan, Shang Ch'êng-tsu and Tung Tso-pin as critical collaters. In deciphering the first bone inscription, the first of the above mentioned phrases is read *erh-kao*, meaning 'second report'. In a critical note Mr Shang comments on the deciphering³⁾:

"The character  has been read *chi* in all previous studies. This is not right. It should be the character *kao*. There are such examples as *ta-kao* ('great report'), *hsiao-kao* ('lesser report'), *erh-kao* ('second report') and *san-kao* ('third report'). The term here is *erh-kao*. The orthographical structures of the two characters *kao* and *chi* are different".

1) 商承祚: 殷墟文字類編, (Hereafter abbr. *Yin-hsü*) II 5, 6, Ch'ang-sha 1923.

2) *Yin-ch'i Pu-tz'ü* (殷契卜辭. Hereafter abbr. *Yin-ch'i*). This book is divided into three parts: Pt. I, Reproduction of ink rubbings of 874 fragments of oracle bones and shells. Pt. II, *Shih-Wen* 釋文: Transcriptions of these bone inscriptions in modern Chinese. Pt. III, *Wen-pien* 文編: Glossary of the characters in the inscriptions.

3) *Ibid.* *Shih-wen* p. 1a.

It can be assumed that all the rest of his colleagues concur with him in this opinion, since otherwise they would have added some other note to state, as they do elsewhere in this book, their independent view. Mr Shang is known as one of the most cautious scholars in this field; but this time he dashes to his conclusion in such dogmatic fashion that the reader is not at all enlightened on the subtle problem of different structures of the two characters—a point with which we shall deal later. But let us say first that there is of course no such term as *ta-kao* ('great report') in the extant material—not even Mr Sun Hai-po, Mr Shang's faithful follower, could find any such instances for his glossary *Chia-ku Wen-pien*¹). The existence of *san-kao* ('third report') is also doubtful. Mr Shang does not cite any example of *kao*.

Mr Kuo Mo-jo, while living in Tokyo and working quite independently, deciphered in his enterprising book *Pu-tz'ü T'ung-tsuán* the first of these phrases as *shang-chi*, Mr Wang's reading. But Mr Kuo goes a step further and explains that it is a technical term denoting the characteristic of the oracular sign revealed by the crack on the bone or shell. He adds that there are other such phrases as *hsiao-chi* ('less auspicious') and *chi* ('auspicious')²). If this is so, it is then one of the most important problems in this branch of study and the little attention hitherto paid to it is rather surprising.

When, six years later, Mr T'ang Lan published his book *T'ien-jiang-kê Chia-ku Wen-ts'un* and *K'ao-shih*, he seemed to have ignored Kuo's decipherment and explanation, and simply deciphered the

1) 孫海波: 甲骨文編. Hereafter abbr. *Wen-pien*, Harvard-Yenching Institute, Peiping (Peking), 1934.

2) Cf. *T'ung-tsuán* II. 4b, 6b. Mr Kuo published in the same year (1933), shortly after the publication of *T'ung-tsuán*, another book of miscellaneous essays on ancient epigraphs of bones, bronzes and stones entitled *Ku-tai Ming-k'ê Hui-k'ao* (古代銘刻彙考). Tokyo. Hereafter abbr. *Ku-tai*) in which he inadvertently transcribed these phrase as *erh-kao* and *hsiao-kao* without any discussion or explanation (*Ku-tai* I. 25-26).

first and the third of these phrases as *erh-kao* and *hsiao-kao*¹⁾, as Messrs. Sun, Shang, etc. did, without giving any reason for his own reading or even mentioning Kuo's decipherment. This dichotomy of opinion is a serious matter since both Messrs. Kuo and T'ang are among the most eminent experts on the Shang era epigraphy. There is a direct challenge to carry investigation further.

Mr T'ang is noted for his cautious approach to the decipherment of Chinese inscriptions, and his erudition in Chinese etymology is perhaps second to none. His accurate decipherment of numerous cryptic characters and terms which will be frequently referred to in these pages is a great contribution to Chinese etymology and palaeography. It seems that he takes it for granted that these characters are too simple and clear to require any detailed discussion. But there are several points which need adequate explanation. First, what does 'second report' mean? What was reported and to whom was it reported? And who was the reporter?

Let us suppose that it was reported to the king by the diviner on the divination of the matter in question. Then the second point arises. If what was divined was to be reported to the king, why were not all the divinations reported instead of only a number of them—not necessarily always the most important ones? The third point, which is far more important, is, why should there be always 'second report' with practically no mention of 'first report' or 'third report'?²⁾ If it is to be assumed that the single character

1) 唐蘭：天壤閣甲骨文存附考釋。The Catholic University, Peiping, 1939. Hereafter abbr. *T'ien-jang*. Cf. II. 63b, 64.

2) In Mr Sun's glossary there are enumerated eighty-five instances of '*erh-kao*' but only one instance of '*i-kao*', 'first report' (ch. *Ho-wen* p.p. 19b-20b). The validity of this single instance is highly doubtful. It is to be found in Mr Y. Hayashi's *Kuei-chia Shou-ku Wen-tzū* (龜甲獸骨文字). Hereafter abbr. *Kuei-chia*) a lithographic reproduction of ink rubbings, II.12. 6, and the sign '·' is so small and out of proportion that it is almost certainly a fault in the ink rubbing. Mr Sun also enumerated three instances of '*san-kao*' or 'third report' (ch. *Ho-wen* p. 20b). It is quite possible that each of these signs composed of

kao, according to the reading of Messrs. Shang, Sun and T'ang, means a 'first report', it remains to be explained why the occurrence of the phrase, 'second report' (*erh-kao*) is far more frequent than that of the phrase 'first report' (*kao*). The reverse would have been more likely. The last point is that if a 'second report' was made by the diviner on the bone or shell, why is it always inscribed immediately beside the oracular crack mark and not, as in other types of notes such as the number of the month, inscribed underneath, or attached to, the main inscriptions? There are also numerous bones and shells with only cracks and without any main inscriptions, yet inscribed in a number of places with these small characters ¹⁾. What would the diviner report if there was nothing worth inscribing on the bone or shell? If by *kao* Messrs. Shang, Sun and T'ang mean 'prayer' to the spirit or ancestor, all the above difficulties would remain substantially the same. Certainly these two small characters must have something to do with the oracular interpretation of the crack mark itself rather than with the supposed 'report' to the king or 'prayer' to the spirit.

It seems that Mr T'ang, like Mr Shang, based his decipherment on purely etymological grounds, as he often does; and it must be admitted that they are sound grounds. From the collected instances of Mr Sun's glossary, one gets the impression that the character *kao*, in the phrase *erh-kao*, seems at first glance to be

three horizontal strokes is the numeral indicating the divided part of the bone or shell and is incidently inscribed close to the isolated single character below it. Even if these instances of '*i-kao*' and '*san-kao*' could be regarded as valid evidence, their scarcity certainly does not seem to be compatible with the far too numerous instances of *erh-kao*. It would be absurd to assume that of all the published material available to Mr Sun when he compiled the glossary in 1933 there should be eighty-five instances of 'second reports' but only one instance of 'first report' and three instances of 'third reports'. It is, therefore, quite safe to say that there is practically no mention of what is assumed to be 'first report' or 'third report' in the extant material of bone inscriptions.

1) E.g. nos. 1510, 1666, 1784, 1899, 1918; also *Yin-hsü Shu-ch'i Ch'ien-pien* (殷虛書契前編. Hereafter abbr. *Ch'ien-pien*) III. 2. 3 etc.

quite different from the character *chi*, meaning 'auspicious', in many oracular sentences. We shall come to this point later. But let us first examine the first character in the *ho-wen*.

Messrs. Shang, Sun and T'ang take the first character, i.e. the two horizontal strokes, to be the character *erh*, meaning 'two' or 'second'. Messrs. Wang and Kuo, on the other hand, take them to be *shang* ('above', 'upper', 'high', 'highly', etc.) Here it should be noted that *shang* in the *ho-wen* '*shang hsia*' ('above and below') is often written with the lower stroke as an upward curve like 'ㄅ', and the phrase in oracular sentences is always '*hsia shang*' instead of '*shang hsia*' (Fig. 1, 11a). Yet in other cases, such as *Shang-chia*, the designation of one of the Shang kings¹), and *Shang-yü*, name of a place²), *Shang* is written with two parallel straight strokes, and there is no dispute about the reading of this *Shang* either in *Shang-chia* or in *Shang-yü*. Even in the *ho-wen* '*shang hsia*', if the size of the inscribed characters is small, the two conjoined characters may be written with practically straight parallel lines³). The fact that *shang* is often written in the *ho-wen* '*shang-hsia*' with an upward curve, therefore, should not be regarded as forming a rigid rule governing the orthography of the character *shang* in any *ho-wen* in the bone inscriptions and ruling out the possibility of reading the ideograph '二' as '*shang*'. As a matter of fact, the two characters *shang* and *erh* are often very confusing if written in isolation. One can only tell the one from the other by their context. Nevertheless, there is evidence provided by Mr Shang's own source book *Yin-ch'i I-ts'un*⁴). In the inscription on Bone no. 378 in this book, the char-

1) Cf. *Wen-pien* ch. *Ho-wen* p. 1a, Fig. I. 12. The second stroke in this name is often telescoped into the square ideograph below it.

2) *Ibid*, p. 18b. For the reading of the second character in this name cf. *T'ung-tsuán* II 130a, b. See Fig. I. 13.

3) Cf. *Ch'ien-pien* IV. 37. 5, Fig. I. 11b.

4) 殷契佚存 (Hereafter abbr. *I-ts'un*) Nanking University, 1933.

acter *shang* in one of the marginal notes '*shang-chi*' is actually written exactly as it is in the phrase '*shang-hsia*', i.e. its lower stroke is written as an upward curve like '丿' (I. 39a). Could Mr Shang possibly read this phrase as '*shang-kao*'?

The second character in the *ho-wen* looks at first glance like *kao*, for it appears to be written with *niu* (ox) on the top and *k'ou* (mouth) below it. In fact, however, *kao*, with very few exceptions, is always written in a slightly different manner¹⁾. Since both *kao* ('report' or 'prayer') and *chi* ('auspicious') are written with *k'ou* as their lower part, what really matters is the upper half of the character. The two strokes on both side of the vertical stroke in the upper half of what we decipher as the character *chi* in '*shang-chi*' are always straight with a highly elevated slant, not like the two corresponding strokes of the character 'niu'²⁾ (or the radical 'niu' which forms a number of characters such as *kao*, 'report'³⁾; *lao*, 'sacrificial ox' or 'corral'⁴⁾; etc.). The top strokes on both sides of the character *niu* are not straight, short lines, but longish curved lines often starting at right angles to the central upright line. The few exceptions found in Sun's glossary⁵⁾, especially the one he refers to in *Kuei-chia* I. 25. 3, look exactly like the radical *niu* in the upper part of the character. But the original ink rubbings in his sources show that the curved strokes are in fact

1) Compare Fig. I. 1, 2, 3 with Fig. I. 7, 8, 9, 10.

2) 牛, cf. nos. 1551, 1622b, 1646, 1777, 1788, 1814, 1898; Fig. I. 7.

3) 告, cf. no. 1888; Fig. I. 8.

4) 牢, cf. nos. 1513, 1618, 1689, 1721, 1770, 1777; Fig. I. 9.

5) The source material from which Mr Sun collects these few exceptions are: *T'ieh-yün Ts'ang-kuei* (鐵雲藏龜, hereafter abbr. *T'ieh-yün*) 46. 2, 193. 1 (this shell is inscribed with both genuine and spurious inscriptions), *Yin-hsü Shu-ch'i Hou-pien* (殷虛書契後編, hereafter abbr. *Hou-pien*) II. 7. 2, 38. 1; and *Kuei-chia* I. 11. 6, I. 25. 3.

inaccurate drawings made by Mr Sun ¹⁾, and the one he refers to in *Kuei-chia* I. 25. 3 is a glaring example of inaccurate draftsmanship (Fig. 2).



Fig. 2. Copy of the original to *Kuei-chia* I. 25. 3.

The character *kao* in Fig. 2 is clearly part of the main inscription and the two small horizontal strokes between the two columns are numeral '2' indicating which part of the inscription is on this part of the bone ²⁾. This small numeral '2' apparently has nothing to do with any of the large characters in the inscription. Mr Sun erroneously takes this numeral together with *kao* in the main inscription and classifies the unrelated characters into the *ho-wen* chapter. The first large character in the left column, with *niu* on the top and *k'ou* beneath it, is definitely *kao*, as the reader can easily notice the extra horizontal stroke in the *niu*, which never occurs in other instances of the supposed *kao* enumerated by Mr Sun. A comparison of this *kao* with that of no. 1888 will fully demonstrate that it is part of the main inscription.

Another example of Mr Sun's misrepresentation of the inscribed characters in his drawings is the instance referred to by him in *T'ieh-yün* 34. 4. If the reader compares the original ink rubbing

1) E.g. *Kuei-chia* I. 11. 6.

2) The lower part of the bone is missing. On both sides of the fragment there must be other damaged inscribed characters which were not taken down when the ink rubbing was made.

with Sun's facsimile (*Wen-pien* ch. *Ho-wen* p. 20b) he will see how different they are.

Thus the few exceptional instances of this character in Sun's glossary which look very much like *kao* with *niu* as its radical are really no exceptions to the rule that the *chi* in *shang-chi* is, in fact, written differently from *kao*, and that the upper half of *chi* is not the radical *niu* (unless it is inadvertently misrepresented by inaccurate drawing).

A convenient comparison of these two characters *chi* and *kao* is happily provided by no. 1601. On this huge scapula there are inscribed both marginal notes and seven sections of main inscriptions. The marginal notes are *shang-chi*, *hsiao-chi* and eight numerals. Three of the seven main inscriptions use the character *kao*; e.g. "Report to [the God of the] River" etc. The upper half of this character is written quite differently from that of *chi*.

In addition to the term *shang-chi* (or *erh-kao*, according to Messrs. Shang, Sun and T'ang), in a number of cases *hsiao-chi* (or *hsiao-kao*) is occasionally inscribed in small characters beside the crack mark, 'in the same manner ¹⁾ as *shang-chi* (or *erh-kao*). It would appear that the two words might mean 'a small report' or 'a lesser report' or, if *kao* should mean 'prayer', then *hsiao-kao* on the other hand, 'a small prayer' or 'a lesser prayer'. None of these interpretations seem to make good sense. What does 'a lesser report' really mean? Why were there always small or lesser reports ²⁾ about the divination in the Shang Court and why no 'great reports' or 'full reports' recorded on the same 'document'? 'A little prayer' might make some sense; but why among the tens of thousands of bones and shells is there not a single instance of

1) Cf. nos 1934, 1983; also *Wen-pien* ch. *Ho-wen* p. p. 20b-21a.

2) Mr Sun enumerates twenty-two instances in his glossary, but the actual figure certainly far exceeds this number.

'a great prayer' (*ta-kao*)? Is it likely that the Shang kings who were often generous enough to offer sacrifices of scores, sometimes even several hundreds, of oxen at one time to their apotheosized ancestors¹⁾, would be so parsimonious in their offering of prayers? Or were their ancestors so insignificant that they deserved nothing more than 'little prayers'?

If we accept Mr Kuo's theory that the two phrases under discussion should be read *shang-chi*, 'highly auspicious', and *hsiao-chi*, 'less auspicious', respectively, all these difficulties can be easily avoided. Since the interpretation *kao* ('report' or 'prayer') is hardly tenable and is irrelevant to the crack marks on the surface of the bone or shell, the phrase *shang-chi* or *hsiao-chi* must be regarded as a note made by the diviner to record his classification of the oracular response to the question put to the bone or shell. The oracular question was, as a rule, recorded on the bone or shell either before or during the divination; but it might also be simply in the mind of the diviner and not be recorded at all, for lack of space or other reasons. It is not clear, however, whether the diviner²⁾ and the recorder³⁾ were the same person. If, as is most likely, they were not the same person, then the recorder might sometimes be absent from duty. In fact there are a good many bones and parts of bones or shells with cracks caused by heating, i.e. bones etc. with oracular answers on them, but without any inscription. This fact explains why on some bones there are only such marginal notes as *shang-chi* or *hsiao-chi* in

1) E.g. *Ch'ien-pien* IV. 8. 4 mentions 300 oxen, *Hou-pien* I. 28. 3 mentions 100 dogs and 300 oxen, Menzies no. 1517 mentions 400 oxen.

2) The Chou term for 'diviner' is '*t'ai-pu*' (太卜). He is now generally called by modern scholars '*chên-jen*' (真人).

3) The Chou term for 'recorder' is *shih* (史, e.g. 史蘇, 史魚). The *t'ai-pu* and the *shih* are clearly shown to be two different officials in the *Tso-chuan* (左傳).

small characters without the main inscription in the form of an oracular question.

Here, however, a new problem crops up. If *shang-chi* or *hsiao-chi* is a note of interpretation concerning the degree of auspiciousness in the oracular crack, why were only some of these cracks interpreted by the addition of these marginal notes while others were not? This is easily explicable. Since the Shang people were extremely superstitious, they did not like, if they could help it, taking down any note where the signs of the crack were unfavourable. Even the occurrence of the less favourable note *hsiao-chi* is in the extant material far less frequent than that of *shang-chi*, 'highly auspicious'. It might be, as already suggested, due to neglect of duty on the part of the recorder, or even to lack of space. If the absence of marginal notes on some of the bones was due to the inauspicious nature of the oracular sign, a comprehensive study of all the types of cracks, noting the absence or presence of these notes, might well lead to the solution of the hitherto cryptic problem of how the Shang diviners interpreted these cracks. But this is beyond the scope of the present study and it must be left to those to whom huge collections of bones or shells, inscribed as well as uninscribed, are accessible.

* * *

One can, however, approach these problems from another point of view which might reveal data more significant than random speculations about the efficiency of the officials in the Shang court. It is to be noted that when the decipherment of these phrases was made by Messrs. Shang, Sun, Kuo and T'ang, none of them attempted to ascertain the dates of the bones and shells on which these marginal notes are found inscribed¹). Now a cursory examination

1) When Messrs. Shang, Sun and Kuo wrote their books, Mr Tung Tso-pin (董作

of the inscribed bones and shells reveals that practically all those containing the two phrases *shang-chi* and *hsiao-chi* ¹⁾ were from the First Period, i.e. the reign of King Wu-ting ²⁾. Checking all the one hundred and seven instances of these two expressions in Mr Sun's glossary with the books on this subject available in Oxford, I have found that apart from a very few instances, which are reproductions of ink rubbings containing nothing but *shang-chi* ³⁾ or *hsiao-chi* ⁴⁾, practically all the inscriptions with this class of marginal note can be dated as being of the First Period. This is done by the use of such clues as the names of the diviners, the formula of the main inscriptions and the style of calligraphy. With the last mentioned criterion, even the few instances of isolated marginal notes on the fragments without any main inscriptions can be easily dated. Out of the one hundred and seven instances under examination I have only found one instance, i.e. *Kuei-chia* I. 30. 12 to be an inscription of the Second Period, i.e. the reign of King Tsu-chia ⁵⁾, as is indicated by the name of his diviner, Ho ⁶⁾. Moreover, this bone is inscribed, *inter alia*, with the single charac-

賓) had not yet published his researches on the dating of oracle bones. Mr T'ang mentioned in the preface of his book the great contribution made by Mr Tung on this line.

1) And also the phrase 不才龜. See next section.

2) The traditional date of this king is 1339-1281 B.C. There are some disputes on the dating of the fall of the Shang Dynasty from which date the dates of the Shang Kings can be ascertained. Mr H. H. Dubs puts the date of King Wu-ting at about 1200 B.C. (*T'oung Pao* XL 4-5, p. 335). This paper, however, is not concerned with the dating of the Shang Kings. The traditional date of the fall of Shang is 1122 B.C. (*Han Shu* ch. 21 pt. II). The new theory put forward by Wang Kuo-wei (王國維) is 1051 B.C. and Mr B. Karlgren puts it in 1027 B.C. (*BMFEA* no. 17, p. 117). The difference is approximately a century. Those who favour any new theory can easily calculate the difference from the traditional date.

3) Cf. *T'ieh-yün* 27. 3, 42. 4, 102. 3.

4) Cf. *Kuei-chia* I. 3. 12, I. 27. 1 etc.


5) 祖甲, traditional date: 1273-1241 B.C.


6) 𠄎 = 何 = 荷. This diviner served both King Tsu-chia and his two sons, Kings Lin-hsin and K'ang Tsu-ting (廩辛, 康祖丁).

ter *chi* which has nothing to do with the numeral '2' below it ¹⁾. Another fragment of bone (*Kwei-chia* II. 11. 17) can be placed either in the end of the First Period or at the beginning of the Second Period, because the names of both Pin ²⁾, the diviner of the First Period and Hsing ³⁾, that of the Second Period appear in the inscriptions on this scapula. All the evidence of the bones and shells in the British Museum Collection confirms this conclusion.

The scarcity of this class of marginal notes in the Second and Third Periods ⁴⁾ is significant. Apart from one or two bones mentioned above, I have so far not yet discovered any bone or shell inscribed with this class of marginal notes that could reasonably be placed in the Second Period. In Mr Shang's book, *I-ts'un*, Bones no. 166 (I. 19b) and no. 541 (I. 59a) can be classified as belonging to the Third Period because the appellation 'Fu Chia' (father Chia) which means King Tsu-chia, father of both Kings Lin-hsin and K'ang Tsu-ting, is recorded in the main inscription. On Bone no. 166 there are three marginal notes, all in small characters inscribed apart from the main inscriptions: *chi*, auspicious; *ta-chi*, greatly auspicious; and *chi yung*, (吉用) auspicious, to be used—meaning, the three sacrificial oxen mentioned in the main inscription were to be used. The marginal note on Bone no. 541 is a single small character, *chi*, inscribed on the left side of the long column of the main inscription. And Mr Shang rightly deciphered this character

1) In this connection Mr Sun again mistakes the numeral as part of the *ho-wen*. Had he seen no. 1550, he might have added an instance of *ssü-kao* to his *ho-wen*. There are other mistakes in this part of his glossary. For instance, the reference he makes to *Ch'ien pien*, I. 52. 4 and VII. 44. 2 are entirely wrong. There is no marginal notes in the inscriptions on I. 52. 4, and on p. 44, Vol. VII of *Ch'ien pien*, there is only one large piece of scapula.

2)  = 𠄎.

3)  = 行, Hsing apparently served both Wu-ting and his son.

4) Tung's dating for the 2nd & 3rd Periods are 1280-1241 B.C. and 1240-1227 B.C. respectively.

in question in all instances as *chi*, auspicious, not *kao*, report or prayer. (*I-ts'un* II. 26b-27a; II. 73b). The last mentioned two are the only instances of this class of marginal notes so far I have found among the bones and shells from the Third Period.

In the Fourth Period, during the reigns of Kings Wu-i and Wen-wu Ting ¹⁾, the practice of inscribing marginal notes of this class seems to have once more been carried on to a greater extent than in the two previous periods; but, as in the previous periods, the two phrases *shang-chi* and *hsiao-chi* have entirely disappeared. Instead, the newly adopted phrase *ta-chi*, greatly auspicious, was frequently used to replace *shang-chi*; the single character *chi* was extensively used presumably to replace *hsiao-chi*; and the newly coined phrase *hung-chi*, immensely auspicious, was for the first time introduced into the phraseology of marginal notes. The elapse of a little more than half a century seems to have made the later Shang kings more superstitious than their ancestors. The kings and diviners of the Fourth Period not only did not like to say 'there will be disasters', as King Wu-ting often did, they were even afraid of interpreting the crack mark as 'less auspicious'. To take Shang's book again, which contains a good proportion of bones and shells from the Fourth Period, there are seven instances of the single character *chi* (nos. 137, 183, 196, 201, 213, 247, 447), six instances of the phrase *ta-chi* (nos. 104, 201, 213, 247, 932, 951), two instances of the phrase *chi yung*, (nos. 87, 761), one instance of the new phrase *tzu-yung chi* (兹用吉) meaning, this is to be used, auspicious, (no. 247) and the first occurrence of the new phrase *hung-chi* (no. 183). All the phrases in these instances are inscribed on bones from the Fourth Period in the exactly same manner and with the same size of the characters as the phrases *shang-chi* and *hsiao-chi* are inscribed on bones and

1) 武乙 and 文武丁. Tung's dating for the Fourth Period is 1226-1210 B.C.

shells from the First Period, and none of them is deciphered by Mr Shang as 'ta-kao' or 'kao yung' or 'hung-kao'; yet in the case of bones from the First Period he deciphers the marginal notes in question as 'erh-kao' and 'hsiao-kao' and, moreover, without the slightest evidence, he asserts that "there are such examples as *ta kao* . . .!"

The fact that Mr Shang seems to have never bothered about the dating of the bones and shells and consequently fails to identify the same character *chi* on the bones of the First Period with that on the bones of the Fourth Period is probably responsible for his inconsistency in deciphering these phrases of the two different periods.

In the Fifth Period¹⁾, however, a new situation arises. The word 'auspicious' was then used with a slightly different style both of calligraphy and phraseology. King Shou-hsin (= Chou-hsin) used three of the expressions of the Fourth Period: *chi*²⁾, *ta-chi*³⁾, and *hung-chi*⁴⁾. But, unlike the marginal notes of the previous periods, these phrases are in most cases embodied in the main inscription as the last sentence of a divination formula, e.g. "The King read the oracle and said, 'Immensely auspicious.'" This serves as an interpretation of the oracular answer to the question: "Will there be no misfortune in the next ten-day week?"⁵⁾ The occurrence of such phraseology in the Fifth Period can not, however, be regarded as a substitute for the brief, scattered marginal notes 'highly auspicious', 'less auspicious' or 'greatly auspicious'

1) Tung's dating for the Fifth Period is 1209-1112 B.C.

2) Cf. no. 1661.

3) Cf. no. 1619, left part; Fig. I. 5.

4) Cf. nos. 1536, 1661. 弘吉 is written in a fused form of *ho-wen*, i.e. with what would be 吉 in the modern dress. Cf. also Fig. I. 6.

5) Compare nos. 1534, 1569 with 1536, 1661, 1672. No. 1619 has both "wu-yu" (亡猷) and 'ta-chi' (大吉) in the same inscription (the six columns of large character inscription to the right are spurious). All these bones are from the Fifth Period.

in the previous periods. The difference is quite obvious. In the first place, such phraseology in the Fifth Period is part of the main inscription, and is not, as in the previous periods, jotted down in smaller characters beside the main inscriptions merely to denote the nature of the crack. In other words, the diviner in the Fifth Period, who was none other than the king himself, no longer took the trouble to note separately the extent to which the crack mark was auspicious. The king himself undertook the manifold duties of reading the oracle, interpreting the crack mark and incorporating the oracular question with the answer, and then had the whole process of divination recorded in one inscription ¹⁾.

In the First Period, the small characters *shang-chi* or *hsiao-chi* were inscribed on the bone after the oracular question had been put to it, heat applied to it, and the significance of the crack mark ascertained. Here we must note that in many cases no oracular answer is recorded on the bones of the First Period. The diviner seems to have contented himself with scrutinising the crack mark only, without taking the trouble to register its implication in words.

In the second place, inscriptions in the First Period sometimes also record King Wu-ting's reading of the oracular sign and his interpretation of it. But this elaboration occurred only when some extremely important matter was involved. Thus, to judge by the extant bones and shells, King Wu-ting never seemed to have bothered about routine divinations as to the general fortune of the next cycle of sixty-days, whereas King Shou-hsin seemed to have attended every divination, important or trivial, and to have read the oracle himself. Further, a striking fact is that when King Wu-ting's interpretation of the oracle is recorded, it is in most cases inscribed on the reverse side of the bone or shell. The Chinese publications

1) Cf. nos. 1536, 1619, 1661, 1664, etc. The actual inscribing was perhaps done by some one else.

of ink rubbings have a great disadvantage in that if the compiler of the book does not indicate whether an individual rubbing is taken from the obverse or reverse side of the bone or shell, the reader can never tell whether or not the bone or shell is inscribed on both sides, or which side of the bone or shell is the one inscribed. Unfortunately most compilers have failed to supply this rather important information ¹⁾, so that a study in the light of this information is not always possible. In the British Museum Collection, however, there are fourteen bones and shells on which King Wu-ting's interpretations of the oracle are inscribed. Of the fourteen instances, ten ²⁾ are inscribed on the reverse side and three ³⁾ on both sides ⁴⁾. Of the three, no. 1535 is concerned with the pregnancy of some lady, probably one of the king's wives; no. 1595 is concerned with an eclipse of the moon and the king's toothache; no. 1802 is a large plastron half covered with inscriptions in large characters ⁵⁾. Half of this plastron is unfortunately damaged and the key words are missing; but from the remaining fragment it is apparent that the inscription is concerned with warfare. It seems clear that, except on very important issues, King Wu-ting would not be present when the obverse side of the bone or shell was being inscribed by the recorder; and if the diviner, after the obverse side of the bone or shell had been inscribed, deemed it necessary to ask the king to interpret the oracle, the interpretation would naturally have to be recorded on the reverse side of the same bone or shell unless there are still space on the obverse side. In all the fourteen instances King Wu-ting's interpretations, like those of King Shou-

1) The few exceptions to this rule are Jung's *Yin-ch'i*, Shang's *I-t's'un* and T'ang's *T'ien-jang*. But the material in the last mentioned book is far too inadequate.

2) Nos. 1537, 1609, 1630, 1799, 1805, 1821, 1822, 1838, 1863, 1879.

3) Nos. 1535, 1595, 1802.

4) The only one inscribed on the obverse side is no. 1585.

5) Plastron is usually inscribed with small characters in many sections symmetrically arranged.

hsin, are recorded and incorporated in the main inscriptions.

The character *chi*, meaning 'auspicious', when used in the main inscriptions in the First Period, is written in an elaborately ornate style ¹⁾, and is rather different from that usually employed in the marginal notes *shang-chi* or *hsiao-chi*. This is perhaps one of the reasons why Messrs. Shang, Sun and T'ang read *shang-chi* and *hsiao-chi* as *erh-kao* and *hsiao-kao*. But the forms of characters used in fortune-telling phraseology such as *chi*, *yu* (misfortune), *tsai* (disaster) and *sui* (calamity) often vary greatly from time to time and slightly from bone to bone in the same period. Besides, to engrave the elaborate, ornate orthography for *chi* for the small characters of casual marginal notes was not only unnecessary but would have been extremely difficult for the inscribers of the First Period, since such ornate orthography was used only in very large characters for which there was ample space. The marginal notes were of necessity written with simplified strokes, a practice known in the Shang times as well as to later ages.

The small character *chi* used in the marginal notes in the Third and Fourth Periods is slightly different from that used in the First Period in that instead of two slanting strokes on both sides of the upper half of the character, use is made of one or two horizontal strokes crossing the vertical stroke. This was due to the labour saving technique of carving all the horizontal strokes of the character first and all the vertical strokes later, or *vice versa*. An illuminating example of this technique is to be found on Bone no. 201 (*I-ts'un* I. 22b) on which the isolated single character *chi* is left with the central vertical stroke uncarved.

To sum up the foregoing discussion: the marginal notes in dispute should be read *shang-chi*, *chi* and *hsiao-chi*. By studying the inscriptions in the light of the different periods in which they were

1) See Fig. I. 4; cf. nos. 1549 reverse side, 1609 rev. side.

inscribed, we are now enabled to say that the marginal notes *shang-chi* and *hsiao-chi* practically only occur on those bones and shells from the First Period inscribed with smaller sized characters alongside the crack marks. The single character *chi* is sometimes found on bones from the Second, Third and Fourth Periods. In the Third and Fourth Periods, however, both phrases *shang-chi* and *hsiao-chi* ceased to be used and the new phrases *ta-chi*, *chi-yung* and *hung-chi* etc. were introduced. On the bones from the Fifth Period, there occurs a new formula for oracular sentences in which the interpretation of the crack mark is part of the main inscription and consequently marginal notes are no longer to be found. This being so, it is even more difficult to imagine why, if *shang-chi* and *hsiao-chi* should be read as 'erh-kao' and 'hsiao-kao', this ceremony of making 'report' or offering 'prayer' in connection with divination should disappear entirely during the Third, Fourth and Fifth Periods. Even Mr Shang himself does not decipher the corresponding marginal notes in the Third and Fourth Periods as *ta-'kao'*, '*kao'-yung* or *hung-'kao'*!

The reason for the frequent appearance or less frequent appearance of these marginal notes on the bones and shells from different periods is at present still a matter for speculation. I now therefore, try, by relating certain instances, to commend my own tentative explanation on this problem.

I have mentioned above that there are bones and shells on which nothing but the marginal note *shang-chi* is inscribed. Of the instances cited above, I shall take nos. 1510, 1666 and *Ch'ien-pien* III. 2. 3 for illustration. No. 1510 is inscribed in two places with *shang-chi* and in one place with *pu tsai min* ¹⁾ below it. The three marginal notes form a roughly vertical column. No. 1666 is in-

¹⁾ See Fig. 5 on p. 58.

scribed in three places with *shang-chi* in an irregular column. Both are fragments of bones. *Ch'ien-pien* III. 2. 3 is inscribed in four places with *shang-chi* in a regular column. All these bones have no main inscriptions on them, and I have so far reserved my judgment on their dates.

There are two other bones inscribed with a few characters in addition to the marginal notes. No. 1731 (Fig. 3) is a fragment

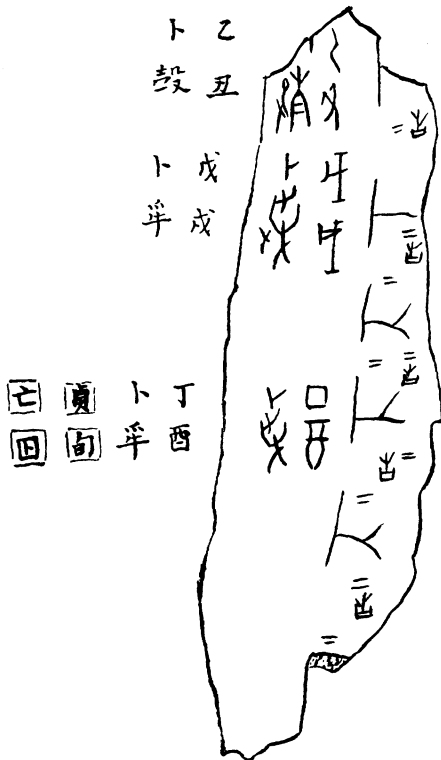


Fig. 3. Copy of the original for no. 1731

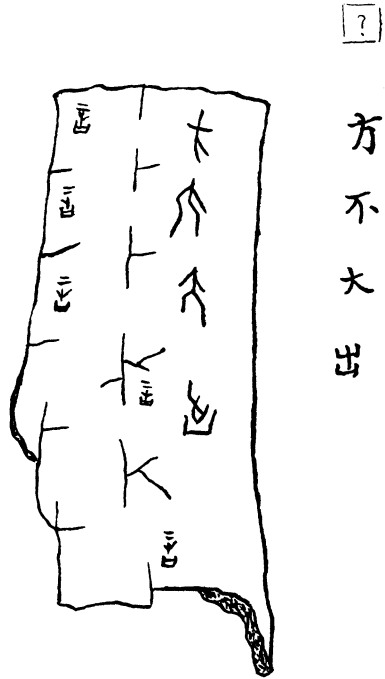


Fig. 4. Copy of the original for no. 1739

Note on Fig. 3. The single small character *chi* in the right topmost section was probably originally inscribed with *shang-chi* in a perpendicular, slanting line as in the fourth section down from the top; and when that part of the bone broke away, it carried with it the character *shang*.

The main inscription on the bone is deciphered in modern Chinese to the left of the drawing. Those characters in square enclosures are the omitted words of the oracular question reconstructed from stock formula. The omitted words of the two top sections can likewise be reconstructed according to the same formula.

of a scapula with six crack marks on the obverse side. To the right in four places there is inscribed *shang-chi* and in one place there is inscribed *chi* or *shang-chi* ¹⁾. To the left there are three sections of inscriptions each of which consists of four larger characters. These inscriptions consist of the names of the three days on which the divinations took place, and the names of two diviners whom we know to have been in the service of the court of King Wu-ting. These diviners' names settle the date of the bone. Had this bone been broken along the six cracks in the middle, the right half of the fragment would, like nos. 1510, 1666 and *Ch'ien-pien* III. 2. 3, be without any clue to its date save the style of calligraphy.

No. 1739 (Fig. 4) is a fragment of bone with five crack marks in the middle of the obverse side, five irregularly disposed marginal notes of *shang-chi* ²⁾ on both sides of the row of cracks, and one column of main inscription with presumably five characters, the first of which is missing. The inscription reads:

"The (name of a tribe) tribe will not come out in strength".

Again, had this fragment been broken along the cracks in the middle, the left side would be left with nothing but the three marginal notes '*shang-chi*'. From these two bones, both of which are from the First Period, we can understand why many bone fragments are inscribed with nothing but marginal notes. We can further assume that bones such as nos. 1510, 1666 and *Ch'ien-pien* III. 2. 3 are from the First Period. This hypothesis can easily be confirmed by the style of calligraphy.

Since no. 1731 is inscribed, in addition to its three main inscriptions, in four places with *shang-chi* and in one place with *chi* or *shang-chi*, each of which interprets the corresponding oracular

1) See note on Fig. 3.

2) Mr F. H. Chalfant copied down only four of the marginal notes and missed the middle one on the left when he reproduced the bone in his book. Cf. *Couling-Chalfant* p. 114.

crack mark, and the lowest marginal note is apparently missing owing to the break of the bone, it is safe to assume that the bone was originally inscribed with six marginal notes each being *shang-chi* or *chi*. It can also be surmised that no. 1739 likewise originally had six marginal notes '*shang-chi*', two of which are now missing as a result of damage to the bone. Confirmation of this surmise is found in the presence of four complete and two half broken chiselled holes and the same number of black scorched marks in the middle of the reverse side of the bone. From the arrangement of these holes, designed to produce the desired spacing of cracks on the obverse side, one can easily see that the obverse side was obviously meant to be inscribed with the six stock oracular questions for the divination of the next six ten-day weeks or *hsün*¹⁾. We have, then, good reason to believe that the bone was first chiselled with olive-shaped holes, usually six in a row, on the reverse side; then inscribed with the stock questions, each of which included the name of the day in which the divination was to be made and the name of the diviner. Heat would then be applied immediately beside the hole right beneath the position of the stock question on the reverse side and the crack would appear on the surface of the bone²⁾. Having read the crack mark the diviner inscribed, or instructed the recorder to inscribe, his interpretation of the mark, i.e. the marginal note. This process of inscribing a stock question, heating the reverse side beside the hole, reading the crack mark and making the marginal note was repeated every ten days until the completion of the sixty-day cycle. Thus a small bone inscribed with six such stock questions actually took the diviner fifty-one days to complete.

1) 旬. The formula of the stock oracular question to be asked on the eve of the next *hsün* in the First Period is like this: "On the day so-and-so it was divined. The Diviner so-and-so asked, 'Will the next week (*hsün*) be without misfortune?'"

2) It seems that sometimes heat was applied before the inscribing of the stock question.

Since the stock questions were so stereotyped and were regularly repeated every ten days, the diviner or recorder often omitted them altogether and simply registered his interpretation of the crack mark as 'highly auspicious' or 'less auspicious'. The space left could then be inscribed with a record of more significant events about which the divinations, for any one of the six ten-day weeks, or for the hole period, had been made. When no significant events were recorded, or when the inscribed part of the bone has been broken and lost ¹⁾, it is seen to be inscribed with only a few scattered marginal notes '*shang-chi*', as is the case with nos. 1510, 1666, *Ch'ien-pien* III. 2. 3, or '*hsiao-chi*', as with nos. 1919, 1934, 1983 etc.

It can also be assumed that in the succeeding Second, and Third Periods, when the routine questions of the six ten-days weeks were dutifully put to the bone, the marginal notes were no longer required, although an occasional industrious recorder might still make them.

The absence of the marginal notes beside the routine weekly questions also indicates a lack of significant events during the period of the six ten-day weeks. On the other hand, when a specific event was to be divined, (e.g. whether a certain tribe was coming out in strength) the recording of routine weekly questions was displaced by that of the more urgent issue, and the marginal notes were usually added as a guide to the action under issue. Many of the bones and shells of the First Period provide evidence to prove this point ²⁾.

1) If the broken part is not lost, an expert can 'jig-saw' the broken parts together from, say, two source books, and have the whole bone reconstructed, e.g. *T'ung-tsuán* II. 20. 53

2) E.g. no. 1595, obverse side, lower half, is inscribed in four places with the routine ten-day-weekly, short, stock questions for the next four weeks. But the upper half of the bone is inscribed with a lengthy inscription about what was going to happen in the next few days. Normally it would have been inscribed with six, instead of the four, stock questions. See

The fact that the marginal notes *shang-chi* and *hsiao-chi* are inscribed in much smaller characters than the main inscriptions and are inscribed alongside the crack marks, is a good criterion for deciding whether an oracle bone inscription is genuine or not. By this, and other criteria, we can say that no. 1613, for instance, is a cleverly-done fake, since the characters of the marginal note *shang-chi* on this scapula are much larger than those of the five weekly oracular questions on the left side. Moreover, the note is not inscribed alongside any of the crack marks: it is not on the 'margin' of the crack 'sign'.

II. 'Pu tsai min'

The third class of marginal notes on the oracle bones immediately beside the crack marks is a single, isolated line of three characters, also found on bones or shells from the First Period. Occasionally the last of the three characters is omitted (Fig. 5, 5). Of the three

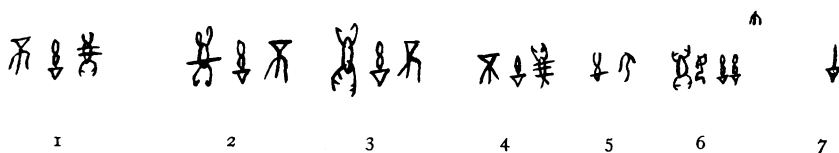


Fig. 5. 1. Brit. Mus. no. 1651 2. No. 1757 3. No. 1570 4. No. 1862
5. No. 1642 6. *Ch'ien-pien* VIII. 4. 3 7. *Ibid.* IV. 31. 7

characters, the first one 'pu' (not, no) is simple and clear; the last one is a pictograph of some sort of animal; what is most perplexing is the second one, also a pictograph, but having a number of variants.

also *T'ung-tsu'an* I. 38b no. 512 (from *Yin-hsü Shu-ch'i Ching-hua* 殷虛書契菁華 p. 2). On this huge scapula, immediately after the weekly stock question, is inscribed a lengthy story of the invasion of both the east and west borders by two foreign tribes. *Ibid.* I. 53b no. 735 (from *Ching-hua* p. 1) provides another example of a similar inscription. Cf. also *Ch'ien-pien* VII. 11. 3, VII. 35. 1 etc.

This phrase has caused among Chinese epigraphists much bewilderment and a good deal of discussion. A summary of this long controversy is made by Mr T'ang Lan in his book (*T'ien-Jang* II 2-4) in which no less than eight different decipherments and theories have been offered by seven scholars¹⁾. Each of the seven has contributed, in one way or another, some clue to the interpretation of this phrase, but none seem to have explained it satisfactorily. Mr Kuo Mo-jo, however, has been at last able to identify the last character in the phrase as a pictograph of a frog and read the phrase 'pu man min',²⁾ meaning, 'not blurred', 'not indistinct'. This identification is certainly correct, although his interpretation of the pictograph on the principle of phonetic-loan is less cogent. His decipherment of the second character as a pictograph of a certain kind of hand tool is also commendable and not wide of the

1) The seven scholars and their books are: 1, Sun I-jang: *Ch'i-wen Chü-li* (孫詒讓: 契文舉例, II. 50). 2, Hu Kuang-wei: *Chia-ku Wen-li* (胡光燾: 甲骨文例, II. 26). 3, Tung Tso-pin: *Anyang Fa-chüeh Pao-kao* (安陽發掘報告, I. 62) and *Chia-ku-wen Tuan-tai Yen-chiu Li*, in *Studies Presented to Ts'ai Yuan P'ei on His 65th Birthday*, Part I, pp. 406-407, Academia Sinica, Peiping, 1933. (甲骨文斷代研究例. Hereafter abbr. *Tuan-tai*). 4, Ch'ên Pang-fu: *Yin-ch'i Pien-i* (陳邦福: 殷契辨疑). 5, Chang Feng: *Tzū-ju Yen-chiu* 張鳳: 孳乳研究). 6, Hsü Ching-ts'an: *Yin-hsü Wen-tzū Ts'un-chên K'ao-shih* (許敬參: 殷虛文字存真考釋 no. 99). 7, Kuo Mo-jo: *Ku-tai* I. 27-29.

I have not seen Chang's essay on this subject and I am not sure whether Mr T'ang is right in attributing the theory to Chang. I think Mr T'ang might have mistaken Mr Wen Yu (聞宥)'s *Yin-hsü Wen-tzū Tzū-ju Yen-chiu* (*The Eastern Miscellany*, 東方雜誌, Vol. XXV, no. 3, Shanghai, 1928) for Mr Chang's work. I have checked, and added herewith some specific notes to, the rest of the books listed by Mr T'ang for accurate reference.

2) 'Pu man min' (不𪗇𪗇) < 'pu mi mang' (不迷芒) < 'pu fen luan' (不紛亂). *Id.* *Yin-ch'i Yü-lun: Man-min Chieh* (殷契餘論: 𪗇𪗇解) *Ku-tai* I. 28a.

mark. Inspired by Kuo's theory, Mr T'ang accepts his decipherment of the third character *min* and identifies the second character, with numerous instances which provide convincing evidence, as a pictograph of a pestle. Finally, drawing from his immense erudition, he decipheres the character as *ts'ai*, which, on the principle of phonetic-loan, is equivalent to *tsai* and is used to mean 'again' ¹). Thus he is able to read the trisyllabic phrase, in its modern dress, as 'pu tsai min' ²) ('not again crack'), meaning, 'It would not crack again', or, 'no more cracks would appear' on the surface of the bone or shell caused by the heating on the reverse side.

Mr T'ang explains that *min* (龜), sometimes inscribed as *min* (the same pictograph with the radical *nü* (woman) to the right) ³) is homophonous with *min* (豐) which is explained by both Chêng Hsüan and Chia Kung-yen in their glossaries on the *Pu-shih* (the Master of Divination) and on the *Chan-jen* (the Diviner) in the *Chou Li* as the branch crack on the shell, while the main crack is termed the *mo* (墨) ⁴). On the other hand, when the *Li Chi* says, "The recorder (or clerk) decides the *mo*", Chêng Hsüan comments: "He examines the main crack and its branch cracks" ⁵). It is thus

1) Ts'ai 卩 = 才, phonetic-loan for *tsai* 再. *T'ien-jang* II. 3a.

2) *Pu ts'ai min* (不才龜) < *pu tsai min* (不再豐) < *pu tsai mo* (不再墨). Loc. cit.

3) Fig. 5, 6, *Ch'ien-pien* VIII. 4. 3.

4) 周禮春官大宗伯卜師：“揚火以作龜，致其墨”占人：“史占墨，卜人占坼”。鄭玄注：“墨，兆廣也；坼，兆豐也”。賈公彥疏：“據兆之正豐處為兆廣，就正墨旁有奇豐罅者為兆豐也”。The Thirteen Classics (十三經注疏) XXIV. 804-5 World Bk. Co.

5) 禮記玉藻 (chapter 13): “史定墨”。鄭玄注：“視兆，坼也”。It seems to me that the passage about divination in which this sentence is found is rather out of place in the context of the whole chapter.

clear that Chêng Hsüan takes *mo* to mean either the main crack only or both the main and the branch cracks. Mr T'ang explains that as a general term *mo* means any crack or cracks; whereas in a specific usage *mo* means the main crack only, and the smaller branch crack or cracks are called the *min*. In fact, he argues, since *mo* and *min* in archaic Chinese were similar in pronunciation, they might be used indiscriminately. ¹⁾

The decipherment of the second character in the phrase by Mr T'ang is even more important than the first one, for it is this character which has for so long baffled the Chinese epigraphists. He first praises Mr Kuo for his correct interpretation that this pictograph is a certain type of hand tool and that its triangle-shaped lower part is the main body of the tool and its upper half is the handle. Proceeding with this theme, he enumerates a number of variants of this pictograph in order to show that the original orthographic form of this pictograph should be a perpendicular line above a triangle pointing downwards ²⁾. If the perpendicular line goes right through the triangle, and the line forming the base of the triangle is protracted from both ends, it reads, instead of *ts'ai*, *tsai*, meaning 'to be in' or simply 'in', as it often occurs in such phrases as 'The King was in such-and-such a place', 'In the *n*th month', etc. As a phonetic-loan, it should read, in this particular context, *tsai*, meaning, again ³⁾. Therefore the decipherment of the trisyllabic

1) “龜，媿，墨，豐，並聲相近……此云不再龜，猶不再墨。” *T'ien-jang* II. 4a “*Min, min, mo, min* were all similar in pronunciation Here it says, 'It would not again *min*'. It is like saying: 'It would not again *mo*'." The archaic pronunciation of *min* and *mo*, according to Karlgren's *Grammata Serica*, are *meng* and *mok*. Loc. cit. p. 454. 1252d p. 366. 904c. *BMFEA* no. 12, 1940.

2) Fig. 5. 7. Cf. also *Ch'ien-pien* VII, 33. 1; *T'ien-jang* II, 2a-3b.

3) Fig. 5. 7 = 才 in its modern dress. Its variant Ψ is used in bone inscriptions for 在, e.g. ' Ψ 10 ' ; 'in the tenth month'. In the phrase under discussion, it is used for 再, again.





phrase should be *pu tsai min*, "It would not again crack".

Since Mr T'ang's theory was published in 1939, most Chinese scholars, except Mr Yü Hsin-wu, have accepted his interpretation as correct. Mr Yü's view, published in a collection of succinct and erudite essays on Chinese palaeography, is in fact a compromise of a number of theories previously put forward by other scholars. By accepting Kuo's reading of the last of the three characters as *min*, he relates it to the homophonous character *ming* (冥), invisible, obscure. The second character in the phrase he identifies as *wu* (杵), the archaic form for *ch'u* (杵), a pestle. Although this reading is different from that of Messrs. Kuo and T'ang, the idea that the pictograph represents a kind of pounding tool was in fact first suggested by Mr Kuo and later expounded by Mr T'ang. From this point Mr Yü comes to accept Mr Ch'ên Pang-fu's (cf. note ¹) on p. 59) interpretation that *wu* (杵), pestle, is a homophone for *wu* (輿), wrong, contradictory. His conclusion is that the phrase in question means 'the crack mark on the bone is neither wrong and contradictory, nor invisible and obscure' ¹). It is hardly likely that the trisyllabic phrase could have said so much. If we suppose that the phrase does say so much, the necessary implication of this interpretation would be that all the rest of the crack marks, which are far more numerous than those denoted with this phrase, are wrong, contradictory, invisible and obscure. This interpretation strikes me, I must confess, as having an element of *reductio ad absurdum*, for today, more than three millennia after the divination, we can still clearly see that none of the crack marks are invisible and obscure (if we look at the bones themselves and not at the ink



¹) "言兆豐之不舛悟, 不冥闇也". Vid. Yü Hsin-wu: *Shuang-chien-yi Yin-ch'i Pien-chih*, p. 52a (于省吾: 雙劍謠殷契駢枝. Hereafter abbr. *Shuang-chien*) Han Ya T'ang Press, Peiping, 1940.

rubbings) although we are still unable to divine whether the crack marks are right or 'wrong', or 'contradictory' or complementary.

Let us, however, try to find better etymological grounds on which may depend the strength of Mr Yü's argument. Our search turns out to be rather disappointing, for he does not produce any cogent reason for his reading of the second character in the phrase as *wu*. Indeed, he himself is not quite sure of it. All that he says is:

"The pictograph  is different from the pictograph *wu* ( = ) by having a pointed arrow-head added to the lower end of the graph. There is no doubt that the character is formed with (the radical) *wu* () and that it is a kind of pestle" (*op. cit.* p. 51b). Then he picks up Ch'ên's reading and jumps to his conclusion without explaining how the different forms of the two pictographs are to be reconciled with each other. As a matter of fact, it is exactly this difference between these two pictographs that has enabled Mr T'ang to make his exhaustive examinations and to work out his theory with irrefutable evidence. And Mr Yü does not even attempt to refute T'ang's theory in order to make room for his own.

Eight years after the publication of Mr T'ang's theory, a really serious challenge, however, was made by the late Mr L. C. Hopkins ¹⁾, and, as few of the Chinese epigraphists read, or care to read, English, the challenge has never been answered.

Mr Hopkins in the first instance accepts without reservation Mr T'ang's decipherment of the first two characters of the phrase, i.e. *pu tsai*, but repudiates his interpretation of the last character. After recapitulating the theories put forward by Messrs. Kuo and T'ang, he asserts: "So T'ang considers that the character *min* (), frog, could, and here should, bear the meaning of .

¹⁾ *Vid.* "A Cryptic Message and a New Solution", *Journal of Royal Asiatic Society*, 1947, pp. 191-8, London.

mo, Blackness': a statement which Mr T'ang has never made and could never have made, for none of the Chinese experts, (least of all Mr T'ang) who read this word *mo* in the context of the *Chou Li*, or of the *Li Chi*, together with its commentary, could have thought that it means 'Blackness' 1). Mr Hopkins goes on: 'Surely such a latitude-narian conception of the usage of Borrowed Characters is not warranted, for the syllables *min* and *mo* are not homophones, nor even synonyms'. Neither does Mr T'ang say that *min* and *mo* are homophones. What he says is, in effect, that *min* (黽), frog, and *min* (罍), crack, are homophones. It is Chêng Hsüan, the Han authority on Confucian classics, who is responsible for the interpretation that, on the one hand, *mo* means the main crack and *min* means the branch crack in the *Chou Li* and that, on the other hand, *mo* means both the main and the branch cracks in the *Li Chi*. Mr T'ang merely suggests that the indiscriminate usage of these two terms was due to the resemblance of the sounds of these words in archaic Chinese, a resemblance lost, of course, in the modern Pekingese pronunciations, *mo* and *min*. This was a point of which, surely, Mr Hopkins was aware when he romanized the Cantonese pronunciation of these characters in his paper (Op. cit. p. 197).

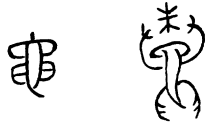
Mr Hopkins then proceeds to put out his own theory in a most vehement manner:

"I deny that this third character of the 'Cryptic Message' is *min* at all, and I claim that it is *chu*, now written 蛛, a spider"—which, according to him, stands for *chu* (朱), red. To illustrate this point, he produces, by drawing, the following two pictographs: one from the *Shuo-wen Chieh-tzû*, the other from the *Shuo-wen Ku-chou Pu* 2).

1) Mr Hopkins' misunderstanding of the meaning of the character *mo* in this context seems to have arisen from his reading of Biot's French translation of the *Chou Li, Rites des Tcheou*, Livr. XXIV, 74-5, not, I presume, from the Chinese text. Cf. note 4. p. 60.

2) The full title of this book by Wu Ta-ch'êng (吳大澂) is 說文古

These two queer characters show the Lesser Curly style ¹⁾ of the character *min* (Fig. 6, 1) and its usage as a radical in the ideograph *chu* (Fig. 6, 2), name of a state mentioned in the *Tso-chuan*, in the bronze inscription style. It is hardly necessary to note here that the date of the first pictograph is more than one millennium later,



1 Fig. 6 2

and that of the second one is half a millennium later than the bone inscription in question.

Commenting on the character *min* in the *Shou-wen Chieh-tzû*, Mr Hopkins boldly declares:


“We do not find *min* as a character, standing alone, but only as one element in a compound, and then always as a Determinative” (*loc. cit.*, p. 196).

Speculating on the ingenuity of the ‘Poet-Scribe’ of the Shang court, he goes a step further and suggests that there were available in ancient times two different homophones for the supposed character *chu*, a spider:

“One of these was *chu*, the trunk or bole of a tree, now written 株, and this type appears on the Bronzes, but not, as far as I know, on the Honan bones. The other homophone is *chu*, Spider, now written 蛛, (usually found in the disyllabic term 蜘蛛, *chih-chu*, the ‘spinning spider’), but on the Honan bones, where alone

摠補. Mr Hopkins omits the first two syllables, *Shuo-wen*, in his reference. In addition to Fig. 6. 2, he also gives two variants which are omitted here.

1) ‘Lesser Curly’ is my literal translation for ‘*Hsiao-chuan*’ (小篆). It is wrong and misleading to call it the ‘Small Seal Character’. It is wrong because characters from any type of Chinese scripts are used to carve seals; it is misleading because one of the eight types of scripts in the Ch’in Dynasty (246-207 B.C.) was called *mo-yin* (摹印), seal characters.

it appears as , so at last we reach what our cryptic phrase seems to say . . . but what it actually means to say is 'not again red-dened.'" (*loc. cit.*, p. 197).

It is rather unfortunate that Mr Hopkins should have ventured into a field fraught with pitfalls. In the first place, the character *min*, frog, is of course to be found in the *Shuo-wen Chieh-tzŭ* or in any Chinese dictionary, ancient or modern, as a character, standing alone. As a matter of fact, all that Mr Hopkins calls 'Determinative' 'element' in the *Shuo-wen Chieh-tzŭ* are individual characters, or *wen*, meaning, basic pictographs or ideographs. If one understands the title '*Shuo-wen Chieh-tzŭ*' correctly, one can not fail to realise that it actually means 'Explanation of Pictographs and Analysis of Compound Characters'. I think the popular mistranslation of its title, '*The Book of Seal Characters*', has contributed a lot to this kind of misunderstanding, not only of the nature of this book, but also of its true value and function.

In the second place, a comparison of the bone character *min* in Fig. 5 with the determinative *min* in the lower part of *chu* (Fig. 6, 2) will show that these two pictographs are far more similar to each other than the Lesser Curly character *min* in Fig. 6, 1 is similar to the determinative *min* in Fig. 6, 2. It will further show the extent to which the pictograph was distorted when the Chinese script was standardized in the third century B. C. For instance, in Fig. 6, 1 the two forelegs of the animal are eliminated altogether and the claws of the two hindlegs are wrongly depicted as its belly, and thus it gives rise to the misinterpretation of the pictograph, which Mr Hopkins quotes at great length, by Hsü Shen, author of the *Shuo-wen Chieh-tzŭ*. It is now common knowledge that many of the definitions given by Hsü Shen have been proved to be wrong in the light of the recent studies on bronze and bone inscriptions. We

have to tread warily if we are to tread on the heels of Hsü Shen, lest many of the pitfalls into which he has fallen should be awaiting us.

There is one more point in connection with the pictograph of this animal. If the third character in the phrase is *chu*, as Mr Hopkins asserts, it is hardly conceivable that in such a small and simplified pictograph the ancient scribe should so meticulously depict the claws of its hindlegs, sometimes even both the fore and the hindlegs. It is indeed doubtful whether the claws of a spider are conspicuous enough to be depicted in any picture, not to speak of highly symbolic pictographs, ancient or modern.

Lastly, many a Chinese binome of two syllables, especially names of animals, birds and insects such as *pienfu*, the bat, *yüan-yang*, the mandarin duck, *wukung*, the centipede¹), etc. can only be considered as words of two syllables; each of the two, to use Dr Chao Yüan-jen's phrase in his *Dictionary of Modern Chinese*, is a 'bound syllable'. To digress into a discussion of this subject would be inappropriate here. Suffice it to say that any monosyllable or 'bound syllable' taken from these words does not make sense; it is simply not Chinese. While *chih-chu* is the Chinese equivalent for a spider, neither *chih* nor *chu* can be taken isolatedly, any more than 'spi-' or '-der' can be taken, to mean a spider. Nor is it true that *chih* means 'spinning', as Mr Hopkins suggests.

There is, however, one aspect of the pictograph *min* which attractively suggests to Mr Hopkins that it seems to resemble the picture of an octopod insect, for the two longish horizontal lines crossing the body of the animal seem to represent four additional legs (Fig. 5.1). But this variant of the character is by no means the rule. Careful statistics from well-assembled material reveal quite a different picture. There are actually three different ways of writ-

1) The Chinese equivalents for these words are: 蝙蝠, 鴛鴦, 蜈蚣.

ing this pictograph: 1, with two parallel lines crossing the body; 2, with one line only; and 3, without any line (Fig. 5, 1, 2, 3 respectively). The following table, compiled from two fairly representative and well indexed books in addition to instances gathered from the British Museum Collection will illustrate this point:

The number of lines crossing the body of the character min

	2 lines	1 line	no line	Total
<i>Wen-pien</i>	22	11	19	52 ¹⁾
<i>Yin-ch'i</i>	11	3	8	22 ²⁾
Brit. Mus.	13	5	8	26 ³⁾
Total	46	19	35	100


From the above table it is clear that the number of instances in which two parallel lines cross the body of the animal consists of only 46 % of the total number of instances of this pictograph. It is therefore impossible to consider these variant instances with two additional lines to be the orthographic form of this character in the bone inscriptions. Moreover, there is one instance of this pictograph in the British Museum Collection having three lines crossing the body of the animal (Fig. 5, 4) and another instance in the *Ch'ien-pien* (VIII. 4. 3) without any such lines but with the radical *nü* attached to the right (Fig. 5.6). Adding these two instances to the table, the percentage would be less than 45. 1. It is not likely that the ancient scribe should have conceived the ani-

1) *Wen-pien* Vol. IV, *Fu-lu*, pp. 13b-14a. The material in this glossary is collected from eight most important source books in this field published up to 1933.

2) *Yin-ch'i* Vol. III p. 42a.

3) Nos. 1510, 1523, 1570 (2 instances), 1584, 1593, 1599, 1629, 1638, 1651, 1681 (2 instances), 1686, 1700, 1701, 1735, 1757, 1794, 1795 (2 instances), 1836, 1874, 1882 (2 instances), 1910, 1921.

mal to have sometimes four legs, sometimes six legs, and at other times eight or even ten legs. The variant forms of the character suggest rather that the ancient scribe regarded it not as a pictograph of *min*, a frog, but as a phonetic-loan for the word *min*, a crack. The existence or non-existence of the additional crossing lines, or the number of these lines, is evidently irrelevant to its semantic connotation.

Apart from the above etymological considerations, Mr Hopkins has found some material evidence to substantiate his theory. Since he has reached the conclusion that the pictograph means 'to redden' by assuming that it is *chu* and not *min*, he has lost no time in finding out that some of the bone inscriptions are actually smeared with red. In addition to the two instances of red pigment in his own collection of the Honan bones, he informs his reader that there are twelve more such instances in Jung Kêng's book ¹⁾. This finding looks like an extremely important discovery and one which is highly relevant to our problem. Having referred to Jung's note 'smeared with red', Mr Hopkins asks, "Why this special distinction of colour? and an even more surprising treatment of his Bone no. 587? ²⁾ This particular fragment contains only two characters, which are not in material contact. The upper one is , namely, (following Kuo Mo-jo) *nan*, 南 south ³⁾, and is smeared with red".

1) I.e. *Yin-ch'i* nos. 2, 171, 184, 224, 579-583, 585-587.

2) *Loc. cit.* no. 587 is not a bone, but a tiny fragment of tortoise plastron. Mr Jung notes in his book (*Yin-ch'i* II. 34a) that from no. 232 onwards are fragments of tortoise plastrons.

3) The character is *kê* 殼, now written 殼, not *nan*. (*Vid. T'ien-jang* II. 13b). Even if it is read *nan*, according to Tung Tso-pin and others, it is 南, not 南. In any case it is the name of a well known diviner in the court of King Wu-ting, not 'south'. (*Loc. cit.* and *Tuan-tai* pp. 344-350). It is curious that Mr Hopkins should have missed Tung's extremely important dissertation on bone inscription and the reading of this character by Mr T'ang with whom he is engaged in this discussion.

With this discovery, he resolves the queries in a matter-of-fact manner:

“My solution is that the hitherto unknown character is *chu*, a spider, but here used for another homophone, *chu*, red, thus providing a key to the meaning of the cryptic sentence in question and proving, so far as I know, the only proposed solution that does so”.

Now this red-smearing business was not, as it appears to have been in Mr Hopkins' paper, first discovered by Mr Jung. An old friend and sometime colleague of Mr Hopkins, Mr Chalfant, in his drawing of bone inscriptions done before 1911 has noted several bones and shells 'lined with red' ¹⁾, and these bones and shells have been kept in the British Museum ever since 1911. However, the number of bones and shells smeared with red consists of only a very small portion in a given number of bones and shells. The ratio in the *Yin-ch'i* is 12 : 874, that in the British Museum Collection is 11 : 483 ²⁾. From the solution offered by Mr Hopkins one is led to think that since, at the time when the bones were inscribed, red-smearing was such an important matter that those not smeared were actually inscribed with the phrase '*pu tsai chu*', "not again reddened", it would seem that 72 out of 73 or 44 out of 45 instances should have been inscribed with this phrase, not the other way round, which is actually the case, as far as we know. And what does the word 'again' mean in this phrase? Does it imply that every red-smearred bone should normally be smeared a second time and only those abnormal instances which were smeared once only were singled out and inscribed with this phrase? If so, the bones and shells that were smeared once only would be extremely numerous. But this

1) *Couling-Chalfant* nos. 1508, 1516, 1550, 1570, 1638, 1805, 1907, 1916, 1917. Checking with the bones in the British Museum, I find Mr Chalfant has omitted to mention nos. 1595, 1802 which are also red-lined.

2) Including a number of bones inscribed with both genuine and spurious inscriptions.

again is exactly the opposite of the facts. Or is it that some inscriptions, (or part of an inscription) were smeared and others were not? This was no doubt what was very much in Mr Hopkins' mind when he picked up shell no. 587 in Mr Jung's book. But then all the non-smeared bones and shells would have to be inscribed with this phrase and the number of its occurrences would be in proportion to the number of those non-smeared bones and shells. But this is still further from the truth, for out of thousands of fragments from the eight source books in Sun's glossary (*Wen-pien*), Jung's book (*Yin-ch'i*), the British Museum Collection plus Mr Hopkins' own collection, there appear to have been only one hundred odd bones and shells inscribed with this phrase ¹⁾. Alternatively, if Mr Hopkins assumes that the phrase was used only on such occasions when the inscriptions were important enough to merit red-smearing, yet for some reason or other the smearing was given up or stopped short at a certain part of the inscription, then the corollary would be that wherever this phrase appears there must be either (1) long and important inscriptions not smeared with red, or (2) long and important inscriptions partly smeared with red; and, most important of all (3), the phrase itself should never be smeared with red.

This corollary is really the crucial test of his theory. Let us examine these points one by one.

1. A general perusal of the source books in this field shows that the phrase in most cases occurs on bones or shells on which very little or no inscription is found. Take, for instance, Jung's

1) Since this phrase only occurs on bones or shells from the First Period, it must be admitted that only about a quarter of the total number of these bones and shells in the above mentioned books and collections can be taken into account. Accurate statistics of the bones and shells belonging to the different Periods is still impossible, but I can say that those of the Second, Third, or Fourth Period are considerably less than those of the First or Fifth Period.

book again. There are altogether eight bones and twelve shells ¹⁾ each of which is inscribed in one or two places with this phrase. Of the twenty bones and shells, eleven ²⁾ are inscribed with nothing but this phrase; three ³⁾ are inscribed with this phrase and the marginal notes: 'highly auspicious' and 'less auspicious', but nothing else; four ⁴⁾ are inscribed with nothing but this phrase on the obverse side of each of them and a few characters on the reverse side; one (no. 156) is inscribed with this phrase and the marginal note 'highly auspicious' on the obverse side and nine hardly legible characters on the reverse side. Only number 5 is inscribed with a few short inscriptions, the usual marginal notes and this phrase. Moreover, on two bones (nos. 155, 156) the same phrase is inscribed in two places. Why this repeated inscription of "not again reddened" where there is no main inscription at all to be "reddened"?

2. There has not been found any bone or shell inscribed with this phrase and containing a main inscription of any length which is partly smeared with red. Nor is there any instance, apart from no. 587 in Jung's book, in which the inscription is partly red-smeared. Since red-smearing is exclusively applied to the obverse side of the bone or shell, there might be bones or shells inscribed on both sides and red is smeared on the obverse sides only. But if Mr Hopkins' reading "not again reddened" is to be adopted for such cases, the phrase should certainly be inscribed on the reverse side, i.e. the non-smeared side. Yet not a single instance of this phrase has ever been found on the reverse side of any bone or shell.

3. There are two bones in the British Museum Collection (nos.

1) *Loc. cit.* I. 4a, no. 5; I. 18b-19a, nos. 154-160; I. 39b-40a, nos. 566-577.

2) Nos. 157, 159, 160, 566, 567, 570-572, 574, 575, 677.

3) Nos. 154, 155, 158.

4) Nos. 568, 569, 573, 576.

1570, 1638) on which this phrase is found in three places. No. 1570 is twice inscribed with this phrase and four numerals but nothing else; no. 1638, now broken in two parts, is inscribed with this phrase in small characters and two important main inscriptions in large characters on the obverse side, and some equally important messages on the reverse side. The interesting point about these two bones is that all the inscriptions, the phrase in question included, on no. 1570 and on the obverse side of no. 1638 are smeared with red¹⁾. This evidence categorically and conclusively overthrows Mr Hopkins' theory that the phrase in question should be read *pu tsai chu*, meaning, "not again reddened". So, after all, the pictograph of the little animal is *min*, frog, a homophone for *min*, crack, or to crack, not *chu*, a spider, a homophone for *chu*, red, or to redden. Mr T'ang's decipherment of the whole phrase remains correct.

From the foregoing it is clear that the study of the marginal notes on the oracle bones lies rather more in the detailed investigations of the physical conditions of the bones and the verification of the decipherment of the inscription by such investigations than in bold assumptions, no matter how ingenious and attractive they may appear to be. Viewed in this light, Mr T'ang's reading is right. Yet when he unreservedly accepts Chêng Hsüan's gloss on *mo* in the *Li Chi* that it means both the main and the branch cracks and thus gratuitously identifies *min* with *mo*, he not only ignores one important material factor, i.e. the difference between the main and the branch cracks on the bone, but also makes little sense of his own excellent reading of the character *tsai*, again. (There is, therefore, some reason for Mr Hopkins to doubt the identifying of *mo*

1) For those readers who have no access to the British Museum Collection, cf. *Couling-Chalfant* pp. 83, 101.

with *min*. Unfortunately the argument he puts forth is untrustworthy). The vertical main crack, which exactly corresponds to the long and deep bed of the gradually narrowing groove in the olive-shaped hole on the reverse side of the bone, could appear on the surface only once when heating was applied to its back. But the continuing heating sometimes caused more than one branch-crack branching out from the main crack. This can still be seen on the bones. Some good examples of this second, and sometimes third, branch crack are to be found on the bones in the British Museum Collection. On no. 1731 (Fig. 3) there are three instances of a second branch crack; on no. 1739 (Fig. 4) there are two instances of a second branch crack and one instance of a third branch crack¹⁾. On the other hand, there has never been found, nor, obviously, could there be, more than one verticle main crack-mark on the obverse side of the heated hole; for even though it could crack a second time, the second crack would become embodied in the first one and consequently no separate crack marks could be observed, or 'examined', by the 'Recorder', as Chêng Hsüan puts it; so that if *min* could mean *mo* (the main crack)²⁾, the phrase 'It would not again crack' would make little sense. But if *min* means definitely only the branch crack or cracks, it would make excellent sense. Thus Chêng Hsüan's equivocal gloss in the *Li Chi* is not to be followed, while his clear-cut statement in the *Chou Li* remains valid³⁾.

The study of the oracle bone inscriptions can contribute to correcting some of the commentaries on Confucian classics by the most venerable Han authorities, and here is but one of such cases.

1) Mr Chalfant's facsimile drawing of these two bones fails to show these second and third branch cracks. Cf. *Couling-Chalfant* pp. 113, 114.

2) I.e. *min* and *mo* could be used indiscriminately in archaic Chinese as Mr T'ang suggested. Cf. note 1), p. 61.

3) For detailed discussion on the difference between the main and the branch cracks see Sun I-jang's *Chou-li Cheng-i* (孫詒讓: 周禮正義) chüan 48, p. 6b, cols. 9-19, *Ssu-pu Pei-yao* Edi.