COLOUR TERMS IN SHANG ORACLE BONE INSCRIPTIONS

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Introduction

Most people are born with the natural ability to see and distinguish the colours of objects and things in everyday life, but to explain in words what colour is, is a more complicated matter. Scientists have generally accepted that, physically, colour is the visual aspect of electromagnetic radiant energy having a spectral composition ranging in wavelength from about 380 to about 720 nanometres. From the psychological point of view, it is a sensation produced on the eye and in the brain by rays of light when resolved by selective reflection. The problems raised by the study of colour use are thus interdisciplinary.\(^2\)

An investigation of colour may begin by looking at the linguistic expression of colour sensation, or more precisely, the colour terminology employed in different languages. However, the difficulty in studying colour in this way may lie in language itself. We know from the study of language that the colour sensation is independent of its linguistic expression, and that the naming of colour is often arbitrary. As Ludwig Wittgenstein wrote:

When we’re asked, ‘What do the words “red”, “blue”, “black”, “white”, mean?’ we can of course immediately point to things which have these colours, — but our ability to explain the meaning of these words goes no further! For the rest, we have either no idea at all of their use, or a very rough and to some extent false one.\(^3\)

Wittgenstein’s philosophical concern was the connection between language, or thought, and reality. He tried to use the study of colour to explain mind, that is, to arrive at the process through which language is able to function. To him, the problem seemed to be partially resolved by the ‘language-games’ rule which states that an underlying concept must be shared by both a speaker and a hearer on the communicative level.\(^4\)

Based on Wittgenstein’s ‘language-games’ and N. Chomsky’s ‘deep-structure’ theories, many scholars are now trying to reconstruct the underlying model used for colour naming in a particular language. Colour perception is

\(^1\) This paper was originally a section of my doctoral thesis ‘Colour symbolism in Late Shang China’ (University of London, 1993). During the writing of the thesis I received help from Professor S. Allan, Dr. P. Thompson, Professor Qiu Xigui and Professor Li Xue Qin, and two travel grants from the Central Research Fund, University of London and the Sino-British Fellowship Trust. I would like to express my gratitude to all of them.

\(^2\) For further discussion on this aspect, see H. Zollinger, ‘Human color vision: an interdisciplinary research problem’, *Palette*, 40, 1972, 1-7.


\(^4\) For further philosophical discussion on Wittgenstein’s theory of colour, see J. Westphal, *Colour: some philosophical problems from Wittgenstein* (Oxford, 1987).
not determined by colour terms; a colour term is a name given to a category of colour presentations which allow a colour to be named.5

Moreover, the study of colour inevitably involves the more complicated issue of colour symbolism. The practice of using colours to express and symbolize a person’s feelings and emotions is familiar. To a degree, the concept of colour reflects the physical and cultural experience, and in particular, the classification system which man imposes upon nature; as L. Lewis points out: ‘The desire to classify and categorize experience, and thus to render it manageable, seems to be present or implied in all schemes of symbolism.’6

In his study of the colour symbolism of the Ndembu culture in Zambia, Victor Turner, for example, argues that colour symbolism has (a) an intimate connection with the organic in its early stages; (b) colours represent a heightened physical experience which may transcend the person’s normal condition, and are therefore conceived as the sacred; (c) the physical experiences associated with colours are also experiences of social relationships; and (d) they also provide a kind of primordial classification of reality.7 Therefore, the study of symbolism needs to be based on human cognitive development as symbolism is not only a kind of conceptual representation but a process of cognitive categorization and symbolization.8

The present study focuses not on a further general anthropological discussion of colour symbolism, nor on its linguistic aspects, but on the colour terms identified from a body of ancient inscriptions from Late Shang China. This paper has two aims: (a) to examine the decipherment of colour terms in Shang oracle-bone inscriptions [hereafter: OBI], the aim being not only to identify the colour terms used in OBI but also to investigate the semantic and phonetic processes underlying their etymological development; and (b) to discuss the nature and development of the colour categorization underlying this colour terminology. By examining the colour terms in OBI and the categorization they represent, this study aims to throw a new light on our understanding of Chinese colour terminology and provide a basis from which further research on later periods may be conducted.

The Late Shang defines a dynastic period dating from approximately the fourteenth to the twelfth century B.C.9 It is now generally accepted that Anyang was the royal capital of the Late Shang Dynasty, probably from the reign of King Pan Geng to that of King Zhou, a period of about 270 years which is also known as the Anyang or Yinshu period.10 Geographically,

9 Absolute chronologies reconstructed by scholars vary enormously; for a brief guide, see D. Keightley, Sources of Shang history: the oracle-bone inscriptions of Bronze Age China (Berkeley and Los Angeles, 1978, paperback ed., 1985), 227–8.
10 According to the Zhushi jinian 竹書紀年: ‘From the time Pan Geng moved to Yin till the Zhou’s annihilation, there were altogether 273 years: during this period the Shang did not again move their capital.’ However, the time varies in the different versions of the book; see Fang Shiming 方詩銘 and Wang Xiuling 王修齡, ed. Guben zhushu jinian jicheng 古本竹書紀年輯證 (Shanghai, 1981), 30. The name ‘Yinshu’ (Ruins of Yin) came into use soon after the Zhou conquered the Shang,
the archaeological remains of the Late Shang capital are located on both north and south banks of the River Huan and include more than twenty sites. Although the functions of some of these sites are not clear, identified sites include the royal palace, royal tombs, temples, sacrificial ground, workshops, residential areas and cemeteries. From these sites, especially Xiaotun, a large number of cracked and inscribed animal bones have been unearthed, most of which are identified as divinatory records from the reigns of King Wu Ding to King Di Xin. These inscriptions cover a broad range of subjects: agriculture, military affairs, building work, hunting, weather and occasionally domestic matters. Because these subjects are mostly mentioned in a ritual divinatory context, Western scholars conventionally call them 'oracle-bone inscriptions'. Chinese scholars generally call them jiaguwen 甲骨文 or 'writings on shells and bones'.

For the classification and periodization of OBI, several factors have to be taken into account: (1) the Shang genealogy, (2) ritual titles of the ancestors, (3) diviner, (4) pit locations in which the inscribed bones were found, (5) foreign statelets, (6) known persons, such as officials, (7) divination topics, (8) grammar and word usage, (9) forms of characters and (10) style of calligraphy. Previous scholars have tried to attribute the inscriptions to the different royal reigns which are usually divided into five periods:

Period I = King Wu Ding 武丁
Period II = King Zu Geng 祖庚, King Zu Jia 祖甲
Period III = King Lin Xin 康辛, King Kang Ding 康丁
Period IV = King Wu Yi 武乙, King Wen King 文丁
Period V = King Di Yi 帝乙, King Di Xin 帝辛

Of all the criteria mentioned, one of the most convenient for dating purposes is that of the names of the diviners found in the inscriptions. The diviners are interrelated and can therefore be divided into groups and attributed to the different reigns. In recent years, a new theory of classification and

and it is still conventional to use this name today. For an introduction to the place, see Dong Zuobin 董作賓, 'Yinxu yanke 設盧延年', in Zhongyang yanjiuyan lishi yuyan yanjiusuo jikan 中央研究院歷史語言研究所集刊  (Bulletin of the Institute of History and Philology, Academia Sinica, ab. BIHP), no. 2, 1930, 224-40. (Repr. in Dong Zuobin xueshu lunzhu 董作賓學術論著, Taibei, 1962, 199-215.)


12 The inscriptions on the 'dragon bones' first began to attract scholarly attention in about 1899, nearly 100 years ago, with the first collection of the bone inscriptions Tikeyan cang gui 铁溪藏龟 compiled and published by Liu Er 劉鹗 (1850–1909) in 1903. Within two years, Sun Yirang 孫诒讓 (1848–1908), an excellent scholar of the Chinese classics and ancient inscriptions, had written the first book on the decipherment of the inscriptions Qiwentu 契文補例. Although Sun's decipherment had many mistakes, his basic method became the starting-point for the study of oracle bone inscriptions by all later scholars. For almost a decade in the 1920s, before the scientific excavations at Yinxu started, Luo Zhenyu 羅振玉 (1868–1940) and Wang Guowei 王國維 (1877–1927) made remarkable progress in both the publishing and research of oracle bone inscriptions. Due to their efforts, the inscriptions became one of the most important sources of Shang history. For further information on the history of oracle bones studies, see Wang Xuyin 王宇信, Jiaguwen tonglun 甲骨文通論 (Beijing, 1989), 320-67.
periodization has been proposed, dividing the inscriptions into two main diviner schools and numerous subgroups. The key to understanding OBI and the Shang divination system lies in the relationship and development of the inscriptions of the various groups. The present study has adopted the new method and the examples cited from OBI are usually referred to by their diviner group rather than by the Five Periods.\(^{13}\)

There are some difficulties in interpreting OBI. Although the pictorial element in the inscriptions on shells and bones is unmistakable, the Shang script is a writing system already in its maturity and the direct ancestor of modern Chinese writing. Traditionally, the Chinese writing system is explained according to the *liushu* 六書 or ‘Six Principles of Writing’: the *xiangxing* 象形 (‘imitating-forms’), *zhishi* 指事 (‘pointing-things’) and *huiyi* 會意 (‘joining-meanings’) are basically word-writing, derived from depicting or indicating things. The forms of characters correspond to the drawing of objects and, more importantly, the meanings of characters are suggested by their graphic forms. The *jiacie* 既借 is based on a rebus principle: an existing character is borrowed to represent another word purely because they may share the same or a similar sound. It is difficult to explain the *zhuanzhu* 轉注 principle, but essentially it meant extending a word-family along both semantic and phonetic tracks, whereby new words could share a relationship with old ones.

At a very early stage, the Chinese script began to develop in a specific direction: frequent use came to be made of the principle of *xingsheng* 形聲 (also known as *xiangsheng* 象聲 or *xiesheng* 講聲), whereby a character usually comprises two elements, one indicating the meaning and the other the sound. The *xingsheng* characters retain the element of word-writing and combine it with rebus writing. This occurs in four ways: (a) by adding phonetic signs to ideographs; (b) by changing a part of the original ideograph into a phonetic element; (c) by adding semantic elements or radicals to those which were used as phonetic borrowing; and (d) by creating a new semantic-phonetic compound from an old one by replacing its elements.\(^{14}\) The *xingsheng* principle gradually became dominant, and the majority of Chinese characters are formed in this way.

In the Chinese writing system, symbols and signs representing a semantic classifier or phonetic indicator may have become stylized and reduced to a certain degree, but not enough to qualify as an alphabet. The reasons for this must be complex. The racial and geographical diversity of Chinese society may have hindered any further codification of the language based purely on a phonetic system; and, linguistically speaking, the monosyllabic feature of Chinese made it much easier to use a ‘meaning-plus-sound’ writing system.

The inscriptions on Shang oracle bones have all the basic features mentioned above.\(^{15}\) However, as an early form, they may also have some distinguishing features not found in the modern writing system. By comparison to the modern Chinese script, the relationship between meaning and graphic structure of Shang inscriptions presents some even more complex problems.

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15 See Li Xiaoding 李孝定, ‘Cong liushu de guandian kan jiagwenzzi 從六書的觀點看甲骨文’, *Nanyang daxue xuebao* 南洋大學學報, no. 2, 1968, 529–60. A table given by Li counts a total of 1226 oracle bone graphs, of which 27% are radical-phonetic compounds, 11% are loanwords, 23% are pictographs, 32% are compound ideographs, 2% are abstract symbols, and 6% are difficult to classify.
First, although the pictorial element in the Shang script is unmistakable, it has not always been noticed that many Shang pictographs or ideographs in fact bear a phonetic element. For example, the character qiang 羊 in the Shang inscriptions depicts a man with a sheep element on his head. This represents an ancient custom of a pastoral tribal people which involved the wearing of sheep skins, but the sheep-element here may also act as the sign indicating the sound of the character.\(^{16}\) In the Shang writing system, phonetic elements, as well as semantic elements, have a key function in the creation and application of characters. For this reason, it is apparent that a basic knowledge of Chinese phonology is very necessary before one can successfully decipher and interpret Shang inscriptions.

Furthermore, by looking at a large number of phonetic-compound characters in the Shang inscriptions, which themselves often derived from pictographs with phonetics, further clues can be found to explicate the interaction among forms, sounds and meanings in the writing system. For instance, the character deng 登 is usually written in OBI as consisting of the elements for food vessel and hands, meaning ‘to offer’; but, when the offering is not food but wine, the element for food vessel is then replaced by an element of a wine vessel; in this case these graphs could originally be read as two words.\(^{17}\)

In most cases, bone characters are read as single syllables; this is because the characters are monosyllabic in modern Chinese. However, this assumption cannot always be successfully applied to Shang inscriptions. The most particular problem is that in Shang inscriptions there exists a special type of character, which Chinese scholars call hewen 合文 or ‘joined characters’. Most hewen are special names, numbers, months, dates and common phrases for ritual offerings; they usually consist of two or more characters joined as though they were a single character, yet which are also characters in their own right. This same principle of hewen is found, for example, in the word for ‘multi-coloured ox’, where it consists of the element of wu 牛 and element of niu 牛, written as 物 or 牛. It is a later xingsheng character, but originally it would have been read as a polysyllabic word.

Empirical research on colour terminology from different parts of the world shows that colour categorization is indeed an evolutionary process. The research project on colour terminology conducted by Brent Berlin and Paul Kay in Berkeley in 1967 is probably the most comprehensive study in this field so far.\(^{18}\) They worked on as many as 98 languages or dialects, including Chinese, and drew some interesting conclusions on the general development of colour terms.

Berlin and Kay argued that (a) there exist universally 11 basic perceptual colour categories for humans; (b) in the history of a given language, the encoding of perceptual categories into basic colour terms follows a fixed partial order; and (c) the overall temporal order is properly considered an evolutionary one; colour lexicons with fewer terms tend to occur in association with

\(^{16}\) Yu Xingwu 于省吾. Jiagu wenzi shilin 甲骨文字譯林 (Beijing, 1979), 435–43. [This is a revised version of Shuangjianchi Yinqi pianzi 雙劍譯殷契譯梓, 3 vols., Beijing, 1940–43.]

\(^{17}\) See Qiu Xigu, 漢字形成問題的初步探索, Hanzhi xingcheng wenti de chubu tan suo Zhongguo yuwen 中國語文, 1978, no. 3, 168–9.

\(^{18}\) B. Berlin and P. Kay, Basic color terms: their universality and evolution (Berkeley, 1969). In their appendix, they have also provided an outline of previous studies.
relatively simple cultures and simple technologies, while colour lexicons with many terms tend to occur in association with complex cultures and complex technologies.\textsuperscript{19}

An examination of the colour terms in OBI against this universal theory shows that although many basic Shang colour terms are still used in later times, the modern perception of the colour defined by the colour terms is not entirely the same as it was for the Shang people. Therefore, a hypothetical reconstruction of the Shang colour categorization is necessary.

Colour symbolism played an important role in Chinese intellectual development. If we look at the context in which Shang colour terms were used, then it is clear that colour was part of the Shang ritual system. Shang diviners made specific divinatory charges asking which colour should be chosen for sacrifices to certain ancestors and spirits; with very few exceptions, the use of colour always relates to the specific context and purpose. For instance, white, red and multi-coloured animals were frequently sacrificed in the ancestral cult: black sheep were used in the rain-making ritual; yellow animals were particularly addressed to the spirits of the directions, or earthly gods. The presence of colour in various Shang rituals reveals that colour was not an accidental phenomenon, but acted as an important symbol.

Shang colour symbolism also influenced the later systems such as the \textit{Wuxingshuo} 行説 or ‘Fives Phases’ cosmological theory, in which the development of colour categorization and symbolism can be traced. However, as this study is primarily concerned with the colour terms found in OBI, the question of colour symbolism will not be covered in the following discussion.\textsuperscript{20}

\textit{The decipherment of the colour terms in OBI}

\textbf{Chi 赤}

There are a number of words referring to the colour red in Chinese, yet \textit{chi} is probably the character most commonly found in classical Chinese literature.\textsuperscript{21} The character is written in OBI as: \begin{tabular}{c}
\text{\ding{121}} \text{\ding{122}} \text{\ding{123}} \text{\ding{124}} \text{\ding{125}}
\end{tabular}.\textsuperscript{22} It consists of two pictorial elements: a frontal view of a human figure and a second element representing fire.

In later Zhou bronze inscriptions this character is more or less identical to its earlier form in Shang inscriptions, consisting of the same elements, with moderately stylized strokes;\textsuperscript{23}

\begin{tabular}{c}
\text{\ding{121}} \text{\ding{122}} \text{\ding{123}} \text{\ding{124}}
\end{tabular}

\textsuperscript{19} Ibid., esp. 134–51.

\textsuperscript{20} In my thesis I examined the inscriptions containing evidence of the use of colour in Shang ritual and discussed the problems in interpreting the colour symbolism in relation to the later Wuxing theory; cf. T. Wang, ‘Colour symbolism’, in particular pp. 135–265.

\textsuperscript{21} Because of a semantic shift, this word usually means ‘naked’ in Modern Chinese (cf. \textit{Xiandai han yu cidian} 現代漢語詞典, Beijing, 1988, 145), but it also remains a colour term throughout the classical ages to the present.

\textsuperscript{22} cf. \textit{Jiangwenbian} 甲骨文編 (ed. Sun Haibo 孫海波, Beijing, 1965), 1238.

\textsuperscript{23} cf. \textit{Jinwenbian} 金文編 (ed. Rong Geng 容庚, Zhang Zhenlin 張振林 and Ma Guoquan 馬國權, Beijing, 1985), 1664.
As the writing system developed, the two elements were later stylized as *da 大 'big' and *huo 火 'fire', both standing as independent characters.

It was not a difficult task for Luo Zhenyu to decipher this character,24 for the graphic form of the character *chi in ancient inscriptions is almost identical to the xiaoizhuan 小篆 or ‘Small Seal Script’ form that is found in the Shuowen jiezi 詳說解字, the etymological dictionary compiled by Xu Shen 許慎 (c. A.D. 58–148) in the second century. It explains: ‘*chi, the colour of the south; derived from the elements “big” and “fire”.’25 Following the popular trend of the Wuxing 五行 or Five Phases Theory at that time, Xu Shen defined the meaning of the character as ‘the colour of the south’ by relating it to a cardinal direction; and identified the character *chi as a huiyizi, that is, a character in which the combination of the graphic elements alludes to its semantic meaning.

Xu Shen’s definition may, however, mislead us into overlooking any possibility of the existence of a phonetic relationship in its development. Several later variations of the character provide us with clues to its etymological association with other characters.

According to the traditional rhyme classification, the character *chi has the *chang 昌 initial, *duo 都 final, and so it is probably reconstructed as <*khijak in Old Chinese.26 In several other xingsheng characters, the *chi element is employed as the phonetic sign; for example: *he 赫 <*hrak (‘fire-red’, ‘angry’); *she 赤 <*skhijak (‘let off’, ‘pardon’). These two characters containing the same element show a similar initial and final; the *he is also semantically related to the *chi.

Two other characters may also bear witness to this phonetic relationship: *xia 色 <*grag; and *zhe 赤 <*tjag. They both mean ‘red colour’, and the *chi-element is here employed as the semantic sign.27 However, phonologically, each of these two characters has a dental or velar initial and their finals are very close to the character *chi. These words may originally have derived from the same Tibeto-Burman root.28

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25 Shuowen jiezi (Beijing, 1963, hereafter: Shuowen), 212.

26 Several scholarly reconstructed systems of Old Chinese are available now, and among them, the system of Li Fankuei (Li Fanggui 李方桂) is most widely accepted for its internal coherence. Li’s system will be used throughout this study unless otherwise indicated. For Li’s theory of Old Chinese, see ‘Shangguyin yanjiu 上古音研究’, Qinghua xuebao 清華學報, no. 9, 1–2, 1971, 1–61; and ‘Jige shanggu shengmu wenti 幾個上古聲母問題’, Zongtong Jianggong shishi jinian lunwenji 總論董公逝世紀念論文集 (Taipei, 1976), 1143–50; and ‘Archaic Chinese’, in Origins of Chinese civilization (ed. D. Keightley. Berkeley, 1983), 393–408. The traditional method, that is, using Chinese characters to indicate the initial and final categories, will be used in this paper. For a brief introduction to the history of Chinese phonology, see Wang Li 王力. Hanyu yuyinshi 漢語語音史 (Beijing, 1985), esp. 17–81.

27 Shuowen, 213.

28 See P. Benedict, Sino-Tibetan: a conspectus (ed. by J. Matisoff, Cambridge, 1972), who has reconstructed the word ‘red’ in proto-Tibeto-Burman as *tsyak (no. 184, 46); see also Zhou Fagao’s 周法高 review article in Zhongguo yinyunxue lunwen ji 中國音韻學論文集 (Hong Kong, 1984), esp. Appendix 1, 292, where Zhou provides his own reconstruction of Old Chinese for comparison.
Let us now look at the occurrence and usage of the character chi in OBI. In several inscriptions, it is used attributively as a word modifying the hair colour of animals; namely, that of horses:

**Heji**: 28195

(a) 乙未卜，貞：左駄，其弼不爾
yiwei/crack/Xian/divine/old/X(?)/left/chariot-horse/qi/good/not/wild
‘Cracking made on yiwei, Xian, divining: Old X the left chariot horse will be tame, not wild.’

(b) 乙未卜，貞：暴入壌，其弼不爾
yiwei/crack/Xian/divine/old/chariot-horse/qi/good/not/wild
‘Cracking made on yiwei, Xian, divining: Old X the left chariot horse will be tame, not wild.’

(c) 乙未卜，貞：競入壌，其弼不爾
yiwei/crack/Xian/divine/old/chariot-horse/qi/good/not/wild
‘Cracking made on yiwei, Xian, divining: Old X the left chariot horse will be tame, not wild.’

(d) 乙未卜，貞：干入壌＆，其弼
yiwei/crack/Xian/divine/old/chariot-horse/qi/good/not/wild
‘Cracking made on yiwei, Xian, divining: Old X the left chariot horse will be tame, not wild.’

(e) 乙未卜，貞：目貫入赤駄，其弼不爾，吉
yiwei/crack/Xian/divine/ShiGu/enter/red/chariot-horse/qi/good/not/wild
‘Cracking made on yiwei, Xian, divining: Officer Gu sends in a red chariot horse, it will be tame, not wild. Auspicious.’

**Heji**: 28196

(a) 乙未卜…貞：左…其弼不（爾），不用
yiwei/crack/…/divine/left/…/qi/good/not/use
‘Cracking made on yiwei, …divining: The left… it will be tame, not wild. Not used.’

(b) 乙未卜，貞：在沼田，黃，左赤馬，其弼…
yiwei/crack/Xian/divine/at/Lin/hunt/Huang/right/chariot-horse/qi/good/
‘Cracking made on yiwei, Xian, divining: Hunting at Lin, Huang, the red horse on the right side will be tame…’

(c) 乙未卜，貞：辰入駄，其弼
yiwei/crack/Xian/divine/Zhen/enter/chariot-horse/qi/good
‘Cracking made on yiwei, Xian, divining: Zhen sends in a chariot horse, it will be tame.’

**Heji**: 29418

(a) 癸丑…貞：右…馬
guichou/…/divine/right/…/horse/
‘…guichou (day 50)…divining: The right… horse…’

29 The meanings of the phrase *qi li bu er* 其弼不爾 in the inscription are not yet entirely clear, and here Yu Xingwu’s interpretation has been followed and a tentative translation is provided; see Yu Xingwu, *Shilin*, 328-9.

30 It is written as a hewen 甲，with an indication of the sex of the horse.

31 This character is found in the *Shijing* 詩經 (Maoshi 毛詩: 298), where Mao Heng’s (c. first century B.C.) commentary says that it means ‘a sturdy-looking horse`; *Maoshi zhengyi 毛詩正義* juan 20.1 (*Shisanjing zhushu* 十三經注疏); Beijing, 1980 [hereafter SSJZS], 610).
(b) 白丑卜，貞，貞：左赤馬，其剽不爾

guichou/crack/Xian/divine/left/chi-red/horse/qi/good/not/wild

‘Cracking made on guichou. Xian divining: The red horse on the left side (of chariot) will be tame, not wild.’

These inscriptions belong to the He-group, which probably dates from the period between the reigns of King Lin Xin and Kang Ding, after Zu Geng and Zu Jia in the Shang royal chronology. They are related and are probably from the same divination set; that is, they were divined by the same diviner on the same topic at the same time.

In these inscriptions, the phrase *chi ma* 赤馬 and *chi bi* 赤駿 undoubtedly refers to ‘red horses’. The colour of the horses seems to have attracted the special attention of the Shang kings.32 The Shang king and his diviner wanted to ensure that the red horses sent in to drive chariots were auspicious. But since the examples do not indicate that the red horses were used as sacrifice, it is therefore difficult to judge what significance a red horse might have had in Shang ritual.33

Apart from denoting the colour of horses, the appearance of the character *chi* in the rest of OBI is rare. Other inscriptions are, unfortunately, unclear or too fragmentary to be put forward as hard evidence. I found two examples where the character *chi* may or may not refer to colour:

**Heji**: 10198.f

戊午卜，效，貞：我狩獲，擒。之日狩，允擒，獲虎一，麋洲…百六十四，麋百五十九，麋赤牝三，赤小…四…

wuwu/crack/Que/divine/we/hunt/X/capture/that/day/hunt/indeed/capture/gain/tiger/one/deer/forty/…/fox/or/fox(wolf)/hundred/sixty-four/river-deer/hundred/fifty-nine/X/chi/you34/you/three/chi/small/…/four/…

‘Cracking made on *wuwu* (day 55), Que, divining: “We are hunting at X and will make a capture”. That day the hunt took place, and indeed captured many animals, including one tiger, forty deer… one hundred and sixty four foxes (or wolves), one hundred and fifty nine river-deer, *X* three red you (?) and four small red’

This inscription is from the Bin-group of the reign of King Wu Ding. It records a hunting expedition and provides a detailed list of captured animals. Here, whether the character *chi* can be read as the colour term ‘red’ is uncertain,

32 In Shang inscriptions, there are a number of words referring to the colour of horses’ coats, such as *bai mai* 白馬 (white horses), *li ma* 驢馬 (black horses) and *bo ma* 駶馬 (striped horses); for a further discussion, see Wang Yuxin 王宇信, ‘Shangdai de ma he yangmaye 軍代的馬和養馬業’, Zhongguoshi yanjiu 中國史研究, 1980, no. 1, 99–108. A later reference can also be found in the *Shijing* (Maoshi: 298), where we read that in Zhou royal horse farms there were many horses of various colours; cf. SSJZS, 609–10.

33 A reference found in the *Shanhaijing*. *Dahuang nanjing 山海經・大荒南經* says that a ‘red horse’ lived in a mythical mountain; cf. Yuan Ke 袁珂, *Shanhaijing jiao zhu 山海經校注* (Shanghai, 1980), 384.

34 This bone graph has multi-functions. In many inscriptions, it is transcribed as you 有 (‘to have’), but in others it is broadly understood as *you* 有 to sacrifice’, ‘to offer’. For further discussions of the character, see Ji Shi, 2259–63, and D. Nivison, ‘The pronominal use of the verb *yu* (GHU): 有’. *Early China*, no. 3, 1977, 1–17; and K. Takashima, ‘Decipherment of the word *yu* 有 in the Shang oracle bone inscriptions and in pre-classical Chinese’, *Early China*, no. 4, 1980, 19–29.
and scholars’ renderings vary.\(^{35}\) Judging by its graphic form, the character 赤 before the chi may possibly refer to a hunting method such as using nets to capture animals; in which case, it is possible that the character chi refers to you you which is likely to be the name of an animal.

Another inscription is from the Li-group, in which the function of the character chi is clearer; it stands for a personal name rather than a colour:

Heji: 33003

甲寅，貞：…射比赤…

jiayin/divine/…/archer/follow/Chi/…

‘On jiayin day (51), divining:… Chi is followed by archers…’

It is not uncommon in Shang inscriptions for characters representing colour terms to be used as proper names of people or places.\(^{36}\) The reason for this may be purely a phonetic borrowing. However, it may also have something to do with a primitive classification system. In late texts, tribal names such as Chi yi 赤夷 (‘the Red Yi’), Xuan Yi 玄夷 (‘the Black Yi’), Huang Yi 黃夷 (‘the Yellow Yi’) and Bai Yi 白夷 (‘the White Yi’) can be read.\(^{37}\)

**Xing 行**

Although we have seen that the character chi is used as the colour term for ‘red’, there may be more than one word referring to ‘red’ in Shang inscriptions. Another bone character appears in Shang inscriptions as: 赤.\(^{38}\) Its graphic structure consists of two elements: the upper representing a sheep (yang 羊), the lower an ox (niu 牛). Luo Zhenyu first deciphered this bone graph as the original form or chuwen 初文 of the later character xing 行, also written 赤; and Luo pointed out that in Shang inscriptions the character xing is understood as referring to red-dish oxen, one of the common sacrificial animals in Shang rituals. Luo’s decipherment was based on sound textual evidence and has been universally accepted.\(^{39}\)

In the Zhou rituals, reddish animals were one of the most preferred sacrificial animals. In the Shijing (Maoshi: 300) we read: xiang yi xing xi 享以骍犡 and bai mu xing gang 白牡骍刚; and most commentators agree that the phrases such as xing xi and xing gang are better understood as referring to ‘red bulls’.\(^{40}\)

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\(^{35}\) For example, Li Pu 李圃 discussed this inscription and claimed that chi is a method of hunting by setting fire to the forest to drive animals out; cf. Li, Jiaaguwen xuan zhu 甲骨文選注 (Shanghai, 1989), 188–94.

\(^{36}\) For a further discussion of this aspect, see Zhang Bingquan 張丙權, ‘Jiaaguwen zongjiao rendi tongming kao 甲骨文中所見人地同名考’, Qingzhu Li Ji xiasheng qi shi sui lunwenji 慶祝李濟先生七十歲論文集, vol. 2, (Taipei, 1967), 687–776. Chi is also to be seen in early Zhou bronze inscriptions as a personal name; see Xue zong Chu fu 薛仲赤簠; cf. Ma Chengyuan 馬承源 (ed. in chief), Shang Zhou qingtongqi mingwenzuan商周青铜器銘文選 (Beijing, 1986–, hereafter Mingwenzuan), no. 823.

\(^{37}\) These four names are mentioned in The Bamboo Annals, which record that the Nine Yi 九夷 tribes came to the Xia dynasty for worship; cf. Fang’s and Wang’s Zhushu jinian, 9.

\(^{38}\) Jiaaguwenbian: 1155.

\(^{39}\) Jishi, 3047.

\(^{40}\) Maoshi zhengyi, juan. 22. (SSJZS, 615). However, in the Zhouli 周禮, a different usage ‘xing gang yong niu 麒髥用牛’ is found, where the phrase xing gang probably refers not to animals but to a kind of reddish hard soil; cf. Sun Yirang, Zhouli zhengyi 周禮正義, juan 30 (Beijing, 1987), 1184, where the xing, as Sun pointed out, is perhaps as a loan character for the original character with the ‘earth’ radical.
In most pre-Han lexicography, *xing* only means ‘red’; it is used as a noun or an adjective, referring to any kind of reddish animal of no matter what species. However, the understanding of the character sometimes varies slightly. Also in the *Shijing* (*Maoshi*: 297), the phrase *you xing you ji 有幹有騮* can be read. Of this Mao’s commentary says: ‘red-yellow is called *xing*,’ and Kong Yingda 孔穎達 (574–648 A.D.), a commentator of the Tang dynasty, explains: ‘the so-called red-yellow is a red colour, but slightly yellowish; this colour is bright and clear’.\(^{41}\) They seem to suggest that the *xing*-colour is a bright red-yellow, or orange colour; and the *xing niu* probably refers to a russet ox.

Some examples from OBI are:

*Heji*: 29514

![Image](118x641)

‘We should sacrifice red-yellow oxen… Auspicious.’

*Heji*: 36003

![Image](151x641)

‘Cracking made on *bingwu* (day 43), divining: In performing the *beng-rite* to Grandfather Kang Ding, we shall perhaps sacrifice penned oxen and red-yellow oxen.’

Sometimes, the *xing*-red-yellow ox was used in contrast to the *wu*-multi-coloured or *hei*-black ox:

*Tunnan*: 2710

(a) ![Image](179x641)

‘Unto Ancestress Xin we will perform the slaughtering sacrifice, it should be a red-yellow ox.’

(b) ![Image](189x641)

‘It should be a *wu*-multi-coloured ox.’

*Heji*: 29508

(a) ![Image](217x641)

‘We should sacrifice a black ox.’

(b) ![Image](249x641)

However, the phonetic interaction and the structure of this bone character remains unexplained. It is not known why the combination of the sheep and ox elements implied the meaning of ‘red oxen’. A new interpretation may clarify this point, namely, that the bone graph is probably an original *hewen*, read as two independent words rather than one.\(^{42}\)

This hypothesis is supported by evidence to be found in OBI. Two examples are found in the Li-group:

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\(^{41}\) *Maoshi* zhengyi, juan 20.1; (SSJZS, 609–10).

\(^{42}\) Qiu Xigui has noted the possibility that *xing* might be read as a *hewen* in OBI; cf. Qiu Xigui, *Guwenzi lunji 古文字論集* (Beijing, 1992), 84.
Heji: 27122
...登蒸牛，大乙白牛，玄玉...
...offer/X/ox/Da Yi/white/ox/hui/first/...
‘...make an offering of x-oxen to Da Yi, and white oxen; it should be the first...’

Heji: 29512
丁丑卜：王其予溳牛于…五牢
dingchou/crack/king/qi/sheng-ascend43/X/ox/to/.../five/penned-ox44
‘Cracking made on dingchou (day 14): The king will perhaps perform the ascending sacrifice of x-oxen to... five penned oxen.’

Here, the phrase 溳牛 is probably the original form of xing 烏 ‘red-yellow oxen’,
where the first character is understood as an adjective rather than a noun.46 Therefore, this hewen might originally have been read as two syllables
xing-niu. Later, when it appears in the Wuming and Huang groups, it is
simplified, and is written as closely as possible to the character niu, as a hewen,
in order to avoid confusion with ‘ox’ and ‘sheep’.47

Is there any phonetic basis for such a graphic transformation? The character xing belongs to the xin 心 initial geng 跟 final categories; yang is yu 余
initial and yang 阳 final; both of the initials are close but, in Li Fangkuei’s
system, their reconstructed vowels are rather different: xing 烏 <*hrjing; yang
羊 <*rjiang. However, according to Pulleyblank’s reconstruction these two
categories are very similar: geng final <*-an; yang final <*-ang;48 and we know
from many xiesheng characters and from rhymed sets, particularly of the Shi-
ing, that the geng and yang final categories are likely to be interrelated in Old
Chinese. So, phonologically, the sheep-element was probably employed at an
early stage, that is, in Shang inscriptions, as the phonetic in the combination of
the joined character xing, indicating the sound.49

In Zhou inscriptions, xing 烏 remained in its original form and was continu-
ously used as a colour term, predictively of ritual animals. On the Da gui 大簋,
a bronze food vessel of the Western Zhou period, we read:

43 This graph is understood as sheng 升 (‘to ascend’), which probably refers to a sort of ritual;
cf. Jishi, 4019–110. However, in his article ‘Shi jiaguwen li de “jiu” 甲骨文里的灸’ (Zhong-
guo yuwen, 1985, no. 5, 384-8), Zhan Yinxin 詹錫鑫 argues that the character should be read as jiu 灸,
meaning ‘to brand’.
44 The decipherments of lao 牝 (with the ox-element, or with the sheep-element as 萬) are very
different. The traditional explanation is that the former is tai lao 太牢 ‘the combination of an ox,
a sheep and a pig’; and the latter is shao lao 少牢 ‘the combination of a sheep and a pig’. But, the
majority of scholars now agree that they should be understood as ‘penned oxen’ and ‘penned sheep’.
45 Xu Zhongshu 徐仲舒 (chief ed.), Jiaguwen zidian 甲骨文字典 (Chengdu, 1988) lists this
character as a variation of xing.
46 This character is also used as a place-name in oracle-bone inscriptions; for example, Heji: 1141.
47 There are sometimes exceptions; for example, Heji: 35986 is a very similar inscription to Heji:
36003 in which the ox-element and the sheep-element are, however, split up, as two independent
characters.
183–7, 202–3.
49 This word probably also had a TB root; in reconstructed proto-TB, ‘red, crimson’ is *kyeng;
cf. P. Benedict, Sino-Tibetan, no. 162, p. 45.; also see Zhou Fagao, Yinrnxue lunwenji, 1984, 293.
The king...rewarded (Da) with a penned red-yellow bull.\(^{50}\)

‘Xing gang’ here clearly refers to a kind of sacrificial animal, that is, red oxen, and the character xing seems to be an adjective. Another example is the document written on stone tablets of the Jin State of the Eastern Zhou period, found in present-day Houma, Shanxi Province, which contains the phrase xing xi 頂義, also referring to a red-yellow bull.\(^{51}\)

Sometimes xing is used in a slightly different context. On the Zhe Jian zhong 贞聾鐘, a bronze bell of the Eastern Zhou period, we read: ‘bu bo bu xing 不帛不兼; (they) are not white nor red’; here the character xing is an adjective used attributively of the colour of metals.\(^{52}\)

The bone character xing, however, later became a phonetic sign in semantic-phonetic compounds. There is no record of this form as an independent character in the Shuowen, but it is found as an element in combinations making up several other characters: (a) 騎; (b) 騎. These two characters are apparently typical xiesheng characters, and in both the xing-element is the phonetic sign.

However, this element probably acts as both the semantic and the phonetic sign; the meaning of (a) is ‘a kind of red hard soil’;\(^{53}\) (b) has the horn element, and Xu Shen gave the following explanation, ‘to use horns to facilitate lowering and raising’.\(^{54}\) This was based on Mao Heng’s commentary on Maoshi, 223, where it is found in the phrase ‘xing xing jiao gong 騎騎角弓’, and the commentary reads xing xing as a description of ox horns, ‘adjusted and convenient’.\(^{55}\) A similar usage is found from the Qin stone-drum inscriptions, where the character xing is written 騜; the xin-element indicates the sound, and the radical is changed into an ox element.\(^{56}\) This shows that the characters represent the same word, even though their forms are written differently.

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\(^{50}\) Mingwenxuan: 395.

\(^{51}\) Shanxi wenwu gongzuwei yuanhui 山西文物工作委員會, Houma mengshu 侯馬盟書 (Beijing, 1976), no. 17:1, where the phrase should be read as 騜儀.

\(^{52}\) Mingwenxuan: 534.

\(^{53}\) Shuowen, 286

\(^{54}\) ibid., 94.

\(^{55}\) Maoshi zhengyi, juan 15.1; (SSJZS. 490). In the Shuowen quotation of the Shijing, the character xing is still written in the old form as 騜. But in the received text of the Maoshi, the xing is written as 騜, where the old phonetic element has been replaced by the new one. In fact, although the 騜-element is employed as the phonetic, the phonetic value of the character xing is not the same as xin. They both share the same initial category, but xin belongs to the zhen 甄 final, and is reconstructed as ㅊhrjin. Phonologically, the zhen and geng 甄 final categories are close. Some evidence suggests that the change might have taken place during the Eastern Zhou period. Apart from the literary evidence in the Shijing and on the Qin stone drums, another piece of evidence has been found on a bronze jar of the Eastern Zhou period, the Cheng Xing hu 陳駟盡, where the character xing is written as 騜. It is noticeable here that the 騜-element has replaced the 騜-element as the phonetic sign. In this context, it is not entirely impossible that the phrase might be understood as an adjective describing the colour of the horns.

\(^{56}\) cf. Guo Moruo 郭沫若, ‘Shiguwen yanjiu 石鼓文研究’, Guo Moruo quanji — kaogubian 郭沫若全集 — 考古篇, vol. 6 (Beijing, 1982), 3–274; [first pub. Shanghai, 1939], in which a good rubbing of the inscription is provided; Guo’s transcription is on p. 59. For a further discussion of the inscription, see G. Mattos, The stone drums of Ch’in (Monumenta Serica Monograph Series, no. 19, 1988), 144–5.
Generally speaking, when the characters are semantic-phonetic compounds, their radicals refer to the semantic classification. Thus, when xīng is used to describe attributively a kind of reddish soil, the character should have the earth radical; with the horse element it should refer to a red horse; with the ox element it should refer to a red ox. But, in practice, there is not such a strict discrimination; throughout the early texts, the phonetic-compounds bearing the xīng-element appear to be interchangeable. It is used as a noun or an adjective referring to any red animal, no matter what species. This demonstrates that in the early stage there was flexibility in the application of characters and shows that the rebus principle was most important.

Bai 白

In OBI, the character bái is written as: ⥔ ⥓ ⥑.\(^{57}\) The identification of the character bái in Shang inscriptions is comparatively easy as the character has been constantly used as a colour term and there is less modification in its graphic development. All the same, its classification, be it as pictograph, ideograph or phonetic loanword, has caused much difficulty and controversy.

If we look at the explanation given in the Shuowen: ‘White is the colour of the West; all affairs and things that relate to Yin are white. (This character) is derived from the element of “enter” which is joined with “two”; two is a Yin number.’\(^{58}\) We find Xu Shen’s explanation for this character a little troubling, for it is based on the guwen form and provides a philosophical interpretation of the Ying-Yang theory. There is no good reason to believe that the original meaning of the Shang character is intended to carry a message for the Yin-Yang philosophers of a later period. The early graphic forms of the character in Shang and Zhou inscriptions, in fact, contradict such a description.

Several scholars argue further that bái is primarily a word for bo 魂 ‘soul’, which is the ‘spirit of Yin’ and means ‘emptiness’, and that from it derived the meaning of the colour white.\(^{59}\) This view is also largely based on speculation, mingled with Yin-Yang ideas which makes it even less convincing than Xu Shen’s.

Another theory is that the character bái was simply a pictograph of the sun. Wieger, for example, in his popular book, Chinese characters, described it as follows: ‘The sun that just appears. This meaning is represented by a small point (primitive) on the top of the sun. The dawn, when the eastern sky becomes white.’\(^{60}\) He argued that the character derives the meaning of ‘bright’ and ‘white’ from the image of the sun. The observation on which the theory is based, however, is flawed for no early examples exist to support such guesswork. In Shang and Zhou inscriptions ‘sun’ (rì 日) and ‘white (bái 白) are two different characters.

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\(^{57}\) Jiaqwenbian: 0984.

\(^{58}\) Shuowen, 160.


\(^{60}\) L. Wieger, Chinese characters: their origin, etymology, history, classification and signification. A thorough study from chinese documents (New York, 1965, first published in 1915), 223. This theory was based on the works of previous scholars, and evidence was found, as the sun and colour white seemed to be related in the early literature; see Zhu Junsheng 朱駿聲 (1788-1858), Shuowen tongxun dingsheng 讀文通訓定聲 (Beijing, 1984), 464–5; and Gulin, 4931–2, 4934–35.
With his first-hand epigraphical knowledge of early inscriptions, Guo Moruo offered another possible explanation of the graph. He argued that the form of the character depicts a thumb, in Chinese called 爨; and that the original meaning of the word is the ‘big brother’ in the family, or the ‘head’ of the communities. In later literature when this character is used as a noun meaning ‘brother’ or ‘head’, a graphic distinction is made by adding a radical to the character, making it a phonetic compound 伯. Although they have different pronunciations in modern-day Mandarin, it is the same reconstruction <*_brak in Old Chinese. Guo believed that when it was used as a colour term this was a loan character based on the phonetic rebus principle; 61 however, bai belongs to the bing 井 initial and the duo 釋 final; mu is the ming 明 initial and the zhi 之 final; and according to Li Fangkuei’s reconstruction, they are not very close: bai <*_brak, mu <*_mag(x) in Old Chinese. Recently, Zhao Cheng 趙誠 has argued that the character bai is an ‘abstract’ pictograph and that when used as the colour term it is purely a phonetic symbol, which he called a ‘yin benzi 音本字’ or ‘original phonetic character’. 62

In Shang inscriptions, bai <*_brak indeed acts as a phonetic element in several phonetic-compounds, including bo 爨 <*_brak, where bai was clearly employed as a phonetic element in a compound. 63 The number bai 百 <*_prak ‘one hundred’ also shares the same sound and form with bai; but whenever it is used as a number, a small distinction is consciously made in its graphic form, which is written as 🍓, 🍴 or 🍵. 64

If we look at the context in which the character bai appears in OBI, three different meanings of the character can be distinguished:

(a) Place-name, for example:

Heji: 33425
庚子卜：王往田于白
gengzi/crack/king/go/hunt/at/Bai
‘Cracking made on gengzi (day 37): The king is going hunting in Bai.’

(b) Official title, probably referring to heads of tribes. There are numerous examples where the character bo is attached to the name of a tribe or a person’s name, such as Bo Yin and Bo Bing; as such, it is possible that bai is used as bo 伯 which is used in later periods as an official title. For example:

Heji: 36509
甲…隹王征孟方伯…
jia…/wei/king/come/attack/Yufang/bo…
‘jia…the king will come to attack the Yufangbo…”

(c) Colour term, as an attributive adjective attached not only to animals but also men and grain; they are often ritual offerings in Shang ritual. As a colour term, the character bai appears frequently in OBI from all the diviners’ groups and periods.

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61 Guo Moruo, Jinwen congkao 金文叢考 (Beijing, 1956), 181–2.
63 The character means ‘white silk’ in later literature, but it refers to a place-name in Shang inscriptions; for example, see Heji: 36842.
64 cf. Jiaguwenbian: 0485.
There are a few inscriptions of the Shi-group mentioning the colour of ritual animals, and ‘white pigs’ are among them. For example:

*Heji*: 19999

...午卜：王岁…白 élevé

.../wu/crack/king/sacrifice/.../white/boar (or hog)\(^65\)

‘Cracking...wu... The king will sacrifice... white boars (hogs)’

Another inscription in which white pigs and multi-coloured oxen are mentioned is more problematic. Judging by its style of writing, it is likely to belong to the Shi-group or the Zi-group. It is on a small fragment and the tiny writing is very hard to read. The following is a tentative transcription and translation:\(^66\)

*Heji*: 19849

...卯，子裡入，歲…桑帀三小隼…勿牛白豕…歳租乙二牢…用，賁…蚩…祝...

.../mao/prince/X/enter/sui-slaughter/.../X/aromatic-wine/three/small/penned-sheep/...multi-colour/ox/white/pig/.../sui-slaughter/grandfather/ Yi/two/penned ox/.../use/Xian/.../huai/.../pray/...

‘...mao, Prince X enters and performs the slaughtering sacrifice... X... aromatic wine, three small penned sheep...multi-coloured oxen, white pigs... perform the slaughtering sacrifice to Grandfather Yi of two penned oxen... used; Xian... it should be... praying...’

In the Bin-group, white animals are frequently sacrificed to ancestors:

*Heji*: 1423

...故…如侍大甲白牛，用

.../Que/...X/sacrifice/Da Jia/white/ox/use

‘...Que...X make a sacrifice to Da Jia of white oxen. Used.’

*Heji*: 2051:

乙未卜：侍于祖…三隼又百豕

yiwei/crack/sacrifice/to/grandfather/.../three/penned-sheep/plus/white/pig

‘Cracking made on yiwei (day 32): To make a sacrifice to Grandfather...of three penned sheep, plus a white pig.’

Sometimes, the king was concerned whether the white horse he desired could be sent in as tribute from different tribes:

*Heji*: 9177

(a) 甲辰卜，敕，貞：奚來白馬…王岡曰：吉，其來

jiachen/crack/Que/divine/Xi/bring/white/horse/king/prognosticate/say/auspicious/qi/bring

‘Cracking made on jiachen (day 41), Que, divining: Xi will bring white horses... The king read the cracks and said: Auspicious, perhaps he will bring them.’

(b) 甲辰卜，敕，貞：奚不其來白馬五

jiachen/crack/Que/divine/Xi/not/qi/bring/white/horse/five

‘Cracking made on jiachen, Que, divining: Xi will perhaps not bring five white horses.’

\(^65\) The graph is written as ushort{\text{\textdegree}}, probably depicting a castrated pig. See Jishi, 2985–6; and Wen Yiduo, *Wen Yiduo quanjji* 蘊一多全集 (Shanghai, 1948), 539–44.

\(^66\) An alternative transcription of the inscription is provided in Yinxu jiagu keci moshi zongji 殷墟甲骨刻辭釋繫總集 (Beijing, 1988), 440.
In some later groups such as the Wuming and Huang groups, inscriptions containing ‘white deer’, ‘white fox (or wolf)’, ‘white rhinoceros (or buffaloes)’ and even ‘white unicorn’ can be read:

Tunnan: 86
...寅卜：王其射白犓犓，潤日無災
...yin/crack/king/qi/shoot/X/white/fox (or wolf)/sunny/day/no/misfortune
‘Cracking made on yin... the king will perhaps shoot at X white foxes (or wolves); and the day will be sunny, and without misfortune.’

Heji: 37449
壬申卜，貞：王田喜，往來無災，獲白鹿一，犫牛
renshen/crack/divine/king/hunt/Hui/go/come/no/misfortune/catch/white/deer/one/fox (wolf)/two
‘Cracking made on renshen (day 9), divining: The king hunts at Hui, no misfortune in coming and going. One white deer and two foxes (or wolves) were caught.’

Yicun: 517 is a piece of rib bone carved beautifully on one side with a two-eyed taotie motif, and on the other side with the following inscription:
辛巳，壬午/彫...獲白兟，丁酉
xinsi/king/zu-meat/Wu Ding/X-sacrifice67/mountain-foot/catch/white/rhinoceros68/dingyou/...
‘On xinsi (day 18), the king performed the meat sacrifice unto Wu Ding; and X-sacrifice was performed at the foot of the...hill; and a white rhinoceros was caught. On dingyou (day 34) ’

Heji: 36481 is not a divination but an inscription recording a war between the Shang and a northern tribe:
...小臣樓比伐，擒危美...卅四，斬千五百七十，斬一百... 丙寅/貞，撻一百八十三，廬五十，矢...獲白兟於大乙，用驅伯印...獲於巫乙，用美於巫丁，僕甘京锡.../small/minister/Qiang/ally/campaign/capture/Wei/Mei.../man/twenty-four/head/thousand/five-hundred/seventy-ten/X/one-hundred/.../bing/chariot/two/bing/crossbow/one-hundred/eighty-three/quiver/fifty/arrow/.../sacrifice/white/unicorn/to/Da/Yi/use/X/chief/Yin/.../X-sacrifice/to/grandfather/Yi/use/Mei/to/grandfather/Ding/X/Gang/Jing/reward/...
‘...the small minister Qiang was an ally in the campaign, we captured Wei Mei...24 men, and 1570 victim heads, and 100 (or more) prisoners of war...2 chariots, and 183 crossbows, and 50 quivers... arrows... we sacrificed a white unicorn to Da Yi; and used Yin, who was the head of the X-tribe... X-sacrifice to Grandfather Yi, and Mei was used to Grandfather Ding; X Gan Jing rewarded...’

The Shang won the great victory and captured Wei Mei, the head of the enemy and many arms and prisoners. In the victory celebrations, a white unicorn69 and the captured chief of the tribe were offered to the Shang ancestors.

67 The meaning of this graph is uncertain; it was probably a sort of sacrificial rite, which was often performed in hunting; see Zhao Cheng, Jiaguwen jianming cidian 甲骨文簡明詞典 (Beijing, 1988), 244.

68 A number of inscriptions recorded that a larger wild animal, the si 兌 was often chased and caught on hunting trips expeditions, and the colour of the animal was sometimes mentioned. The interpretation differ as to whether the animal was a wild buffalo or rhinoceros, see J. A. Lefeuvre, ‘Rhinoceros and wild buffaloes in north of the Yellow River at the end of the Shang dynasty’, Monumenta Serica, 39, 1990/91, 131–57.
Apart from animals, *bai* can be used to modify the colour of objects such as grain; for example:

*Heji*: 32014

**tu**/white/millet/offer

‘It should be white millet that is offered.’

*Heji*: 34601 and *Yingcang*: 2431 also bear similar inscriptions in which ‘white millet’ is recorded as an offering.

The king and his diviners seem not only to have had an great interest in white-coloured animals and objects for their sacrifice but this interest appears to have extended also to human victims:

*Heji*: 1039

(a) **zhou**/…/… 白人

*yichou*/crack/…/divine/…/white/man

‘Cracking made on *yichou* (day 2), …divining: …white men.’

(b) 燃白人

*liao*/burn/white/man

‘Make the burning sacrifice of white men.’

*Heji*: 293

壬子卜，……正：……白人

*renzi*/crack/Bin/divine/hui/this/evening/use/three/white/Qiang/to/Ding/use

‘Cracking made on *renzi* (day 49), Bin, divining: It should be this evening three white Qiang-men will be sacrificed to Ding. Used.’

In these inscriptions the character *bai* can be understood in three ways: as a number (‘one hundred’); as men from the Bai-tribe; or men distinguished by their light skin colour, as Yao Xiaosui 姚孝遂 has argued. However, as mentioned earlier, the Shang scribes usually tried to make some distinction when characters were used for different functions. In the above examples the character *bai* is written in the way which is usually regarded as being the colour term. In this case, the ‘white man’ might be of a different race from the Shang, or just a man who had a lighter skin than the Shang.

**Wu**

In OBI there is a graph written as 马 or 阝, and this character refers to a colour of ritual animals, usually oxen. Wang Guowei first deciphered the character as *wu* 与 with textual support from the *Shijing*, where a sentence reads: ‘sanshi wei

69 This graph is transcribed as 马, reading *lin* 马. In Chinese tradition, the *lin* or unicorn is an extremely rare beast and consequently carries great significance. See Dong Zuobin, ‘Huo baiin jie 獵白麟解’ in Xueshu lunzhu, 217–71, in which Dong wrongly identified another graph *si* as *lin*; however, he has given a comprehensive discussion of the significance of the ‘unicorn’ in Chinese history. Some of the words in these inscriptions have not yet been fully deciphered, and even the understanding of the phrase *bai lin* sometimes differs; for instance, Hu Houxuan 胡厚宜, in his article ‘Zhongguo nuli shehui de renxun he rensheng 中國奴隸社會的人殉和人牲’, *Wenwu*, 1974, no. 8, p. 63, read the word as a name, ‘Chief Lin’.

70 See Yu Xingwu, *Shilin*, 450.


72 Jiaguwenbian: 0083.
wu 三十餘物 ’ in which, according to Mao Heng’s commentary, the wu refers to za se nius 雜色牛 or ‘multi-coloured oxen’. However, a decade later, Guo Moruo challenged this view; he observed that the graph depicted a plough breaking through earth and argued that the graph is the original form of the character li 黧; when used as a colour term, it should be read as li 黧, referring to black oxen.

In order to decide whether the word refers to a multi-colour or to black, it must be examined in three steps: first, the etymological relationship must be investigated by exploring its form, sound and meaning; secondly, we should examine its relationship with other related words in early texts; and thirdly, by examining the usage and context of the word in OBI, the possible readings should be tested.

In the Shuowen the character wu 物, as a phonetic compound, is defined as a general term for ‘things’: ‘wu means ten thousand things; and an ox is a big thing. The number of Heaven and Earth starts with the Altair (qianniu ‘lead an ox’); thus, it derives from the ox, and the wu 勿-element is the phonetic.’

Xu Shen’s explanation here was based on later literature, certainly not on the original meaning of the character. In later transmitted texts, the meaning and function of the character wu is rather complex. When used as a noun, apart from the general meaning of wan-wu 萬物 or ‘ten thousand things’, it also refers to ‘objects’, ‘matters’, ‘plants’, ‘animals’, ‘marks’, ‘spirits’, ‘patterns’, ‘types’, and so on. The particular usage of wu, as ‘objects’ and ‘things’, probably did not start before the late Zhou period.

Xu Zhongshu, a student of Wang Guowei, observed that the graphic form of wu 々 (勿) was originally a pictograph of a plough breaking up earth, and so its primary meaning might refer to the colour of soil. By contrast, Qiu Xigui argued that the graphic form is not a plough but a knife, with the dots representing the object it cuts apart; and that the form therefore suggests the primary meaning ‘to separate’, ‘to select’.

It is very difficult to give an absolute textual reconstruction of the lexicographical development of certain words such as wu, because the dating of many of the literary texts involved is still questionable. In some other transmitted pre-Han texts such as the Zhouli and Guoyu, the archaic meaning of

73 cf. Jishi, 0317–18; also Wang Guowei, Guantang jili 觀堂集林 (Beijing, 1959), 287; Wang did not recognize that the character could be an original hewen.

74 cf. Jishi, 322; and a more lengthy discussion in Guo Moruo, ‘Jiaguen Yanjiu 甲骨文研究 , Guo Moruo quanjie: kaogubian, vol. 1, 83–92. [Originally Shanghai, 1931]. Later, in his Nulizhi shidai 奴隸制時代 (Beijing, 1956), 7, Guo went on to use this linguistic evidence to illustrate an agricultural aspect, namely, that ploughing by buffalo was common in Shang times. However, oxen were usually used as sacrificial animals in Shang ritual, and there is as yet no evidence of buffalo being used for ploughing in Shang times. See Xu Jinxiang 許進雄, ‘Jiaguen suo biaoxian de niugeng 甲骨文所表現的牛耕 ’, Guwenzi yanjiu, no. 9, 1984, 53–74.

75 Shuowen, 30.


77 Discounting all the literary records handed down through generations, the earliest example known of the character wu being used in the sense of ‘things’ is found in the inscription on a bronze vessel from Zhongshan State of the Warring States period. It reads: ‘jian ya tiansia zhi wu 閘（見）於天下之勿（物）, Knowing of things under Heaven’ (Mingwenxuan: 880).


‘multi-colour’ or ‘colour’ of the character wu 物 has survived. Sometimes, when it is used as a verb, usually ‘to select’ animals, or ‘to survey’ lands, it probably implies that such selection is primarily decided by colour.

For example, in the ‘Chuyu’ (楚語), it reads: ‘the hair indicates the wu (colour) the blood announces the killing; the meaning of the character wu here is directly interpreted as ‘colour’.80 In the ‘Diguan•Caoren’ (地官•草人), it reads: ‘using the method of the soil transformation to wu (‘survey’) the land.’ Zheng Xuan’s 鄭玄 (C. A.D. 127–200) commentary says that wu here means ‘to divine on the type and colour of the soil for cultivation’.81 Elsewhere the commentary is even clearer: ‘wu means to select by colour’.82 In the ‘Baozhangshi’ (保章氏), it is read: ‘By observing the wu (colour) of the five clouds, thereby distinguishing the omens, auspicious or inauspicious, flood or drought, and the phenomena of the coming harvest or famine.’83 Here, Zheng Xuan’s commentary made it very clear: ‘wu refers to colour; it means to observe the colours of clouds and vapours surrounding the sun.’ Later commentators explained that the five-coloured clouds represented the different omens: green for pests; white for death; red for war; black for flood; and yellow for harvest; and it was said that: ‘everything has its shape (xing 形) and colour (se 色): heaven has the colour of clouds, earth has the colour of soils, animals have the colours of their hair or skins; all these colours are called wu.84

Also, multi-colour relates to wu. In the ‘Sichang’ (司常), we read: ‘the Sichang charges the nine banners which are distinguished by their colours and names...the one of mixed colours is called wu.’85 Here, a multicoloured banner is called wu 物.86 Such textual evidence shows that the original meaning of wu is likely to be ‘colour’, ‘multi-colour’ or ‘distinction by colour’. The character wu developed later to refer generally to a type of classification (wu lei 物類), whence it derives its later meaning of ‘things’, ‘objects’. This meaning then gradually became dominant and other meanings sank into oblivion.

It is also necessary to examine the relationship between wu 物 and li 辟. Although their modern pronunciations differ from each other, the early phonetic relationship between them seems to have been close. Wu belongs to the ming 明 initial and the wu 物 final categories, reconstructed as <*mjät; and li to the lai 来 initial and the zhi 脂 final, and is reconstructed as <*ljød. In Shang inscriptions, the wu-element is also employed in other compounds.

80 Guoyu 國語 (Shanghai, 1988), juan 18, 565.
81 Zhouli zhengyi, juan 30, 1182–3.
82 ibid., juan 24, 937. The phrase wu se 色 is still used in modern Chinese, but now only means ‘to choose’.
83 ibid., juan 51.
84 See Sun’s commentary; ibid., 2124–5. The Shang already practised the divination method of observing the clouds; there are phrases such as ge yun 各雲 (Heji: 10405, 10406, 21021, 21022), liu yun 六雲 (Heji: 33273, Tunnan: 1062) and wu yun 五雲 (Tunnan: 651) in OBI.
85 ibid., juan 53, 2200, where Sun Yirang has also provided a very informative comment on the ‘Nine Flags’ which are distinguished by patterns and colours.
86 A similar account is also found in the Shuowen. However, in Shuowen jiezi zhu 說文解字注 (Shanghai, 1981), 453–4, Duan Yucai 段玉裁 (1735–1815) noted that the character wu 勿 here should be written as 施; and in Shuowen shili 說文釋例 (Beijing, 1987), 446, Wang Jun 王筠 (1784–1854) suggested that the phrase wu wu 勿勿 here should be read as cong cong 勿勿 (蔴蔴).
such as 犭, which later is a phonetic-compound  利 <*lja>. They may have originated from the same root, since their phonetic relationship in Old Chinese is indeed close.

Besides the phonological relationship between them, they may also relate to each other semantically. Different commentators have tended to read the character  利 as ‘multi-coloured’ or ‘black’, and have often cited textual references to support their arguments. In the following, the relevant texts will be examined.

The Shangshu text, contains the phrase ‘bo qi li lao 播弃犭老’, where the character is used to describe the wrinkled and speckled faces of old people. In the Zhanquoe, we read a similar phrase, ‘mian mu li hei 面目犭黑’, where the character  利 is used together with  黑 ‘black’; the commentators say that the phrase refers probably to ‘yellowish dark’. So it is preferable, as Wang Yinzhi 王引之 (1766–1834) pointed out, to read the character  利 as ‘multi-colour’ rather than ‘black’. In the Shanhaijing we read: ‘qi zhuang ru li niu 其状如犭牛 ’; Guo Pu’s 郭璞 (c. 176–324) commentary here says that  利 refers to a multi-coloured pattern ‘like a tiger skin’. In the Lunyu, attributed to Confucius, we also read: ‘li nio zhi zi 牠牛之子 ’; He Yan 何晏, a commentator of the third century a.D., noted that ‘a mixed pattern is called  利’. All these texts show that the character  利 is indeed better understood as ‘multi-colour’, and is particularly related to animals like oxen.

In fact, in OBI, the two elements  勿 and  犭 are written separately in many inscriptions, and the latter may sometimes be omitted. When the two elements are written together, particularly in the Chu and Huang groups, they are written very close up, like a semantic-phonetic compound, where the ox-element would be the radical and  勿 the phonetic sign. It was originally, as Jin Xiangheng 金祥恆 pointed out, a  hewen  and therefore should be read as two syllables, that is, as  wu-niu, where  勿 is the modifying adjective element in a noun compound.

Further evidence is found in Shang inscriptions. Apart from its combination with the ox-element in particular,  勿 also appears as an element in the composition of several other characters: (a) with the character  老 ‘a penned animal’, as 犭; or with the character  马 馬 ‘horse’, as 犭; and (b) added to a graph indicating the sex of the animals, such as  金 (犭) and  犬 (犭). Rather than reading all these characters as one word, it would better to read them as  wu-ma,  wu-lao,  wu-mu and  wu-pin, and so on.

87 In the Shuowen, the ancient form of  利 is written as  利 (p. 91).
88 ‘Qinxshi’ (奏馨), this particular document has been identified as a later forgery rather than original Zhou writing. See Shangshu zhengyi, 仅書正義 , juan 11 (SSJZS, 181), where Kong Yingda noted that  利 might be better understood as ‘spotted’.
89 Zhanguqe 戰國策 (Shanghai, 1985), juan 3, 85–6, where it is pointed out that the character  利 is interchangeable with 黑. See also Hao Yixing 郝懿行 (1757–1825), Erya yishu 爰雅義疏 (Beijing, 1982), ‘Shigu diyi 科詁第一 ’, 23–4.
90 Wang Yinzhi, Jingyi shuwen 經義述聞 (Shanghai, 1936), 266–7.
91 ‘Dongshanjing’ (東山經), see Yuan Ke, Shanhaijing jiaoza, 101. In Shanhaijing jian shu 山海經箋疏 (Chengdu, 1985), juan 4, Hao Yixing cited another reference in his commentary, stating that the character  利 here means ‘multi-colour’, more precisely ‘a black pattern on a yellowish background’.
92 Lunyu zhu shu 論語注疏 , juan 6 (SSJZS, 2478).
The bone character wu retained its graphic form in early Zhou bronze inscriptions and was mostly used as a negative. Many scholars, including Guo Moruo, disregarded the possibility that the bone graph could be read as the later negative wu 勿. But, as Qiu Xigui pointed out, wu is actually used as a negative in Shang inscriptions, which suggests that the relationship between these two characters is probably one of phonetic similarity.

The real testimony comes from OBI themselves. One inscription recently published by Shen Zhiyu 沈之瑜 reads:

(a) 六丑卜，行，真：兼甲寅鑚粗乙歳，東幽勿牛，茲用
guichou/crack/Xing/divine/next/jiayin/Hou/grandfather/Yi/slaughter/
hui/you-dark-red/wu-multi-colour/ox/this/use
‘Cracking made on guichou (day 50), Xing, divining: On the next jiayin (day 51), in performing the slaughtering sacrifice to Grandfather Hou Yi, we should sacrifice dark-reddish multi-coloured oxen. This was used.’

(b) 真：兼黃勿牛
divine/hui/huang-yellow/wu-multi-colour/ox
‘Divining: We should sacrifice yellowish multi-coloured oxen.’

Although Shen insisted that the character wu means ‘black’, this inscription actually proves that phrases such as you wu niu 黃勿牛 and huang wu niu 黃勿牛 cannot be explained logically if the wu reads as ‘black’. How is one to understand the phrase ‘dark-black oxen’? They may be better understood, as Qiu Xigui argued, as ‘dark-reddish multi-coloured oxen’ and ‘yellowish multi-coloured ones’.

The difficulty of the reading of wu lies in the problem of colour categorization itself. Wu probably covered most dark tints in Shang inscriptions. Nonetheless, there is a clear distinction between hei-‘black’ and wu-‘multi-colour’ in OBI. Although both are used attributively to modify the colours of ritual animals, they sometimes appear, in contrast, in the same inscriptions. Thus, the semantic definition given to the bone character wu is probably za-se 雜色, that is, (a) any non-white-coloured animals; (b) different colours mingled together, which is particularly used of a brindle animal.

Zhi 紫

In OBI, the character zhi is written as: 紫 or 紫. Because it is sometimes used in conjunction with nouns such as niu or ox, Luo Zhenyu first read it as a colour term modifying the colour of the animal.

95 See Qiu Xigui, ‘Shi “wu” “fa”’, Guwenzi lunji, 70–4.
96 This inscription was published by Shen Zhiyu, ‘Jiaguwen bao yu xinhou 甲骨卜辭新獲 ’, Shanghai bowuguan jikan 上海博物館集刊 3, 1986,161.
97 Qiu Xigui, ‘Jiaguwen zhong suojuan de Shangdai nongye 甲骨文中所見的商代農業’.
98 Jiaguwenbian: 165, where Qiu argues that in OBI the character wu is often in contrast to the colour word xing 紫 (紫), and it probably then refers to a darkish multi-coloured ox.
Luo’s decipherment was based on interchangeable characters in pre-Han texts. In the ‘Yugong’ (‘禹贡’), the phrase ‘jue tu chi zhi fen’ 贼土赤埴墐 can be read; later commentators such as Zheng Xuan have pointed out that there existed an interchangeable relationship among zhi 墙 <*djæk, zhi 燷 <*trjak and zhi 燩 <*thrjak, in the sense ‘red’.

However, the explanations given for the character zhi in this text by different sources are contradictory. Karlgren has translated the above sentence as ‘Its soil is red, clayey, and fat’, in which he reads chi zhi fen as three separate words, and the character zhi as meaning ‘clayey’. This translation obviously followed some other old commentaries such as Kong Yingda’s.

Apart from (a) ‘red’ and (b) ‘clayey’, there is a third explanation of zhi. In fact, the chi zhi in the Yugong text is better regarded as one word rather than separate words; it probably refers to both the hue and density of the soil. In the Shiming 煤名, another Han dynasty dictionary by Liu Xi 劉熙 (second century A.D.), it is defined so: ‘soil which is yellow, fine and dense is called zhi.’ This explanation, in fact, takes into account the two previous views, and defines the word in terms of both colour and texture.

In Zhou bronze inscriptions, the character zhi appears frequently, modifying objects such as textiles and clothes. The most common phrase is zhi yi 觉衣; many scholars used to read this zhi as zhi 燩, meaning ‘patterned weave’; while several scholars have also argued that it is better understood as a colour term. Like the character xing 觉, zhi can also be used to describe ox horns. On the Shi Qiang pan 史遷盤, a newly discovered Western Zhou bronze basin of the King Gong period (c. 927–908 B.C.), it is read: ‘ji jiao zhi guang, yi qi yan si; 橫角點光，ItemClick its 隱’ (Beijing, 1984). Here, the character zhi is likely to be a variation of zhi and is used as a colour term modifying the ox horns.

100 See Sun Xingyan 孫星衍 (1753–1818), Shangshu jingwu zhushi 尚書今古文注疏 (Beijing, 1986), 154–5.
102 Shangshu zhengyi, juan 6 (SSJZS, 148).
103 Wang Xianqian 王先謙 (1842–1917), Shiming shu zheng bu 舅名疏正補 (Shanghai, 1984), 18.
104 For example, see Mingwenxuan: 229 (Dou Bi gui 豆閉簋) and 252: (Mian gui 免簋).
105 For different opinions, see Gulin, 7003–18. In his Xi Zhou ceming zhidu yanjiu 西周冊名制度研究 (Beijing, 1986), 226–8, Chen Hanping 陳漢平 argued that the character zhi refers to a ‘yellow’ colour in the context.
106 Mingwenxuan: 225.
107 See Lian Shaoming 麗商名, ‘Shi Qiang pan yanjiu 史遷盤研究’, Guwenzi yanjiu, no. 8, 1983, 35–6. E. L. Shaughnessy has annotated and translated this inscription into English and seems to follow Lian’s interpretation of these two relevant sentences. The translation reads: ‘Even-horned and redly gleaming, appropriate were his sacrifice.’ Furthermore, Shaughnessy made the following observation of the graph, perhaps the two hands holding a basin 賧 beneath the etymonic compound are intended to imply a mirrorlike brightness; cf. Sources of Western Zhou history: inscribed bronze vessels (Berkeley, Los Angeles and Oxford, 1991), 183–92, esp. 190. A number of articles have been written on the inscriptions of the Qian pan; they include Li Xueqin 李學勤, ‘Lun “Shi Qiang pan” jiqi yiyi 論史遷盤及其意義’, Xinchu qingtongqi yanjiu 新出土青銅器研究 (Beijing, 1990), 73–82; Qiu Xigui, ‘“Shi Qiang pan” ming jieshi 史遷盤銘解釋’, Guwenzi lunji, 371–85; Yu Xingwu, ‘“Qiang pan” mingwen zhihe jie’ ‘盤銘文之解’, Guwenzi yanjiu, no. 5, 1981, 1–16; and Zhao Cheng, ‘Qiang pan’ mingwen bushi 碧盤銘文補釋’, Guwenzi yanjiu, 5, 1981, 17–26. Since scholars’ reading of these sentences vary greatly, other possibilities cannot be ruled out.
If we examine the evidence directly found in OBI, where it has several different usages and meanings, we find first, it is used as a personal name such as Zi Zhi 子隻 ‘Prince Zhi’; 108 or as a place-name, wang ru Zhi 王人隻, ‘The king enters Zhi’. 109 Secondly, as Qiu Xigui argues, the character zhi is also used as a verb, meaning ‘to wait’ in some oracle bone inscriptions. 110 Thirdly, in many inscriptions, in particular in the Chu-group, the character zhi is probably a jiming 祭名, that is, the name of a ritual sacrifice; for example:

*Heji*: 22846

戊午卜，成，貞：王賜大戊，象，無咎

wuwu/crack/Lú/divine/king/bin-rite/Da Wu/zhi-sacrifice/no/trouble

‘Cracking made on wuwu (day 55), Lú, divining: The king will perform the reception rite to Da Wu, and make the zhi-sacrifice. There is no trouble.’

According to Yu Xingwu, zhi here probably means the ‘dry meat’ (ganrou 乾肉) of animals. 111 However, in some inscriptions, zhi might be better read as a verb; for example:

*Heji*: 22550

乙卯卜，行，貞：王賜祖乙，象，牛

yimao/crack/Xing/divine/king/bin-rite/Zu Yi/zhijone/ox

‘Cracking made on yimao day (52), Xing, divining: The king performs the bin-rite to Grandfather Yi, and makes the zhi-sacrifice of one ox.’

Here, the character zhi can be understood as a finite verb ‘to bask’; niu can then be understood as the object of the verb, and the number can refer to the object. 112

In a number of inscriptions, in particular among those of the Li-group, phrases such as: ‘ri you zhi 日有噩’ and ‘yue you zhi 月有噩’ are found. 113 Guo Moruo explained ri you zhi as ‘solar eclipse’, 114 and Chen Mengjia 謝夢家 read it as ‘sunspots’. 115 In both cases, the character zhi can be understood as the sun or moon changing colour. This view has been accepted by many scholars, and these inscriptions are interpreted as scientific evidence for Chinese astronomy. 116

108 For example, *Heji*, 30036, 30037, 32775.

109 For more examples, *Heji*: 5068, 5165, 1535, 16101, 16102, 16103, 16104, 16105. These are mainly from the early period, namely, the Bin, Li, and Zi diviners’ groups.


112 There are several examples containing the phrase zhi and niu together, but unfortunately most of them are too fragmentary to be used as hard evidence. For example, *Heji*: 8969, 15761, 16229 and 23000, in which the character zhi is likely to be a name or a verb rather than an adjective.

113 The number of inscriptions including ri you zhi is great (for example, *Heji*: 33696–704, 27388, 29697–9, *White*: 1371); and the majority of the inscriptions are from the Li and Wuming groups, *Tunan*: 726 reads: ‘yue you zhi’ in which it relates to the moon.


115 Chen Mengjia, *Yinxu buci zongshu 玉骨卜辭綜述* (Beijing, 1956), 240.

However, this rendering has been challenged very recently by several scholars. In a recent paper, Ito Michiharu 伊藤道治 has carefully examined the use of zhi in many inscriptions of the different periods. Ito disagrees with the view that the inscription refers to ‘astronomical’ phenomena such as the solar or lunar ‘eclipse’ or ‘sunsots’, and he suggests that ri you zhi and yue you zhi are expressions concerning rituals to the sun or moon, in which zhi should also be understood as the name of the ritual.\footnote{Ito Michiharu, ‘Zhi zi kao 齋字考’ (unpublished paper presented at the Conference of the Xia-Shang Culture Studies, Luoyang, 1991).} \footnote{As mentioned earlier, Luo Zhenyu was the first to decipher it as a colour term, and he transcribed the graph as 徽.} \footnote{There is an earlier Wuming-group inscription, Heji: 30718, in which the character zhi was used as an adjective, but the inscription is too fragmentary to be certain. Also, in the Huang-group, zhi is still used in a way referring to the ritual sacrifice; for example, Heji: 38115, but an epigraphic distinction has been made to it, written as 鋤.}

The question here is whether the character zhi is used as a colour term in some inscriptions, in particular when it appears together with a noun such as niu; sometimes zhi and niu are written together as a hewen 既.\footnote{\footnotemark{118}} In the Huang-group,\footnote{\footnotemark{119}} there are a few inscriptions in which the character zhi is most likely used as an adjective modifying the colour of oxen. For example:

*Heji: 35995*

其齋牛，茲用
qi/zhi-ox/this/use

‘We shall perhaps sacrifice a zhi-colour ox. This was used.’

It often appears together with the lao 牲 (‘penned ox’) and wu 物 (‘multi-coloured ox’):

*Heji: 36081:*

(a) 甲申卜，貞：武乙宗祊，其牢，茲用
jiashen/crack/divine/Wu Yi/temple/beng-rite/qi/penned-ox/this/use

‘Cracking made on jiashen (day 21), divining: In performing the beng-rite at Wu Yi’s temple, we shall perhaps sacrifice penned oxen. This was used.’

(b) 其齋牛
qi/zhi-ox

‘We shall perhaps sacrifice zhi-colour oxen.’

(c) …貞：…武丁…受有賀
…/divine/…/Wu Ding/…/receive/you-have/assistance
‘…divining: … Wu Ding… receive assistance.’

(d) …勿牛…用
…/wu-multi-coloured-ox/…/use

‘…multi-coloured oxen … This was used.’

Although the inscriptions are fragmentary, it is clear that the divination charges here are made of the chained-choice type (xuanzhen 搖真) and are concerned with the selection of ritual animals. The diviner first proposed various animals such as lao 牲, zhi niu 齋牛 and wu niu 募牛; they are all written as hewen. The zhi-ox here is probably in contrast by colour to the wu niu ‘multi-coloured ox’.
A very rare inscription of the Huang-group, which is inscribed on a carved bone, also includes the term *zhi* in a manner which supports the suggestion that it is likely to be a colour term:

**Yicun:** 518

壬午，王田于桊麓，獲韋韋兕，王錫盧丰韋小韋兄。在五月，佳王六祀彤日。

*renwu*/king/hunt/at/Mai/foot-of-mountain/capture/Shang/zhi/rhinoceros/king/reward/Zai Feng/palace-officer/small/huangxiong(?)*/20/in/five/month/wezi/king/six/year/yong-rite/day

‘On *renwu* (day 19), the king hunted at the foot of Mount Mai, and a *zhi*-colour rhinoceros of Shang was captured. The king rewarded Zai Feng, the officer of the palace, with a small bronze vessel. This was on the day of the *yong*-rite, in the fifth month of the sixth year of the king’s reign.’

This is a record about the king’s hunting activities. The phrase *zhi si* 彫兪 here refers to the animal (a rhinoceros or wild buffalo) captured in the hunting expedition. The carving and content of the inscription are very similar to *Yicun:* 517, where the capture of a *bai si* 白兪 (white rhinoceros, or buffalo) is recorded.

Although there are reasons to believe that the bone character *zhi* is used as a colour term, probably denoting a yellowish- or reddish-brown, different interpretations cannot be completely ruled out.

Many scholars have believed that *zhi niu* in Shang inscriptions is probably the same as *te niu* 特牛 found in later texts. In many Zhou texts, as was mentioned earlier, the character *zhi* 彫 is interchangeable with *zhi* 健; and the latter is itself interchangeable with the character *te* 特.121 The relationship among them is based on the principle of phonetic-borrowing: *zhi* <*dak* and *te* <*dak* both belong to the *ding* 定 initial, and the *zhi* 彫 final, differing only in the medial; their reconstructions are therefore very close.

There is, however, a real confusion about the semantic meaning of the character *te* in later textual criticism. A brief search through some pre-Han texts, such as the *Zhouli, Liji, Zuozhuan* and *Guoyu,* reveals that the character *te* is often used as an adjective attributed to a kind of ritual animal, such as *te sheng* 特牲; or in combination with various animals: *te yang* 特羊, *te tun* 特豚 and *te niu* 特牛. But, the interpretations of *te* in these texts may vary from scholar to scholar. For instance, in the *Zhouli,* we read: ‘*fan ma te ju si zhi yi* 凡馬特居四之一 ’; Zheng Xuan said in his commentary that it ‘means that there are three female ones and one male’; he obviously read the *te* here as ‘male (animal)’.122 In the *Shuowen,* it is said ‘*pu-te* 拌特 means a male-ox’;123 Duan Yucai in his commentary also cited a reference from the *Chuci.*124 Many scholars have agreed that *te* means ‘male (animals)’.

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120 The translation of *huang xiang* 彫兄 as ‘a bronze vessel’ is very tentative; see Guo Moruo’s ‘Zai Feng gu keci 宰丰骨刻辭’; cf. *Guo Moruo quanjí–kaogu bian,* vol. 1, 405–10.
121 See Lu Deming 陸德明 (c. 550–630), *Jingdian shiwen 經典釋文* (Shanghai, 1985), 683, 759, where he notes that *zhi* and *te* are interchangeable in the *Liji* text.
122 *Zhouli zhengyi, juan* 62, 2613.
123 *Shuowen,* 29.
124 Duan Yucai, *Shuowen jiezi zhu,* 50.
At the same time, a completely different explanation has been offered: that *te* means ‘one’, ‘single’ or ‘alone’. In the *Yaodian* (‘典 Bulk’), we read: ‘(He) returned, arrived at the ancestral temple; *te* (one ox) was sacrificed.’\(^{125}\) In the *Zuo zhuan* (22th year of Duke Xiang), we read: ‘a *te* (single)-sheep is offered, and the combination of a sheep and a pig would be granted.’\(^{126}\) In the *Guoyu* (*Jinyu* ‘言語’): ‘you can prepare for me a banquet of *te* (one)-sheep’;\(^{127}\) again in the *Chuyu* (*楚語’): ‘the *duges* ju-rite uses the *te* (single)-ox; and for the *si*-sacrifice, use a *tailao*-combination (of one ox, one sheep and one pig).’\(^{128}\) In the *Liji. Jiao te sheng 禮記·郊特性*, we read: ‘a single bull (*te mu 特牡*) is used in the rites performed in the suburbs; and the combination of an ox, a sheep and a pig is used at the Altars of Soil and Grain.’\(^{129}\) In all these texts, *te* 特 is understood by the commentators to mean ‘one’ or ‘single’ (yi ye 一也); and in particular in the *Liji* text, *te* can hardly mean ‘male’, but refers rather to a number.

**Huang 黃 and Hei 黑 (or Jin 親)**

The main reason that the characters *huang*—‘yellow’ and *hei*—‘black’ are discussed together is because they are often confused in the early orthography. However, if we examine their appearance in OBI closely, although they are written similarly, there is still a distinction in their graphic forms.

The character *huang* is written with several variations in OBI: (a) 輕 (b) 輕 (c) 輕. Despite the variations, the graph is basically a drawing of a man with an abnormal body in frontal view;\(^{130}\) and, as Qiu Xigui points out, its graphic development is as follows:\(^{131}\)

\[\text{[Diagram]}\]

The character *hei* is written as: 他.\(^{132}\) It is a pictograph of a figure with a big head. Yu Xingwu deduced that when it is used as a colour word it should be read as *hei*—‘black’.\(^{133}\) This decipherment has been accepted by most scholars.

In OBI, *huang* and *hei* are clearly two different words, although both are used as adjectives modifying attributively the colours of animals, such as *hei yang* 黑羊 ‘black sheep’, and *huang niu* 黃牛 ‘yellow oxen’. Some examples are:

**Hei:** 31178

蛋黃牛，有正
huilhuang-yellow/ox/have/correct

‘We should sacrifice yellow oxen. There is correctness.’

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125 *Shangshu zhengyi, juan 3* (SSJZS, 127); see Kong Yingda’s commentary.
126 *Chunqi Zuo zhuan zhengyi 春秋左傳正義, juan 35* (SSJZS, 1974); see Du Yu 杜預 (222–284)’s commentary.
127 *Guoyu. juan 8*, 286; see Wei Zhao 韦昭 (204–273)’s commentary.
128 ibid., *juan 18*, 564–5; Wei Zhao commentary.
129 *Liji zhengyi 禮記正義, juan 25* (SSJZS, 1444).
130 See Tang Lan 唐蘭, ‘Maogong ding “zhu fu, cong heng, yuhuan, yu tu” xinjie 毛公鼎·朱彝, 趙衡, 玉環, 玉環·新解’, *Guanning ribao 光明日報*, 9 May, 1961, where he argues that the pictographic form of the character is perhaps a religious person such as a shaman.
131 See Qiu Xigui, ‘Shuo buci de fen wu wang yu zuo tu long 說卜辭的焚巫尪與作土龍’, *Gwenzi lunji*, 218.
132 *Jiaoguwenbian*: 1606.
Heji: 36350

乙卯：其黃牛，正，王受有祐
yimao/qi/huang-yellow/ox/correct/king/receive/you-have/assistance
‘On yimao (day 52): We will perhaps sacrifice yellow oxen, correct; the king will then receive assistance.’

Heji: 29544

庚寅：王受有祐
hui/black/dog/king/receive/you-have/assistance
‘We should sacrifice black dogs, the king will then receive assistance.’

Yingcang: 834

庚寅卜，貞：其黑豕
gengyin/crack/divine/qi/black/pig
‘Cracking made on gengyin (day 27), divining: We will perhaps use black pigs.’

Sometimes, yellow oxen were sacrificed to the directions (fans 方), and black sheep were used for the rain-making magical rite:

Heji: 14315

(a) 貞：燎東西南，卯黃牛
divine/burn/east/west/south/mao-cut/yellow/ox
‘Divining: We shall perform the burning sacrifice to the East, West, and South, and cut a yellow ox.’

(b) 燼于東西，佑伐，卯南黃牛
burn/to/east/west/you-sacrifice/human-victim/mao-cut/south/yellow/ox
‘In performing the burning sacrifice to the East and West, we shall offer human victims, and cut a yellow ox to the South.’

Heji: 30552

(a) 貞用黑羊，無雨
not/use/black/sheep/no/rain
‘We do not use black sheep, there will then be no rain.’

(b) 壬白羊用于之，有大雨
hui/white/sheep/use/for/it/have/big/rain
‘It should be white sheep that are used for it, there will then be heavy rain.’

Occasionally, the huang-‘yellow’ refers to metals:

Heji: 29687

丁亥卜，大...其鑄黃呂...凡利，亥...
dinghai/crack/Da/...qi/cast/huang-yellow/metal/...fan³/²lii (good)/hui/...
‘Cracking made on dinghai (day 24), Da... casting a yellow metal... X, favourable; it should...’

Yingcan: 2567

王其鑄黃呂，奠盟，亥今日乙未，利
king/qi/cast/huang-yellow/metal/offer/blood/hui/today/yiwei/lii (good)
‘The king casts a yellow metal and makes the blood offering; it should be today, yiwei (day 32), favourable.’

³ This is probably a pictograph of a bier H, but whether it is used here in its original meaning is uncertain; see Zhao Cheng, Jiaguwen cidian, 224.
The inscriptions here are very interesting: not only is the character huang used for the first time attributively to modify a metal, as an adjective, but it also reveals the ritual that accompanied bronze casting in the Shang period.135

The character huang appears frequently in Zhou bronze inscriptions, and has several variations:136 (a) 裸 (b) 裸 (c) 裸 (d) 裸. In most instances, as Guo Moruo pointed out, it is used as a phonetic loanword of huang "a belt", or huang 璟 or heng 衡 (衡) "a jade pendant".137 Both huang and heng belong to the jian 見 initial category and the yang 陽 final; and their reconstructions are indeed very close: huang <*gwang; and heng <*grang.

Apart from being used as a loanword, huang is also used as a colour term in Zhou texts. For example, a common phrase huang gou 黃耆 ‘old people’ is found both in Zhou bronze inscriptions and the transmitted texts such as the Shijing138 where the character huang is understood as referring to the colour of old people’s hair.139 On the Baigongfu fu 白公父簠, a bronze vessel of the King Xiao reign (c. ninth century B.C.), we read: ‘qi jin kong ji, yi xuan yi huang 其金孔吉, 赤玄亦黃’.140 Here xuan and huang are both understood as colour terms referring to the metals.141

As mentioned earlier, the characters huang and hei are often confused with each other. The reason for such confusion could simply be scribal error, but there may also be a more complex etymological reason.

In the Shuowen, Xu Shen gave an explanation of the form and meaning of the character hei: ‘the colour of what fire smoked over; derived from the flame-element which rises out of the window. The 火-element is an archaic form for window.’142 Xu’s definition of hei has been rejected by many modern scholars because the graphic form is based on the Small Seal Script, written as 甲,143 which does not correspond to the form seen in OBI.

In OBI, hei is also written with two variations: (a) 甲 (b) 甲. The main element is almost identical, apart from the addition of a mouth-element on the top and sometimes a fire element beneath. Since these characters are sometimes used indiscriminately, it is then presumed that they shared the same sound.144

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136 Jinwenbian: 2207.
137 Guo also argues that the graph depicts a man wearing an archaic jade pendant; cf. Jinwen congkao, 174–86.
138 Mingwenxuan: 201, 471; Maoshi: 172, 246 and 302.
139 See Hao Yixing, Erya yishu, 23–5.
140 Mingwenxuan: 301.
141 See Chen Chusheng 陳初生, Jinwen changyong cidian 金文常用詞典 (Xian, 1987), 1107–8. Other phrases such as Huang di 黃帝 (‘Yellow lord’) and huang zhong 黃鐘 (‘Yellow tune’) can be found on the late Zhou bronzes.
142 Shuowen, 211.
143 This form occurs in several early Zhou bronzes. As Chen Zhaorong 陳昭容 argued recently, the bone graph cannot be linked directly to the later character hei and the characters may have different origins. Chen also discussed the problem of the confusion between huang and hei. See Chen Zhaorong, ‘Guwenzi zhong de [ ] ji cong [ ] zhu zi 古文字中的[ ]及從[ ]諸字’, Hanxue yanjiu 漢學研究所, 6.2, 1988, 135–73.
144 For example, Heji: 10170, 10181, 10187, 10184. All these inscriptions bear the character hei, but are written differently. By not recognizing that this is no more than a variation, many scholars here misread this character; for example:

Cutian: 551: 用 甲牛 use/jin-black/ox
In early Zhou bronze inscriptions, the character is transformed thus: The main graphic structure is very similar to the Shang character, but the head is given emphasis by small dots which some scholars argue represent ink. Their theory is that this was a pictograph of a man whose face was tattooed, a practice known in Chinese history as qing mian 青面, an ancient punishment of criminals. Therefore, the ink must suggest the meaning black. However, the bone graph does not have these ink spots, and the character hei is never used as a colour term in Zhou bronze inscriptions.

If only its graphic development is taken in account, the bone character should be transcribed as jin 金. The identification of this bone character with the modern form han 禾 'drought', in the context of the examples which follow, was proposed by Tang Lan.

Heji: 10168
庚戌卜，貞：帝其降穉
geguxu/crack/divine/di-god/qi/descend/han-drought
‘Cracking made on gengxu day (47), divining: The di-god is perhaps sending down a drought.’

Heji: 10187
丁未卜，...龍方...降穉
dingwei/crack/.../Longfang/.../descend/han-drought
‘Cracking made on dingwei (day 44), ... Longfang... sending down a drought.’

In the inscriptions the character han seems to be used as a noun. However, it can sometimes be read as a verb:

Heji: 10164
...丑卜，貞：不雨，帝佳穉我
...chou/crack/divine/not/rain/di-god/wei/han-drought/us
‘Cracking made on ... chou day, divining: There is no rain. the di-god is causing us to suffer drought.’

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Here, Guo Moruo read it as loanword of the character jin 穴, meaning 'red'; see Cuihian kaoshi, 20. Tsung-Tung Chang and Serruys read it literally as a pictograph 'to burn a hunchback on fire' or 'to use (as victim) a hunchback'; see Chang, Der Kult der Shang-Dynastie: im Spiegel der Orakelschriften (Wiesbaden, 1970) 249; and Serruys’s ‘Language of Shang oracle bone inscriptions’, Toung Pao 60, 1–3, 1974, 1050, n. 32.

145 Jinwenbian: 1662.
146 See Tang Lan, ‘Shaanxisheng Qishan Dongjiacun xin chu Xi Zhou zhongyao tongqi mingci de shiwen he zhusi 陝西省岐山董家村新出土西周重要銅器銘詞的釋文和注釋 ’, Wenwu, 1976, no. 5, 63.
147 In the Shuowen (p. 290), it is written as 穴, and also as 賢, meaning ‘a clay soil’; and its guwen form is written as 穴. In Zhou bronze inscriptions, jin is sometimes used attributively to modify a jade tablet, e.g. jin zhang 墨鼎, in which the character jin is also understood as jin ‘a kind of precious stone’; see Mingwen xuan: 434 (Song ding 頌鼎), 435 (Song gui 頌簋), 436 (Song hu 頌壺). But, it is not entirely impossible that the character jin there should be read as a term referring to dark or black colour. Many surviving archaic jade zhang-tablets are black.
148 Tang Lan, Yinxu wenzi ji 殷墟文字記 (Beijing, 1981, first pub. 1934), 82–6.
Heji: 10172
辛卯卜，啟，貞：帝其嘆我
xinmao/crack/Que/divine/di-god/qi/han-drought/us
‘Cracking made on xinmao (day 28), Que, divining: The di-god is perhaps causing us to suffer drought.’

Yu Xingwu reads the character here literally as hei-‘black’, ‘darkness’, (‘the sun loses its light’).^149

In OBI, the jin-element is also employed as a phonetic in another bone-character jian 腦 which occurs frequently, meaning ‘difficulty’, ‘trouble’, or ‘hardship’. For example:

Heji: 24164
甲子卜，旅，貞：今日無來艱
jiazi/crack/Lü/divine/today/no/come/trouble
‘Cracking made on jiazi (day 1), Lü, divining: There is no coming trouble today.’

It is difficult to relate these characters hei and jin in the Zhou phonological system. *Hei* belongs to the xiao 晃 initial and the zhi 見 final, reconstructed as <*hak* or <*hmak*; and *jin* belongs to the jian 見 initial and the wen 文 final, reconstructed as <*kian*; they are unlikely to be related to each other.

*Jian* 腦 <*kran* is closer to the reconstruction of *jin*. However, although their initials are close, their finals still differ substantially. Their distinct phonetic reconstructions seem difficult to explain in the present phonological framework. If it is accepted that they all derived from the same root and the original character can only have one pronunciation, then some phonological explanation needs to be found.^150

You 煳 (or Xuan 玄)

The character you can be found in OBI; it is written as:^151 咣. The graphic structure of this character consists of two elements: 咣 and 玄; the former resembles two twisted threads, and the latter was understood by many scholars as a mountain-element. Traditionally, it is regarded as a xingshengzi, that is, its elements may suggest its meaning and sound. The *Shuowen* says: ‘you means hidden; it is derived from the element of 玄 inside an element representing mountain, 煳 is also the phonetic sign.’^152


^150 The later phonetic-compounds which bear the *jin*-element as their phonetic element also clearly divide into two different categories, for example: (a) 動, 懶, 見, 難 and (b) 漢, 難. In the (a) category, the characters mostly have velar initials and wen 文 <*-an* or zhen 貞 <*-in* final categories; the (b) category have various initials such as ni 泥 <*-n*, xiao 晃 <*-h* and tou 透 <*-th*, and their finals are mostly the same, yuan 元 <*-an*. The evidence here seems to suggest that there was a movement from the central vowel -a- to the low vowel -a-in that period; and that the palatization caused by the -j- and -r- may have been an important factor in such a transition. Tang Lan has once suggested that the *shen* and *yuan* categories are interrelated in proto-Chinese; see *Yinxia wenzi ji*, 79–81, 86.

^151 *Shuowen biaoshu*: 0533.

^152 *Shuowen*, 84.
However, as several scholars have argued, the ancient form of you is probably not derived from the mountain-element, but from a simplified form of the fire-element which acts as the semantic element.\textsuperscript{153} In Shang inscriptions, the elements for ‘mountain’ (shan 山) and ‘fire’ (huo 火) are often confused in their forms.

If the element representing twisted threads is written in half, as 回, then it becomes another character, xuan 玄. There is probably an etymological relationship between these two characters, because they relate to each other in various ways.

Semantically, the two characters are indeed related. In the Shuowen, xuan is defined almost as a synonym of you: ‘it means hidden and remote; black mixed with red is called xuan. It represents something hidden which is then covered up by the 路 (‘to enter’) element.’\textsuperscript{154} Thus, as you means ‘hidden’, xuan also means ‘hidden and remote’; and here xuan is defined as a colour word. In modern Chinese, both you and xuan mean black; but, in the strict archaic lexical sense, xuan refers to the ‘dark-red’ colour.

In OBI, apart from its role as a component of you, the twisted threads element is also an independent character zi 芝. Although their pronunciations seem distinct in Mandarin Chinese, these two characters you and zi probably shared an early phonological relationship. In Old Chinese, you belongs to the ying 影 initial and the you 幽 final; and zi to the jing 精 initial and the zhi 之 final. Their phonological categories are closely related, and their reconstructed sounds are: you 影 <*jiagw, zi 芝 <*tsjag. The character zi is often used as a demonstrative or pronoun in both Shang inscriptions and later transmitted texts, meaning ‘this’; we often read phrases such as zi yong 芝用 (‘this is used’) in OBI.\textsuperscript{155} In some texts, it may also be understood as a colour term meaning ‘black’ or ‘dark’.\textsuperscript{156}

Several other characters probably also originated from this root word, such as you 幼 <*jiagw, meaning ‘young’, which employed the twist-element as the phonetic sign;\textsuperscript{157} ji 業 <*kjag ‘small’; and si 絲 <*hrjag, the original pictograph of silk threads, and you 甬 referring to ‘dark’ or ‘dark-green’ colour. These examples suggest that the characters with the 丝-element are usually related to each other in some way, both phonetically and semantically. These characters are often interchangeable; that is, they are cognates, but sometimes they are just loan characters. They probably derive from a common root.\textsuperscript{158}

In OBI, the character is indeed used as the colour term attributively of ritual animals; for example:

**Heji:** 33606

SSI牛

**hui**you-dark-red/ox

‘We should sacrifice dark-red oxen.’

\textsuperscript{153} cf. Gu lin, 2481–3.

\textsuperscript{154} Shuowen, 84.

\textsuperscript{155} See Hu Houxuan, ‘Shi “ziyong” “zi yu” 石“茲用”、“茲御”’, BIHP, 8.3, 1940, 467–84.

\textsuperscript{156} It is sometimes interchangeable with the character zi 潤 ‘black’; cf. Shuowen, 84.

\textsuperscript{157} In the inscription on the Zhongshanwang Cuo ding 中山王厝鼎, you is written as 艴, this shows that the phonetic value of 艴 and 幼 are the same; cf. Mingwenxuan: 880.

\textsuperscript{158} In his doctoral thesis, ‘Yin Zhou guwen tongyuan fenhua xianxiang tansuo 豕周古文同源分化现象探索’ (Jilin Daxue 吉林大学, 1991), 180, Wang Yunzi 王蕴智 argues that these characters can be traced back stage by stage to the same Shang root <*jiou.
COLOUR TERMS IN SHANG ORACLE BONE INSCRIPTIONS

Tunnan: 763

...卜: 小乙卯，象幽牛，王受��，吉
.../crapk/Xiao Yi/mao-cut/hui/you-dark-red/ox/king/receive/assistance/aus-picious

'Cracking made on... We shall perform the cutting sacrifice and it should be dark-red oxen; the king will then receive assistance. Auspicious.'

Sometimes, the dark-red ox is used in contrast to animals of the other colour:

Heji: 14951

黃幽牛，又黃牛
hui/you-dark-red/ox/you-again/huang-yellow/ox

'We should sacrifice dark-red-oxen, plus yellow ones.'

Although the character you is usually written with the ‘fire-element’ in OBI, there are some exceptions; for example:

Tunnan: 4420

黃幽牛
hui/you-dark-red/ox

'We should sacrifice dark-red oxen.'

where you is used as a colour term attributively of the colour of an ox, but the ‘fire-element’ here is omitted, and the  בהתאם element is written closely to the character niu, as if it were a hewen character.

There is some evidence to suggest that the characters you and xuan 玄 may not have been distinguished at this stage in the Shang period. Heji: 33276 reads:

乙巳，貞：癸禾于羹，三玄牛
yisi/divine/hu-beg/harvest/to/Nao/three/xuan/ox

'On yisi (day 42), divining: In performing the prayer for a good harvest to Nao, three xuan (dark-red) oxen are offered.'

In this inscription the character xuan is written with only one twisted thread and without the fire-element. Judging by the context, it is likely to be a simplified form of you 玄.

Therefore, although in modern Chinese lexicography both the characters you and xuan are defined without distinction as ‘dark’/‘black’, the colour term you is more likely to be a ‘reddish’ colour than a ‘black’ colour in the Shang perception. In Shang ritual, animals of the you-dark-red colour are used differently from hei-black animals, and are closer to the reddish animals such as xin niu or red-yellow oxen.

Some later references may help us to understand the problem better. In Zhou bronze inscriptions, both you and xuan are constantly used as attributive adjectives, that is, colour terms: xuan is mostly used to describe metals or ores such as xuan-liu 玄錠,159 xuan-guang 玄銳,160 and textiles and clothing such as xuan-yi 玄衣 and xuan-gun 玄衾;161 whilst you appears frequently and

159 For example, Mingwenxuan: 826: Zhugong Jing zhong 齐公鼎錫, 827: Zhugong Hua zhong 齐公鷙酉.
160 ibid., 538: Wuwang Guang jian 吳王光鼎.
161 For example, see Mingwenxuan: 201: Shi Wangfu ding 齐壬父鼎, 202: Shi Cai ding 齐癸鼎.
attributively modifies the colour of jades such as you-huang 出黃 (金),\(^\text{162}\) In these inscriptions, they are likely to be understood as ‘dark’, ‘red-dark’, or even ‘dark-green’. In Zhou bronze inscriptions, many of the colour words are often used attributively of objects such as the clothes which are gifts from Zhou kings to their ministers. The colours of the gifts such as jades and garments, as Chen Hanping argued, probably symbolize the social status of the receiver.\(^\text{163}\)

In pre-Han literature, it is likely that there is still a difference, however subtle, between you and xuan. For example, in the Shijing, we read: ‘qi ye you you 蒲葉有蒲’ (Maoshi: 228), and ‘he cao bu xuan 何草不玄’ (Maoshi: 234). In both examples, you and xuan are used to modify the colour of the plants but, according to the early commentaries, you means only ‘black’ or ‘dark-green’, whereas xuan, as Zheng Xuan noted, is ‘dark-red’.\(^\text{164}\) In the Laozi, a phrase xian pin 玄牝 ‘Dark Cow’ can be read.\(^\text{165}\) Although it is attributed with a profound philosophical meaning, the word xuan seems also to be related to menstruation.

Later, the meanings of you and xuan become much more complex, especially in literary contexts, where they signify ‘dark’, ‘deep’, ‘remote’, ‘hidden’, ‘mysterious’, ‘small’, ‘subtle’, ‘silent’,\(^\text{166}\) and both are used to refer to the spiritual world. However, there seems to be a slight distinction between them: the latter often signifies the sky or heaven, such as the Xuan gong 玄宮 (The Dark Palace), Xuan pu 玄圃 (The Dark Garden), and Xuan que 玄闕 (The Dark Gate-tower), while you is related to the underworld which is called the You du 窮都 (Dark Capital).\(^\text{167}\)

**Conclusion: Shang colour categorization**

In the above I have identified and examined the usages of a number of colour terms found in Shang oracle bone inscriptions: chi-‘red’, bai-‘white’, hei(or-jin-)-‘black’, huang-‘yellow’, xing-‘red-yellow’, you-(or xuan-)-‘dark-red’, possibly zhi-‘brown’, and wu for multi-colour. There may be other colour words used in Shang inscriptions which it is not yet possible to decipher, but the colour terms found so far show that the Shang already had a rich colour vocabulary. To conclude this paper, I would like to offer some theoretical discussion of Shang colour categorization in relation to general studies done by other linguists and anthropologists in the field.

First, it is interesting to note that the graphic forms of some of the colour terms contain a semantic element indicating their meaning: the characters chi

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\(^\text{162}\) ibid., 416: Liu ding 柳鼎; in this attributive phrase the character you 豫 is sometimes interchangeable with cong 槐 (蔔), for example, see also Maaogong ding 毛公鼎.

\(^\text{163}\) Chen Hanping, Ceming zhidu, 286–93.

\(^\text{164}\) See Maoshi zhengyi, juan 15:2 and 15:3 (SSJZS, 495, 501).

\(^\text{165}\) See Chen Guying 陳鼓應, Laozi zhuan yi ji pingjie 老子注譯及評解 (Beijing, 1984), 85.


\(^\text{167}\) For example, in the Zhaohun (‘招魂’): ‘Souls, please return! Stop your descent to that Dark Capital!; in the same chapter, we read: ‘Flying fire is rising continually; the dark-red face turns steaming red.’ The youdu 窮都 is known to be the underworld, and the phrase xuanyan 玄顏 ‘dark-red face’ refers, as Wang Yi 王逸 (c. A.D. second century), pointed out, to heaven. See Hong Xingzhu 洪興祖 (c. A.D. twelfth century), Chuci bazhu 楚辭補注 (Beijing, 1983), 201, 213–14.
and you both have the fire-element; and the character for black is etymologically associated with ‘drought’ and ‘difficulty’. The reason why these words are associated somehow relates to a psychological interaction between natural phenomena and the human perception of colour. The basic law behind such association may be founded on analogical thinking; for example, red reminds us of the connotations of fire and blood, green calls up thoughts of trees and nature.

Secondly, the characters representing colour terms usually have more than one function; apart from being adjectives, they are also verbs, grammatical particles, or personal or place names. When used as a colour term, the word functions as an adjective modifying an object, usually an animal, forming an attributive phrase. That the Shang colour terms are associated with ritual animals is significant. Linguistic profusion is, as Evans-Pritchard argues, related to the direction and strength of a people’s interests. In studying the Nuer cattle vocabulary, he found that the nomenclature of oxen mainly referred to their colour and the shape of their horns; for example, the Nuer had ten principle colour terms: ‘white’ (bor), ‘black’ (car), ‘brown’ (lual), ‘chestnut’ (dol), ‘tawny’ (yan), ‘mouse-grey’ (lou), ‘bay’ (thiang), ‘sandy-grey’ (lith), ‘blue and strawberry roan’ (yil), and ‘chocolate’ (gwir). When a cow was of a single colour it was described by one of these terms, but there were, however, many combinations. In his study of the Mursi colour terms, David Turton also finds that there are no colour terms in Mursi other than cattle-colour terms and the configurations of cattle colours serve as a model for colour naming. The Shang people may also have used ritual animals as their model for colour naming.

Furthermore, the identification of colour terms and their graphic forms cannot take us very far if we do not understand the colour categorization they stand for. As we have learned from linguistic and anthropological studies, even when a word is used as a colour term throughout its lexical history, it does not necessarily exhibit a fixed reference to the colour spectrum; and we should remember that its semantic boundary can shift from time to time. It is useful then to reconstruct the colour categories underlying the colour terms found in OBI which could lead to a better understanding of Chinese colour terminology.

According to Berlin’s and Kay’s theory, mentioned above in the introduction, at the first stage of colour categorization we should have ‘light-warm’

168 The Greek word for ‘fire’ (pyr) and the Latin word burrus meaning ‘fiery red’ derived from the same ancestral form. This led to Romance forms meaning ‘dark red’ (Provençal burel meant ‘brownish red’) and Old French burel (variant bure), meaning ‘dark brown’. Cf. D. Bolinger and D. Sears, Aspects of language (New York, 1981), 266.


172 In the 1940s, Hu Puan 胡懋安 tried to reconstruct the evolutionary history of Chinese colour terms. His starting-point was that the evolution of the colour vocabulary was associated with the evolution of human society; therefore his reconstruction is as follow: bai-‘white’ came first; it is a pictograph of a man’s face, indicating the recognition of man himself; second is chi-‘red’, which is associated with ‘fire’; it probably emerged in the hunting stage; third huang-‘yellow’ derived from the ‘soil’, indicating the development of agriculture; and fourth hei-‘black’ came with a settled and civilized society, the form of the character representing cooking ‘smoke’. See Hu Puan, ‘Cong wenzixue shang kaojian gu dai
(white, red and yellow) and ‘dark-cool’ (black, green and blue) categories. White emerged from the ‘light-warm’ category at the second stage. At the third stage, either ‘dark-cool’ decomposes into black and cool, or ‘warm’ is split into red and yellow. The fourth stage must be black, white, red and yellow. At the fifth stage green and blue are differentiated from the ‘cool’ category.\textsuperscript{173} Thus, the so-called universal temporal order is as follows:

I: light-warm (white/red/yellow)
   dark-dool (black/green/blue)

II: warm
   white
   dark-cool

III\textsubscript{a}: warm > red/yellow
   white
   dark-cool

III\textsubscript{b}: warm
   white
   dark-cool > black/cool

IV: white
   red
   yellow
   black

V: white
   red
   yellow
   green/blue
   black

Basing himself on the Theory of Berlin, Kay and McDaniel, W. Baxter argues that there are probably only four basic colour terms (bai 白, huang 黄, chi 赤 or zhu 朱, xuan 玄) in pre-Zhou Chinese, representing four colour categories: white, red, yellow and dark-cool.\textsuperscript{174} The evidence from Shang inscriptions largely supports this hypothesis, but it also shows some particularities.

Apart from the four categories, there probably existed a category \textit{wu} 勺 ‘multi-colour’ in the early stage. The colour terms \textit{bai} and \textit{wu} are seen to be used in contrast in the inscriptions of the early period (the Shi-group). In Shang colour

\textsuperscript{173} Berlin and Kay’s theory since has been modified; $\Rightarrow$ P. Kay and C. K. McDaniel, ‘The linguistic significance of meanings of basic color terms’, \textit{Language} 54, 1978, 610–46.

\textsuperscript{174} W. Baxter, ‘A look at the history of Chinese color terminology’, \textit{Journal of the Chinese Language Teachers Association}, xviii, 2, 1983, 1–25. Here, Baxter lists the character \textit{zhu} as one of the early basic terms. Although the form can be found in OBI, it is never used as a colour term. It is, however, used as the colour term representing red in Zhou bronze inscriptions.
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categorization, \textit{bai}-‘white’ probably covers most of the light tints while \textit{wu} seems to include all ‘coloured’ objects. An alternative interpretation is that \textit{bai} means ‘no-colour’, and that \textit{wu} refers to various dark-cool colours. A similar case can be found in ancient Egyptian colour terminology, where apart from the four basic colour terms: black (\textit{km}), white (\textit{hd}), red (\textit{dsr}) and green (\textit{wad}), there is another term \textit{sdb} meaning ‘variegated’ or ‘multi-coloured’, which is used only for animal skins and hair. The same situation is also seen in Sumerian and Akkadian.\textsuperscript{175}

Therefore, although Berlin, Kay and McDaniel argued that the discrimination of ‘white’ (warm) and ‘black’ (cool) must be ‘Stage I’ of the universal colour categorization, it is not entirely impossible that the first colour distinction may also be between the two categories, ‘coloured’ and ‘non coloured’.

By using colour chips, many investigators have found considerable differences between the way one group of people classifies the colour spectrum by comparison to others. For instance, H. Conklin has observed that the classification of colours among the Hununoo of the Philippines is radically different from our own.\textsuperscript{176} There are four basic colour terms: (a) \textit{(ma)la\text{\={g}}ti?} covers English ‘white’, but also all other light tints; (b) \textit{(ma)biru} covers ‘black’, but also dark tints of other colours; (c) \textit{(ma)rara?} covers approximately ‘red’, ‘orange’ and ‘maroon’; and (d) \textit{(ma)latuy?} covers the range of ‘yellow’, and light tints of ‘green’ and ‘brown’. Furthermore, their classification is based on the wet/dry axis, which is different from that of brightness/intensity.

Based on my study of Shang colour terms, the Shang colour categorization can be hypothetically reconstructed as shown in fig. 1.

![Fig. 1](image)

The evidence from OBI suggests that there are three or four colour terms standing for the ‘red/warm’ category: \textit{chi}-‘red’, \textit{xing-}‘red-yellow’ (‘orange’), \textit{you}-‘dark-red’; and probably \textit{zhi}-‘brown’ (which is a dark-yellow or dark-red-yellow colour) might also be related to this category. Red is the most silent of colour experiences to the human eye, and covers a greater


variety of wavelength combinations than other colours. However, there is some lexical distinction between the words chi, xing and you in Shang inscriptions: they all refer to animals of reddish colour, but chi is only used attributively to modify the colour of horses, whilst xing, zhi and you refer to oxen. Linguistically speaking, they can hardly be treated as synonyms. In fact, the difference between these colour terms is more likely to lie in the saturation of the hue.

Huang-'yellow’ also presents some difficulty for our categorization. In the Shuowen, Xu Shen says that huang ‘is the colour of earth’; and in Shang rituals, we see that animals of yellow colour were sacrificed to the directions or the earthly spirits. Sometimes, huang-'yellow’ was used in contrast to you-'dark-red’. In the Shang colour categorization, ‘yellow’ seems to be a neutral colour, which may be understood as a ‘warm’, or a ‘cool’ colour, largely depending on the luminosity and the sensory processes, rather than the hues.

In reading the colour chart, we have to bear in mind that our translation of the colour terms in Shang inscriptions has to be tentative because there are uncertainties as to whether modern perceptions of colour which are represented by these colour terms are or are not similar to those of the Shang people. It is clear that understanding colour categorization is a multidimensional process: the effect of colour, its hues, brightness and saturation all play their part. A colour term sometimes has less to do with the real object’s colour than its lightness or saturation, and these three attributes are often mixed or overlap.

A final observation should be made on the late stage of development in colour categorization with special reference to the linguistic representation of ‘green/ blue’. In late periods, apart from white, red, yellow and black, there is the fifth basic colour term qing 青<*tsing, representing the ‘green/blue’ category.

The form of the character qing is found in Shang inscriptions, written 青, but it is never used as a colour term. The character qing graphically, as well as phonetically, relates to sheng 生<*sring ‘to grow’. Textual evidence of the use of qing as a colour term probably does not appear until the Zhou period.

On the Qiang pan, cited earlier, we read: ‘qing you gao zu 青幽高俎’, where qing, used together with you, is probably understood as the extended meaning of the colour term ‘dark-green’, referring to the sky or heaven where the ancestors lived.

177 Shuowen, 291.
178 In his study of the semantic system of Shang language, Zhao Cheng noted that the colour terms may cover domains much broader than their modern lexicography; he thinks that in OBI hei-‘black’ covers darkish grey, bai-‘white’ covers light grey and yellow, huang-‘yellow’ covers brown and chi-‘red’ covers bright yellow or orange. See Zhao Cheng, ‘Jiaguwen ciyi xitong tansuo 甲骨文詞義系統探索’, Lunwenji, 101–2.
180 cf. Jishi, 1739, where Li Xiaodong argues that the character appears in one inscription in which it was probably used as qing-‘green’, but evidence shows that it should be read as nan 南 ‘south’, rather than qing-‘green’.
181 Many scholars have read the qing as a loan character for jing 静 ‘silent’, and translated the phrase as ‘the silent and mysterious ancestors’; for example, see Li Xueqin, ‘Lun “Shi Qiang pan” jiqi yiyi’ (see n. 167 above).
In pre-Han texts, the meaning of the character *qing* is complex; it probably means (a) the colour green, e.g. *qing cao* 青草 ‘green grass’; (b) the colour blue, e.g. *qing tian* 青天 ‘blue sky’; and (c) sometimes, *qing* is also understood as black or dark. In the Shijing, for example, we read ‘lù zhu *qing* *qing* 綠竹青青’ (Maoshi: 55) and ‘qi ye *qing* *qing* 其葉青青’ (Maoshi: 233). In both cases, the character *qing* is likely to be an adjective referring to the colour ‘green’; and in the first example in particular, it is used to describe *lù zhu* or ‘green bamboo’. However, when used in the context of the sky, *qing* is interchangeable with *cang* 著 <*tshang* (‘dark-grey’). In the Shijing, the colour term referring to the sky is *cang*: ‘you you *cang* *tian* 悠悠蒼天’ (Maoshi: 65); and ‘bi *cang* *zhe* *tian* 彼蒼者天’ (Maoshi: 131).

In Zhuangzi. Xiaoyaoyou, Baxter argues that green and blue were included in the black category in pre-Zhou Chinese. From the literary material, it is likely that *qing* was indeed interchangeable with other colour terms such as *cang*, *you* or *xuan* during the early stage. Later, when colour categorization was better defined, a distinction between *you* and *xuan* was made and *qing* emerged from the dark category, from which also derived the new colour terms *lù* 綠 ‘green’ and *lan* 藍 ‘blue’.

There is no doubt that the Shang people did know of the existence of the colour green/blue. Archaeological evidence has shown that green pigment was specially made and used at that time. In the 1960s, Cheng Te-k’un 鄭德坤 studied a group of fifteen *t’u* *lu* pigment containers assigned to the late Shang and early Zhou period. These containers are made of bronze, pottery, jade and marble. Each piece has four or five tubular containers, one at each corner. In three out of the fifteen containers, deposits of pigments were found in the bottom of the tubes, and these have been identified as white, black, red and green powders. Therefore, it is possible that in the Shang period although the *qing*-‘green/blue’ category was not yet linguistically distinguished, it was included in the *wu*-multi-colour or *huang*-yellow category. Here, the linguistic history of *qing* is a perfect example demonstrating the complex relationship between colour terms and colour categorization.


183 *Maoshi zhengyi*, *juan* 3:2; (SSJZS, 321).

184 ibid., *juan* 15:3 (SSJZS, 501).

185 ibid., *juan* 4:1; (SSJZS, 330).

186 ibid., *juan* 6:4; (SSJZS, 373).


189 Cheng De-k’un, ‘The T’u-lu colour-container of the Shang-Chou period’, *BMFEA*, 37, 1965, 239–50. The name ‘T’u-lu’ was taken from an inscription inscribed on one of the containers.

190 The specimen was analysed by the Research Laboratory for Archaeology at the University of Oxford. A report was included in Cheng’s paper.