

On Metaphor and Metonymy Based on TIME Category in the Oracle-Bone Inscriptions and the Bronze Inscriptions in China Ancient Shang Dynasty Before 3000 yearsⁱ

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Abstract

Metaphor and metonymy had always being believed as two kinds of figures of speech, but they are recently regarded as two kinds of thinking way, and widely accepted to study the modern language in cognitive linguistics field, especially to study the India-Europe language family. Are they common thinking way to any language? So this paper wants to verify this theory through studying the TIME category of language material based on the ancient language from Sino-Tibet language family. After systematically analyzing the time concepts in the OBI and BI in China ancient Shang Dynasty, we consider that in TIME category, metaphor and metonymy play a decisive role to conceptualize the time, and they have penetrated every level of TIME category – from subordinate category to basic category and super ordinate category. It is true to regard metaphor and metonymy as two kinds of common thinking way.

Key Words: Metaphor and Metonymy, the Oracle-Bone Inscriptions, the Bronze Inscriptions, Remote Ancient China.

Traditionally, metaphor and metonymy have been regarded as figures of speech, but Black (1962:37), Burke (1945:503), Lakoff & Johnson (1980:5), Sweetser (1990:8, 19), F. Ungerer & H. –J. Schmid (2008:114) believed that metaphor and metonymy are powerful cognitive tools for our conceptualization of the world. Namely, metaphors and metonymies act as ‘cognitive instruments’, and they are not just two stylistically attractive ways of expressing ideas by means of language, but two ways of thinking about things. Are these two ways of thinking common phenomena in one category 3000 years ago? In addition, these two cognitive instruments play the same role in the early inventing words? At the same time, the relationship between the metaphor and metonymy is also worth studying. So this paper chooses 3000-year-ago Oracle-Bone Inscriptions and Bronze Inscriptions as the language material and TIME category as the investigating point to study the above questions. The Oracle-Bone Inscription (OBI) was written on the animal bones or tortoise shells. The Bronze Inscription (BI) was written on the Bronze wares. The OBI and BI of the Shang Dynasty were dated from B.C.16 century to B.C.11 century.

They are the remote Chinese Characters, and the language materials which recorded have been considered as the earliest firsthand language information for studying the Chinese history and Chinese language, they keep many original features of inventing words to record language, so OBI and BI are believed as the true start-point of studying Chinese history and Chinese language. As we know, time concepts are abstract and complex, and they cannot be easily conceptualized, so we investigate the TIME category in the OBI and BI which existed before 3000 years, and we can better understand the acting factors in conceptualization process. This paper will discuss the ways of thinking when the conceptualization process of the TIME category.

1. Time Is An Order.

1.1 The Order of the Days

In Shang Dynasty, the Heavenly stems and the Earthly branches—Ganzhi in Chinese played the most important role in the time concepts system in the OBI and BI. The system of the Heavenly stems and Earthly branches is a form to record time in Chinese culture. It consists of 10 Heavenly stems and 12 Earthly branches which are two sets of signs. One can be taken from each set to form 60 pairs, and which can designate the days. The 10 Heavenly Stems are Jia (甲), Yi (乙), Bing (丙), Ding (丁), Wu (戊), Ji (己), Geng (庚), Xin (辛), Ren (壬) and Gui (癸). The 12 Earthly Branches are Zi (子), Chou (丑), Yin (寅), Mao (卯), Chen (辰), Si (巳), Wu (午), Wei (未), Shen (申), You (酉), Xu (戌) and Hai (亥). The first one of the 10 Heavenly stems is Jia (甲), and the first one of the 12 Earthly branches is Zi (子), so they form the first one of the 60 Ganzhies—Jiazi (甲子), and it represents the first day of the 60 days. The second one of the 10 Heavenly stems is Yi (乙), and the second one of the 12 Earthly branches is Chou (丑), so they form the second one of the 60 Ganzhies—Yichou (乙丑), and it represents the second day of the 60 days. On the analogy of this, we can get the following Ganzhi form which can represent the 60 days.

day 1	day 2	day 3	day 4	day 5	day 6	day 7	day 8	day 9	day 10
Jiazi 甲子	Yichou 乙丑	Bingyin 丙寅	Dingmao 丁卯	Wuchen 戊辰	Jisi 己巳	Gengwu 庚午	Xinwei 辛未	Renshen 壬申	Guiyou 癸酉
day 11	day 12	day 13	day 14	day 15	day 16	day 17	day 18	day 19	day 20
Jiaxu 甲戌	Yihai 乙亥	Bingzi 丙子	Dingchou 丁丑	Wuyin 戊寅	Jimao 己卯	Gengchen 庚辰	Xinsi 辛巳	Renwu 壬午	Guiwei 癸未
day 21	day 22	day 23	day 24	day 25	Day 26	day 27	day 28	day 29	day 30
Jiashen 甲申	Yiyou 乙酉	Bingxu 丙戌	Dinghai 丁亥	Wuzi 戊子	Jichou 己丑	Gengyin 庚寅	Xinmao 辛卯	Renchen 壬辰	Guisi 癸巳
day 31	day 32	day 33	day 34	day 35	day 36	day 37	day 38	day 39	day 40
Jiawu 甲午	Yiwei 乙未	Bingshen 丙申	Dingyou 丁酉	Wuxu 戊戌	Jihai 己亥	Gengzi 庚子	Xinchou 辛丑	Renyin 壬寅	Guimao 癸卯
day 41	day 42	day 43	day 44	day 45	day 46	day 47	day 48	day 49	day 50
Jiachen 甲辰	Yisi 乙巳	Bingwu 丙午	Dingwei 丁未	Wushen 戊申	Jiyou 己酉	Gengxu 庚戌	Xinhai 辛亥	Renzi 壬子	Guichou 癸丑
day 51	day 52	day 53	day 54	day 55	day 56	day 57	day 58	day 59	day 60
Jiayin 甲寅	Yimao 乙卯	Bingchen 丙辰	Dingsi 丁巳	Wuwu 戊午	Jiwei 己未	Gengshen 庚申	Xinyou 辛酉	Renxu 壬戌	Guihai 癸亥

The 60 pairs are a cycle. In this cycle, Jiazi (甲子) is on the first place, and Guihai (癸亥) is the last one. Behind Guihai (癸亥) is Jiazi (甲子) again, and next cycle begins, so the 60 Ganzhi can record the sequence of the time during 60 days. Each Heavenly Stems and Earthly Branch has accurate place in Ganzhi system, so people can calculate the time between two Ganzhies when they emerge in the OBI in the Shang Dynasty.

(1) **Jiazi (甲子)** in the OBI: 甲子夕卜，侑祖乙一羌，歲三牢。(《合集》32171)

Chinese Pinyin: Jiazi xi bu, you Zuyi yi qiang, sui san nao. (Heji 32171)

Word-to-word translation: Jiazi night crack-making, sacrifice ancestor Yi in way of You one person Qiang, Sacrifice three bulls. (Heji 32171)

Idiomatic translation: Crack-making in the night at **Jiazi (day 1)**, (charge) we shall sacrifice one Qiang person to ancestor Yi in way of you and kill three bulls for ancestor Yi. (Heji 32171)

(2) **Yichou (乙丑)** in the OBI: 辛酉卜，确贞：乙丑其雨，不佳我祸。(《合集》6943)

Chinese Pinyin: Xinyou bu, Que zhen: Yichou qi yu, bu wei wo huo. (Heji 6943)

Word-to-word translation: Xinyou crack-making, Que divine, Yichou will rain, not we have calamity.

Idiomatic translation: Crack-making on Xinyou (day 58), Que divined: (charge) It will rain on **Yichou (day 2)**, and we shall not have calamities. (Heji 6943)

(3) **Bingyin** (丙寅) in the OBI: 丙寅允雨。四月。 (《合集》12546)

Chinese Pinyin: Bingyin yun yu. Siyue. (Heji 12546)

Word-to-word translation: Bingyin really rain, the fourth month. (Heji 12546)

Idiomatic translation: (Verification) It really rained on **Bingyin (day 3)** in the fourth month. (Heji 12546)

1.2 The Order of the Months

In the OBI in the Shang Dynasty, the moon's shape is ☾ (Heji 20924) or ☽ (Heji 629) which derived from the incomplete moon. The period which moon cycles the earth is 29 days and a half day, but in ancient Chinese lunar year, one month is 30 days, and the next month is 29 days. The months were located in this way. In order to adjust to the solar year, in the OBI, people set the thirteen month sometimes at end of the year. People in the Shang Dynasty put Chinese numbers which were called 'yi(一), er(二), san(三), si(四), wu(五), liu(六), qi(七), ba(八), jiu(九), shi(十), shiyi(十一), shier(十二), shisan(十三)', namely the Arabic numbers—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 in front of the moon to express the order of the month in the year.

(4) **Yiyue** (一月) in the OBI: 惠兹卜用。一月。 (《合集》25016)

Chinese Pinyin: Hui zi bu yong. Yiyue. (Heji 25016)

Word-to-word translation: this divining use, the first month. (Heji25016)

Idiomatic translation: We shall trust and use this divining. It is in **the first month**. (Heji25016)

(5) **Eryue** (二月) in the OBI: 王宾戡亡祸。二月。 (《合集》25671)

Chinese Pinyin: Wang bin zhi wang huo. Eryue. (Heji 25671)

Word-to-word translation: The king sacrifices in ways of Bin and Zhi, have not calamity, the second month. (Heji 25671)

Idiomatic translation: (charge) the king will sacrifice in ways of Bin and Zhi, and have not calamities. It is in **the second month**. (Heji 25671)

(6) **Sanyue** (三月) in the OBI: 辛卯卜，即贞：王其御于祖。三月。 (《合集》40972)

Chinese Pinyin: Xinmao bu, Ji zhen: Wang qi yu zu. Sanyue. (Heji 40972)

Word-to-word translation: on Xinmao Crack-making, Ji divines: the king will sacrifice to the ancestors in way of Yu, the third month. (Heji 40972)

Idiomatic translation: Crack-making on Xinmao, Jin divined: (charge) the king will sacrifice to the ancestors in way of Yu. It is in **the third month**. (Heji 40972)

1.3 The Order of the Years

In the Shang Dynasty, war and sacrificing the ancestors are the most important things. The word expressed the sacrificing is Si (祀) in Chinese. Its shape is 𠄎 (Heji 28170) in the OBI. In this character, the left sector is the table on which the sacrificial offerings were located, and the right sector expressed the sound of this character. Si (祀) consisted of five forms of sacrificing to the ancestors. They are Rong (彤), Yi(翌), Ji(祭), Su(𠄎) and Xie(𠄎). People had sacrificed to all ancestors in these five sacrificing forms in fixed order. It formed a cycle when these five sacrificing forms all were used to sacrifice to all ancestors in order. A cycle was called one Si (祀). A cycle is 360 days or 370 days which coincided with the solar year.

(7) **Ersi** (二祀) in the OBI: 癸未王卜贞：酒彡日，自上甲至于多毓衣，亡它在祸。才四月。隹王二祀。 (《合集》37836)

Chinese Pinyin: Guiwei Wang bu zhen: Jiu Rongri, zi Shangjia zhi yu duo Hou yi, wang ta zai huo. Zai Siyue. Wei Wang ersi. (Heji 37836)

Word-to-word translation: Guiwei the king Crack-making divine: sacrifice on Rong day, from Shangjia to a few kings sacrifice, no calamity at Huo. The fourth month, King the second year. (Heji 37836)

Idiomatic translation: Crack-making on Guiwei (day 20), the king divined: (charge) sacrificing the ancestors from Shangjia to a few kings on day Rong, it will not have calamities at place Huo. It is in the fourth month of the king's **second year**. (Heji 37836)

(8) **Sansi** (三祀) in the OBI: 癸巳王卜贞：旬亡祸。王占曰：吉。才六月。甲午彡羌甲。隹王三祀。（《合集》37838）

Chinese Pinyin: Guisi wang bu zhen: Xun wang huo. Wang zhan yue: Ji. Zai Liuyue. Jiawu Rong Qiangjia. Wei Wang san si. (Heji 37838)

Word-to-word translation: Guisi the king crack-making divine: these ten days have not calamity. The king read the crack and say: luck. In the sixth month, Jiawu sacrifices Qiangjia in way of Rong, the king the third year. (Heji 37838)

Idiomatic translation: Crack-making on Guisi (day 30), the king divined: (charge) there are some calamities in these ten days. The king read the crack and said: (prognostication) it will be luck. It is in the sixth month. Sacrificing to the ancestor Qiangjia in way of Rong on Jiawu (day 31), it is in the king's **third year**. (Heji 37838)

(9) **Sisi** (四祀) in the OBI: 癸巳王卜贞：其酒口日，自上甲至于多毓衣，亡它在祸。才口月。隹王四祀。（《合集》37841）

Chinese Pinyin: Guisi Wang bu zhen: Qi jiu...ri, zi Shangjia zhiyu duo Hou yi, wang ta zai huo. Zai...yue. Wei Wang si si. (Heji 37841)

Word-to-word translation: Guisi the king crack-making divine: sacrifice in way of Jiu at some day, from Shangjia to a few kings sacrifice in way of Yi, no calamity at *huo*, in some month, the king the fourth year. (Heji 37841)

Idiomatic translation: Crack-making on Guisi (day 30), the king divined: sacrificing to the ancestors from Shangjia to a few kings in ways of Jiu and Yi at some day, there are some calamities at place Huo. It is in some month of the king's **fourth year**. (Heji 37841)

So, 60 Ganzhies can record the order of 60 days in one cycle, Jiazi (甲子) records the first day, Yichou (乙丑) records the second day, and Guihai (癸亥) recording the 60th day. After Guihai, next cycle begins. Ganzhies develop a sequence of days. And from Yiyue (一月, the first month) to Eryue (二月, the second month), to Sanyue (三月, the third month), till to Shier Yue (十二月, the twelfth month) or Shisan Yue (十三月, the thirteenth month), 12 months or 13 months orderly form a sequence during one Si (一祀, one year). Five sacrificing forms have fixed order and fixed time duration. Every king uses these five sacrificing forms to sacrifice to the ancestors. When they finish these five sacrificing forms in order, the time is one Si (祀), namely, one year. So people use Si (祀) to record the order of the years when one king is on the throne.

2. Time Is a Direction

There are a group of time expressions to be used in front of time words to indicate the time direction in OBI and BI in the Shang Dynasty, namely, these words disclose the time points which locate at past, at present, or in the future. These time expressions are Xi (昔), Jin (今), Yi (翌), Lai (来) and Sheng (生).

Xi (昔), its shape in the OBI is  (Heji 16930) or  (Heji 137b). The meanings in this character are 'the sun' and 'the floods'. It describes the sun was shining over the floods on the Central Plains that comprises the middle and lower reaches of the Huanghe River in the far remote time, so it means 'past'. Jin (今), its shape in the OBI is  (Heji 20899). It means 'now' or 'at present'. Yi (翌), its shape in the OBI is  (Ying 1079) which is pictography character of bird's feather. Its meaning of word is 'in the near future' or 'the next time'. Lai (来), its shape in the OBI is  (Heji 1422) which is pictography character of barley. Its meaning of word is 'in the future'. Sheng (生), its shape in the OBI is  (Heji 33038). Its character meaning is 'grass is growing from earth'. 'Growing' means marching, so Sheng can mean 'next' or 'future'.

(10) **Xi** (昔) in the OBI: 四日庚申亦有來艱自北。子既告曰：昔甲辰，方征于攸，俘人十又五人。五日戊申，方亦征，俘人十又六人。六月在敦。（《合集》137反）

Chinese Pinyin: Siyue Gengshen yiyou laijian zibei. Ziji gao yue: 'Xijiachen Fang zheng yu you, fu ren shiyouwu ren. Wuri Wushen, Fang yi zheng, fu ren shiyouliu ren, Liuyue zai Dun.' (Heji 137fan)

Word-to-word translation: Four days Gengshen also have coming calamity from the north. Son Ji tell: **the past** Jiachen the state Fang raid field You, capturing 15 persons. Five days Wushen, the state Fang also raid, capturing 16 persons, the sixth month at Dun. (Heji 137b)

Idiomatic translation: (Verification) There were some unfortunate things happened from the north in the fourth day at Gengshen (day 57). Son Ji told that the state Fang had raided our fields *you* in **the past** Jiachen (day 41), and capturing 15 persons from our fields. After five days, the state Fang raided our fields too at Wushen (day 45), and capturing 16 persons. It was in the sixth month at the Place Dun. (*Heji* 137b)

(11) **Jin** (今) in the OBI: 今辛亥勿侑于上甲。 (《合集》7076)

Chinese Pinyin: **Jin** Xinhai wu you yu Shangjia. (*Heji* 7076)

Word-to-word translation: **At present** Xinhai no sacrifice to *shangjia* in way of You. (*Heji* 7076)

Idiomatic translation: (charge) we shall not sacrifice to the ancestor *shangjia* in way of You **at present** on Xinhai (day 48). (*Heji* 7076)

(12) **Yi** (翌) in the OBI: 贞：翌甲午不其易日。 (《英》1079)

Chinese Pinyin: Zhen: **Yi** Jiawu bu qi yiri. (*Ying* 1079)

Word-to-word translation: divine: **the coming** Jiawu no change the weather. (*Ying* 1079)

Idiomatic translation: Divining: the weather will not change **on the coming** Jiawu (day 31). (*Ying* 1079)

(13) **Lai** (来) in the OBI: 贞：來甲寅侑上甲十牛。 (《合集》1140)

Chinese Pinyin: Zhen, **Lai** Jiayin you yu Shangjia shi niu. (*Heji* 1140)

Word-to-word translation: divine: **the future** Jiayin sacrifice to *shangjia* in way of You ten bulls. (*Heji* 1140)

Idiomatic translation: divine: (charge) we shall sacrifice ten bulls to the ancestor *shangjia* in way of You on **the future** Jiayin (day 51). (*Heji* 1140)

(14) **Sheng**(生) in the OBI: 贞：生一月不其多雨。 (《合集》12501)

Chinese Pinyin: Zhen, **sheng** Yiyue bu qi duoyu. (*Heji* 12501)

Word-to-word translation: divine: **next** the first month no heavy rain. (*Heji* 12501)

Idiomatic translation: divining: (charge) it will not have heavy rain in the **next** January. (*Heji* 12501)

So, in these words, Jin (今) means ‘now’ or ‘at present’ which point the existing time points when speaker is speaking. Xi (昔) means ‘past’ which points the past experience which speaker finished his speech. Yi(翌), Lai Lai(来) and Sheng(生) mean ‘in the future’ which point the approaching time when the speaker predicts the coming thing. So these words form ‘past—now—future’ time-chain which has direction. In this time-chain, ‘now’ is the start-point through which human beings view this world.

3. Time Is a Motion

In Shang Dynasty, the sun and the moon are the main reference points which people use to define the time cycle of one month or one year and the place of time during one day. In ancient China, people divided one day into many periods of time, then the ancient people named each period of time in special noun, so each period of time has its special name—we call it Time Duration in Chinese language. These names of Time Duration derived from the motion of sun and moon during one day. The Time Durations in the daylight mainly based on the motion of sun, and the Time Duration in the night mainly based on the motion of moon.

3.1 The Motion of the Sun

Ri(日), its shape in OBI and BI is  (*Heji* 28569), and it is a pictographic character which is like ‘sun’. ‘Ri’ means ‘one day’.

(15) **Ri** (日) in the OBI: 乙亥夕卜，其雨。子占曰：今夕雪，其于丙雨，其多日。用。 (《花东》400)

Chinese Pinyin: Yihai xi bu, qi yu. Zi zhan yue: ‘Jinxue, qi yu Bing yu, qi duori.’ Yong. (*Huadong* 400)

Word-to-word translation: Yihai night crack-making, rain. Son *zi* read the crack and say: this night snow, on Bing rain, a few days. Use. (*Huadong* 400)

Idiomatic translation: Crack-making in the night on Yihai (day 11), divining: (charge) it will rain. Son *zi* read the crack and said: it will snow in this night, and it will rain on day Bing, raining for **a few days**. Using this divining. (*Huadong* 400)

Dan (旦), its shape in the OBI is  (*Heji* 27308). The meaning in this character is ‘the sun is on the horizon’. The word’s meaning is ‘the time when the sun is rising from the horizon’.

(16) **Dan** (旦) in the OBI: 于祖丁旦尋。 (《屯》 60)

Chinese Pinyin: Yu Zuding Dan xun. (*Tun* 60)

Word-to-word translation: to ancestor Ding at time Dan to sacrifice in way of Xun. (*Tun* 60)

Idiomatic translation: (charge) we shall sacrifice to the ancestor Ding in way of Xun at time **Dan**. (*Tun* 60)

Zhao (朝), its shape in the OBI is  (Heji 23148) or  (Heji 33130). The meanings in this character are ‘the sun is rising from the grass and the moon is still on the sky’.

(17) **Zhao** (朝) in the OBI: 癸丑卜，行贞：翌甲寅毓祖乙歲，朝酒。茲用。 (《合集》 23148)

Chinese Pinyin: Guichou bu, Xing zhen, Yi Jiayin Houzuyi sui, Zhao jiu. Zi yong. (Heji 23148)

Word-to-word translation: Guichou crack-making, Xing divine: the next day Jiayin king Zuyi sacrificed in way of Sui, time Zhao sacrificed in way of Jiu? This divining use. (Heji 23148)

Idiomatic translation: Crack-making on Guichou (day 50), Xing divined: (charge) we shall sacrifice to the king Zuyi on the next day Jiayin (day 51) in the way of Sui, and sacrificed in way of Jiu at time **Zhao**? (Using inscription) to use this divining. (Heji 23148)

Rizhong(日中), their shapes in the OBI are  (Heji 28569)  (Heji 28089b). The meanings in this character are ‘the sun’ and ‘middle’ or ‘center’. The word’s meaning is ‘The sun is at the highest point in the sky’.

(18) **Rizhong** (日中) in the OBI: 惠日中又大雨。 (《合集》 29789)

Chinese Pinyin: Hui Rizhong you dayu. (Heji 29789)

Word-to-word translation: time Rizhong rain heavily. (Heji 29789)

Idiomatic translation: (charge) it will rain heavily at time **Rizhong**. (Heji 29789)

Xiuzhongri(羞中日), their shapes in the OBI are  (Heji 18146)  (Heji 28089b)  (Heji 28569). The meanings in these characters are ‘the sun’, ‘to near’ and ‘the highest point’. The word’s mean is ‘the time when the sun near the highest point in the sky’.

(19) **Xiuzhongri** (羞中日) in the OBI: 戊寅卜，阴。其雨今日。羞中日允雨。 (《合集》 20908)

Chinese Pinyin: Wuyin bu, yin. Qi yu Jinri. Xiuzhongri yun yu. (Heji 20908)

Word-to-word translation: Wuyin crack-making, cloudy. Rain today, Xiuzhongri really rain. (Heji 20908)

Idiomatic translation: Crack-making on Wuyin (day 15), divining: (charge) it is cloudy. (Prognostication) it will rain today. (Verification) It really rains at time **Xiuzhongri**. (Heji 20908)

Ze(昃), its shape in the OBI is  (Heji 13312). The meaning in this character are ‘the sun’ and ‘man is to lean to one side’. The word’s meaning is ‘the time when the sun lefts the highest point in the sky to the lower point’.

(20) **Ze** (昃) in the OBI: 丁酉卜，今二日雨。余曰：戊雨。昃允雨自西。 (《合集》 20965)

Chinese Pinyin: Dingyou bu, Jin erri yu. Yu yue: ‘Wu yu.’ Ze yun yu zi xi. (Heji 20965)

Word-to-word translation: Dingyou crack-making, today two days rain, the king said: Wu rain. Time Ze really rain from the west. (Heji 20965)

Idiomatic translation: Crack-making on Dingyou (day 34), divining: (charge) it will rain during these two days since today. The king read the crack and said: (prognostication) it will rain on day Wu. (Verification) it really rained from the west at time **Ze**. (Heji 20965)

Mo (莫), its shape in the OBI is  (Heji 10729). The meaning in this character is ‘the sun’ and the ‘grass’ or ‘forests’. The word’s meaning is ‘the time when the sun set in the grass or in the forests’.

(21) **Mu** (莫) in the OBI: 父己歲，惠莫酒。 (《合集》 27401)

Chinese Pinyin: Fuji sui, hui Mo jiu. (Heji 27401)

Word-to-word translation: father Ji sacrifice in way of Sui, time Mu to sacrifice in way of Jiu. (Heji 27401)

Idiomatic translation: (charge) we shall sacrifice to father Ji in way of Sui, and to sacrifice in way of Jiu at time **Mu**. (Heji 27401)

3.2 The Motion of the Moon

Yue (月), its shape in OBI and BI is  (Heji 20924), and it is a pictographic character which is like ‘moon’. ‘Yue’ means ‘one month’. In lunar calendar in ancient China, one month is 29 days or 30 days which is based on the cycle of moon phases.

Xi (夕), its shape in the OBI is  (Heji 629). The meanings of the characters are ‘the moon is on the sky’. The word’s meaning is ‘the time during the moon is on the sky’.

Yuechu(月出), their shapes in the OBI are 𠄎(Heji 20924) 𠄏(Heji 20045). The character 𠄏 consists of two parts—foot and pit. The direction of the toes is contrary to the pit. It means ‘to go out of the pit’. So Yuechu means the time when the moon just comes out.

Su(夙), its shape in the OBI is 𠄐(Heji 28737). It consists of two parts—moon and human being. The human being bends knees and stretch out hands to do something. It means human being gets up early to work in the moon light.

(22) **Yue** (月) in the OBI: 王宾父丁, 歲二牢亡尤。正月。 (《合集》23199)

Chinese Pinyin: Wang bin Fuding sui ernao wangyou. Zhengyue. (Heji 23199)

Word-to-word translation: the king sacrifice father Ding in way of Bin, kill two bulls no calamity, the first month. (Heji 23199)

Idiomatic translation: (charge) the king will sacrifice father Ding in way of Bin and kill two bulls, and it has not calamities. It is in the first month. (Heji 23199)

(23) **Xi** (夕) in the OBI: 癸亥卜, 亘弗夕征雀。 (《合集》20393)

Chinese Pinyin: Guihai bu, Gen fu xi zheng Que. (Heji 20393)

Word-to-word translation: Guihai crack-making, Gen not in the night attack Que. (Heji 20393)

Idiomatic translation: Crack-making on Guihai (day 60), divining: (charge) Gen should not attack Que at time **Xi**. (Heji 20393)

(24) **Yuechu** (月出) in the OBI: 于月出迺往, 亡災。 (《安明》1918+《合集》2096)

Chinese Pinyin: Yu Yuechu nai wang, wang zai. (Anming1918+Heji2096)

Word-to-word translation: time Yuechu go, no calamity. (Anming1918+Heji2096)

Idiomatic translation: There is not calamity when we go at time **Yuechu**. (Anming1918+Heji2096)

(25) **Su** (夙) in the OBI: 惠今夙酒。 (《补编》9601)

Chinese Pinyin: Hui jin su jiu. (Bubian 9601)

Word-to-word translation: today time Su sacrifice in way of Jiu. (Bubian 9601)

Idiomatic translation: (charge) we should sacrifice to ancestors in way of Jiu at time **Su** today. (Bubian 9601)

4. Time Is an Event

Time exists beyond the mind of human beings, but the time concepts which have reflected the mankind’s lifestyle and relationship between human beings and nature have accompanied human beings forever. In the Shang Dynasty, the sacrificing gods and fighting against the enemies are the most important things among the state’s political undertaking, and the basic lifestyle is agriculture planting, supplemented with the hunting and picking, so the time concepts must derive of these situations and served human beings who had lived by these lifestyles. It is a basic experience for human beings to percept the entity in the physical world and to remind of the critical events. Human beings can understand the abstract experience through these basic experiences, and consider the abstract experiences as an entity which can be separated, so that human beings can reason with these concepts.

4.1 The Ordinary Life Events

In Shang Dynasty, human beings use the ordinary life events to record the time. Shi(食), its shape in the OBI is 𠄑(Heji 18584). It means ‘The food is stored in the round-mouthed food vessel’. Human beings use Dashi(大食) to indicate ‘the time during eating in the morning’, and using Xiaoshi(小食) indicates ‘the time during eating in the afternoon’. Dashis(大食), their shapes in the OBI are 𠄒(Heji 21021) 𠄓(Heji 18584). 𠄒 means ‘great’ and ‘big’. Xiaoshi(小食), their shapes are 𠄔(Heji 23706) 𠄕(Heji 18584). 𠄔 Means ‘little’ and ‘small’.

Cai(采), its shape in the OBI is 𠄖(Heji 11726). It means ‘to pick up the fruit on the tree’. The word’s meaning is ‘the time during picking up the fruits on the trees in the morning’. Human beings use Dacai(大采)—their shapes in the OBI 𠄗(Heji 21021) 𠄘(Heji 11726) to indicate ‘the time during picking up fruits in the morning’, and using Xiaocai(小采)—their shapes in the OBI 𠄙(Heji 23706) 𠄚(Heji 11726) to indicate ‘the time during picking up fruits in the afternoon’.

Hun (昏), its shape in the OBI is  (Heji 18528), this character is composed of four parts—sun, human being, water and vessel. The sun still is on the sky, and human beings begin to take shower in the vessel. It indicates that human beings finish their all-day work, doing some washing and being going to have a rest. So it indicates the time duration during which the sun has not sunk and the night has not come.

Gu (鼓), its shape in the OBI is  (Heji 891a). This character consists of three parts—drum, drumstick and one hand. It indicates that human beings beat the drum using the drumstick. In ancient China, people beat a drum to record the time in the night.

(26) Dashi (大食) and Xiaoshi (小食) in the OBI: 癸丑卜，贞：旬。甲寅大食雨自北。乙卯小食大启。丙辰中日大雨自南。（《合集》21021）

Chinese Pinyin: Guichou bu, zhen: Xun. Jiayin Dashi yu zi bei. Yimao Xiaoshi da qi. Bingchen Zhongri da yu zi nan. (Heji 21021)

Word-to-word translation: Guichou crack-making, divining: ten days. Jiayin **Dashi** rained from the north. Yimao **Xiaoshi** it shining. Bingchen Zhongri heavily rained from the south. (Heji 21021)

Idiomatic translation: Crack-making on Guichou (day 50), divining: (charge) there are not calamities during these ten days. (Prognostication) it will rain from the north at time Dashi on Jiayin (day 51), shining at time Xiaoshi on Yimao (day 52), and heavily raining at time Zhongri on Bingchen (day 53). (Heji 21021)

(27) Xiaocai (小采) in the OBI: 癸巳卜，王，旬。四日丙申辰雨自东，小采既，丁酉少，至东雨，允。二月。（《合集》20966）

Chinese Pinyin: Guisi bu, Wang: Xun. Siri Bingshen Ze yu zi dong, Xiaocai ji, Dingyou shao, zhi dong yu, yun. Eryue. (Heji20966)

Word-to-word translation: Guisi crack-making, the king, ten days. Four days Bingshen time Ze rain from the east, time **Xiaocai** over, Dingyou little, to the east rain, really, the second month. (Heji20966)

Idiomatic translation: Crack-making on Guisi (day 30), the king divined: (charge) there are not calamities during these ten days. (Prognostication) it will rain from the east at time Ze on the fourth day Bingshen(33), being over at time Xiaocai, and it will lightly rain on Dingyou (day 34) to the east. Really. It is in the second month. (Heji20966)

(28) Hun (昏) in the OBI: 惠今昏酒。（《合集》30838）

Chinese Pinyin: Hui Jin Hun jiu. (Heji 30838)

Word-to-word translation: today time Hun sacrifice in way of Jiu. (Heji 30838)

Idiomatic translation: (charge) we shall sacrifice in way of Jiu at time **Hun** today. (Heji 30838)

(29) Gu (鼓) in the OBI: 贞：惠五鼓，上帝若，王受又又。（《合集》30388）

Chinese Pinyin: Zhen: Hui Wugu, Shangdi ruo, Wang shou youyou. (Heji 30388)

Word-to-word translation: divining: time Wugu, the god happy, the king get blessing and protection. (Heji 30388)

Idiomatic translation: divining: (charge) the gods are happy at time **Wugu**, and the king will get blessing and protections from the gods. (Heji 30388)

4.2 The Sacrificing Events

Si (祀), its shape in the OBI is  (Heji 28170). The left sector of the character meaning is 'a shrine for idols or ancestral tablets', or 'the platform for arranging the sacrificed vessels and offerings'. The right sector is its sound. Its word's meaning is 'the cycle of sacrificing', and it means one year. Rong(𠄎), its shape in the OBI is  (Heji 1590), It represents a kind of sacrifice activity. Xieri (𠄎), its shape in the OBI is  (Heji 31009). It represents a kind of sacrifice activity.

(30) Si (祀) in the OBI: 癸酉王卜，贞：旬亡祸。王占曰：吉。才十月又二。佳王六祀。（《合集》37845）

Chinese Pinyin: Guiyou Wang bu zhen: Xun wang huo. Wang zhan yue: Ji. Zai Shiyue you er. Wei Wang liu **Si**. (Heji 37845)

Word-to-word translation: Guiyou the king crack-making and divined: ten days no calamity. The king read the crack and said: luck, at the twelfth month, at the king's sixth Si. (*Heji* 37845)

Idiomatic translation: Crack-making on Guiyou (day 10), the king divined: (charge) there are not calamities during these ten days. The king read the crack and said: (prognostication) it is luck. It is in twelfth month of the king's sixth Si. (*Heji* 37845)

(31) **Rong** (𠄎) in the OBI: 甲午王卜，才沁师贞：今日步囬亡灾。十月二。隹十祀𠄎。（《英》2563）

Chinese Pinyin: Jiawu Wang bu, zai Qinshi zhen: Jinri bu Bi wang zai. Shiyue er. Wei Shisi Rong. (*Ying* 2563)

Word-to-word translation: Jiawu the king crack-making, at place Qinshi divined: today go to the place Bi no calamity, twelfth month, the tenth Si **Rong**. (*Ying* 2563)

Idiomatic translation: Crack-making on Jiawu (day 31), the king divined at place Qinshi: (charge) we shall not have calamities when we go to the place Bi today. It is in twelfth month and day **Rong** of the king's tenth Si. (*Ying* 2563)

(32) **Xie** (𠄎) in the BI: 用乍兄癸彝。在九月。唯王九祀荔日。（《雋函》）

Chinese Pinyin: yong zuo Xionggu Yi. Zai Jiuyue. Wei Wang Jiusi Xieri. (*Xiecha You*)

Word-to-word translation: so make brother Gui sacrificial vessel. At the ninth month. The king ninth Si **Xieri**. (*Xiecha You*)

Idiomatic translation: so made sacrificial vessels devoted to brother Gui. It is in ninth month and day **Xie** of the king's ninth Si. (*Xiecha You*)

4.3 Other Events

Qiu(秋), its shape in the OBI is  (*Heji* 32854). It is composed of two parts. The above part is pictography of locust, and the below part is pictography of fire. In the season of harvesting the millet, the locusts flourish and devour the millet, so human beings use fire to drive them away.

Mu(暮), its shape in the OBI is  (*Ying* 1978). This character is composed of three parts: the sun, the birds and the forests. The sun sinks into the forests, and the birds return to the nest in the forests.

(33) **Qiu** (秋) in the OBI: 惠今秋。（《合集》29715）

Chinese Pinyin: Hui JinQiu. (*Heji* 29715)

Word-to-word translation: this autumn. (*Heji* 29715)

Idiomatic translation: (charge) it is in this autumn. (*Heji* 29715)

(34) **Mu** (莫) in the OBI: 贞：暮酒。（《合集》23148）

Chinese Pinyin: Zhen: Mu jiu. (*Heji* 23148)

Word-to-word translation: divining: time Mu sacrifice in way of Jiu. (*Heji* 23148)

Idiomatic translation: (charge) we should sacrifice to ancestor in way of Jiu at time Mu. (*Heji* 23148)

The critical events can be used to define time concepts because any event takes place at certain place and during certain time. An event and time cannot be separated, and any event is related with other things, and they have certain stage and process when they take place, developing and ending, so events can reflect the essence of time which has sequence and continuity. In the Shang Dynasty, the events such as sacrificing, harvesting, eating, picking, and so on, were a much important part in the time concepts.

5. Time Is A Creature Or A Plant.

Qiu(秋), its shape in the OBI is  (*Heji* 9632). Its character meaning is 'locust'. Its word's meaning is 'time during the locusts doing harm to the crops in the Central Plains'. Chun (春), its shape in the OBI is  (*Heji* 9784). Its character meaning is 'grasses and leaves of trees begun to grow'. The word's meaning is 'the time when the grass and leaves of trees begin to grow in the Central Plains'.

(35) **Qiu** (秋) in the OBI: 惠秋令禽田。（《屯》1087）

Chinese Pinyin: Hui Qiu ling Qin tian. (*Tun* 1087)

Word-to-word translation: autumn order Qin hunting. (*Tun* 1087)

Idiomatic translation: (charge) we should order Qin to hunt in autumn. (*Tun* 1087)

(36) **Chun** (春) in the OBI: 贞：來春不其受年。（《合集》9660）

Chinese Pinyin: Zhen: Laichun bu qi shou nian. (Heji 9660)

Word-to-word translation: divining: the coming spring no have good harvests. (Heji 9660)

Idiomatic translation: divining: (charge) we should not have good harvests in the coming spring. (Heji 9660)

6. Time Is A Tool.

Sui (岁), its shape in the OBI is  (Heji 9647). Its character meaning is ‘a tool for planting and hunting’. Its word’s meaning is ‘a harvest season’.

Jin (今), its shape in the OBI is  (Heji 20899). It is a pictography character of a bronze bell. In ancient China, the leader calls the public together to declare law and important things using bronze bell, so the bronze bell is conditioned to present events, and it is reference point of current time, so it means ‘to be present’.

(37) **Sui** (岁) in the OBI: 辛巳卜，亘贞：祀岳拜來歲受年。（《合集》9658）

Chinese Pinyin: Xinsi bu, Gen zhen: Si Yue bai lai sui shou nian. (Heji 9658)

Word-to-word translation: Xinsi crack-making, Gen divined: sacrifice to Mountain in way of Bai and the coming Sui have good harvests. (Heji 9658)

Idiomatic translation: Crack-making on Xinsi (day 18), Gen divined: (charge) we should sacrifice to Mountain in way of Bai, and we can have good harvests in the coming Sui. (Heji 9658)

(38) **Jin** (今) in the OBI: 丁未卜，宾贞：今日侑于丁。六月。（《合集》339）

Chinese Pinyin: Dingwei bu, Bin zhen: Jinri you yu Ding. Liuyue. (Heji 339)

Word-to-word translation: Dingwei crack-making, Bin divined: today sacrifice to Ding in way of You, the sixth month. (Heji 339) Idiomatic translation: Crack-making on Dingwei (day 44), Bin divined: (charge) we should sacrifice to the ancestor Ding in way of You today (at present). It is in the sixth month. (Heji 339)

7. Conclusion

1) We can generalize the metaphors and metonymies in the TIME category based on the systematically analyzing the time concepts in the OBI and BI in China ancient Shang Dynasty. Metaphors have two forms: + TIME IS AN ORDER+ and +TIME IS AN DIRECTION+. Metonymies have five forms: +TIME IS MOTION OF SUN+, +TIME IS MOTION OF MOON+, +TIME IS AN EVENT+, +TIME IS a CREATURE OR a PLANT+, +TIME IS a TOOL+.

2) We consider that in TIME category, metaphor and metonymy play a decisive role to conceptualize the time. They have penetrated every level of TIME category – from subordinate category to basic category and superordinate category, namely, from the concrete time concepts to the abstract time concepts. And they play a critical part on every time hierarchy—from the shortest time duration during one day to the longest time periods such as ‘Yue’ (month), ‘Chun’ (spring), ‘Qiu’ (autumn) and ‘Si’ (year) etc.. They are not only two stylistically attractive ways of expressing ideas, but also two pervasive ways of thinking.

3) As F. Ungerer & H. – J. Schmid (2008: 131) said, metonymies are more elementary than metaphors. Based on analyzing the metaphor and metonymy of the TIME category in the OBI and BI in China ancient Shang Dynasty, metonymy is of fundamental function. For instance, all time concepts come from these three metonymies +TIME IS MOTION OF SUN+, +TIME IS MOTION OF MOON+ and +TIME IS AN EVENT+, namely, time concepts exist because of motion of the sun and moon, and of events of human beings and things around human beings. And the core factor of the metaphors + TIME IS AN ORDER+ and +TIME IS AN DIRECTION+ ‘RI’(日), ‘Yue’(月), ‘Si’(祀), ‘Xi’(昔), ‘Jin’(今), ‘Sheng’(生) all come from the metonymy.

4) Metaphor and metonymy contemporarily act on many time concepts. For example, the time concept Mu (莫), its shape in the OBI is  (Ying 1978). This character is composed of three factors – sun, four trees and one bird. Four trees represent forests. The ancient character describes two things. One: the sun sinks into the forests. It indicates that daytime is gone. The concept derives from the motion of sun. It stresses the change of the location where the sun is on the sky, so it is a metaphor +TIME IS PLACE+. TWO:

the bird returns to the nest in the forests. The daytime will disappear, and the bird goes home to rest. It is a typical event in special time duration. So it is a metonymy +TIME IS AN EVENT+.

5) We consider the 'path' schema, life experiences, and the orientation schema play the critical part in constructing the mapping scope of the metaphors and metonymies. Relatively, the orientation schema is of secondary importance. The source concept are concrete objects, concrete motion of objects, concrete life experience and concrete life events, and the target concept is TIME which is abstract concept.

Two concepts are inclined to correspondences acted with main components of the mapping scope, then finishing the conceptualization process of the TIME category.

Abbreviations

Heji: *Jiaguwen Heji Ying: The Oracle Bone Collections in Great Britain*

Huadong: *Yinxu Huayuanzhuang Dongdi Jiagu; Tun; Xiaotun Nandi Jiagu*

Huai: *Huaiteshideng Suocang Jiaguwenji*

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