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XXX Ciclo

Biological Classification in Early Chinese Dictionaries and Glossaries: from Fish to Invertebrates and Vice Versa

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「爾雅注蟲魚,

定非磊落人。」

Chi commenta insetti e pesci nello Erya,

di certo non è uomo di qualità.1

El mundo era tan reciente que muchas cosas carecían de nombre, y para mencionarlas había que señalarlas con el dedo²

1

¹ Han Yu 韓愈 (768 – 824), Du Huangfu Shi Gong'an yuanchi shi shu qi hou 讀皇甫湜公安園池詩書其後二首 [Leggendo le ultime due poesie di Huangfu Shi presso i giardini di Gong'an].

² Gabriel García Márquez (1927 – 2014), *Cien Años de Soledad*, Madrid/México, D.F./Alfaguara: Real Academia Española; Asociación de Academias de la Lengua Española, 2007, 3.

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1. Introduction

This work focuses on the different methods of classifying the term *chong* 蟲 ("invertebrates" or "creeping creatures") and *yu* 魚 ("fish") species in classical Chinese texts from Early China – roughly from the Warring States period 戰國 (ca. 453 – 221 BCE) to the Han dynasty 漢 朝 (206 BCE – 220 CE), which is considered as the foundational period of Chinese lexicography. The historical term for lexicography or philology is *xiaoxue* 小學 [lesser/minor learning], a term which in origin designated the education in the six arts (rites *li* 禮, music *yue* 樂, archery *she* 射, charioteering *yu* 御, calligraphy *shu* 書 and mathematics *shu* 數), but by the Han period "the term *xiao xue* starts having the meaning of studies of characters", i.e. philology and/or lexicography. It "translates gently the Latin ars minor" (Bottéro 2017).³

In order to understand later developments of classification methodology, I will also deal with texts like the *Bencao gangmu* 本草綱目 (*Compendium of Materia Medica*)⁴, a Ming dynasty 明朝 (1368 – 1644) encyclopedia-like work⁵ that subsumes the natural knowledge on animals and plants of that time.

³ Lexicography and dictionaries studies are undoubtedly intertwined with the *Weltanschauung* of the Han period principally because "as long as Confucianism was the state ideology, it was taken as axiomatic that the object of lexicology was to enhance a correct understanding of the *Classics*." (Wilkinson 2013, 77). See also *Hanshu Yiwen zhi* 30, 1720-21, Bottéro (2002, 2017), 14 and Chi Xiaofang, *Zhongguo gudai xiaoxue jiaoyu yanjiu* (Shanghai: Jiaoyu chubanshe, 1998), 2. Also see Roetz (1993) on the "axial age of Chinese thought".

⁴ The *Bencao gangmu* is a Chinese *materia medica* work written by Li Shizhen 李時珍 (1518 – 1593) during the Ming dynasty. It is regarded as the most complete and comprehensive premodern book on *materia medica* in the history of traditional Chinese medicine. The text lists the plants, animals, minerals, and other items that were believed to have medicinal properties and consists of 1,892 entries.

⁵ The corpus of Literary Chinese texts is deeply rooted in works from the pre-Imperial period and collected and edited principally in the course of the Western Han period 西漢 (206 BCE – 9 CE). These texts possess a great number of textual strata from different periods. The need to understand the most ancient and obscure passages in them leads to the development of commentaries that helped the Han scholars to study and read them. Texts on lexicography in this corpus are based on a restricted number of texts that were gathered and organised by scholars starting from the Han dynasty: all the posterior lexicographic literature is an expansion or an amendment of these early works. For further analyses of this aspect of the Chinese literature see Giles (1901), Karlgren (1931), Granet (1934), Nienhauser (1986), Loewe (1993), Idema & Haft (1997), Loewe & Shaughnessy (1999), Lévy (2000), Mair (2001), Li (2007), Kern (2010), Knechtges & Chang (2014), Wilkinson (2015), Durrant, Li & Scharberg (2016), Bottéro (2017) and Puett (2017).

1.1 Primary sources

The most important primary source for my research is the *Erya* 爾雅 (*Approaching Elegance*)⁶: it is traditionally considered a 3rd century BCE "dictionary of words" *cidian* 辭典⁷ that reached its present form as late as the mid-2nd century BCE, though this dating is quite debatable. At the present time, there are wildly conflicting datings of the *Erya*, and controversial ideas of its dependence to other texts. In Early Chinese sources such as the *Yiwen zhi* 藝文志 (Treatise on Literature) chapter of the *Han shu* 漢書 (The Book of the Former Han, ca. 111 CE), we read that the *Erya* was compiled by the Duke of Zhou (*Zhou Gong* 周公, before 1000 BCE). By the first half of the last century, Bernhard Karlgren had dated this text's original compilation to the 3rd century BCE⁸. There was subsequently agreement on the fact that the *Erya* is a multi-layered text, with passages both from the 3rd century BCE and the Han dynasty period. Bottéro, for instance, says that:

[...] a closer analysis of the text suggests a quite different scenario. The structure of the Ěryǎ is quite heterogeneous and may have combined two or three different texts. The first two sections ("Shì gǔ 釋詁" [On explanations of old words/expressions], "Shì yán 釋言" [On words/expressions]), which consist in lists

⁸ Karlgren (1931), 46--49.

⁶The title of this text is somewhat vague, and it is difficult both to translate and to understand. Other possible translations for this glossary are "Sprachrichtigheit" (Karlgren), "Approaching Perfection" (Bottéro and Behr), "The Ready Guide" (Peng Jing and Yong Heming, although this translation appears less convincing than the others). Er 爾 (Baxter-Sagart *n[ə][r]?) is in fact cognate with er 邇 (BS *n[ə][r]?) which means "near", "close by"; *ya* 雅 (BS *N-G^cra?) means "elegant", "cultured", "refined". The latter is also quasi-homophone with the character *xia* 夏 (BS *[G]^cra?), which possesses ethno-anthropological features: this character, in fact, represents the name of the Xia dynasty and at that time was an epithet of belonging to a proper Chinese heritage. This graph eventually expanded his semantic value in order to describe both gracefulness and normativeness. This is why it is a cognate with *ya* 雅. See Coblin (1972); *Hanyu Da Zidian* 漢語大詞典, 4405. A passage in the *Xunzi* 荀子 (c. 3rd century BCE) states that "the people of Yue are at home in Yue, and the people of Chu are at home in Chu—the gentleman is at home in what is graceful." 越人安越, 楚人安楚, 君子安雅 (trans. by Hutton 2014, 142), with the last character sometimes written as *xia* 夏.

⁷ The Chinese language has at least two different expressions for "dictionary": *cidian* 辭典 (dictionary of words) and *zidian* 字典 (dictionary of graphs). The former can be interchangeably written *cidian* 詞典. Harbsmeier (1998), 65, along with the latter two categories (which are respectively identified by him as "semantic dictionary" and "pictographic-cum-semantic dictionary"), points out that there is another different kind of Chinese dictionary: a folk-etymological-phonetic dictionary category that is represented by the *Shi ming* 釋名 (Harbsmeier, 1998). Generally speaking, the main difference between the two is that *zidian* are organised graphically using a recurring graphic component that each Chinese character possesses, i.e. the "semantic classifiers" or *bushou* 部首 ("section header", see footnote 19). The English word "radical" was used in the past as a translation for *bushou*, but it implied an oversimplified metalinguistic adaptation of the Chinese language to Indo-European linguistics. The *cidian* are instead organised by semantic categories, i.e. different topics like the names of mountains, seas, animals or plants.

of synonyms or quasi-synonyms, have an original presentation starting with a gloss related to shǐ 始 'beginning' and ending with one related to zhōng 終 'end'. These sections probably correspond to an originally independent text. The third section ("Shì xùn 釋訓" [On explanations]), which presents bisyllabic intensives and all sorts of expressions mostly taken from the Shījīng 詩經 (Book of Songs), was probably an

independent text attached to the Shījīng. Many glosses encountered here are shared with the 'Máo commentary' (Máo zhuàn 毛傳) to the Shījīng in 30 rolls, usually ascribed to the Early Western Hàn scholar Máo Hēng 毛亨. All the 16 other sections follow an encyclopedic organization with a peculiar classification glossing.⁹

The controversies still continue today, as South Coblin points out that:

More recently, the dating of the text has been widely discussed in China. Some authorities, such as Hú and Fāng et al. (2001), have [...] opted for a broad dating spanning the Warring States and early Hàn periods. Most others, however, limit the formative period to the late Warring States (475–221 BCE), or at the latest, the Qín (221–206 BCE) periods (e.g., Dòu 2005, Féng Yùtáo 2007, Féng Huá 2008).¹⁰

The *Erya* is a text made of brief glosses and divided into 19 chapters, each dealing with a particular semantic area of interest: utensils, musical instruments, mountains, rivers, plants and animals. There are five zoological chapters, two of which are called *Shi chong* 釋 蟲 (Glosses on invertebrates) and *Shi yu* 釋魚 (Glosses on aquatic animals), respectively¹¹. Although the *Erya* is apparently a meagre text composed of laconic glosses, this heavily stratified "dictionary of words" was probably conceived as a thesaurus to understand obscure characters that are found in the Classics, especially the *Shijing* 詩經, (*Book of Odes* or *The Classic of Poetry*)¹². The *Erya* helped scholars, as well as students and pupils, from the Han dynasty

⁹ Bottéro (2017), 2--3.

¹⁰ South Coblin (2017), 1.

¹¹ The other three chapters are "*Shi niao*" 釋鳥 [Glosses on winged animals], "*Shi shou*" 釋獸 [Glosses on quadrupeds] and "*Shi chu*" 釋畜 [Glosses on domestic animals].

¹² The *Shijing*, simply known as *Shi* or better the Mao Heng's edition of the *Shi* (*Mao shi* 毛詩), has been transmitted as one of the Five Classics (*Wnjing* 五經); dating back to the pre-Qin period (before 221 BCE) and later part of the so-called "Confucian Canon". The texts are the following: the *Shi* 詩 (*Shijing* 詩經) [Odes], the *Shu* 書 (*Shangshu* 尚書) [Documents], the *Li* 禮 (*Liji* 禮記) [Rites], the *Yi* 易 (*Yijing* 易經) [Changes] and the *Chunqiu* 春秋 [Annals]. Several of the texts were already prominent by the Warring States period, although we do not know if all were identical to the ones we know today, which were compiled during the Han period. During the reign of Emperor Han Wudi 漢武帝 (156 – 87 BCE), these texts became part of the state-sponsored curriculum. The *Shijing* is the first of these Classics. It is the oldest existing collection of Chinese poetry, comprising 305 songs (depending on the version) dating from the 11th to 7th centuries BCE, although there is evidence that the text we have nowadays is probably "a Zhou text in Han clothing: both its script and, to some extent its text, have been influenced by post-*Shijing* phonology" (Baxter, 1991). Due to the difficulty of the

onwards to understand the original meaning (according to Han scholars) of characters in need of an explanation for whatever reason (e.g. being *hapax legomena* or simply possessing an obscure meaning); moreover, it provided a reliable repertoire of synonyms that were needed in order to get closer to an "authoritative lexicon"¹³. After the commentary¹⁴ of Guo Pu 郭璞 (276 – 324)¹⁵ and the sub-commentary of Xing Bing 邢昺 (932 – 1010)¹⁶, the *Erya* was canonised as one of the Thirteen Classics¹⁷ during the Song 宋 dynasty (960 - 1279 CE) in recognition of its prestige as a lexicographic guide.

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language, with the majority of the odes dating to the Spring and Autumn period (771 - 476 BCE, see Behr, 2004), its verses have always needed a proper interpretation in order to be understood.

¹³ The language in which the Classics were written laid the basis for the constitution of a Literary Chinese (*wenyan* 文言) that became the state and official written language for officials and scholars. Due to the changes of the language through the ages, commentaries were developed to understand correctly the language of the Classics. While the old texts remained unchanged, commentaries and sub-commentaries changed both their reading and the interpretation, especially during the Han period where it was necessary to establish a politically unified environment. The *Erya* subsumed the lexicon of the Classics and its meaning, which was regarded as a model of stylistic perfection as well as an authoritative lexicon. These two concepts are subsumed once again in the *ya* 雅 graph, which stand both for elegance and authority (see footnote 6).

¹⁴ A commentary is a text that accompanies an older writing, specifically to clarify obscure passages or to introduce new data to enrich incomprehensible ones. This is not exclusive to the Chinese literary tradition, but it certainly occupies a prominent position in it. A sub-commentary is a commentary to another commentary, compiled at a subsequent date. Many texts that were written before the Tang B dynasty (618 – 907) have both a commentary and a sub-commentary, owing to the linguistic variations of Classical Chinese throughout the ages. Another important use of sub-commentaries was to update or manipulate earlier commentaries that reflected different political or philosophical viewpoints. Indeed, making philosophical or political statements was the most important function for most commentaries, compared to mere philological elucidation.

¹⁵ Guo Pu was a writer and scholar of the Eastern Jin period 東晉 (317 – 420 CE), and is best known as one of China's foremost commentators on ancient texts. Guo was a Daoist mystic, geomancer, collector of strange tales, editor of old texts, and erudite commentator. He was the first commentator of the *Shanhajing* 山海經 (*Classic of the Mountains and Seas*) and of the *Erya*. He is also traditionally considered the author of the *Zangshu* 葬書 (*The Book of Burial*), the first-ever and most authoritative source of *fengshui* 風水 doctrine and the first book to address the concept of *fengshui* in the history of China, although recent studies consider it as a later text, probably of the Tang period. See Lian, 1999 and 2002. For a study of the *Shanhajing*, see Fracasso (1996) and Strassberg (2011). For a study of the *Zangshu* and *fengshui* related texts, see Paton (2013).

¹⁶ Xing Bing was a Confucian scholar of the early Northern Song period 北宋 (960-1126). Together with Sun Shi 孫奭 (962 – 1033), Xing Bing revised a Tang period collection of commentaries to the Classics, the *Jiujing zhengyi* 九經正義 [The correct meaning of the Nine Classics], which had become Nine by this period (i.e., the Five Classics and the Four Books, see footnote 12). Xing himself wrote commentaries to the *Lunyu* 論語 (*The Analects*), the *Xiaojing* 孝經 (*Classic of Filial Piety*) and the *Erya* 爾雅, the last two became eventually part of the Classics. For the life and works of Xing Bing, see Shi&Nie, 2012 and Wang, 1988. For the creation of the "Thirteen Classics canon", see footnote 17.

¹⁷ Apart from the original "Five Classics" (see footnote 12), several other texts became later part of the curriculum for the Imperial exams: the Four Books (*Sishu* 四書) that are the *Daxue* 大學 (*The Great Learning*), the *Zhongyong* 中庸 (*The Doctrine of Mean*), the *Lunyu* and the *Mengzi* 孟子 (*The Mencius*). The *Chunqiu* was represented by the three most important commentaries to this work: the *Zuo Zhuan* 左傳 (*Zuo tradition*), the

The influence of the *Erya* on the literary history of China is also inferable from the proliferation of glossaries that are roughly organised in the same way and explicitly edited as expansions of it. The most important examples are the *Yiya* 逸雅 (*Lost* [*Er*]*ya*, c. 200 CE), the *Guangya* 廣雅 (*Extension to the* [*Er*]*ya*, c. 230 CE), the *Piya* 埤雅 (*Increased* [*Er*]*ya*, c. 1096 CE) and the *Erya yi* 爾雅翼 (*Wings to the Erya*, c. 1174 – 1270). These texts, along with the *Erya*, were edited and compiled during the Ming dynasty into one single glossary with the name of *Wuya* 五雅 (The five *ya*):

- 1) The Yiya, better known as Shi ming 釋名 (Glosses on Names), is a lexical list (or phonetic dictionary, see Harbsmeier 1998, 65) that uses almost paronomastic glosses playing on the phonemes of the Chinese language. There is controversy whether this dictionary's author was Liu Xi 劉熙 who flourished around 200 CE or the more-famous Liu Zhen 劉珍 who died in 126 CE. The semantic categories are presented in chapters that imitate the *Erya* structure and organisation (the chapter's names are always introduced by the character *shi* 釋 "glosses on").
- 2) The Guangya is a "dictionary of words" edited by Zhang Yi 張揖 (fl. 227 232 CE) during the Three Kingdoms period (220 280 CE). It was later called the Boya 博雅 (Broadened [Er]ya). Zhang Yi wrote the Guangya as a supplement to the centuries older Erya dictionary. He used the same 19-chapter divisions into lexical categories, and it has 2343 entries for 18,150 characters (the received text has 17,326), including corrections and emendations, which is about 5000 more than the received Erya.
- 3) The *Piya* is a "dictionary of words" compiled by Song dynasty scholar Lu Dian 陸佃 (1042 1102). He wrote this *Erya* supplement along with his *Erya Xinyi* 爾 雅新義 (*New Exegesis of the Erya*) commentary. The *Piya* preface is dated 1125. Lu Dian arranged the *Piya* into eight semantically based chapters that closely

Gongyang Zhuan 公羊傳 (Gongyang tradition) and the Guliang Zhuan 穀梁傳 (Guliang tradition). Other two texts came up beside the Liji 禮記: the Zhouli 周禮 (Zhou Rites/Etiquette), and the Yili 儀禮 (Ceremonies and Etiquette). The Xiaojing 孝經 (Classic of Filial Piety) and the Erya were eventually added to this eleven-book corpus. The Thirteen Classics became the basis for the Imperial Examinations during the Song dynasty. See Fingarette (1972), Queen (1996), Goldin (1999), Ivanhoe (2000), Nylan (2001), Makeham (2003), Van Norden (2007) and Loewe (2011).

correspond with the last *Erya* chapters 13-19. The only exceptions are Chapter 5 *Shi ma* 釋馬 (Glosses on Horses) and Chapter 8 *Shi tian* 釋天 (Glosses on Heaven).

4) The *Erya yi* is a "dictionary of words" written by Song dynasty scholar Luo Yuan 羅愿 (1136 – 1184) and revised by Yuan 元 dynasty scholar Hong Yanzu 洪焱 祖 (1262 – 1328) which added phonetic explanations to the glosses. It is divided into 32 chapters that cover only biological glosses (grass, herbs, trees, birds, quadrupeds, invertebrates and fish).

Another primary source of fundamental importance is the *Shuowen jiezi* 說文解字 (*Explaining graphs and discerning characters*)¹⁸, which is a 1st century CE "dictionary of characters" *zidian* 字 典 compiled by the scholar Xu Shen 許慎 (58 – 147). This text organises Chinese characters according to "semantic classifiers"¹⁹ and, among them, there are the *chong* and *yu* characters. This "dictionary of characters" suggested an alternative method to classify Chinese characters, a scheme that gave birth to modern and contemporary dictionaries such as the *Kangxi zidian* 康熙字典 (1716), which popularised the system of 214 "semantic classifiers" that Mei Yingzuo 梅膺祚 (fl. 1615) already used in his dictionary *Zihui* 字彙 during the late Ming 明 dynasty. The scheme survives today in many dictionaries, the most famous being the *Hanyu da zidian* 漢語大字典 (1986 - 1989), or the *Zhonghua Da Zihai* 中華大字海 (1994) which is considered the most comprehensive Chinese dictionary ever compiled.

Other texts with a substantial quantity of zoological terminology were consulted: for instance, the *Shanhai jing* 山海經 (*Guideways through Mountains and Seas*), a multi-layered text

¹⁸ The title of this "dictionary of characters" is of fundamental importance in the history of Early Chinese texts, since it is one of the few instances when the author of the text gives it a certain title (see Bottéro 2002, 20). The concept of *wen* $\dot{\chi}$ is attested in earlier sources, although it is rarely used with the meaning of "graphic character" (*Zuozhuan* 23-24-41, *Hanfeizi* 49, see Bottéro 2012, 15). The use of zi \dot{z} , on the other hand, was even scarcer. While these two graphs can be nowadays translated as "non-compound characters" (*wen*) and "compound characters" (zi), that might not be true during the Eastern Han period (25 – 220 CE). As Bottéro suggests "[...] the use of *wén* and zi in Xu Shen's work reveals a fundamental distinction between graphic structure on the one hand (ed. *wen*), and the writing system on the other (ed. zi)".

¹⁹A "semantic classifier" (*bushou* 部首 "section header"), formerly known as "radical", is an element present in the majority of Chinese characters. These characters are composed of a semantic constituent, i.e. the *bushou*, and a phonetic one. For example, the character *zhu* 蛛 (spider) is composed by the *hui/chong* 虫 (invertebrate) *bushou* and by the phonetic element *zhu* 朱 (vermilion red). The first one determines the semantic field of the character (invertebrates), while the second just gives the reader a hint of its pronunciation.

that deals with geography and mythology²⁰; another fundamental text is the first topolectal dictionary *Fangyan* 方言 [*Regional Speeches*] by Yang Xiong 揚雄 (53 BCE–18 CE), that lists multiple regional names for the same animal, often presenting paronomastic glosses and linguistic puns. Another important, although brief, work is the *Ji jiu pian* 急就篇 (*Quick Progress Chapters*)²¹ a text that students used in order to learn Chinese characters during the first half of the 1st century CE. The *Huainanzi* 淮南子 (*Masters of Huainan*)²², principally considered a syncretistic philosophical text, is another essential source for an animal lexicon that focuses on the importance of classifying correctly the vast number of living beings.

This final analysis highlights the importance of not leaving the investigation confined to lexicographical works, such as glossaries and dictionaries: apart from the "Literature of Dictionaries"²³ mentioned earlier, animal terminology appeared in almost every kind of literary product: historiography (*shi* 史), masters' literature (zi 子), the classics (*jing* 經, literally "the warp in a loom"),²⁴ and "miscellaneous literary works" (*ji* 集 "*collectanea*")²⁵. The omnipresence of animals in early Chinese texts is justified by the idea that animals, being part of the natural world, could be an indicator of the balance of the human society: "a fundamental aspect of the correlation between the human and animal realms was the idea that animals and the natural world at large were subject to a transformative influence resulting

²⁰ The first five books of the text are called *Wuzang Shanjing* 五臧山經 [Five Precious Orographies]. They represent two thirds of the opera and are probably from at least the 4th century BCE. However, the remaining thirteen books are necessarily from a later period. See Fracasso 1996, XX-XXIV and Strassberg 2002. ²¹ Joseph Needham translates it as "The Handy Primer" (Needham 1986, 194).

²² The *Huainanzi* was presented to the Emperor Han Wudi 漢武帝 (156 – 87 BCE) by his relative Liu An 劉 安 (179 – 122 BCE), king of Huainan, around 139 BCE. It is an account of the debates which took place at Liu An's court, aiming at defining the necessary conditions to establish social and political harmony. The text, divided into 21 chapters, encompasses various disciplines: geography, mythology, history, politics and zoology. See Major 2010.

²³ There are important examples of a "Literature of Dictionaries" also in the Sumerian "word list tradition", as well in the Indian tradition with the 5th century BCE sage Yaaska and his commentary to the Vedic text *Nirukta* (Interpretation of words). See Vogel 1979, 303.

²⁴ These four categories were established during the Imperial period in order to catalogue texts. The first and most important example of this classification is retrievable in the *Yiwen zhi* 藝文志 [Treatise on Literature and Arts], a bibliographical section of the *Han shu* 漢書 [Book of the Han] compiled by the court official Ban Gu 班固 (32 – 92 CE). They were designed to include every literary piece compiled in pre-Imperial China.

²⁵ Among them it is possible to find proper zoological writings that were considered simple technical works. Some examples are fishing or breeding treatises. Some exemplary titles of this kind of text are gathered in literary catalogues: e.g. the *Xiang liu chu* 相六畜 [*Physiognomy of the Six Domestic Animals*] or *Zhao Mingzi diao zhong sheng yu bie* 昭明子釣種生魚鱉 [*Master Zhao Ming's (manual) on fishing, planting and raising fish and softshell turtles*]. See Sterckx 2002, 25.

from virtuous human conduct and the correct governance of human society" (Sterckx 2000, 2). It is then fundamental to consider this concept when describing the lexicographical works that were supposed to contain, among others *corpora*, also a zoological thesaurus.

1.2 Methodology and State of the Art

This research/study analyses the invertebrate and the fish lexicon, and attempts to subsume all the philological information that the sources can supply. The choice of focusing on these two explicit categories is not casual because they appear as "authonomous" zoological categories: for example, the classification of domestic animals (*chu* 畜) is presented in juxtaposition to wild animals (*shou* 獸), and the class of bipedal winged beasts (*qin* 禽 or *niao* 鳥) is often contrasted by quadruped beasts (*shou* 獸). On the contrary, the categories of *yu* and *chong* are not part of a dichotomous system as the ones aforementioned and present a more variable array of creatures. Moreover, I speculate that the term *chong* is an omnicomprehensive lexeme that can subsume more than one explicit zoological category, and thus it possesses a special value in dictionaries and glossaries. Similarly, the term *yu* encompasses different creatures that ultimately share their habitat as a common element, and nothing else.

The lexicon was researched in the corpus of texts compiled between the Warring States period and the Han dynasty, to establish interconnections between glosses and the writings in which the glossed word appeared.

Title	Abbreviation
Cang Jie pian 倉頡篇	СЈР
Erya yishu 爾雅義疏	НҮХ
Erya zhengyi 爾雅正義	SJH
Erya zhu 爾雅注	GP
Erya zhushu 爾雅注疏	XB
Erya 爾雅	EY

Here is a chart of the "dictionaries" and their commentaries which have been consulted:

Fangyan 方言	FY
Guangya 廣雅;	GY
Jijiu pian 急就篇	ЈЈР
Jingdian shinven 經典釋文	JDSW
Shi ming 釋名	SM
Shi Zhou pian 史籀篇	SZP
Shuowen jiezi 説文解字	SW

Chart of consulted loci classici:

Title	Abbreviation
Baopuzi 抱樸子26	BPZ
Chuci 楚辭	CC
Chunqiu fanlu 春秋繁露	CQFL
Chunqiu Gongyangzhuan 春秋公羊傳	GYZ
Chunqiu Guliangzhuan 春秋穀梁傳	GLZ
Chunqiu Zuozhuan 春秋左傳	ZZ
Da Dai Liji 大戴禮記	DDLJ
Guanzi 管子	GZ
Huainanzi 淮南子	HNZ
Liezi 列子	LZ
Liji 禮記	LJ
Lunheng 論衡	LH
Lunyu 論語	LY
Mengzi 孟子	MZ
Shangshu 尚書	SS
Shanhaijing 山海經	SHJ

²⁶ Although a later text, Ge Hong's 葛洪 (283 – 343) *Baopuzi* 抱樸子 [The Master Who Embraces Simplicity] was included both in South Coblin and Carr's philological analyses because it originally quotes glosses from the *Erya*.

Shijing 詩經	SJ
Xunzi 荀子	XZ
Yi Zhou shu 逸周書	YZS
Yijing 易經	YJ
Yili 儀禮	YL
Zhouli 周禮	ZHL
Zhuangzi 莊子	ZHZ

A further passage in the data collection was the creation of a textual study of the chapters *Shi chong* and *Shi yu* that functions as a catalogue for all the characters analysed in this research so that it will be easier to compare and contrast analogous or similar glosses and lexemes. More importantly, the analysis was used to identify which writings have a proclivity to subsume zoological terminology (apart from dictionaries and glossaries) in order to initiate a study of how *chong* and *yu* related terms evolved and changed from text to text.

For instance, it is still broadly accepted that the *Shi chong* chapter of the *Erya* deals also with reptiles and bivalves (Coblin 1972, 2017; Carr 1979; Sterckx 2002; Bottéro 2017): however, after a careful analysis of its glosses, there is no trace of any reptile or mollusc²⁷. Since the emphasis of the research is on the evaluation of zoological lexemes as units of a hypothetical taxonomic system, it is fundamental to acknowledge and understand why the compilers of glossaries and dictionaries decided to follow a certain classificatory order, especially if it branches out from the contemporary *forma mentis*. Besides, it is more efficient trying to understand and reconstruct the structures of Early Chinese thought, rather than forcibly apply modern taxonomic schemes.

The second step of this study is to delve into the lexicographic-taxonomic perception of animals, from both a diachronic and synchronic point of view. For instance, even if these lexical categories were culturally conceived as different, they included certain lexemes that were able to shift from one category to another: for the sake of categorisation, there are always present undeniable taxonomical marks, but while the category names remain perfectly constant, the terminology which they contain may vary from source to source, or could even

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²⁷ Gu 1990, 55. Although he still includes molluscs in *Shi chong*.

vary in the same text²⁸. For these reasons, I would define them as "dynamic" words: they can refer to a certain animal species without losing the characteristics of the other. This kind of "lexicographic dynamism" might be linked to a "natural dynamism", i.e. annotations on animals that can transform into other animals: metamorphoses are not a rare sight in Han texts that describe the natural world²⁹. This phenomenon is probably linked to the correct use of names (*zhengming* 正名)³⁰ in order to exercise human control (i.e. verbal and nominal control³¹) over the known universe.

When trying to elucidate botanical linguistics and plant terminology in the sixth volume of the massive *Science and Civilisation in China* (1986), Joseph Needham (1900 - 1995) and Lu Guizhen 魯桂珍 (1904 - 1991)³² pointed out that "most of the terms and names are composite or 'molecular' so that perhaps the 'atoms' of the script should claim our attention

³⁰ I would like to highlight that the "correct use of names" is a late Warring State period philosophical issue that was discussed principally in the *Xunzi* with heavy political remands. For a detailed study of it, see Ptak (1986), Gassman and Cheng (1988), Djamouri (1993), Defoort (2000), Roetz (2006), Geaney (2011, 2018).

²⁸ It is possible to find an interesting gloss that places aquatic invertebrate larvae (probably those of mosquitos) in the *Shi yu* chapter (gloss 4.2.26) or even a gloss that is closely related to one in the *Shi chong* chapter (gloss 4.1.42), defining the same kind of animal, the leech.

²⁹ The most famous passages of animal and vegetal transformations are from the *Zhuangzi* and the *Liezi* (see gloss 4.1.11) where different kinds of creatures are generated from metamorphoses and spontaneous generation starting from seeds (*zhong* 種) and germs (*ji* 機). Other prominent examples of metamorphoses, in *Huainanzi* 5.2 [5/39/18-23] we read: "*ying hua wei jiu* 鷹化為鳩" (Hawks metamorphose into pigeons, trans. by John Major, 2010:184). These metamorphoses are related to the seasonal regulations and rites. However, these are mere instances of correspondence schemes as it is hard to believe that in agricultural society anyone would have seriously entertained the idea that hawks transform into pigeons (Wolfgang Behr, personal communication, May 30, 2017). For an in-depth analysis of this kind of metamorphoses, see Sterckx 2002, 203.

³¹ See Defoort (2000) and Sterckx (2002). Furthermore, a passage in *Huainanzi* states the importance of the correct use of names and points out: 今謂狐狸,則必不知狐,又不知狸。非未嘗見狐者,必未嘗見狸也。狐、狸非異,同類也。而謂狐狸,則不知狐、狸。是故謂不肖者賢,則必不知賢; 謂賢者不肖,則必不知不肖者矣。 "Now if you call a fox a raccoon dog, it is certain that you do not know what a fox is, nor do you know what a raccoon dog is. If it is not that you have never seen a fox, then surely you have never seen a raccoon dog. [In one sense,] a fox and a raccoon dog do not differ, as they belong to the same class of animals. But if you call a fox a raccoon dog, you do not know what a worthless person, if you call a worthless person a worthy, it is certain you do not know what a worthless person, it is certain you do not know what a worthless person is." (*Huainanzi*, 10.14, trans. by John Major).

³² Joseph Needham was a British scientist, historian and sinologist known for his scientific research and writing on the history of Chinese science. His main interest shifted from biochemistry to sinology after the meeting with his future wife Lu Guizhen in 1937. Lu Guizhen was a biochemist specialising in clinical nutrition. They devoted their life to the project *Science and Civilisation in China*: in 1954, along with an international team of collaborators, they initiated this project to study the science, technology, and civilisation of ancient China. This project produced a series of volumes published by Cambridge University Press; some of which are still work in progress. See Winchester, 2009.

before the 'molecules'. Since the Chinese written language is made up of ideographs based very largely on ancient pictographs one would rather expect to find a substantial 'botanical' component in the radicals and phonetics''³³. According to Needham, this is presumably true not only for botany but also zoology³⁴. Moreover, he also underlined why we should pay attention to distinguishing between biological terminology and biological nomenclature: while the former is used to describe and characterise a living being as a single unity, the latter highlights the differences between species and plays a significant role in the development of systems of classification³⁵.

While it is legitimate in a modern scientific treatment to use terms like "species" and "taxonomy", we must be very cautious when it comes to the early Chinese context, as they might be inappropriate. Early "proto-scientific" theories are not plausibly comparable with modern zoology. For instance, the word "taxonomy" and the concept behind it ³⁶ are, relatively speaking, of recent coinage. "Taxonomy" entered Western dictionaries with the publication of *Théorie élémentaire de la Botanique* by the Swiss botanist Augustine P. de Candolle (4 February 1778 – 9 September 1841) in 1813. Nonetheless, I will employ this modern term because it is probably the most effective and direct linguistic medium that can organise adequately the vast and chameleon-like universe of early Chinese zoological lexemes. In

³³ Needham 1986, 117. However, there is a category mistake here since a language is not made up of any graphs. Graphs represent language, i.e. one semiotic system is mapped onto another. Moreover, pictographs are but one category and by no means the most important already in the earliest phases of Chinese writing. A good argument that can even confute the presence of animal pictographs in Oracle Bone Script (*jiagumen* 甲骨文, from now on OBS) is that they are already turned by 90 degrees.

³⁴ Ibid., 182

³⁵ Ibid., 117

³⁶ From the Ancient Greek τάξις taxis, "arrangement", and -νομία -nomia, "method". Even if it is commonly known that the act of classifying and discerning different animals or plants is as old as the hills, this process had never had a clear methodological background. Generally speaking, Western cultural taxonomy was deeply influenced by Aristotle's (384 – 322) *History of Animals* (Tῶν περὶ τὰ ζῷα ἰστοριῶν Ton peri ta zoa istorion, "Inquiries on Animals") and Theophrastus's (372 – 287) *Enquiry into Plants* (Περὶ φυτῶν ἱστορια Peri phyton istoria) which developed and established a strongly hierarchical view of life, with the human being at the top of the taxonomic "ladder". Another distinctive feature of this categorisation of living beings is the *genus-differentia* system (common features vs. specific features), a binomial way to classify entities that is still prominent today (*genus-species*). The influence of these taxonomic schemes was undisputed until the theories of Carl Linnaeus (1707 – 1778) and Charles Darwin (1809 – 1882) which set the basis for modern taxonomy. See Foucault, Michel, *Les Mots et Les Choses* [*The Order of Things: An Archaeology of the Human Sciences*], Paris: Gallimard, 1966; Durkheim, Émile, *Les formes élémentaires de la vie religiense* [*The Elementary Forms of Religious Life*], Oxford University Press, 2008 (first edition PUF, 1912); Atran, Scott, *Cognitive Foundations of Natural History: Towards an Anthropology of Science*, Cambridge University Press, 1990; Leroi, Armand Marie, *The Lagoon: How Aristotle Invented Science*, London: Bloomsbury, 2014.

addition, it is in my view justifiable to employ our modern means, i.e. the scientific taxonomy, as a mode of comparison in order to investigate if there are one or more ways in which early Chinese scholars undertook to classify consistently animals and plants on a consistent basis.

Roel Sterckx is the author of the only essay on animal perception in pre-Imperial and Han China (The Animal and the Daemon in early China, 2002). Investigating the symbolic meanings that animals and fantastic creatures had in Early Chinese texts, Sterckx points out the essential role that lexicography and animal classification had in defining the world in which Chinese culture operated³⁷. In fact, one of the central themes in Sterckx's analysis is precisely to define how Chinese texts deal with the problems of classifying animal species. The author clarifies from the very outset that it is impossible to apply the modern concept of "taxonomy" when reading and analysing ancient Chinese texts: "Taxonomy is a hermeneutic process which, in early China, was deeply entrenched in lexicography, as can be seen, for instance, in the titles of the 'zoological' chapters of the Eryd"³⁸. It is possible then to corroborate the hypothesis that in Early China the impulse to classify living beings germinate directly from the need to classify names, and it developed through dictionaries and glossaries, i.e. a process that involves first taxonomy and then lexicography. Sterckx then stresses that the natural order in ancient China was not interpreted on the basis of protobiological criteria that determined the affinity between different zoological species. On the contrary, it was based rather on the idea that everything in the universe could be represented by a name, and consequently by a graph³⁹. This assertion is in partial contrast with what Needham wrote about an early Chinese debate on taxonomy: "[...] the Lunyu [...] obliges us indeed to believe that in the closing years of the 6th-century canons of botanical and zoological nomenclature were being actively discussed by the learned."⁴⁰ Bearing these premises in mind, I decided not to expend any effort in attempting to come up with modern

³⁷ When talking about Chinese culture, I only consider the milieu of the *literati* and high classes. For the vast majority of the population, which was illiterate and rural, these classification schemes were probably entirely meaningless or even unknown.

³⁸ Sterckx 2002, 23.

³⁹ "Instead of being concerned with the collection and the classification of animal data and the analysis of the differentiae between animals and other living creatures, the analytical exposition and classification of animals in early China was motivated by a concern with the classification of animal names. Much of the protoscientific discourse of animals occurred within the framework of lexicography. This detailed attention for animal nomenclature was part of a wider concern with textual exegesis and lexicographic classification." Sterckx 2002, 43.

⁴⁰ Needham 1986, 191.

translations corresponding to the lexemes that I will analyse in this study: while the idea that Early Chinese scholars could correctly identify fauna species is fascinating and challenging, it is not within the scope of the present research. I will try to delineate the "original" meaning that a character has in its lexicographic environment, especially when a single lexeme can have multiple acceptable translations.

First, it is crucial to investigate if there is a common explanation of *chong* and *yu* in primary sources, and secondly if there are any hints of a shared awareness in classifying them as different kinds of animals. The main foci of this dissertation are not only the words "chong" and "yu", but also every single character that has a semantic link with them, i.e. graphs that have either chong or yu as a "semantic classifier". The data also include characters that, even without a graphical connection with *chong* and *yu*, describe an animal that is unmistakably a part of the categories of yu or chong (or as seen below in section 3.2.2, the characteristics of both categories)⁴¹. Translations of some glosses are provided where necessary, with a comparison between the animal described and a modern interpretation of it. This is unavoidable when we bear in mind the *caveat* mentioned above regarding original meanings and contemporary zoological correspondences. A successful philological approach will depend, it seems to me, on adopting the methods Weldon South Coblin employed in order to analyse the first three chapters of the Erya in his PhD dissertation (University of Washington, 1972). Michael Carr then emulated this methodology in his 1979 University of Arizona dissertation on the botanic glosses in the Erya (chapters 13 and 14). In his study, South Coblin inspected every single gloss consulting the commentary of Guo Pu and the sub-commentary of Xing Bing, along with the exhaustive Qing 清 dynasty (1644 – 1911) commentaries by Hao Yixing 郝懿行 (1757-1825) and Shao Jinhan 邵晉涵 (1743-1794)42, in order to unravel the efficaciousness of the neglected Classic Erya as synonomicon.

⁴¹ An example would be the word *gui* i "tortoise": while the character does not possess any of the *chong-yu* radicals, it depicts an animal akin to them.

⁴² These two commentaries on the *Erya* are the most comprehensive. For each gloss in the *Erya*, Shao Jinhan's 邵晉涵 *Erya zhengyi* 爾雅正義 (*Correct meanings of the Erya*) chronologically cites all texts that can be related to that gloss (but not lexicographical sources, just Early Chinese texts, especially the Classics). Occasionally, the author feels entirely sure in assigning a particular gloss to an entire passage, in which case he uses the expression *ci shi zhi ye* 此釋之也 "this [passage of the *Erya*] explains it". Hao Yixing's 郝懿行 *Erya yishu* 爾雅義疏 (*Proper sub-commentary to the Erya*) always quotes lexicographical sources in order to elucidate the *Erya* glosses; moreover, it gives at least ten sentences as example from Early Chinese texts in which the glossed character reflects the

The results of these studies are essentially twofold: on the one hand, they enable a modern usage for ancient glossaries like the *Erya*, which can be utilised as "compasses" to understand obscure terminology in Early Chinese texts on the basis of a rigorous philological analysis. More importantly, they help to decipher the mechanisms behind the organisation of animal categories in Early China. In order to understand the nature of a dynamic and equivocal method of animal classification, it is necessary to consider theories that credit Chinese glossaries with the presentation of a systematic zoological classification. The main objective of previous researches (Coblin 1972, Carr 1979) was to outline the correct interpretation of lexemes within the texts in which they appear, while the intention of this project is to reveal the reasons behind the systematic classification of the *chong-yu* terminology. While the most immediate process to name a category of lexemes is by identifying the elements that are present in it, it will be argued that the two categories under scrutiny are too heterogeneous to be summarised. Moreover, I will show that there is the possibility that the *chong* and the *yu* category were conceived as a mixture of different animals that were systematically excluded from the other zoological categories⁴³.

The focus of studies of animals in Early China has usually been on the role assumed by fauna in their relation with human beings. For example, one of the main *topoi* is the importance of animal sacrifices in the ritual world and how animals are related to good or bad omens. Several attempts have been made by scholars to clearly identify animal categories, but none so far from a lexicographical point of view. The aim of these studies was to consider animals as names that needed to be classified and to be ordered in a coherent scheme.⁴⁴ While a 21st century human may readily understand what a "fish" is, the same thing may not be taken for granted for an official in premodern Chinese society.

semantic value listed in the *Erya*. A comprehensive chart of graphical variants is then provided, usually with additional examples.

⁴³ The *Erya* description of the *chong* category is too generic to give a precise identity to the variety of fauna that is present in the chapter *Shichong*: *You zu wei zhi chong*. *Wu zu wei zhi zhi* 有足謂之蟲。無足謂之豸。 "Those which have legs are called *chong*, the ones which do not are called *zhi*". While the presence of legs is crucial inside the early Chinese process of the identification of animals, this sentence seems to juxtapose two different kinds of *chong*: the legged ones are simply *chong*, while the legless ones are identified by a subcategory of *chong* called *zhi*. However, we should not forget that the *Erya* is heavily stratified and that this gloss might refer to a more generic category of *chong* or ultra-*chong* (a creature that even when classified in a certain category, could be also ascribed to the *chong* category).

⁴⁴ One of the most complete works about early Chinese fauna is Guo Fu's 郭郛 (b. 1922) Zhongguo gudai dongwuxue shi 中國古代動物學史 (Beijing: Science Press, 1999).

Problems arise when we try to establish a connection between modern science and ancient lexicography. As pointed out earlier, this study chooses to focus on the taxonomy (the ethnosemantic classification) inherent in a corpus of Early Chinese texts, deliberately disregarding how it correlates with the system of zoological classifications developed in the West in the 18th century by Carl Linnaeus (23 May 1707 – 10 January 1778) in his Systema Naturae. The reasons for the absence of a dichotomy in classifying fish and invertebrates in Early China will be examined, and I will try to elucidate why these two classes of living beings are on the one hand closely related to each other, and isolated from other categories on the other. I shall also problematise why the Chinese characters that identify these two categories can lend and borrow their radicals among the animals that belong to a broader variety of "chong-yu" creatures. The literary works that deal with this "nominalistic zoology" are, of course, glossaries and proto-etymological⁴⁵ texts such as the Erya or the Shuowen jiezi, or often-overlooked brief works like the Jijin pian. Such lexicographical works probably had an important role in Chinese culture, whether it was didactic or functional (in rhetoric, politics, philosophy, etc.): dictionaries and glossaries were the means of knowing the names of the entities that composed the known universe.

Image 1 A glimpse of dictionaries of graphs zidian 字典 (here named "dictionaries") versus dictionary of words cidian 詞典 (here named "encyclopaedias"). Needham 1986, 184.



⁴⁵ Etymology presupposes a notion of sound laws, which ancient dictionaries do not have. What I call protoetymology is entirely paronomastic, i.e. a synchronic scheme of semantic correspondences.

2. Taxonomy and Lexicography: Striving towards an Inevitable Categorisation

This chapter focuses on the relationship between taxonomy and lexicography in Early China and the importance of animal terminology. Despite the difficulty of outlining a uniform zoological system in ancient China, the presence of animals in Early Chinese culture is abundant: excluding the vast iconographic repertoire of zoological depictions from the Shang \overline{B} (1600 – 1046 BCE) to Han dynasties⁴⁶, it is possible to find several references to the animal world in Early Chinese texts. This literal production ranges from analogies and metaphors between the human world and animals behaviours (both in the classics and in master's literature) to catalogues of strange creatures that dwell in the wilderness⁴⁷. For instance, the *Shijing* is rich in biological terminology: it is possible to find plant and animal names in 250 poems out of 305, covering 82% of the whole text (Lü Hualiang 2010). Animals are used principally as metaphors or similes: e.g. as similes of beauty, see ode n°57 Shuo Ren 碩人, which goes: "Her head is cicada-like, her eyebrows are silkworm-like" (gin shou e mei 螓首蛾眉, tr. Bernhard Karlgren 1950, 38). Alternatively, the example of the turtledove, or cuckoo, in the ode n°152 Shijiu 鸤鳩 that is a topos representing a person who monotonously complains (Xiong Youqi 2013, 2).⁴⁸ While the prominent existence of zoological terminology is well attested, in the Early Chinese period there is a lack of systematic biological literature:

⁴⁶ Sterckx writes: "The zoomorphic is embedded early on in the Shang-period oracle bone script (1200 to 1000 BC) that includes numerous pictographs representing animals [...]. Zoomorphic motifs pervade Shang and Zhou period (tenth to third century BC) bronze vessel decor; and scenes depicting hunts, animal combat, husbandry, and games involving animals abound in Han period (second century BC to second century AD) murals and on decorated ceramic bricks." Sterckx 2016, 1.

⁴⁷ The most prominent example of this kind of literature is the *Shanhaijing* which exemplifies "[...] the importance of recognizing the *guaiwu* 怪物, or 'strange creatures', that dwell throughout the landscape." Strassberg 2002, 1.

⁴⁸ Another famous passage about a correlation between a human being and an animal (in this case an insect) is the one in *Zhuangzi*, II, 14 in which Zhuang Zhou dreams about being a butterfly ("Once Zhuang Zhou dreamed he was a butterfly, a butterfly flitting and fluttering around, happy with himself and doing as he pleased. He didn't know he was Zhuang Zhou. Suddenly he woke up, and there he was, solid and unmistakable Zhuang Zhou. But he didn't know if he were Zhuang Zhou who had dreamed he was a butterfly or a butterfly dreaming he was Zhuang Zhou. Between Zhuang Zhou and a butterfly, there must be *some* distinction! This is called the Transformation of Things." trans. Burton Watson). We can then safely admit that the use of animal analogies is a well-attested and widespread rhetorical phenomenon in both Classical Chinese poetry and literature (Bocci 2010, and Ptak 2011).

technical texts that deal exclusively with animals are relatively scarce and the study of animals as living beings is not conceived as of primary importance⁴⁹.

2.1 The Concept of "Animal" in Early China

The modern Chinese word for animal, *dongwu* 動物 was evidently not a standard zoological label: in Early China, there are single categories that include different animals, but never a word that subsumes them all.⁵⁰ This is because there was probably no concern to identify a category of living beings different from humans, and this indifference is sometimes reflected in passages where the anthropocentrism of Early Chinese culture becomes predominant⁵¹. To correctly nominate and organise animal lexemes is probably a means to understand the human world and regulate it. However, I propose another *careat* regarding

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⁴⁹ "While this relative silence regarding animals as an object of scientific inquiry by no means implies that the animal world was a topic not worthy of disputation in Early China, the absence of a canon of analytical writings on animals is noteworthy. It suggests that the way in which animals figured in the Early Chinese perception of the world was based on a different understanding of the correlation between human society and the natural world and the relationship between humans and animals." Sterckx 2000, 2.

⁵⁰ The term *dongwu* appears with the meaning of "animal" only in the *Zhouli*, chapter *Di Guan Si Tu* 地官司徒. The literal meaning is "moving being", and it is not entirely compatible with the concept of "animal" in Western civilisations: the word "animal" comes from the Latin word "animalis" meaning "to possess a soul", and more extensively "to possess life". This derives directly from the Greek word *zoon* ζφον with the same meaning. See Stercks 2005, 28. "One area which illustrates the low share of zoological theory in China is that of the basic terminology used to refer to animals both as a generic category or a collective of different species groups. The classical Chinese language lacks a linguistic equivalent for the term 'animal', which has its origins in the Platonic notion of 'zoon' and presupposes animacy and in-animacy as distinctive criteria". As Carr suggests, another instance of *dongwu* can be imagined as in contraposition to *zbiwu* 植物 "plant", which literally means "fixed, immobile being." Carr 1979, 48.

⁵¹ In the Chunqiu fanlu 春秋繁露 ("Luxuriant Dew of the Spring and Autumn Annals") attributed to the Han dynasty scholar Dong Zhongshu 董仲舒 (179 – 104 BCE), there is a sentence that reads: 能說鳥獸之類者,非聖人 所欲說也。聖人所欲說,在於說仁義而理之 [...] "It is not the desire of the sage to be able to explain the species of birds and beasts. A sage wants to explain benevolence and righteousness and regulate those [...]" (chapter Zhong zheng 重政, 2). Another important passage is in the chapter Fei Xiang 非相 of the Xunzi 荀子 ("Master Xun", c. 310 - c. 235 BC) in which animals are located in relationship with humans just to compare the moral differences between them, specifying that biological differences are not relevant: 人之所以為人者 何已也? 曰: 以其有辨也。飢而欲食, 寒而欲煖, 勞而欲息, 好利而惡害, 是人之所生而有也, 是無待而然者也,是禹桀之所同也。然則人之所以為人者,非特以二足而無毛也,以其有辨也。 今夫狌狌形狀亦二足而無毛也,然而君子啜其羹,食其胾。故人之所以為人者,非特以其二足而 無毛也,以其有辨也。夫禽獸有父子,而無父子之親,有牝牡而無男女之別。故人道莫不有辨。 "What is that by which humans are human? I say: it is because they have distinctions. Desiring food when hungry, desiring warmth when cold, desiring rest when tired, liking the beneficial and hating the harmfulthese are things people have from birth. These one does not have to await but are already so. These are what Yu and Jie both share. However, that by which humans are human is not because they are special in having two legs and no feathers, but rather because they have distinctions. Now the ape's form is such that it also has two feet and no feathers. However, the gentleman sips ape soup and eats ape meat. Thus, that by which humans are human is not because they are special in having two legs and no feathers, but rather because they have distinctions. The birds and beasts have fathers and sons but not the intimate relationship of father and son. They have the male sex and the female sex but no differentiation between male and female. And so for human ways, none is without distinctions." (Hutton 2014, 160).

this generalised representation of Early Chinese thought: it would be limiting to attempt to arbitrarily compare the contemporary Western concept of "animal" with the Early Chinese one. For this reason I would rather reflect on "how" this systematisation was developed and not "why" it was organised in a certain way. The concept of the "regulation" of animals cannot be compared to the modern necessity of an encyclopedic analysis. Animals were part of that "natural world" in which human beings lived too, hence their regulation was functional to human society.

Nevertheless, the abundant zoological terminology of the time was gathered in early glossaries and dictionaries following a proto-taxonomical organisation based on protobiological assumptions. As noted earlier, the main lexicographical sources are the *Erya* and the *Shuowen jiezi*, as well as some minor glossaries such as the *Jijin pian*. However, due to the lack of zoological theorising in Early China, it is not easy to identify a systematic lexicographic frame of reference in which animals were ordered and categorised. Depending on factors such as the period or social needs, the corpus of lexemes was not fixed. For example, the animal terminology in Shang OBS and in Western Zhou (1046 – 771 BCE) bronze inscriptions (BI) is related to hunting and sacrifices, with a focus on the quality of the animal fur, the horn length, animal diseases, animals as gifts, etc. It is not unusual to find the same animal listed under two different lexemes simply because there is an important difference between the two archetypes (e.g. a horse with a different coat colour is still a horse, but it could have been listed as a different animal).⁵²

If there were no proto-scientific interest in organising a detailed and unambiguous animal classification, why was the collection of zoological terminology so important? One of the possible interpretations is that giving a name and a character to every single entity in the known universe was the key to imposing human control over nature. On the other hand, it could have reflected the necessity to create a common and understandable universal language. In fact, the "comprehension of names" was the epistemological means to understand the natural world.⁵³ Confucius exhorted his disciples to read the *Shijing* in order to "become

⁵² In the *Shi chu* chapter of the *Erya* there are 58 glosses, and 48 of them are dealing just with different kind of horses. The featured differences are dealing mainly with the colour of the coat or the presence of less coloured spots on the horses' bodies. For example, gloss 44: 白馬黑鬣, 駱。 "A white horse with a black mane is called *luo*"; gloss 45: 白馬黑脣, 駩。 "A white horse with a black muzzle is called *quan*". See Carr 1979. ⁵³ Sterckx says that: "I will argue that the motives underlying animal classification in China were not primarily

zoological but figured within a larger project to explain the structures of the cosmos as a whole. Rather than

familiar with the names of numerous birds, animals, plants, and trees."⁵⁴ Furthermore, almost every non-technical text that deals with animals, emphasises the classification of zoological nomenclature. There are rarely what we would call "biological descriptions" of animals or of ethological properties, the focus is always on the lexicographic value of the animal name. This particular feature of Early Chinese society stems from the fact that "the Chinese [...] integrated animals within correlative schemes guided by extra-biological sets of principles such as time or season, space or biotope, colour, and human activity."⁵⁵

Therefore, it is possible to conclude that the processes that led the development of Early Chinese proto-zoology - or "zoography"⁵⁶ - were indicative of a necessity to establish a functional and ordered cosmos that appeared profoundly divided and heterogeneous after the troubled years of the Warring States period. The dawn of the Han Empire, an epoch in which the final version of the *Erya* is undoubtedly attested, is considered a historic moment where the priority for the monarchy was to construct a unified ideology⁵⁷. Along with the unification of units of measures, coins and cart axles, the language and its script were standardised mainly to establish the principle of unity in the State. In addition, the categories used within the "common language" had to be unified too. The concept of animal, the names of animals and the zoological classes, were but a small part of a long series of categories waiting to be classified and homogenised, a common fate that shared with the names of plants, mountains, rivers, lakes, and all the other entities that existed "All under Heaven".⁵⁸

perceiving the world as a purely physical reality that could be analysed as a biological system, the ancient Chinese classified the living species as part of a textual and ritual order based on correlation rather than differentiation. Animal classification was therefore subsumed within a larger hermeneutic quest, namely that of establishing a progressive socio-political, ritual and intellectual control over the world at large." (Stercks 2005, 29)

⁵⁴多識於鳥獸草木之名。Lunyu 論語, XVII.9, trans. by Burton Watson.

⁵⁵ Sterckx 2005, 29.

⁵⁶ This term is used by Stercks to exemplify that the processes of taxonomisation the animal world is based on "the belief that through the progressive description of all phenomena in the world one can establish social and political control over these phenomena and influence their inner and outer workings." Stercks 2005, 30. ⁵⁷ See Loewe (2011), Levi Sabattini (2012, forth.), Pines (2009, 2014).

⁵⁸ This is the Classical Chinese term to describe the world from the Zhou dynasty onward: *Tianxia* 天下 (All under Heaven". Other terms like *sifang* 四方 "four quarters" or *wanbang* 萬邦 "ten thousand states" or *jiuzhou* 九州 "nine provinces" are related to the political world, while *Tian xia* symbolises the entire geographical world and whatever lies within it. See Pines 2002.

2.2 More than One taxonomy: Different Methods of Classifying Animals

Since I began my analysis on the basis that in Early China the classification of animals was not driven by a zoological interest, I do not find it surprising that there was not a categorical method that determined an unequivocal animal taxonomy. In fact, it is possible to discern three different ways to classify animals in texts of the selected period: a (lexico)graphical classification, a correlative classification and a pure logographic one.⁵⁹

2.2.1 Lexicographical Classification

The first type of classification is applied principally in lexicographic texts such as the *Shuowen jiezi* primarily because, as its name evokes, it concerns the use of the graphical elements of Chinese characters to differentiate various kind of entities, in this case animals. The main reason for this classification is that the organisation of characters through the *bushou* system⁶⁰ reveals that certain graphs are used as "bricks" in order to represent, more or less adequately, a high percentage of words present in the Chinese language. The *bushou* graphs are slightly more important than the other graphs because they possess a semantic link to the words represented thanks to their presence in its depiction⁶¹. Among the 540 *bushou* that Xu Shen identifies in his *Shuowen jiezi*, there are many pictograms representing animal lexemes that date back to the OBS. ⁶² Xu Shen provides some heterogenous descriptions of these pictograms that cannot be ascribed to a consistent zoological classification. ⁶³

⁵⁹ These names follow the ones in Stercks (2005), although the present study will focus more on the terminology implied by the three classifications rather than analysing the motivations behind this kind of tripartite codification. I decided to change the name "graphical classification" to "lexicographical classification" in order to put the *Shuowen jiezi* and the *Erya* methods of classification on the same level (the adjective "graphical" could have been too linked to the first text rather than the second). I combined the third category, namely "ritual classification", together with the "correlative classification".

⁶⁰ See footnote 19.

⁶¹ This feature of the Chinese writing system is a part of the so-called *liu shu* 六書 (see footnote 69), the six principles of character formation. In particular, the use of a semantic radical plus a phonetic element is the *xing sheng* 形聲 principle ("phonetic-semantic" compounds or "giving form to a sound"). More than 90% of Chinese characters are today represented by this principle, while during the OBS period this percentage was as low as 25%. (See Abbiati 1992, Boltz 1994, Wilkinson 2013, Sampson & Chen 2013, Boltz 2017).

⁶² The pictograms that represent animals and have the status of "semantic classsifier" are several, for example: *ma* 馬"horse", *yang* 羊 "sheep", *yu* 魚 "fish", *niu* 牛 "cattle", *hui* 虫 "a kind of snake", *niao* 鳥 "long-tailed bird", *zhui* 隹 "short-tailed bird", *hu* 虎 "tiger", *shu* 鼠 "rodent", *quan* 犬 "dog", *shi* 豕 "boar", *gui* 龜 "turtle", *meng* 黽 "frog", etc.

⁶³ The description is focused on the graphical aspect of the character rather than the biological features of the animal described. E.g. *hu* 虎 is glossed as [...] *hu zu xiang ren zu ye* 虎足象人足也 (the paws of the tiger resemble

Although the *Erya* overlooks the graphical aspect of Chinese characters focusing exclusively on their semantic value, its internal organisation reveals the basis of the graphical classification of animals. The designation of the five zoological chapters of the *Erya*⁶⁴ shows what the categories of this "lexicographical classification" look like:

- a. "Invertebrates and creeping creatures" (chong 蟲 *C.lruŋ)⁶⁵
- b. "Fish and aquatic creatures" (yu 魚 *[r.ŋ]a)
- c. "Birds and flying creatures" (niao 鳥 *tfiw?)
- d. "Quadruped beasts" (shou 獣 *s.thu(?)-s)
- e. "Domestic animals" (chu 畜 *qh<r>uk-s)

The main difference between the two dictionaries lies in the fact that the *Erya* does not provide any description of the section heading collective names, while the description of each one of them can be found in the *Shuowen jiezi*. Wang Guowei 王國維 (1877 – 1927) in his *Guantang Jilin* 觀堂集林 (Collected Writings of the Revealing Hall) underlines the fact that the compilers of the *Erya* were principally focused on the explanation of names, not on the biological value of the animals.⁶⁶ The order in which these categories are presented appears not to be a casual one since there is a gradual trajectory towards the human being as the highest category, whereby the invertebrates appears as the farthest animal and the domestic animals as the closest to mankind.

2.2.2 Correlative Classification

This method of classification is mentioned in three texts that are related to the sphere of rituals: the Zhouli 周禮 (Zhou Rites/Etiquette), the Liji 禮記 (Rites Records or Notes on Etiquette)

the human feet) in order to justify the resemblance between the character *ren* 人 and the bottom of the character *hu* 虎.

⁶⁴ i.e. *Shi chong* 釋蟲 "glosses on invertebrates and creeping creatures", *Shi yu* 釋魚 "glosses on fish and aquatic creatures", *Shi niao* 釋鳥 "glosses on birds and winged animals", *Shi shou* 釋獸 "glosses on quadruped beasts", *Shi chu* 釋畜 "glosses on domestic animals". For different approaches to the translation of these chapters' titles, see Coblin 1972 and Carr 1979.

⁶⁵ From now on, I provide between parentheses the phonetic reconstructions based on Old Chinese by Baxter-Sagart (2014). The Schuessler reconstructions (2009) are provided after a semicolon if notably different from the B-S. See the introduction of chapter 4 for any emendations by the author.
⁶⁶ Wang Guowei 1923, 219.

and the Da Dai Liji 大戴禮記 (Notes on Etiquette by Dai the Elder). While there are some slight differences between them, it is possible to establish a correspondence between the three systems of classification.⁶⁷ Their main characteristic is that they set different kinds of skins as a parameter to categorise five different species of animals:

- a. "scaled creatures" (lin 鱗之蟲 *C.r[ə][n])
- b. "feathered creatures" (yu 羽之蟲 *[G]^w(r)a?)
- c. "naked creatures" (*luo* 贏/倮之蟲 *[r]^fo[r]?)
- d. "hairy creatures" (mao 毛之蟲 *C.m^saw)
- e. "armoured creatures" (*jie/jia*介/甲之蟲 *k^cr[e]p-s/*[k]^cr[a]p)

Two significant features emerge from this scheme: the first is that these categories are quite broad and obviously do not correspond to current biological taxonomy. Secondly, a relationship could be established with the "lexicographical classification" because "birds" are usually "feathered creatures", while "quadruped beasts", which always belong to the mammal clade, are known as "hairy creatures". Third, these zoological sets are used as antonymic pairs in order to point out differences between one category and the other, rather than subsuming animals with similar biological characteristics. For example, in the *Shuowen jiezi*, animals called *shou* are described as creatures with four legs, while, by contrast, birds are defined as creatures with only two legs. Other juxtapositions exist between animals fed and raised by humans (*chu*) and those which are not (*shou*).

The correspondence of the categories of *yu* and *chong* is seemingly more problematic, primarily because these two classes include a wider range of animals. Most importantly, the two categories sometimes overlap, especially in the case of amphibians or water invertebrates that possess features from both classes *yu* and *chong*. It is fundamental to note that *yu* and

⁶⁷ The Zhouli presents the use of the term *dongwu* to designate animals for the first time, *zhiwu* to designate plants and *min* \mathbb{R} to designate mankind; both the *Liji* and the *Da Dai Liji* <u>mainly use</u> (but not always) the word *chong* \mathbb{B} as an instance of "animal", not of "invertebrate" (See section 3.1.2). Other minor differences occur in the graphic rendering of *luo*, which is written *luo* \mathbb{R} in the *Zhouli* and *luo* \mathbb{R} in the *Liji* and in the *Da Dai Liji* (ZhL, 288; LJ, 602; DDLJ, 259); and the term for "armoured/shelled creatures" that appears as *jia* \mathbb{P} , not *jie* Λ , in the *Da Dai Liji* (DDLJ, 259). Nevertheless, the phonetic reconstruction of *jia* and *jie* is very similar and the two terms can easily be swapped (*[k]kr[a]p vs *kkr[e]ps).

chong are never used in contraposition; on the contrary, they subsume the "scaly animals" and the "armoured animals" categories from the "correlative classification" illustrated above. One type of evidence of this lexicographic overlap between species is observable in the classification of turtles: as a reptile, they are representable by the broad *chong* category, as maritime creatures they can be included in the *yn* category while they are certainly not considered scaly animals, but armoured ones.

2.2.3 Pure Logographic Classification

As already explained in 2.2.1, some characters became prominent in defining zoological categories in lexicographic works in a way that a single word could subsume a whole set of animals which share some similarities. The logographic nature of the Chinese script presents, however, a uniqueness indicated by the presence of "semantic classifiers" (*bushou*) in the vast majority of characters. This characteristic is relevant to the act of classifying words (or simply the act of reading) because it is more immediate to associate characters with the same semantic classifier, i.e. a relevant graphical feature, which does not necessarily represent a strong and binding semantic relation. *Au contraire*, the same semantic classifier is just a vague reminder that a character is related somehow to other characters with the same classifier and nothing more than that. Moreover, the semantic classifiers adapted through the evolution of the Chinese writing systems and scripts, and they were sometimes replaced by others for the sake of simplicity or the prevailing of more popular graphic forms.⁶⁸

The identification of a "pure logographic" classification in zoological terminology might seem reasonable enough since it is mainly composed of characters that "represent a form" (*xiang xing* 象形), i.e. pictographs that represent a stylised image of an animal, or by characters "giving form to a sound" (*xing sheng* 形聲), i.e. graphs formed by a "semantic classifier" and a phonetic element⁶⁹. Nevertheless, this affirmation remains true only to a

⁶⁸ This unique process gave birth to the so-called "character variants" (*yitizi* 異體字) which presuppose the presence of "standard characters" to which one could compare them. A great number of these variants are still catalogued inside dictionaries, although not used in the common writing. For a further study see Galambos 2017, 36-41.

⁶⁹ These terms are found in the famous postface (xu序) of the Shuowen Jiezi by its author Xu Shen. There is a total of six different "scripts" *liu shu* 六書 (or better "writing origins") which all Chinese characters are traditionally divided into. These are *zhi shi* 指事 "indicating the matter", *xiang xing* 象形 "representing a form", *xing sheng* 形聲 "giving form to a sound" (pictophonetic), *hui yi* 會意 "conjoining meanings", *zhuan zhu* 轉注

certain extent because the zoological *xiang xing* characters are not consistently the "semantic classifiers" for the zoological *xing sheng* characters.

Among the five categories identified by the lexicographical classification, only three are epitomised by a character that "represents a form": chong in his "single form" hui 虫, yu 魚 and niao 鳥. As for the other two, shou 獣 is a character that "gives form to a sound" composed by the semantic classifier quan 犬 "dog", and the phonetic element shou 嘼⁷⁰; chu 畜 is instead a "conjoined meaning" character (hui yi 會意) composed by mi 糸 "fine silk" (written as xuan 玄 in contemporary script) and tian \square "cultivated field" with the probable etymological meaning of "(animals) tied with (silk) ropes and detained in farmlands".⁷¹ Even if these former three semantic classifiers directly correspond to a homonymous lexicographic category, this does not necessarily mean that every zoological term that belongs to one of these categories presents the analogous semantic classifier as part of its graphical structure. One might expect nevertheless that a semantic classifier giving its name to a whole lexicographic category could be the most prevalent in that category: for instance, the Shi yu chapter consists of 98 zoological terms, among them only 43 present the yu semantic classifier (about 44%, less than half), 28 terms have the single-chong classifier (about 29%), the remaining glosses display other semantic classifiers, among the others the most prominent are bei 貝 (shell, 5 glosses) and meng 黽 (frog, 3 glosses).

Thus, along with a lexicographical and a correlative classification, it is possible to corroborate the existence of a pure logographic classification that is independent of the other two. The limits of this lexical taxonomy are that a pure logographic classification is extant exclusively within a graphical context, i.e. a universe made of "graphs that can represent words" and not "words that represent entities". In other words, we should not be surprised

[&]quot;reversed and refocused", *jia jie* 假借 "substituted and lent". For the translation choices and the developmental history of the six scripts, see Boltz 2017.

⁷⁰ *Shon* 嘼 is a *xiang xing* character that probably represents an ancient hunting device made by two stones tied together to the upper part of a stick. (Li Xueqin 2012, 101).

⁷¹ Li Xueqin 2012, 1203. The animals grouped inside the *shou* and *chu* categories present a different and more complex array of semantic classifiers: the most prominent in the former category is lu 鹿 [deer] with 22 entries, followed by *zhi* 豸 [stalking animal, feline] with 19 entries, *shu* 鼠 [rodent] with 14 entries, *quan* 犬/犭 [dog] with 13 entries, *shi* 豕 [boar] with 11 entries, *hu* 虎 [tiger] with 5 entries and *ma* 馬 [horse] with 3 entries. The animals grouped inside the *Shi chu* chapter present these semantic classifiers: *ma* 馬 is the most important with 41 entries, followed by *niu* 牛 [cattle] with 15 entries, *yang* 羊 [sheep] with 8 entries, *quan* 犬/犭 with 7 entries.

to see a character written with the single-*chong* semantic classifier that is lexicographically classified as a fish.

2.3 Species, Taxa, Categories: shu 屬 versus chou 醜

One of the main problems in investigating Early Chinese lexicographical works such as the *Erya* is the lack of definitions regarding what we call today "species". As Michael Carr and Joseph Needham point out, there are several terms in the Chinese language that are implied in modern scientific classification for taxonomical purposes:

- 1. Kingdom is jie 界, e.g. "Animalia" (animals) dongwu jie 動物界
- 2. Phylum is *men* 門, e.g. "Chordata" (vertebrates, chordates) *jisuo dongwu men* 脊索 動物門
- 3. Class is gang 綱, e.g. "Reptilia" (reptiles) paxing gang 爬行綱
- 4. Order is mu 目, e.g. "Testudines" (turtles) guibie mu 龜鱉目⁷²
- 5. Family is ke 科, e.g. "Trionychidae" (softshell turtles) bie ke 鱉科
- 6. Genus is *shu (zhu)* 屬, e.g. "Pelodiscus" (a kind of softshell turtles) *zhonghua bie shu* 中華鱉屬
- 7. Species is *zhong* 種, e.g. "Pelodiscus sinensis" (the Chinese softshell turtle) *zhonghua bie* (*zhong*) 中華鱉 (種)

In order to represent the specificity of these taxonomic ranks, both the English and Chinese languages use an array of terms that are differently implied in a normal discourse. For instance, the word "family" possesses a different value in an everyday life context as compared to a biological context⁷³; the same distinction can be made within the Chinese terminology:

1. *Jie* 界 *k^sr[e][t]-s GR "(Étymol.) Sentier, sente entre deux champs."; SDCMC "Boundary between fields or farmplots"; HYDZD "Boundary, border" 地界; 邊界; SW "(the graph) *jie*

 $^{^{72}}$ Carr 1979, 93 uses *lei* 類 instead of *mu* 目 to identify the "order" of taxonomic rank.

⁷³ From the Oxford English Dictionary: "A group of people related by blood or marriage" versus "A principal taxonomic category that ranks above genus and below order, usually ending in -idae (in zoology) or -aceae (in botany)".

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is a boundary" 畍: 境也。⁷⁴; EY (釋詁) 疆, 界, 邊, 衛, 圉, 垂也。"The boundary *jiang*, the limit *jie*, the margin *bian*, the defensive perimeter *wei*, the border *yu* are all 'edges' *chui*."

- Men 門 *m^sə[r] GR "(Étymol.) Porte à deux battants. [...] 2. a. Famille; maison; clan. b. École; doctrine ou partisans d'une doctrine; secte. [...] 3. a. Classe; catégorie; branche (du savoir); spécialité; matière (de cours); embranchement (d'une classification)."; SDCMC "gateway, usu. with two leaves, family, group, faction, sect, class, category"; HYDZD "Of houses and zones, gateway that can be opened or closed to get in or get out, clan, school of thought, category" 房 屋或區域的可以開闢的出入口, 家族, 學派, 類別; SW "(the graph) men is 'to hear' men. It derives from two 'leaves' hu. It represents a form." 門: 聞也。从二戶。象形。75
- Gang 綱 *k^saŋ GR "1. a. Corde maîtresse d'un filet (pr le lancer ou le serrer). b. Lien; corde. Lier; attacher. 2. (p. ext.) a. Élément essentiel; point principal. b. Idée-force; grandes lignes.
 c. Principes; sommaire. d. Compendium. 3. a. Loi (nationale); norme. b. Gouverner; ordonner; rectifier. 4. a. Classe; catégorie (d'animaux, de plantes, etc.)."; SDCMC "Headrope, guiderope, mainstay, major cord of a net to which all other strings are attached, network, nexus, organization, ordering principles."; HYDZD "indicates the totality of ropes that form a net [...] a general reference to things and objects" 提網的總繩 [...] 事物的總要; SW "(the graph) gang is a rope that holds together other ropes" 綱, 維紘繩也。
- 4. Mu 目 *C.m(r)[u]k GR "1. Œil. (p. ext.) Vue. 2. (Méd. chin. trad.) Œil: a. Orifice lié au foie.
 b. Expression du cœur et reflet des esprits. 3. Regarder; considérer. Point de vue; jugement; appréciation. 4. Désigner du regard; faire signe avec les yeux. 5. Nommer. Nom; désignation.
 6. Article (d'un catalogue, d'une liste). (p. ext.) Catalogue; liste. 7. a. Thème; section; division.
 b. (Biol.) Ordre."; SDCMC "Eye(s), to 'eyeball', regard, look at, see, point of view, judgement, label, tag, item."; HYDZD "Human eyes, watch attentively [...] item (on a list), catalog" 人的 眼睛, 注視 [...] 要目, 目錄; SW "(the graph) *mu* is the eye of a person. It represents a form." 目, 人眼。象形。
- 5. Ke科 GR "1. a. Classe; division. b. Famille (dans les sciences naturelles). c. Abrév. de 科學 kē xué Science. Scientifique. 2. a. (Adm. hist.) Section; département censorial auprès d'un ministère (dyn. 明 Ming dyn. 清 Qing). b. Section; département. c. Branche (d'enseignement); spécialité; faculté (d'une université). d. Service (dans un hôpital). 3. Degré; grade."; SDCMC "Class(ification), category; section, division, type."; HYDZD "Class, rank" 品類, 等級; SW "(the graph) ke is to measure" 科, 程也。

⁷⁴ Shao Ying 邵瑛 (1739 – 1818) in his *Shuomen qunjing zhengzi* 說文群經正字 notes that "nowadays in the Classics, the character (*jie* 畍) is reported as *jie* 界" 今經典作界.

⁷⁵ See Duan Yucai "What can be heard, it means that the outside can be heard from the inside, and the inside can be heard from the outside." 聞者, 謂外可聞於内, 内可聞於外也。But Luo Zhenyu 羅振玉 (1866 – 1940) in his *Zengding Yinxu Shuqi Kaoshi* 增訂殷虛書契考釋 [Revised and Expanded Philological Inquiries on Scripts from the Ruins of Yin] argues that *wen* is just a phonetic gloss.
- *Shu/zhu* 屬 *N-tok/tok GR "(*shu*) 1. a. Appartenir à; entrer dans la catégorie de; être de (tel signe du zodiaque); ressortir à. b. Catégorie; espèce; groupe. c. (Biol.) Genre. 2. Collègue; pair. 3. Parent; familier. 4. (Adm. hist.) Dépendre de; appartenir à. Soumis à; subordonné à; subalterne; subordonné; dépendant. Suivants; serviteurs; subordonnés | (*zhu*) 1. a. Se suivre sans discontinuer; se succéder. b. Suivre; aller à la suite de. 2. Atteindre; arriver à. 3. a. Réunir; rassembler; regrouper; convoquer."; SDCMC "(*shu*) subjoin(ed), subordinate to, belong to; category, class; kind, type, variety | (*zhu*) attach(ed), link up, connect; gather, assemble, collect."; HYDZD "(*shu*) type, kind | (*zhu*) join, continuous" 類別, 種類 | 連接, 連續; SW "(the graph) *shu* is to link" 屬, 連也。
- Zhong 種 *k.toŋ? GR "2. a. Espèce; sorte; catégorie. Classer par categories", SDCMC "kind, sort, category; class, species"; HYDZD "kind, type" 種類, 類別; SW "(the graph) *zhong* (*chong*) is something planted that, after a while, ripens" 種, 先種後孰也。⁷⁶

Out of these seven terms, there is just only one that appears as a category marker in the *Erya*: shu/zhu 屬 *N-tok/tok, with the meaning of "belonging to an (explicit) category". Its appearance in the text is not prominent as it can be found only eight times and only in the last two chapters *Shi shou* (Glosses on quadrupeds) and *Shi chu* (Glosses on domestic animals). This feature is relevant from the moment that we consider the *Erya* already divided into "taxonomic" chapters, where the name of the chapter title itself creates a category inside the whole discourse on glosses. Whenever it is necessary to explore a more complex category of beings, such as quadrupeds or domestic animals, the *shu* character intervenes in presenting explicit sub-taxonomies within an already given category. Although quite rudimentary and simplistic, this use of sub-categories underlines the striving to create a more sophisticated way to classify entities, in this case animals. We have three explicit sub-taxonomies in the *Shi chu* chapter⁷⁷. For instance, *Shi chu* 50 is a laconic statement:

⁷⁶ The quote from the *Shuowen jiezi* refers to another meaning of the graph *zhong*. It is probably just a kind of cereal. See Duan Yucai "This means, as a matter of principle, that cereals are the ones that behave like this." 此謂凡穀有如此者.

⁷⁷ The three explicit sub-taxonomies in the *Shi shou* chapter are "Animals that dwell in the wilds" *yu shu* 寓屬, "Rodents" *shu shu* 鼠屬 and "Ruminants" *yi shu* 齸屬. There is another sub-taxonomy that Carr labels as "Respirants" *xu shu* 須屬 (Carr 1979, 94), but that I find quite problematic as it is not a sub-category of quadrupeds, but it explains the "needs" that a certain animal necessitates in order to breathe. For instance, under the *xu shu* category there is a gloss that says "the fish (one) is called *xu*" *yu yue xu* 魚曰須: Guo Pu states that "(in order to) move, (fish) need to breathe through their gills" *gu sai xu xi* 鼓鰓須息 (*Erya*, 372). The other glosses are quite similar, so it is safe to presume that this part was added to the *Shi shou* chapter as an "inconsequential coda". The five explicit sub-taxonomies in *Shi chu* are "Horses" *ma shu* 馬屬, "Cattle" *niu shu* 牛屬, "Sheep" *yang shu* 羊屬, "Dogs" *gou shu* 狗屬 and "Chicken" *ji shu* 雞屬. There is a sixth explicit taxonomy, which does not follow the pattern X-屬 and that concludes the chapter. It simply reads "The six domestic

牛屬

niu shu

"They belong to the (sub)category of cattle"78

This two-character sentence comes after the enumeration of all the terminology related to the cattle category, with a focus on the various kinds, colours and sizes of oxen, cows, bulls and calves:

摩牛, 犦牛, 犤牛, 犩牛, 犣牛, 犝牛, 犑牛。角, 一俯一仰, 觭。皆踊, 觢。黑脣犉, 黑眥 抽, 黑耳犚, 黑腹牧, 黑腳犈。其子犢, 體長牬, 絕有力欣報。

"The big ox *ma* with an outstanding colour is a bovine, the zebu *bao* is a bovine, the small *pai* is a bovine, the fat *wei* is a bovine, the yak *lie* is a bovine, the hornless ox *tong* is a bovine, the buffalo *ju* is a bovine. About the horns (of a bovine), if one goes downwards and the other upwards, (those are called) *ji*. If both (the horns) are straight, (those are called) *shi*. (A bovine with) black lips is (called) *run*, with black and shining eyes is

(called) *you*, with small ears is (called) *wei*, with a black belly is (called) *mu*, with black hooves is (called) *quan*. Its offspring is called *du* (calves), the ones with a long body (are called) *bei*, the ones with extraordinary power are (called) *jia*.³⁷⁹

After this colourful array of bovines, the two characters *niu shu* clearly mark a hiatus in the chapter between a "section" with glosses on cattle and the following "section". In fact, the next section presents glosses on sheep and its last two characters are:

羊屬

yang shu

"They belong to the (sub)category of sheep"80

It is not by chance that we find this kind of explicit taxonomy in the *Shi shou* and the *Shi chu* chapters: these two zoological categories are directly in contact with human beings (especially domestic animals), and different animals that belongs to the *shou* and the *chu* category are considered of different "species" while nevertheless belonging to a super-category that could encompass them. For instance, dogs and chickens embody the common feature of being

animals" *liu chu* 六畜 and it follows a summary of the aforementioned five explicit sub-taxonomies plus the category of swines (*zhi* 彘).

⁷⁸ Erya, 381.

⁷⁹ Erya, 379–381.

⁸⁰ Ibid. 382.

animals which live in symbiosis with humans, they are of course very different from a physical and biological point of view. Thus, the *Erya* compilers decided to place both of them under the *chu* category, since along with horses (*ma* 馬), cattle (*niu* 牛), sheep (*yang* 羊) and swine (*zhi* 彘) they were meant to describe and provide a form to the concept of *liu chu* 六畜 [six domestic animals] that was present in some *loci classici*, but without any exhaustive or unambiguous explanation⁸¹. In any case, in both *Shi shou* and *Shi chu* chapters, it is possible to clearly identify special sub-categories of *shou* and *chu*: this could be seen as a rudimentary attempt to establish a more complex taxonomic system within the traditional division of entities into categories.

The second and last category marker that we can find in the *Erya* is *chou* 醜 *t.q^hu?. This graph may seem problematic because it is nowadays glossed as "ugly" or "abominable"⁸², but Duan Yucai 段玉裁 (1735 – 1815) in his commentary to the *Shuowen jiezi* (*Shuowen jiezi zhu* 說文解字注, 1815), states that:

醜,凡云醜類也者,皆謂醜,即疇之假借字。疇者,今俗之儔類字也。

"(the graph) *chou*, as a matter of principle, it is possible to say that is 'category', in all cases it is called "*chou*" (abominable), that is because it is a substitute/lent character for '*chou*" (category). *Chou* is what nowadays is vulgarly known as '*choulet*' (category)."

⁸¹ The term *liu chu* is prominently visible in the *Zhou li* (15 instances: twice in the *Tianguan zhongzai* 天官家宰 chapter, eleven times in the *Diguan situ* 地官司徒 chapter, once in the *Xiaguan sima* 夏官司馬 chapter and once in the *Qinguan sikou* 秋官司寇 chapter) and also in the *Zuozhuan* (two references: the first one in the 19th year of Duke Xi Xi gong shijiu nian 僖公十九年 and the second one in the 25th year of Duke Zhao *Zhao gong ershiwu nian* 昭公二十五年). In both the *loci classici*, the elements present in the category of *liu chu* are not explained and this term is often accompanied by other "number+object" categories: e.g. "the five sacrificial animals" *wu sheng* 五牲 and "the three victims" *san xi* 三犧 (*Zuozhuan, Zhao gong, 25*); "the six quadrupeds and the six fowl" *liu shou liu qin* 六獸六禽 (*Zhou li, Tianguan zhongzai,* 88). By the means of Du Yu 杜預 (222 – 285) commentary to the *Zuozhuan (Zuozhuan zhu* 左傳注), it is possible to know that sometimes the category of the *liu chu* subsumes all the animals of the *wu sheng* category: "the five sacrificial animals are cattle, sheep, swine, dog, chicken" *wu sheng: niu, yang, shi, quan, ji* 五牲: 牛、羊、豕、犬、雞, but when combined with the *liu chu* it gains a different meaning "(the five sacrificial animals are) elaphure, deer, roe-deer, wolf and hare" *mi, lu, jun, lang, tu* 麋、鹿、鹭、狼 (*Zuozhuan, 1669*).

⁸² See Hanyu Da Zidian: kewu 可惡 [abominable]; yanwu 厭惡 [to be disgusted]; zhishi wu buhao 指事物不好 [indicates something that is not good]; yangzi nankan 樣子難看 [ugly appearance], etc. and Shuowen jiezi: chou, ke wu ye 醜, 可惡也 [(the graph) chou is to be abominable].

It is possible to find another instance that corroborates this thesis in the *Shi gu* 釋詁 (Glosses on [difficult/ancient] words) chapter of the *Erya* where *chou* 醜 is glossed as *zhong* 衆 [multitude] and Hao Yixing's *Erya Yishu* adds some precious information about the gloss:

儔, 輩, 羣, 類皆以衆

Chou, bei, qun, lei jie yi zhong

"Companion chou, generation bei, flock qun, category lei are all ways to say multitude zhong"

Having said so, the character *chou* as a category marker is present in all the *Erya* biological chapters excluding *Shi yu*⁸³, and Michael Carr hypothesises that all the glosses with the *chou* mark "are located towards the end of the respective chapters, which may indicate that they were a later accretion to the original *Erya* text"⁸⁴, always assuming, of course, that there ever was an original *Erya* text. As an example, the followings are the uses of *chou* as a category marker in the *Shi niao* chapter of the *Erya* (*Shi niao*, 84-88):

鵲鵙醜, 其飛也翪。

"Concerning the category of magpies (que) and shrikes (ju), they fly upwards and downwards with their feet tucked up under their body (zong)"

鳶烏醜, 其飛也翔。

"Concerning the category of kites (yuan) and ravens (nu), they fly spreading their wings and soaring up high (xiang)"

鷹隼醜, 其飛也翬。

"Concerning the category of hawks (ying) and falcons (sun), they fly clapping their wings quickly (hul)"

鳧鴈醜,其足蹼,其踵企。

"Concerning the category of wild ducks (*fu*) and wild geese (*yan*), their feet are webbed (*pu*) and their heels are erect (*qi*) (while flying)"

烏鵲醜, 其掌縮

"Concerning the category of ravens and magpies, their feet retreat (suo) (while flying)"85

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⁸³ The marker is retrievable in *Shi cao* 釋草 [glosses on herbs], *Shi mu* 釋木 [glosses on trees], *Shi chong* and *Shi niao* 釋鳥 [glosses on wildfowl and flying creatures].

⁸⁴ Carr 1979, 97.

⁸⁵ Erya, 356 – 357

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It is apparent that while the category mark *shu* subsumes a relevant number of different animals that fall under a certain *genus*, the category mark *chou* has a more limited range. In fact, it only groups couplets of different species that share a distinctive characteristic, rather than identify a sub-taxonomy within an already given macro-category of entities. Nevertheless, the character *chou* (a noun, N) is always preceded by an "X" biological lexeme that "modifies" it (adjective or ad-noun, ad-N)⁸⁶: in this way, the noun "X" that represents a specific kind of animal or vegetable, becomes a "collective" noun (X-*chou*) that epitomises a whole sub-category of living beings, very similar to the English expression "X-like". For instance, an "owl-like" sub-category of birds (*xiao chou* 枭醜) or a "cicada-like" (*tiao chou* 蜩 醜) list of creatures.

⁸⁶ For the concept of N (noun lexeme), ad-N (noun modifier), see Harbsmeier "A Summary of Classical Chinese Analytic Syntax: The System of Basic Syntactic Categories" in *Problems of Chinese and General Linguistics*. *Anniversary volume to Sergey Yakhontov in honor of his 90th birthday*. Saint Petersburg: Saint Petersburg State University, 2016, 525-577.

3. From Invertebrates to Fish and Vice versa

3.1 What Does It Take to Be a *chong* 蟲? History of a Polysemous Character



Image 2 The evolution of the chong character. Li Xueqin 2012, 1170.

In order to define what the word *chong* 蟲 (*C.lruŋ) represents, it is necessary to outline the history of this character and the range of its use during the development of Early Chinese lexicography. Firstly, it is fundamental to summarise the different graphic variants that are related to the concept of *chong*, as there are at least two ways to represent the same lexeme, being a single *chong* character and a trebled *chong* one (虫 versus 蟲). Secondly, it will be necessary to underline that the graph and the word *chong* underwent semantic shifts that established the polysomy of this character: as section 2.2.2 has already pointed out, the graph *chong* has a broad and generic semantic value in certain *loci classici* since it is a general term for any kind of animal. Finally, I shall discuss a "lexicographic companion" of the character *chong*, the so-called "legless invertebrate" *zhi* 豸, which also shares a polysemic background.

3.1.1 Graphic Variations in Representing *chong*: Two's a Company, Three's a Crowd

The graph that is written nowadays as *chong* 蟲 is a "conjoining meaning" character, i.e. a character composed of two or more characters that determine semantically its meaning

with no phonetic elements⁸⁷. The conjoining characters, in this case, are three *hui/chong* 虫⁸⁸, which is a character that "represents a form", i.e. a graph with purely iconographic origins⁸⁹.



While the former character is attested only from the Warring States period onwards, the latter has a more ancient origin dating back to the Shang dynasty OBS. It depicts a curled creature, with a small head and a long, hooked tail as if it is represented in the act of slithering, hence the direct affinity with snakes and not invertebrates. As *Le Grand Ricci* points out, there is no proof that the ancient OBS graph represented the word "snake" or had any semantic connection to the animal world:

- 1. Causer du dommage (en parl. des Esprits ou des ancêtres); nuire. Dommage; tort.
 - 2. Ds 它示 tuō shì Les autres ancêtres (n'appartenant pas à la lignée directe).90

3. Nom de lieu.

4. Nom de personne.

⁸⁷ That is the *huiyi* 會意 category of the *liu shu* 六書 (the six traditionally recognized types of Chinese character structures or usages). See Boltz, 2017. Also called a "syssematic" character in Behr, 2006.

⁸⁸ In order to properly distinguish the two "forms" of *chong*, from now on this form (*hui* 虫) will be identified either as "*hui* form" or "single-*chong*" form. *Hui* is an alternative pronunciation of the character because it is considered as an early depiction of the character hui 虺 as the IV century dictionary *Yu pian* 玉篇 [*Jade Chapters*] (compiled by Gu Yewang 顧野王, 519 – 581 CE) points out: *hui*, *ci gu wen hui* zi 虫, 此古文虺字 [*Hui* (*[r]u[j]?) 虫 is the old script for the character *hui* 虺] (*Hanyu Da Zidian*, 3025). ⁸⁹ See Boltz, 2017.

⁹⁰ The OBS graph is the same that generated the graph 它 [neutral 3rd person pronoun]

If we exclude its use as a proper noun and its pronominal value, the OBS graph was implied only with the meaning of "causing damage, harm", something that could be seen as a characteristic of particular animals: certain kinds of snakes are harmful to human beings, as well as certain kinds of invertebrates are noxious both to humans and crops.



Image 4 Other OBS representations of hui 虫/ta 它. From Le Grand Ricci Numérique.

Another fascinating character that is related to the graphic forms of *chong* is kun #*[k][§]u[n], an evident reduplication of the character *hui*. It is attested from the OBS period onwards (see image 5), but even in this case there is no evidence of a zoological use of this graph, because it is only implied as a proper noun:

> Nom d'un Esprit ou d'un ancêtre auquel les Shang offrent des sacrifices, pouvant attirer des malheurs sur le roi.

> > 2. Nom d'une tribu et de son territoire.



Image 5 The evolution of the kun character. Li Xueqin 2012, 1167.

In order to evaluate and identify this graph, we need to examine another character that developed separately from a strict logographic point of view: $kun \mathbb{E} *[k]^{\varsigma}u[n]$ [elder brother; offspring; multitude; alike] is a graph that "represents a form" and it originally depicted an invertebrate, maybe a scorpion-like creature. Li Xueqin comments on its graphic evolution:



Image 6 The evolution of the kun character. Li Xueqin 2012, 608.

This character has been glossed with several different meanings, e.g. as *tong* 同 [same; alike] in the *Shuomen jiezi*, as *xiong* 兄 [elder brother] in the Mao version of the *Shijing* and as *hou* 後 [following; later] in the *Erya*, but there are other instances in which *kun* appears as a modifier of the character *chong*, for example in *Liji* chapter *Li yun* 禮運 (The Conveyance of Rites) there is a sentence which reads:

"Thus, there were no floods, droughts or plagues caused by a myriad of insects [...]"

故無水早昆蟲之災92

Comparing this passage with one from the *Da dai liji* and another one from the *Han shu*, it is possible to delineate another possible meaning of the character *kun*:

"A myriad of small insects hatches from their eggs. A myriad kun is a multitude zhong"

昆小蟲抵蚳。昆者,眾也93

"When the Way to be a Lord is reached, then the grass, the trees and the myriad of insects each one reaches his own proper place."

君道得,則草木昆蟲咸得其所94

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⁹¹ 象形字。初文像昆蟲之形,後其身訛變為《日》,其兩足訛變為《比》。Li Xueqin 2012,608. ⁹² Lii,832.

⁹³ Da Dai Liji, 32.

⁹⁴ Han shu, 307.

While the first one tells us immediately that *kun* is another way to say *zhong* 眾/衆 *tuŋ-s [multitude], this thesis is corroborated by the commentary of the second passage by Yan Shigu 顏師古 (581 – 654), the Tang period commentator of the *Han shu*:

"Kun is multitude. Kun chong [a myriad of insects] can also be written as zhong chong [a multitude of insects]"

昆, 衆也。昆蟲, 言衆蟲也。95

Finally, there is a quote directly from the *Shuowen jiezi* in which it is possible to rediscover the "doubled *hui*" *kun* 蛀 character as an independent semantic classifier that generates as much as 24 different characters. Its gloss also validates the interpretation of *kun* as "myriad, multitude":

"Kun is a collective/general noun for chong"

触: 蟲之緫名也。%

Following these premises, it is necessary to problematise the fact that there are at least two, if not three, different characters that nowadays are read and understood as *chong* which were conceived independently and that eventually overlapped in meaning: *chong* 蟲 and its single-*chong* form 虫. While the latter is used today as the simplified version of the former⁹⁷, there is some evidence that the two characters co-existed to some extent until the triple-*chong* form assimilated the semantic value of the single-*chong* form. After all, as Duan Yucai says, the conjoined meaning of the triple *chong* follows the one of the character *zhong* 衆, written as *zhong* 眾 from a more correctly philological point of view⁹⁸:

"The character *ren* [person] triplicated becomes the character *zhong* [crowd], the character *hui* [snake, invertebrate] triplicated becomes the character *chong* [invertebrates, creatures]."

⁹⁵ Ibid.

⁹⁶ Shuowen jiezi, 1125.

⁹⁷ In the People's Republic of China simplified script (*jianhuazi* 簡化字), *chong* 虫 is used with the exact same meaning of *chong* 蟲, which is considered its traditional script variant (*fantizi* 繁體字).

⁹⁸ The character *zhong* 衆 is a corrupted version of *zhong* 眾, which originally depicted three people (*ren* 人) side by side. It is another character composed by the triplication of a single graph. An eye (*mu* 目) was added over them in later depictions. See Image 7.



3.1.2 Everything Is a *chong*: Hints of a Non-inclusive Taxonomy

As we already discussed in section 2.2.2, instances of *chong* in earlier *loci classici* (mainly the *Liji*, chapter *Yue Ling*) are not related to the concept of insect or invertebrate. The character *chong*, in fact, appears as a common *descriptum* for the five phases descriptors as the following table illustrates¹⁰⁰:

Taxonomical category	Its creatures	Its creatures	Its creatures	Its creatures	Its creatures
	are scaly	are feathered	are naked	are furry	are armoured
	其蟲鱗	其蟲羽	(short-haired)	其蟲毛	其蟲介
			其蟲倮		
Yue Ling calendarisation	3 months of	3 months of	The exact	3 months of	3 months of
	Spring	Summer	centre (of the	Autumn	Winter
	孟春	孟夏	year)	孟秋	孟冬
	仲春	仲夏	中央	仲秋	仲冬
	季春	季夏		季秋	季冬

A partially identical scheme is retrievable also in the *Da Dai Liji*¹⁰¹, the most evident difference being the structure X 之蟲 rather than 其蟲 X. From this scheme, we can deduce that there are at least five different kinds of *chong*, each with a different typology of skin (with scales, feathers, short hair, fur or a shell) and a different affinity with a period of the year. If we add to this scheme the legendary four animals related to the four seasons and to the four

⁹⁹ Shuowen jiezi, 1128.

¹⁰⁰ Liji, 550-652.

¹⁰¹ Da Dai Liji, 99-100.

cardinal points mentioned in the first chapter of the *Liji*, *Qu Li* 曲禮 (Summary of the Rules of Propriety)¹⁰², we can see a clearer picture of the semantic value of *chong* as a generic term:

Animal	Its creatures	Its creatures	Its creatures are	Its creatures	Its creatures
taxonomy	are scaly	are feathered	naked (short-	are furry	are armoured
	其蟲鱗	其蟲羽	haired)	其蟲毛	其蟲介
			其蟲倮		
Four Spirits	Azure Dragon	Red Bird	(Yellow Dragon	White Tiger	Dark Warrior
	Qing Long 青龍	Zhu Que 朱雀	Huang Long 黃龍	Bai Hu 白虎	(a snake-turtle
			- not mentioned		symbiont)
			in the <i>Liji</i>)		Xuan Wu 玄武
Species	Snake-like	Wildfowl	(Felines or	Quadrupeds,	Turtles and
	Reptiles and	(鳥, 禽)	Humans – 虎,	Wild Beasts	Molluscs
	Fish (蛇, 魚)		豹,人)103	(鬥大)	(龜,貝)

Even if these are unmistakable hints of the use of *chong* as a hyponym for "animal", the *Liji* presents six compounds with the structure X+蟲 (with one exception being 蟲+X) that stand outside of the correlative classification use of this polysemous character:

- Kun chong 昆蟲 [Numerous creatures]; as already pointed out, this expression is the standard disyllable for "insect" in modern Chinese language, however in the Liji this expression is present with the hypernymial meaning of "a high number of different creatures". Some examples follow:
 - a. "Until the insects had all withdrawn into their burrows, they did not fire the fields" 昆蟲未蟄,不以火田¹⁰⁴. Even though James Legge

¹⁰² They are traditionally known as "Four symbols" *si xiang* 四象 or "Four spirits" *si ling* 四靈. Their traditional names appear in the *Liji*, 95. Their identification was not unanimous, for instance in chapter "Cerimonial Usages" *Li Yun* 禮運, the four spirits are the quintessential ("seminal" *jing* 精, see Sterckx 2002) animals: the qilin *lin* 麟, the phoenix *feng* 鳳, the tortoise *gui* 龜 and the dragon *long* 龍. *Liji*, 818.

¹⁰³ The commentary of Zheng Xuan to the *Liji* identifies *luo chong* as belonging to the categories of tigers and leopards (*hu bao zhi shu* 虎豹之屬), i.e. with a permanent short fur (*heng qian mao* 恒淺毛). See *Liji*, 602. However, the *Da Dai Liji*, discussing what is the quintessential species (*jing* 精 or *zhang* 長) that represent each of the five taxonomies, states that the Sage (*sheng ren* 聖人) is the paragon of naked animals. The semantic value of *luo chong* shifts then from felines to human beings since the Sage is indeed a man (*ren* 人). This affirmation compares twice in text, both in chapter *Zengzi Tian yuan* 曾子天圓 [Zengzi's Version of the Roundness of Heaven] and in chapter *Yi benming* 易本命 [The Change is at the Origin of Life]. *Da Dai Liji*, 100, 259-60. ¹⁰⁴ *Liji*, 437.

translates *kun chong* as "insects", I speculate that in this case, the semantic value of this disyllable is "all the creatures". The verb *zhe* 蟄 [to hide, to hibernate], as we will see, is often related to the noun *chong* in a relation "descriptor-*descriptum*" \rightarrow hibernating creatures. Nevertheless, the disyllable is parallel with *caomu* 草木 [herbs and plants] which is a less ambiguous generic term that encompasses all the flora, so we can cautiously say that *kun chong*, in this case, is a generic term that encompasses all the fauna. In fact, the verb *zhe* is not exclusively linked with the hibernation of insects, but could simply mean "to hide", "to retire"¹⁰⁵, and thus it can be related to a vaster array of animals. Moreover, the following lines describe the offspring of different kinds of animals, so the implication of *kun chong* as mere "insects" would be limiting.

- b. "Thus it was that there were no plagues of flood, drought, or insects" 故無水旱昆蟲之災¹⁰⁶. In this case, the disyllable stands for a multitude of harmful insects, so it is to be understood as "the myriad of insects" rather than "creatures". Zheng Xuan states that they belong to the category of locusts and caterpillars (*ming zhong zhi shu ye* 螟螽之屬也), the quintessential noxious invertebrates.
- c. "May the ground no sliding show, water in its channels flow, insects to keep quiet know; Only in the fens weeds grow!" 土反其宅, 水歸其壑, 昆蟲毋作, 草木歸其澤。¹⁰⁷ Another time there is a correspondence between *kun chong* and *cao mu*. For this reason, I speculate once again that the semantic range of this compound is not restricted to the world of insects but it subsumes the whole fauna. In addition, the previous line has a parallel passage where the two initial subjects are ground (*tu* ±) and water (*shui* 水), making the discourse

¹⁰⁵ Le Grand Ricci: 1. Hiberner (en parl. des animaux, insectes). 2. Rester caché ds son repaire (en parl. d'un animal). Caché; retiré. *Hanyu Da Zidian*: 1. 動物冬眠,潛伏起來不食不動; 2. 冬季藏伏起來的動物; 3. 蟄居。長期隱居。 [1. Hibernation, being latent without eating or moving; 2. Animals that in winter hibernate; 3. Live in seclusion, hidden for a long time.]

¹⁰⁶ *Liji*, 832.

¹⁰⁷ Liji, 936.

logic and coherent (ground \rightarrow water \rightarrow animals (and not only insects) \rightarrow plants).

d. "Strange insects and the fruits of plants and trees, produced under the best influences of light and shade, were all made ready" 昆蟲之 異, 草木之實, 陰陽之物備矣。¹⁰⁸ Even in this last example, the term *kun chong* is parallel to *cao mu* and also to *yin yang zhi wu* [entities of light and shade], another lexeme that subsumes a vast number of beings. This is another hint of the hypernymial nature of *kun chong* in the *Liji*.

Having said so, there are other fascinating references to this disyllable in other *loci classici* such as the *Xunzt*¹⁰⁹, the *Da Dai Liji*¹¹⁰ and the *Huainanzi*¹¹¹. In all these instances, the binomial expression always has the value of "numerous creatures" and not necessarily just "insects". In fact, the term *kun chong* is on another occasion in correlation with the expressions "myriad of entities" *wan wu* 萬物 (hypernym both for flora and fauna), "herbs and plants" *cao mu* 草木 (hypernym for flora) or "bipeds (wildfowl) and quadrupeds (wild beasts)" *qin shou* 禽獸 or *niao shou* 鳥獸 (hypernym for fauna). I am quite sure that between *kun chong* there are other animals, such as the ones belonging to the *yu* category: it is surprising that fish and other aquatic animals were omitted from this kind of enunciation; it is more plausible that *kun chong* had the same value of what is nowadays the "etc." mark.

¹⁰⁸ Liji, 1572.

¹⁰⁹ 然後昆蟲萬物生其間 [Beyond these, the insects and other myriad creatures live in the remaining space.] *Xunzi*, 318. Translation by Eric Hutton (2014). I suggest amending the text by removing the reference to insects, because in my opinion *kun chong wan wu* has to be considered as a "wrap-up" formula, and not a taxonomic evaluation.

¹¹⁰時播百穀草木,故教化淳鳥獸昆蟲 [The hundreds of grains and the vegetation are planted according to the seasons, therefore the transformations of all animals are harmonised] and 人、禽、獸、萬物昆蟲各有 以生。[Human beings, wildfowl, wild beasts and the myriad of creatures and so on, have all their means of birth.] *Da Dai Liji*, 119, 256. It would be strange to say first "the myriad of entities" and then "insects". I suspect that the formula *wan wu kun chong* could be another way to encompass all the living things.

¹¹¹ 禽獸昆蟲與之陶化 [Even birds, beasts and insects were refined and transformed by them.] *Huainanzi*, 302. Translated by Sarah Queen and John Major. Once again, I think the translation of *kun chong* as insect would be misleading. In this case, since wildfowl and wild beasts are already cited, I would suggest translating *kun chong* as "and all the multitude of the remaining creatures".

- 2. *Zhe chong* 蟄蟲 [Hibernating creatures]; even in this case, traditional translations of *chong* are often related to the insect realm. However, the text simply states that these "hibernating creatures" perform specific actions that are common to every kind of animal that slumbers or hibernates during the winter:
 - a. "Creatures that have been torpid during the winter begin to move" 蟄蟲始振¹¹²
 - b. "Creatures¹¹³ in their burrows are all in motion, opening their doors and beginning to come forth." 蟄蟲咸動, 啟戶始出¹¹⁴
 - c. "Creatures stop up the entrances to their burrows" 蟄蟲坏戶115
 - d. "Creatures would not retire to their burrows" 蟄蟲不藏116
 - e. "Creatures in their burrows all try to push deeper, and from within plaster up the entrances" 蟄蟲咸俯在內¹¹⁷
 - f. "Creatures would come forth again from their burrows" 蟄蟲復出
 - g. "Creatures will come to the light and revive" 蟄蟲昭蘇119
- 3. *Hai chong* 孩蟲 [Hatchlings or young creatures]; there is only one instance of this expression in the *Liji* and it states the prohibition on killing baby or young animals: "Nests should not be thrown down; <u>unformed insects</u> should not be killed, nor creatures in the womb, nor very young creatures" 毋覆巢, 毋 殺孩蟲、胎、夭.¹²⁰ Even in this case, I disagree with the translation of *chong* into "insects" since the binomial expression *hai chong* stands together with two other characters (*tai* 胎 [foetus] and *ao* 夭 [young animal or plant]) that do not identify a specific class of animals, so there is no point in considering

- ¹¹⁶ *Liji*, 620.
- ¹¹⁷ *Liji*, 631. ¹¹⁸ *Liji*, 644.

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¹¹² Liji, 531.

¹¹³ Legge translates "insects", emphasis mine.

¹¹⁴ *Liji*, 556.

¹¹⁵ *Liji*, 618.

¹¹⁹ *Liji*, 1302.

¹²⁰ *Liji*, 545.

Liji, 545.

hai chong "unformed insects". It is, rather, probably a term for the offspring of whatsoever category of animal.

- 4. Chong min 蟲螟 [(Harmful) insects like caterpillars]
- 5. Huang chong 蝗蟲 [Locusts and other insects]
- 6. Jie chong 介蟲 [Armoured creatures → Beetles]
- 7. Zhi chong 熱蟲 [Predatory creatures]

Finally, a last remark regarding the taxonomies in the Zhouli: while the correlative classification method is implied more or less identically, the term used to represent generic animals is not *chong*, but the disyllable *dongwu* 動物 [moving entity, in modern Chinese "animal"]. It is difficult to establish why the compilers of the Zhouli were inclined to use this lexeme instead of *chong*. Michael Carr proposed that *dongwu* was implied in the Zhouli due to its phonetic resemblance to *chong*, but in the light of new phonetic reconstructions I suggest that we not follow this interpretation:

Karlgren (1957)	*d'ung-miwət	*diông
Schuessler (2011)	*dôŋ?-mət	*druŋ (older form *rluŋ)
Baxter-Sagart (2014)	*[Cə-m-]t ^s oŋ?-C.mut	*C.lruŋ
Abridged and simplified	mttong'mut	lrung

In my opinion, the use of *dongwu* as a generic term for "animals" is simply justified by the comparison with the generic term for plants *zhiwu* 植物 [immobile entity] and not by phonetic connections.

To corroborate this hypothesis, I want to point out that the passage of the Zhouli in the chapter "Ministry of the Earth or of the Official Education" (Di Guan Situ 地官司徒) implies dong wu only as a generic term: every time a class of animal is enounced, the generic term shifts to a more specific one, i.e. mao wu 毛物, yu wu 羽物, lin wu 鳞物, luo wu 贏物, jie wu 介物. The substitute lexeme for chong is wu and not "dong wu". In addition, the term chong is indeed present in the Zhouli in three passages of the chapter "Ministry of the Autumn or of the Punishments" (Qiu Guan Sikou 秋官司寇)¹²¹ and in two passages of the chapter

¹²¹ Zhouli, 1156-8.

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"Ministry of the Winter or the Artificer's Records" (*Dong Guan Kaogongji* 冬官考工記)¹²². In the first case, *chong* appears in two disyllables, namely *mai chong* 貍(埋)蟲 and *shui chong* 水蟲. The former is identified by the commentary of Zheng Xuan and the sub-commentary of Jia Gongyan as a noxious invertebrate that hides inside the house (自埋之蟲), while the latter is probably a generic term for amphibian: the two officials cited in the passage are in charge of frogs (*guo* 蝈 and *yu* 蜮, which here is a probably graphic variant of *guo* 蟈). In the second case, *chong* is used as the name of a decoration of a bell (Biot says that it is in form of a reptile¹²³) or it is a common term to indicate "small creatures" (*xiao chong* 小蟲), an expression that is retrievable in the *Shuomen jiezi* definition of *chong*¹²⁴.

To my knowledge, this extreme "generalisation" of the term *chong* could radically change the perceived structure of Early Chinese taxonomies: even if it is the common understanding that *chong* is polysemous and can mean both "invertebrate" <u>and</u> "creature" (of any species), one meaning does not preclude the other. In fact, the word "invertebrate" as a zoological category makes sense only in a contemporary environment, while it is not necessarily true for an Early Chinese mindset. The "diachronic semantic shift" from "animal" to "insect" that Carr evocates ¹²⁵, could be a giant misunderstanding caused by the incompatibility of our modern categories and the ones present in Early China. To sum up, I postulate that the term *chong* really meant any kind of creature that did not have certain characteristics to be included in another category, hence it could be the outermost and featureless element in a non-inclusive taxonomical system.

3.1.3 Invertebrates with legs, invertebrates without legs

Moving on to lexicographical sources, the *Erya* chapter *Shi chong* provides a vast array of animals classified under the *chong* label, a category that has been translated in several ways in order to subsume the different genres and species that are included in it.¹²⁶ There is no evidence in the received *Erya* of a different use of *chong* and its *hui* form: the character appears

¹²² Zhouli, 1292, 1330.

¹²³ Biot, 270, 470.

¹²⁴ Shuowen jiezi, 1107-8.

¹²⁵ Carr 1979, 67.

¹²⁶ Carr 1979, 65 identifies the category and comments that it includes "insects, worms, spiders, reptile, etc."; Boltz 1994, 137 considers them as "zoa-entomoid creatures".

only four times in the whole text (five if we count the title of the chapter *Shi chong*) and each instance present a triple-*chong* form.

The only gloss that aims at describing the characteristic of the *chong* category is the last one in the *Shi chong* chapter:

"Those that have legs are called *chong* (*C.lruŋ; drul), those without legs are called *zhi* (*[d]re? - dre?)"

There is no evident explanation about any other characteristic of this category of animal, like its aspect or the features of the skin. The category that in this case is juxtaposed to *chong* is *zhi* (and not, for example, *yu*), and the dichotomous element of this gloss is the presence or absence of legs. The use of legs as distinguishing taxonomic element is relevant in the description of the animal kingdom; for example, the word *shou* \mathbb{R} and the word *qin* \mathfrak{A} are glossed in the *Erya* as a contrastive lexical pair:

"The ones with two legs and feathers are called *qin* (*[C.G](r)[ə]m; gəm Sch.), the ones with four legs and fur are called *show* (*s.t^hu(?)-s; hjuh Sch.)"

二足而羽謂之禽, 四足而毛謂之獸128

In this case, there is an explicit reference to the correlative classification as the terms yu 羽 (*[G]^w(r)a?; wa?) and *mao* 毛 (*C.m^saw; mâu Sch.) are indicated as a supplementary feature of the *qin* and *shou* categories. Moreover, there is some evidence of paronomastic correspondence between *qin* 禽 and *qin* 擒 (*C.G(r)[ə]m; gəm Sch.) and between *shou* 獸 and *shou* 狩 (*s.tu?-s; hju? Sch.)¹²⁹: animals that can be caught (with nets and traps - *qin*) are *qin*, while animals that can be hunted (*shou*) are *shou*.

¹²⁷ Erya, 326.

¹²⁸ Erya, 358.

¹²⁹ 禽者,擒也。言鳥力小,可擒捉而取之。獸者,守(狩?)也。言其力多,不見可擒,先須圍 守(狩?),然後乃獲,故曰獸也。 [(The animals categorised as) wildfowl are (the ones that can be) caught with nets and traps. It is said that birds' strength is feeble, they can be caught with nets and then be captured. (The animals categorised as) wild beasts (quadrupeds) are (the ones that can be) hunted. It is said that their strength is vigorous, it is not possible to encounter and catch them with nets or traps; first they must be surrounded and then "hunted" *shou*, only then they are captured, that is why they are called "wild beasts" *shou*.] *Erya*, 358.

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Animal category	Paronomastic verb	Correlative classification
<i>qin</i> 禽(*[G](r)[ə]m; gəm Sch.)	<i>qin</i> 擒 (*G(r)[ə]m; gəm Sch.)	ッル 羽 (*[G] ^w (r)a?; wa?)
shou 獣 (*st ^h u(?)s; hjuh Sch.)	shou 狩 (*s.tu?s; hju? Sch.)	<i>mao</i> 毛 (*m ^s aw; mâu Sch.)

Proceeding to another lexicographical source, the *Shuowen jiezi* dedicates two separated sections to either character: in chapter 14 (*juan shisi* 卷十四) it is possible to find a *hui* section (*hui bu* 虫部) and a *chong* section (*chong bu* 蟲部). According to the *Shuowen jiezi*, the *hui* form represents "A [other] name for the viper *fu*, long three inches, its head as big as much as a human thumb. It is depicted lying down." (一名蝮,博三寸,首大如擘指。 象其臥形¹³⁰). Therefore, it is highly probable that the original meaning of the *hui* form was the representation of a certain kind of snake: the *Hanyu Da Zidian* reports that there are at least three different forms of the single-*chong* character that are attested in OBS and BI, each one depicting a different shape of the "head" of the snake. ¹³¹



Image 8 Alternative depictions of the character hui/chong. Hanyu Da Zidian, 3025.

Nevertheless, the Shuowen definition of the hui form continues in more generic terms:

"Small and minute among the living beings, some of them walk, some have fur, some are naked, some have shells, some have scales; by means of (the graph) *hui/chong* they are represented"

物之微細,或行,或毛,或贏,或介,或鱗,目虫爲象。132

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¹³⁰ Shuowen jiezi, 1107. This animal is also present in the Erya, gloss 4.2.44.

¹³¹ See *Hanyu Da Zidian*, 3025. Inscription in *yi* 乙 8718 depicts an "arrow-headed" snake, while the one in *tie* 鐵 46.2 depicts a "wedge-headed" snake. There is also an "eyed" snake in the BI on the tripod of Chang (*Chang ding* 昌鼎). All of these graphs can be reconducted to *hui/chong* 虫.

¹³² Shuowen jiezi, 1107-8.

While this could be an array of the differences that exist between distinct species of invertebrates, there are some hints of the use of the *hui* form as a universal term for different types of animals. In his commentary to the *Shuowen jiezi*, Duan Yucai writes:

"The scaled and armoured animals are depicted by means of *hui/chong*. For instance, these are *chi* dragons, hornless dragons *qiu*, clams and mussels. The ones that fly are depicted by the means of *hui/chong*. For instance, these are bats. The ones that have fur or are naked are depicted by means of *hui/chong*. For instance, these are the ape *yuan* and the monkey *wei*."

鳞介以虫爲形。如螭虯金蚌是也。飛者以虫爲形。如蝙蝠是也。毛贏以虫爲形。 如蝯蜼是也。¹³³

It is apparent that all the characters used as examples for different taxa of animals present the hui-form in the radical-position. They all appear in the hui section of the Shuowen jiezi, which is composed of 159 glosses in total. From this statement by DYC, it is possible to draw two conclusions: firstly, the hui/ chong semantic classifier is principally used to represent animals that belong to four out of the five different categories identified by the correlative classification method, namely scaly, armoured, furred and naked animals. While the feathered animal category is apparently omitted, there is a reference to "flying ones" (fei zhe 飛者) which evidently completes the correlative classification picture. Secondly, we must underline the strong relation with the pure logographic classification since the Shuowen jiezi must be considered as a text that presents a list of graphs, rather than a text that presents a list of words. It is not surprising that all the different animals from the five correlative categories considered as chong are represented by characters with the chong semantic classifier; however, these animals are classified elsewhere under a different category; for instance, the Erya categorises bianfu 蝙蝠 [bat] as a niao 烏 [flying animal] and the monkeys yuan 蝯 and wei 蜼 as shou 獣 [wild beasts]¹³⁴. These elements exacerbate the differences between a pure logographic classification where different graphs are classified based on their semantic classifiers and a more empirical and naturalistic classification that is focused on the meaning transmitted by graph (i.e. the animal) rather than its graphic representation.

The triple-*chong* section, on the other hand, is very small if compared to the *hui* section since it presents only six characters, five if we exclude the first one which is *chong* 蟲.

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¹³³ Ibid.

¹³⁴ Erya, 352, 368-9.

Moreover, this first gloss quotes entirely the *Erya* passage about the juxtaposition between *chong* and *zhi* (gloss 4.1.55), without giving any further clarification. Duan Yucai notes that the explanation of the differences between *chong* and *zhi* is a "specific reference that includes a general reference" (*ju xi yan yi bao hun yan* 舉析言以包渾言): although the implication of this formula is related to a text exegesis of the 19th century and thus far beyond the scope of this dissertation, Duan Yucai had to distinguish the semantic value of *zhi* as a semantic classifier. In fact, while Xu Shen does not avoid citing the reference to *chong versus zhi* in the *Erya*, he dedicates a whole section to the semantic classifier *zhi* which is implied in characters related to the feline semantic field:

"(The character) *zhi* (stands for) wild beasts with elongated backbones that move flexibly, (when they) desire to kill their prey, they patiently wait and stalk (them)."

豸: 獸長晉行豸豸然, 欲有所司殺形。¹³⁵

Duan Yucai notes that the reference of this character to legless invertebrates is due to their body length:

"As a matter of principle, the body of legless creatures is very long, for example the ones akin to snakes or earthworms"

凡無足之蟲體多長,如蛇蚓之類。136

He also points out that the use of the word "backbone" (*ji* 晉) is simply an extended meaning (*yinshen* 引伸) and not a reference to vertebrates only, i.e. animals that possess a spine.

¹³⁵ Shuowen jiezi, 774.

¹³⁶ Ibid. The translation of *chong* here is inevitably "creature, animal" since we know that a snake is not an invertebrate. However, due to the reference of the *Erya* gloss *chong* versus *zhi*, I suppose that Duan Yucai used *chong* in the way it is used in *Shi chong* chapter, hence with the meaning of "zoo-entomoid, invertebrate".

Nevertheless, the characters that follow this section of the SW are mainly mammal predators, (especially felines such as wildcats, leopards, etc.)¹³⁷ marking the difference between the semantic value of this *zhi* and the one found in the EY and in the *chong* section of the SW. While there could be a paronomastic link between *zhi* \Re (*[d]re?) and *chi* \Re (*[d]re?) [walk hesitatingly]¹³⁸, this does not exclude the ambiguity of the graph in describing two completely different categories of animals.



Image 9 The evolution of the zhi character. Li Xueqin 2012, 848.

Michael Carr seeks to elucidate this semantic expansion of *chong* with the relative semantic contraction of *zhi* by stating that:

"To summarize these two semantic shifts: [*chong*] 蟲 originally meant 'animals', then it came to mean 'animals with feet', and then to mean 'insects, reptiles, etc.'; [*zhi*] 豸 originally (probably) meant 'insects', then came to mean 'animals without feet' or 'animals that stalk or crawl', and then came to mean 'reptiles without feet'. These patterns of semantic shifts demonstrate a sort of lexical equilibrium in which the semantic expansion

of one term is conversely linked to the semantic contraction of another term."139

While this theory seems convincing, it is based on older phonetic reconstructions (see footnote 138) and errs from the outset: if we check older scripts such as the OBS and BI, it is possible to discern that the graph *zhi* does indeed "represent a form" (*xiang xing*) of an

¹³⁷ In this order, we have *bao* 豹 [leopard], *chu* 貙 [lynx], *tan* 貚 [bobcat], *pi* 貔 [panther], *chai* 豺 [jackal], *yu* 貐 [an antropophagous tiger-clawed lynx], *mo* 貘 [snow leopard], *, na* 貀 [two-legged leopard], *he* 貈[a fox like mustelid, raccoon dog], *huan* 貆 [badger], *an* 豻 [wild dog], *li* 貍 [wildcat, raccoon dog], *tuan* 貒 [badger], *huan* 貛 [badger or male wolf], *diao* 貂 [sable] (interestingly considered belonging to the category of rodents *shu shu* 鼠屬), *mo/he* 貉[raccoon dog], *mao* 貓 [cat]. There are a few exceptions since some characters are outside the mammal predator semantic field: these are *yong* 貛 [a kind of humped ox, yak or zebu], *jue* 貜 [a big ape], *you* 貁 [a long-tailed monkey] (also considered belonging to the category of rodents *shu shu*). *Shuowen jiezi*, 774-7.

¹³⁸ Michael Carr suggests another paronomastic link with $2hi \perp \pm 10^{\circ}$ [to stop], hence to stop and wait while preying, to stalk, but its phonetic reconstruction is slightly different in light of the most recent studies. Carr in fact compares Karlgren reconstructions of $dieg \not\equiv$ and $tieg \perp$ which are decidedly more similar (Carr, 1979, 69).

¹³⁹ Carr 1979, 72.

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animal, depicted vertically and sideways¹⁴⁰. Although there are sources that surely identify this animal as "a feline, a head with whiskers, paws, backbone"¹⁴¹ or a "carnivorous animal, with a large body, big mouth and sharp teeth"¹⁴² neither *Le Grand Ricci* nor Li Xueqin do have any idea of what species of animal is represented by the OBS of zbi^{143} . Nevertheless, I contend that it would not be contradictory to state that zbi originally depicted a feline, but it expanded its semantic value by including the meaning of legless invertebrates: while the graphic representation of zbi maintained some characteristics that we can identify as "paws", "whiskers" and "mouth", the description of zbi in the SW focuses on other characteristics, such as possessing an "elongated spine" (*chang ji* 長晉) or the tautological feature of "moving like a *zbi*" (*xing zbi zbi ran* 行豸豸然). Such characteristics are not exclusive to the animal originally represented by the *xiang xing* character, but they are compatible with legless animals with elongated bodies like snakes, centipedes or earthworms. After all, the graph that originally represented a fish underwent a similar, if not even more successful semantic expansion becoming the label for any kind of animal that lives in water.

¹⁴⁰ The vast majority of animals is, in fact, represented vertically and sideways.

¹⁴¹ Wieger 1965, 332.

¹⁴² Gu Jianping 2012, 257.

¹⁴³ In its ancient usage, *Le Grand Ricci* says that *zhi* is "Nom d'une tribu et de son territoire (utilisant le nom d'un animal, <u>non identifié</u>, pour se désigner)." Li Xueqin (2012) says: "象形字。像一種動物,但究竟是何種動物,<u>不得而知</u>。" [It is a character that represents a form. It looks like a species of animal, but actually it is impossibile to know which one.]

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3.2 Are There Plenty of yu 魚 in the Sea? History of a Totipotent Character



Image 10 The evolution of the yu character. Li Xueqin 2012, 1028.

This section aims at identifying the semantic value of the character yn ff (*[rŋ]a, *ŋa Sch.), which subsumes much more than the simple category of fish. Even if the earlier graphic depictions of this character that represents a form (*xiang xing*) seem clearer than the ones that depict *chong*, its meaning shifted and created two independent semantic values: the first one a hypernym that refers to all the varieties of animals that nowadays are known as fish, and the other a much "larger" hypernym that encompasses all the creatures that live in water, not necessarily fish. This last feature of this lexeme is the key that made a large number of non-fish animals inevitably become "fish" from a taxonomic point of view.

3.2.1 One yu to Classify Them All: from Exclusive to Inclusive Category



Image 11 Some variations of the character yu. Hanyu Da Zidian, 4983.

From its early depictions, the character *yu* is easily ascribable to the image of a sideways fish standing in a vertical position: from top to bottom, it is possible to identify the head of the fish, its fins, scales and forked tail. Although there is no doubt about the pictographic nature of this character, the early lexicographic sources already describe it as a graph that encompasses animals beyond its categorical border (i.e. animals that do not belong to its taxonomical category *fei yu zhi shu* 非魚之屬).

In the exact same way as the *chong* character, there are a couple of "conjoined meaning" characters based on the *yu* character, i.e. *yu* 鱟 (*[rŋ]a) [two fish] and *xian* 鱻 (*[s][a]r) [fresh]. They, however, did not have any relevant taxonomic value, the former being a mere reduplication of *yu* and the latter an alternative graphic form of *xian* 鲜 (*[s][a]r) [fresh]¹⁴⁴. Another character that is strictly related to *yu* is *yu* 漁 (*[ŋ](r)a) [to fish], which was undistinguishable from the original *yu* in the OBS, making the graph not only a noun, but also a verb¹⁴⁵, a characteristic partially shared with *chong*, although the latter was much rarer than the former (see 3.1.1). Nonetheless, the *yu* character is relatively more common in analysed *loci classici* than the *chong* character: we have 377 instances of the latter, but 784 of the former.

¹⁴⁴ For a further analysis, see Huang Jingui 1995, 456-9.

¹⁴⁵ "The character *y*[#] already appeared in Oracle Bones Script and it was lent to represent the verb 'to catch fish'." "魚"在甲骨文中已出現, 假為捕魚之"漁"。 Li Xueqin (2012), 1028.

The *Erya* dedicates a whole chapter devoted to "glosses on *yu*" *Shi yu* 釋魚, but there is no evidence of the description of the character *yu* because it is principally used as a generic term that describes specific animals. Gloss 4.2.13 reports, for example, that *ying* 鱦 is a generic term that describes a small "aquatic creatures" (*xiao yu* 小魚). On the other hand, there are glosses like 4.2.15 that seems to identify *yu* as the generic name for fish: *kun* 鯤 in this case only identifies juvenile fish (*yu zi* 魚子, "fry", "freshly hatched fish"). A final instance of the use of *yu* as "fish" is probably the second to last gloss of the chapter (4.2.45) which following the terminology of Carr has to be called a "partonomic definition"¹⁴⁶, i.e. a gloss that describes specific organs of the fish, in this case its skull, intestines and tail (*zhen* 枕, *chang* 腸 and *wei* 尾).

Notwithstanding the foregoing, it is quite evident that a large number of animals described in "glosses on fish" (*Shi yu*) are not "fish" at all and belong to different classes of living beings. A quick analysis of the chapter shows other creatures - crustaceans, insects, annelids, shellfish, tortoises, softshell turtles, snakes and even a mammal.¹⁴⁷ Xing Bing acknowledges the variegated nature of this section of the *Erya*, commenting that it focuses on "scaly and armoured" animals¹⁴⁸, automatically excluding the *Shi chong* chapter from the correlative classification scheme. Consequently, Hao Yixing corroborates this hypothesis by remarking that:

"The (lexemes) glossed in this chapter include both (animals belonging to) the category of scaly creatures and armoured creatures; the animals that are vulgarly called *chuan qin* [river animals] are subsumed here in the chapter *Shi yu*."

茲篇所釋兼包鱗介之屬魯語謂之川禽而此總曰釋魚。149

The reference to a popular name, "river game" [literally "wildfowl"] is evidently linked to the description of *yu* in the *Shuowen jiezi*:

¹⁴⁶ Carr 1979, 473.

¹⁴⁷ Gu Yanlong tries to translate the character *yu* in the *Erya* as "cold-blooded animals", but I am convinced that Early Chinese compilers were more aware of the fact that *yu* lived in water (or in proximity to it) rather than being heterothermic animals. See Gu 1990, 24-25.

¹⁴⁸ "All possess either scales or armours" *jie you lin jia* 皆有鱗甲 *Erya*, 327. ¹⁴⁹ *Erya yishu*, 1202.

"(The character) *yu* stands for (any) aquatic creature. It is a character that represents a form. The tail of a fish resembles that of the swallows."

魚:水蟲也。象形。魚尾與燕尾相侣。150

Apart from the curious lexicographic reference to the fact that the four dots below the character yu and the character yan [swallow] do not have anything in common with the semantic classifier huo [fire]¹⁵¹, this gloss has a twofold interpretation. First, it can simply indicate that the hypernym "fish" is describable as a creature that lives in water, but a second interpretation could suggest that yu is the term that incorporates all the aquatic fauna.

According to the *Shuowen*, there are three other creatures that can be labelled as *shui chong*, but I would cautiously suggest that the characters that represent them are all either too specific or rare to veil the semantic value of *yu*:

- "The character *fu* [a kind of cicada] stands for the azure *fu*, a water creature"
 蚨: 青蚨, 水蟲¹⁵²
- "The character *tuo* [alligator] stands for a water creature, it looks like a lizard but longer" 鼍:水蟲。似蜥易,長大。¹⁵³
- 3. "The character xi [frog] stands for a water creature." 雞: 水蟲也。154

Another important instance of the disyllable *shui chong* is retrievable in the *Ji jiu pian* where it is said that "water creatures are tadpoles, frogs and toads"¹⁵⁵ stating that only amphibians could be considered "water creatures". In this case, I suppose that the value of the *chong* character could be either related to the *chong* of the *Shi chong* chapters (where among more than fifty invertebrates, the only vertebrate is a kind of toad¹⁵⁶), or it roughly describes what those amphibians are, i.e. animals that necessarily live in proximity to water.

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¹⁵⁰ Shuowen jiezi, 962.

¹⁵¹ Sometimes the character *huo*火 [fire] has a reduced form of four dots when it has a semantic classifier value (e.g. *ran* 然 [burn], *xun* 熏 [fumigate], *re* 熱 [hot]). The deformation of the tails of fish and swallows to four dots is related to their *xiang xing* form and it has nothing to do with the semantic classifier "fire". Duan Yucai says that "their tails look like a branch, therefore [...] they do not follow (the semantic classifier of) fire" 其尾 皆枝,故[...] 非从火也。Ibid.

¹⁵² Shuowen jiezi, 1121.

¹⁵³ Shuowen jiezi, 1133.

¹⁵⁴ Shuowen jiezi, 1134.

¹⁵⁵水蟲科斗蠅蝦蟆。Ji jiu pian, vol. 3, 6.

¹⁵⁶ See gloss 4.1.19.

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3.2.2 Lexicographic dynamism: turtles, frogs and other "dynamic fish"

Comparing the number of lexemes that are related either to the category of *chong* and the category of *yu*, the latter hypernym encompasses only 107 graphs in the *Shuowen jiezi* versus 190 of the former and 47 glosses versus 55 in the *Erya*. While the quantity of *chong* seems numerically superior, the variety of fauna in the *yu* category is more prominent¹⁵⁷. This particular feature of the *yu* category lies in the presence of a fairly high number of graphs that are not represented with the *yu* semantic classifier. The flexibility or better the indeterminacy, of using the semantic classifiers in phonosignific characters is well-known¹⁵⁸, especially due to the absence of an overlap between the figure of the *compiler* and the observer in Early Chinese texts. Nevertheless, in the *Shi chong* chapter of the *Erya*, the vast majority of characters present a *chong/hui* semantic classifier (with some minor exceptions), creating a "fixed semantic environment": there is no doubt that the elements categorised under the *chong* label are effectively *chong*. The situation drastically changes in the *Shi yu* chapter, where there is a high presence of *chong/hui* characters.

	Shi chong	Shi yu
Chong/hui s.c.	96 out of 55 (ca. 1.75	27 out of 47 (ca. 0,57
	mentioning per gloss)	mentioning per gloss)
<i>Yи</i> s.c.	0 out of 55	44 out of 47 (ca. 0,94
		mentioning per gloss)
Other s.c.	2 meng 黽 (ca. 0.004	1 gui 龜, 3 meng 黽, 4 bei 貝
	mentioning per gloss)	(ca. 0,17 mentioning per
		gloss)

This kind of data suggests that the category *yu* encompasses a more heterogeneous array of creatures, with more definite sub-categories: the twenty glosses that elucidate characters with semantic classifiers different from *yu* are in fact nestled inside the core of the *Shi yu* chapter (4.2.25 to 4.2.43), as if they belong to another textual stratum.¹⁵⁹ The glosses

¹⁵⁷ See the introduction to the chapter *Shi yu* by Hao Yixing (*Erya Yishu*, 1169), Carr 1979, 73 and Gu 1990, 23-26.

¹⁵⁸ Boltz 1994, 67-75 and 156-167.

¹⁵⁹ This is highly improbable due to the similarity with the other glosses. It cannot be excluded that this part of the text was originally placed in the *Shi chong* chapter and then moved away for the sake of symmetry: the *Shi*

that analyse characters with the *chong* semantic classifier belong principally to the phylum of molluscs (see gloss 4.2.31-32-34-36), with a noteworthy addition, the hermit crab (4.2.35), which is technically a crustacean, but due to the scavenged mollusc shell that it carries around, looks externally like a sea snail.

The other semantic classifiers implied in the *Shi yu* chapter that possess a standalone zoological value are the following:



1440页。3《金文编》879页"鼄"字偏旁。4《金 文编》878页。5、6《说文》285页。7《甲金篆》 934页"蝇"字偏旁。8《甲金篆》934页。

Image 12 The evolution of the meng character. Li Xueqin 2012, 1173.

A. "Frog" meng 黽 (*m^{\$}rəŋ?); a semantic classifier that according to the *Shuowen jiezi*, derives both from the physical appearance of a frog and from the graph ta 它 (*l^{\$}aj), saying that it has the head of a snake (meng tou yu ta tou tong 黽頭與它頭同). It is simply glossed as the disyllable wameng 鼁黽 (frog-toad, two synonyms that stands for a single entity guo hezi wei yi wu 果合字爲一物) and it is derivative for 12 graphs (versus 190 for chong and 107 for yu). Its value as semantic classifier was gradually substituted by yu and chong, probably due to its complexity and the easier semantic association with more "popular" semantic classifiers. As it is possible to see from gloss 4.1.37, it was implied to represent animals that are not related in any way to frogs or amphibians: in Early Chinese texts, the common term for spider, *zhizhu* 蜘 蛛 is sometimes written with the meng semantic classifier ($extbf{at}$). Since one of the

chong chapter would have been composed of 75 glosses versus a mere 27 in the *Shi yu* chapter. This is, however, my personal thought on the matter.

features of *meng* is, as Guo Pu indicates, having a large and possibly round abdomen (*da fu* 大腹), it is more coherent to associate a spider to this kind of creature rather than a worm or a snake. However, other scripts depict the character *meng* similar to what looks like a spider¹⁶⁰. Due to its amphibian nature and its loose relation with snakes¹⁶¹, it is not surprising that *meng* is classified among the "aquatic animals", even if it does not belong to a specific correlative category. In fact, it is neither a "scaly animal" nor an "armoured" one¹⁶².



Image 13 Some variations of the character meng. Hanyu Da Zidian, 5082.

B. "Tortoise" *gui* 龜 (*[k]^wə or *[k]^wrə) is an omnipresent character, with more than 800 instances in the *loci classici*. The fortune of the tortoise as an animal is due to the divinatory abilities of its plastron. I do not want to focus here on this particular feature of tortoises¹⁶³, but rather to discuss why it is curious that the *Erya* puts the character *gui* among "aquatic animals". Tortoises do not specifically live in water¹⁶⁴, moreover they are the quintessential "armoured creature" (*jie chong* 介蟲 for the *Liji*

¹⁶⁰ Erya, 332. See image 13 and also gloss 4.1.37 and 4.2.30.

¹⁶¹ Snakes are considered "scaly animals". See gloss 4.2.41-44.

¹⁶² There are some fragments of later texts that consider them as "naked animals" *luo chong* 贏蟲. See Sterckx 2002, 86.

¹⁶³ For detailed works on the divinatory role of tortoise plastrons in Ancient China, see Keightley, David N. *Sources of Shang History: The Oracle-Bone Inscriptions of Bronze Age China* (Berkeley: University of California Press, 1978); Li Xueqin. "The Divinatory Turtle Plastrons Dated to King Wen of Zhou (r. First Half of the Eleventh Century B.C.E.): The Cultural Relations Between the Shang (1600 B.C.E.-1046 B.C.E.) and Zhou (1046 B.C.E.-256 B.C.E.) Dynasties." Tr. Xing Wen. *CCT* 44.3 (2013): 16-26; Allan, Sarah, *The Shape of the Turtle: Myth, Art, and Cosmos in Early China*. (Albany: SUNY Press, 1991); Eno, Robert, "Deities and Ancestors in Early Oracle Inscriptions." In *Religions of China in Practice*, edited by Donald S. Lopez, 41--51 (Princeton: Princeton University Press, 1996); and Thorp, Robert L. *China in the Early Bronze Age Shang Civilization* (Philadelphia: University of Pennsilvenya Press, 2006).

¹⁶⁴ As a matter of fact, a tortoise is a land turtle and, vice versa, a turtle is a water tortoise.

or *jie wu* 介物 for the *Zhouli*), which are traditionally separated by "scaly creatures", i.e. fish and dragons. Xu Shen in the *Shuowen jiezi* describes *gui* in these terms:

"(The character) *gui* represents the concept of old age. On the outside there are its bones (carapace and plastron), on the inside there is its flesh. It derives from *ta* (snake), the head of a tortoise is the same as that of a snake. [...] The species of tortoises and softshell turtles let snakes become their male counterparts. (The character) represents the form of its legs, shell and tail."

龜:舊也。外骨內肉者也。从它,龜頭與它頭同。[...] 龜鼈之類,以它為雄。象足甲尾之形。

On another occasion, a character is depicted with a snakehead, hence distantly related to "scaly animals/fish". This time it is clarified that snakes actively assume the role of mating partners for tortoises and softshell turtles, making snakes and tortoises even more closely related. This is supported also by the representations of *Xuanwu* 玄武 ("the Dark Warrior" *[G]^{wç}i[n]m(r)a?), one of the four Spirits, which is depicted as a tortoise-snake symbiont.¹⁶⁵ As a semantic classifier, *gui* is one of the less productive, having only two derivative characters in the *Shuowen jiezi*, neither of them retrievable in the *Erya*.¹⁶⁶



Image 14 The evolution of the gui character. Li Xueqin 2012, 1173.

¹⁶⁵ For the Four Spirits, see section 3.1.2. For a deeper analysis of the figure of *Xuannuu*, see Chen Qiwen 陳器 文, *Xuannuu shenhua chuanshuo yu xinyang* 玄武神話、傳說與信仰 [Legends, Traditions and Beliefs in *Xuannul*], Xi'an: Shaanxi Shifan Daxue chuban zongshe youxian gongsi, 2013.

¹⁶⁶ The characters are *tong* 麵 (a proper name of an unidentified tortoise) and *ran* 轤 (the hem or margin of a tortoise shell). *Shuomen jiezi*, 1132.

C. "Shellfish" *bei* 貝; a relatively more productive character when used as "semantic classifier" with 3 derivative characters in the *Erya* and 67 in the *Shuowen*.¹⁶⁷ The *Shuowen jiezi* definition of *bei* is "an armoured animal that lives in the sea" (*hai jiechong ye* 海介蟲也).¹⁶⁸ This piece of information establishes a strong connection between tortoises and shellfish. On the other hand, seashells are legitimised as part of the *Shi yu* chapter primarily because of their marine habitat. The sub-commentary to the *Shangshu* by Kong Yingda specifies that "seashells are water creatures" (*bei zhe, shui chong* 貝者, 水蟲¹⁶⁹), the same exact definition of *yu* in the *Shuowen jiezi*.



To sum up, I would cautiously point out that this nestled sub-chapter of non-yu semantically categorised characters is mainly composed of animals that do not fall into the category of "scaly creatures" and could have been organised on purpose separated from the piscine glosses. Moreover, I substantially divide the glosses 4.2.25-44 into two separate contiguous groups:

- Glosses 4.2.25-38 with the addition of gloss 4.2.46; a group for "non-scaly" aquatic animals that divides itself into other two sub-groups:
 - o Glosses 4.2.25-27+30 → featureless (non-scaly, non-armoured)
 "water *chong*" composed of mosquito larvae (an insect), leeches (an annelid), tadpoles (amphibian larvae) and frog/toads (amphibians).

¹⁶⁷ The *Erya* has *biao* 贆, *yi* 貽, and *chi* 貾, see gloss 4.2.39. The *Shuowen jiezi* characters with a semantic classifier *bei* 貝 are not related entirely to the animal world; on the contrary, the majority of them are related to money and commerce since the seashell was the first kind of money in Early China; it was eventually substituted with metal coins during the Qin period (上古史, 貝殼曾被用作貨幣 Li Xueqin 2012, 564). ¹⁶⁸ *Shuowen jiezi*, 479.

¹⁶⁹ Shangshu, 284.

This sub-category could also be seen as a "naked creatures" list, an alternative to the tigers and leopards cited in both the *Liji* and *Zhouli*.¹⁷⁰

- O Glosses 4.2.28+31-38 → "armoured creatures", composed of 16 kinds of molluscs, 1 crustacean¹⁷¹ and 18 between tortoises and softshell turtles.
- Glosses 4.2.39-44 a group of "non-piscine" scaly creatures, composed of two kinds of amphibians (newts and giant salamanders), two reptiles with legs (lizards and geckoes) and four kinds of snakes. The reason why I subsume glosses with amphibians into this category is for purely somatic reasons: in fact, newts and salamanders do have tails and a more lizard-like appearance, so they can be ascribed to the reptile world.

¹⁷⁰ See footnote 162.

¹⁷¹ Although comparable to a mollusc since it is the hermit crab and it carries a shell on its back.

4. Textual Studies of *Shi chong* and *Shi yu* chapters of the *Erya*

The focus of this chapter is to elaborate and problematise the lexicon of the *Erya* chapters that concern invertebrates and fish. Special regard is given to the *loci classici* in which those words are found as well as their taxonomical and etymological value. The Old Chinese reconstruction is Baxter-Sagart (2014) if not specified, otherwise (Sch.) indicates the Alex Schuessler reconstruction (2009). The author's self-made reconstructions (indicated by a plus symbol "+") are provided only if there is not an official phonetic reconstruction: they are based on Baxter-Sagart with confrontations with the *Guangyu* rhymes as well as with the Karlgren and Schuessler reconstructions.

I decided to simplify some of the Baxter-Sagart reconstructions in order to leave out some purely phonological issues like the annotation of "C" as a representation of an undefined initial consonant, a double consonant *in lieu* of the pharingalisation (⁶), or some of the punctuation marks (full stops, hyphens) because the focus of this study is not to evaluate some grammatical patterns and regularities in phonetical reconstructions, but rather to emphasise the original alliterative or the rhyming values of the single words¹⁷².

4.1 Shi chong [Glosses on invertebrates]

4.1.1 螜,天螻。

Federico Valenti

聲 hu (*[g]gok +), mole-cricket. This invertebrate is identified principally in the DDLJ (Xia Xiao Zheng 夏小正, 3) where the Qing period commentator Wang Pinzhen 王聘珍 (active 18th century) points out that hu (here with an alternate form hu 毂) is glossed by the EY as 天螻 *tianlou* (*lli[n][r]o):

"Then, the hu chirps. The insect hu is also known as 'mole-cricket' tianlou."

截則鳴。截,天螻也。173

¹⁷² My simplification is not, of course, a reinterpretation or amendment to Baxter-Sagart's rigorous reconstruction of Old Chinese. I want to thank Lukas Zadrapa for having inspired me to adapt Baxter-Sagart reconstruction for the purpose of my research, without adultering their incredible work. ¹⁷³ Da Dai Liji, 34.

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Guo Pu indicates that *hu* "is the mole-cricket" *lougu ye* 螻蛄也, a thesis corroborated also by Xing Bing "As regards to *hu*, one of its names is *tianlou* [large cricket]¹⁷⁴, another one is *shuoshu* [huge rat], that is what we call today *lougu* [mole-cricket]"¹⁷⁵. There is some evidence from the SW that the character *gu* 蛄 is the standard word for mole-cricket since it tautologically reads that "the mole-cricket *gu* is the mole-cricket *lougu*" 蛄, 螻蛄也¹⁷⁶. The only other source that mentions these two words is the FY: there is a passage in which *tianlou* are regarded as a Qin 秦 and Jin 晉 regional name of the word *cicao* 蠀螬 "grub, scarab larvae" (*tshojntssu, see gloss 4.1.39). Moreover, the character *hu* is also present in the passage as a regional variant (this time for the regions to the east of the Central Plains *zi guan er dong* 自 關而東) of the same word *cicao*, but it appears as the second character of a binomial (*xuanhu* ^ú ^ú</sup> ⁴ ^{wh}ar[g]gok +) and it is depicted with the alternative form already seen in the DDLJ¹⁷⁷.

4.1.2. 蜚, 蠦蜰。

蜚 *fei* (*pəj?) is a quite common character in Han and pre-Han texts, principally because it has different meanings, especially when it is cognate with the character *fei* 飛 (*əpə[r], Baxter says that the phoneme [*-r] becomes [*-j] in dialectal language, so they are phonetically similar) "to fly" it appears frequently with the character *niao* 鳥 [long-tailed bird] indicating the "flying birds"¹⁷⁸. It can also represent a mythical beast sometimes translated as "gryphon"¹⁷⁹. The EY identifies it with the alternative name of 蠦蜰 *lufei* (*rabə[r]+), with the second character being replaced by the former *fei* 蜚 in Shao Jinhan's *Erya Zhengyi* (SJH reads 蜚, 蠦蜚¹⁸⁰). GP quotes almost directly the SW indicating that the second *fei* 蜰 has an alternate name *fupan* 負盤 (*[b]ə?[b]ban, note the character *fu* is phonetically similar to *fei*

¹⁷⁴ The original version of the *Erya zhushu* states *da lou* 大螻, but it is a transcription error. However it probably matches better the meaning of the gloss. A mole-cricket is indeed a "large cricket".

¹⁷⁵ 蛰, 一名天螻, 一名碩鼠, 即今之螻蛄也。Erya, 313.

¹⁷⁶ Shuowen jiezi, 1112

¹⁷⁷ Fangyan, 132

¹⁷⁸ The expression *fei niao* 蜚鳥 is equivalent to *fei niao* 飛鳥. Cf. Lunheng chapters Ji yao 紀妖 [Ominous Recordings] and Yan du 言毒 [About Poisons]; Mozi chapter Fei yue 非樂 [Condemnation of Music]; Shiji chapter Yin Benji 殷本紀 [Annals of Yin] where *fei niao* [flying birds] is used in juxtaposition with ye show 野獸 [wild beasts]; Han shu chapter Wuxing zhi 五行志 [Treaty on the Five Phases].

¹⁷⁹ In the *Huainanzi: feilian* 飛廉, cf. Major 2010, 97; In the *Shanhai jing: fei* 蜚/榌/齹 "There is an animal that resembles an ox, it has a white head, with only one eye and a snake-like tail" see Fracasso 1996, 68. ¹⁸⁰ *Erya zhengyi*, 264.

俄 bə[r]) and that it is a foul-smelling invertebrate¹⁸¹. It is crucial to highlight that this quote is somewhat similar, but not identical, to the one we found in the SW which reads:

"[the character] fei [represents] a smelly animal, the fufan (*[b]ə?ban+)"

fei: chou chong, fufan ye

蜚: 臭蟲, 負蠜也。

The character fan 蠜 (*[b]a[n] or *[b]rom +) is a good substitution for the character pan 盤 (*[bb]an), both phonetically and graphically since it presents the *hui* semantic classifier; the other main difference is the *fei* graphical variant that presents the triple-*chong* semantic classifier instead of the single-*chong*. The fact that the name *fupan* or *fufan* glosses alternatively *fei* 蜚 (a graphical variant of it) and *fei* 璺, it suggests that we are probably in front of two characters that were semantically interchangeable, although with a different phonetic and graphic value. Nevertheless, it is possible to consider this animal as akin to the bedbug, the most iconic invertebrate with a foul odour. Hao Yixing's *Erya Yishu* (HYX) corroborates this thesis indicating that

"It is round and thin like a plate, that is why it is called *fupan* [to carry a plate on its back] [...] it is as big as a coin, it is light and fragile like an autumn leaf, it can fly, its smell is repulsive and disgusting."

圓薄如盤,故名負盤...其大如錢,輕薄如黃葉色,解飛,其氣殠惡。182

There are several implications with the word *chou* 臭 in this gloss: firstly, XB comments that this kind of animal comes from humid and damp territories situated in the south, and that it is noxious to "the things of men"¹⁸³. Additionally, there is a strong reference with a passage in the ZZ that present the formula *you fei* 有蜚 [there was (an invasion of) *fei*] with a clear statement that normally this kind of invasion is not recorded in the annals because it is not considered as a natural disaster ("The presence of *fei* is not regarded as calamitous, thus it is not recorded" 有蜚, 不為災, 亦不書)¹⁸⁴. However, a subsequent

¹⁸¹ 蜰即負盤, 臭蟲 "fei is the same as the fupan, a smelly invertebrate" Erya, 313.

¹⁸² Erya yishu, 1153.

¹⁸³ 南方溼氣之所生也。[...] 害人之物 [They are born among the humid vapors of the South...they harm the things of men] *Erya*, 313.

¹⁸⁴ Zuozhuan, 70.
passage in the CQ text explicitly notes that "there was (an invasion) of *fei* during the autumn" ¹⁸⁵ and that is because the phenomenon was probably serious. In fact, the ZZ text states:

"(That) was considered a natural disaster. As a matter of principle, (this) thing is not a disaster, (so) it is not recorded."

為災也。凡物不為災,不書。186

The same report is recorded both in the GYZ and the GLZ. It might be considered that *chou* has the ambivalent meaning of both malodorous and pernicious, firstly because being fetid is a peculiarity of bedbugs, and secondly because the appearance of this insect is somewhat related to a calamity. Even if this term is glossed by *fufan* (or *fuban*), a lexeme that the EY classifies later in the text as a kind of grasshopper or locust¹⁸⁷ (a more appropriate animal that can cause calamities such as eating crops, see gloss 4.1.21), Xing Bing admonishes the reader that this homonymy happened by mistake¹⁸⁸.

4.1.3 螾衡,入耳。

螾街 yinyan (*[G](r)ə[r]?nq(r)an?) is laconically identified by Guo Pu as the common centipede youyan 蚰蜒, a smaller version of the *mugong* 蜈蚣. The second character is written in different ways in other *loci classici*: for instance, the ZhL presents in the section *Kao Gong ji* 考工記 a disyllable written as *quexing* 卻行 [returning walking] that was later commented by Zheng Xuan as the characteristic of the category of the *yinyan* 螾衍¹⁸⁹; a second example is taken from the FY where it is stated that the animal *youyan* 蚰蜹 is called *yinyan* 螾谊 in the regions to the east of the Central Plains¹⁹⁰. All these characters are evidently variants of the same. Moreover, the FY confirms the gloss of the EY exemplifying that *ru'er* 入耳 (*n[u]pnə?) is a dialectal name for the same animal: Xing Bing adds that it is because the

¹⁸⁵ Qiu, you fei 秋, 有蜚。This is the "original" jing 經 text, not the zhuan 傳. See Zuozhuan, 333.

¹⁸⁶ Zuozhuan, 334-5.

¹⁸⁷ Cao zhong, fufan 草螽, 負蠜。 [A grasshopper that lives among the grass is the one called *fufan*]. Erya, 318.
¹⁸⁸ Xiangshe wu er 相涉誤耳 [they are related just by mistake], Erya, 313.

¹⁸⁹ 卻行, 螾衍之屬[the "returning walking" (is a feature of) the *yinyan* category], *Zhouli*, 1329-30. The meaning of *quexing* is explained by the Tang dynasty sub-commentary written by Jia Gongyan 賈公彦 (fl. 649 – 683) stating that it is the capability of walking in the direction of the two extremities of the body (*neng liang ton xing* 能兩頭行).

¹⁹⁰ 蚰蝣, 自關而東謂之螾菑, 或謂之入耳 [About the centipede *youyan*, to the east of the Central Plains it is called *yinyan*, some people call it *ru'er*], *Fangyan*, 132.

house centipede delights itself by entering inside the ears of human beings¹⁹¹. It is the first of a series of glosses that give a name to an animal by describing its attitude, i.e. a "behavioural gloss". The SW has an entry only for the character *yin* that is glossed as "moving on the sides" *ce xing ye* 側行也, but it does not provide any other information on the second character.

4.1.4 蜩, 蜋蜩、螗蜩。蚻, 蜻蜻。蠽, 茅蜩。蝒, 馬蜩。蜺, 寒蜩。 蜓蚞, 螇螰。

As Xing Bing indicates, this series of glosses deals with the terms related to the size and the dialectal terminology of the cicada intermathtarrow intermat

Tiao is fairly common in the analysed *loci classici*, with a prominent presence in the DDLJ chapter Xia Xiao Zheng 夏小正. In this chapter, both *langtiao* (*[r]aŋ[d]diw+) and *tangtiao* (*[n]rraŋ[d]diw +, note the phonetic similarities) are present, even if written without the *chong* semantic classifier. The former is described as a cicada that manifests the five colours (*mucai ju* 五彩具), while the latter is called by the commoners *huchan* 胡蟬 [foreign

¹⁹¹ 今蚰蜒憙入人耳者也。[Nowadays house centipedes adore the fact to enter inside human ears] *Erya*, 313. ¹⁹² 此辨蟬之大小及方言不同之名也。[This discerns the sizes of the cicada as well as the different names (that are present in) the topolects.] *Erya*, 314.

¹⁹³ 蜩: 蟬也。Shuowen jiezi, 1116.

¹⁹⁴ 禪,楚謂之蜩,宋衛之間謂之螗蜩,陳鄭之間謂之蜋蜩,秦晉之間謂之蟬,海岱之間謂之蟜。 其大者謂之蟧,或謂之蝒馬;其小者謂之麥蚻,有文者謂之蜻蜻,其嶋蜻謂之疋,一大而黑者謂 之殘,黑而赤者謂之蛻。蜩蟧謂之蓋蜩。軈謂之寒蜩,寒蜩,瘖蜩也。[The cicada *chan*, in Chu is called *tiao*, in the regions between Song and Wei is called *tangtiao*, in the regions between Chen and Zheng is called *langtiao*, in the regions between Qin and Jin is called *chan*, in the regions between the sea and mount Dai (Shandong) is called *ji*. A big specimen is called *liao*, some people call it *mianma*; a small specimen is called *maizha*, if it is striped is called *jingjing*, its female is called *jie*, a big and black one is called *zhan*, a black and red one is called *ni*. *Tiaoliao* cicadas are called *maotiao*. *Ying* cicadas are called "cold-cicadas", "cold-cicadas" are mute cicadas.] *Fangyan*, 127-8.

cicada], it is slightly smaller than the standard cicada and emits a resounding and clear sound¹⁹⁵. Moreover, *tiao* is cited inside the SJ on three occasions, always translated by Legge and Karlgren as "cicadas", and each poem depicts this animal as loud and noisy¹⁹⁶. Finally, the FY simply considers *tiao* as a Chu dialectal variant of *chan*, with *lang* and *tang* being other dialectal variants, the former being the dialect of the regions of Chen and Zheng, and the latter the dialect of the regions of Song and Wei.¹⁹⁷

On the other hand, *tha* \pm (*sqqrət +) is a rare character, with its presence attested only in the EY and the FY: as Guo Pu writes, it describes again a smaller version of the cicada *tiao* and Xing Bing adds that this kind of insect has got stripes on its body. The description matches the passage in the FY in which this animal is described, with a clear link to the name that glosses it, *jingjing* 蜻 $(*ts^hents^hent + or kentskents)$:

"If they have got stripes they are called *jingjing*"

有文者謂之蜻蜻

Guo Pu adds a note in the FY saying that "(the *jingjing*) is the same as the *zha*. The *Erya* says so¹⁹⁸." Zheng Xuan identifies this small animal in the ode n°57 *Shuo ren* 碩人 (The stately person) of the SJ:

"Her head is cicada-like, her eyebrows are silkworm-like"

螓首蛾眉199

"The cicada qin (*[dz]i[n]) is called jingjing"

螓謂蜻蜻也200

¹⁹⁶ Ode n°154 四月秀葽、五月鳴蜩。 [In the fourth month there is the flowering and seeding *yao* plant, in the fifth month there is the singing cicada]; Ode n°197 菀彼柳斯、鳴蜩嘒嘒。 [Luxuriant are those willows, the crying cicadas are chirping]; Ode n°255 如蜩如螗、如沸如羹。 [You are (noisy) like the cicada, like the grasshopper, you are (chattering) like boiling water]. Karlgren 1950, 98, 146, 216.

¹⁹⁵ 似蟬而小,鳴清亮者也。 [it resembles the cicada, but smaller; it emits a clear and resounding cry] *Erya*, 314.

¹⁹⁷ 禪,楚謂之蜩,宋衛之間謂之螗蜩,陳鄭之間謂之蜋蜩,秦晉之間謂之蟬。[The cicada *chan* in Chu is called *tiao*, in the regions between Song and Wei is called *tangtiao*, in the regions between Chen and Zheng is called *langtiao*, in the regions between Qin and Jin is called *chan*.] *Fangyan*, 127.

¹⁹⁸ 即蚻也。爾雅云耳。Fangyan, 128.

¹⁹⁹ Shijing, 263 trans. by Karlgren 1950, 38.

²⁰⁰ Shijing, 263.

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The sub-commentary of Kong Yingda confirms this reference by pointing out the She Ren version of the EY which reads:

"Sheren says: "It is a small cicada" it is (pronounced like) *qingqing*, a certain gentleman said: "Its cry is *zhazha*." This animal forehead is large and squared."

舍人曰:'小蟬也。'青青者,某氏曰:'鳴蚻蚻者。'此蟲額廣而且方。201

A similar reference to the *zhazha* cry of a cicada-like creature is retrievable in the DDLJ:

"(its) cry is zha" 鸣札,。²⁰²

The character 蠽 *jie* (*[dz]zet) is glossed by *maotiao* 茅蜩 (*mmru[d]diw), literally the "cogon grass cicada". The SW indicates that "it is a small cicada (both *tiao* and *chan* are mentioned)²⁰³", while Guo Pu and Xing Bing add that it is green, similar to a *chan* cicada, but smaller, and that is called *maojie* in the regions east of the Yangtze river²⁰⁴. HYX gives further information stating that

"Nowadays the size of this cicada is extraordinarily small, it likes to sing standing on the blades of grass and on the tips of twigs."

今此蟬形尤小,好鳴於草梢也。205

The FY presents a more complex variant of the *mao* character using this form *maotiao* 蓋蜩 and it is used to gloss a different name, *tiaoliao* 蜩蟧 (*[d]diw[r]r(i)aw +), another kind of cicada that is surprisingly described as bigger than the standard ones²⁰⁶. However, the

203 蠽: 小蟬蜩也 [(the character) jie (indicates) a small kind of chan and tiao cicadas]. Shuowen jiezi, 1126.

²⁰¹ The *qingqing* 青青 (MC *tshengtsheng*, similar to OC ts^heŋts^heŋ) reference is not a typing error, but a philological digression. It refers to the onomatopoeic connection between the sound *zhazha* and the animal *jingjing*. In fact, according to the EY its other name is simply *zha*. See *Shijing*, 263.

²⁰² Da Dai Liji, 36.

²⁰⁴ GP 江東呼為茅截, 似蟬而小, 青色。 [East of the Yangtze it is called *maojie*, it is similar to the cicada but smaller, it is green]; XB quotes partially GP's comment. Note that the double-*chong* (*kun* 蛱) semantic classifier is absent, probably because GP is just emulating the sound of a dialect. The character *jie* 截 is the standard variant of the less seen *jie* 截 that is present inside the insect name in the EY. *Erya*, 314. ²⁰⁵ *Erya yishu*, 1157.

²⁰⁶ 其大者謂之蟧, 或謂之蝒馬 [The big ones are called *liao*, some people call them *mianma*]. This is a reference to the next section of the EY gloss 4.4 蝒, 馬蜩。*Fangyan*, 128.

comment of GP to the FY reveals that this *maotiao* 蓋蜩 is called 蓋蠽 *maojie* east of the Yangtze river, a powerful hint that the gloss is talking about the same animal²⁰⁷.

The character *mian* 蝒 (*me[n]s or *men?) is unequivocally glossed as a "horse-cicada" *matiao* 馬蜩 (*mmra?[d]diw), i.e. a big and strong species. Both GP and XB agree that this cicada is "the biggest among the other cicadas"²⁰⁸. According to the BCGM, the *tiao* cicada mentioned in the ode n°154 of the SJ, is a *mian*.²⁰⁹

The cicada *ni* 輗 (*ŋe or *ŋet Sch.) is glossed as *hantiao* 寒蜩 (*ə[g]ga[n][d]diw or gândiû Sch.), GP adds that this animal is also called *hanjiang* 寒螿 (*ə[g]ga[n][ts]aŋ) and that it is similar to the cicada *chan*, but smaller; it is also green and red²¹⁰. The SW glosses the character *ni* exactly the same way as the EY does²¹¹. The FY presents a different colouration for this invertebrate, stating that "it is black and red" and the name that is glossed by *hantiao* it is different: it is not *ni*, but *ying* 螰 (*[q](r)əŋ + or ?əŋ Sch.) and that is a "mute cicada" 瘖 蜩也, but GP in the FY commentary writes that this is not true and that it is better to trust the EY or the LJ²¹². In fact, the most important passage in *loci classici* is from the LJ, section *Yue ling* 月令 (Proceedings of Government in the Different Months; Month Regulations), and it affirms that these insects are able to sing:

[&]quot;Cool winds come; the white dew descends, the cicada of the cold chirps. (Young) hawks at this time sacrifice birds, as the first step they take to killing (and eating) them."

²⁰⁷ 江東呼蓋蠽也。Fangyan, 128.

²⁰⁸ 蜩中最大者為馬蜩。[Among the cicadas, the biggest one is the "horse-cicada"], *Enya*, 314. There is a minor change in HYX where the character *tiao* 蜩 is substituted with *chan* 蟬. Perhaps this corroborates the fact that *chan* is a category marker larger than *tiao*, which on the other hand refers only to a smaller number of cicadas with certain characteristics.

²⁰⁹夏月始鳴,大而色黑者,蚱蟬也,又曰蝒(音綿),曰馬蜩,《豳詩》"五月鳴蜩"者是也。[In the summer months they begin to chirp, they are big and their colour black; they are cicadas, they can also be called *mian* or *matiao*; they are the ones (in) the Ode of Bin (that says) "in the fifth month there is the singing cicada".]

²¹⁰ 蜺, 寒蜩。寒螿也。似蟬而小, 青赤 [The cicada *ni* is the "cold-cicada" *hantiao*. It is (also known as) *hanjiang*. It resembles a cicada *chan*, but smaller. It is green and red.] *Erya*, 314.

²¹¹ 蜺: 寒蜩也 [(the character) *ni* is the "cold-cicada" *hantiao*]. Duan Yucai points out that this character is also used as a variant of the more common *ni* 寛 character, with the meaning of a "rainbow that is red and green" 屈虹,青赤. While there is a certain correlation between the colours of this kind of rainbow and this insect, the fact will not be discussed in a taxonomic study on invertebrates. See *Shuowen jiezi*, 961, 1116.

²¹² 按爾雅以蜺為寒蜩。月令(禮記)亦曰。寒蜩鳴。 知寒蜩非瘖者也。[According to the *Erya*, the cicada *ni* is considered the "cold-cicada". The Month Regulations (in the Recordings of Etiquette) also says so. The "cold-cicadas" sing. I am aware of the fact that the "cold-cicadas" are not mute.] *Fangyan*, 128.

涼風至,白露降,寒蟬鳴。鷹乃祭鳥,用始行戮。213

The commentary of Zheng Xuan corroborates the thesis of GP ("both the cold-cicadas *chan* and the cold-cicadas *tiao* are considered *ni* cicadas" 寒蟬, 寒蜩, 為蛻也²¹⁴).

The last cicada of this series is the one called tingmu 蜓蚞 (*llen?mmok) and it is glossed by another dysillable xilu 螇螰 (*[g]gemərrok or *gêrôk Sch.). The peculiarity of this section is that one of the two words (xilu) is present in a different passage of the FY, at the beginning of chapter 11²¹⁵, but it still depicts a species of cicada. GP reveals that xilu is a dialect term of the people of Qi used to describe the tiliao 蝭蟧 (*[d]de[r]r(i)aw +) cicada, that is called also *huigu* 蟪蛄 (*GG^w[i]jskka? +) by the people of Chu. The last term is more prominent than the others, appearing in the Zhuangzi (Inner Chapters nei pian 內篇, Free Easy and Wandering xiao yao you 逍遙遊) and in the Huainanzi (chapter Responses of the Way dao ying xun 道應訓, it quotes directly the passage from the ZhZ) as an example of a short-lived animal that does not possess the sense of time²¹⁶. ZhZ commentator Cheng Xuanying 成玄英 (fl. 631 – 655) corroborates this thesis adding that "huigu is the name of a summer cicada, it is born on weath stalks, it is also called 'wheat-knotted'. It is born in summer and dies in autumn; for this reason, it cannot know the succession of seasons"²¹⁷. Finally, as a dialectal term of the people of Chu, this term found its place in the Chuci poem "Calling the Hermit Back" zhao yinshi 招隱士 with a marginal reference to the short life of this summer cicada²¹⁸.

²¹³ Liji, 608. Translation by James Legge.

²¹⁴ Ibidem.

²¹⁵ 蛥缺, 齊謂之螇螰, 楚謂之蟪蛄, 或謂之蛉蛄, 秦謂之蛥蚗。自關而東謂之切蟧。或謂之蝭蟧, 或謂之蜓蚞, 西楚與秦通名也。[The cicada *shejue* is called *xilu* in Qi, is called *huigu* in Chu, some people call it *linggu* and it is called *shejue* in Qin. To the east of the Central Plains it is called *daoliao*. Some people call it *tiliao* or *tingmu*, both terms are understandable from the Western part of Chu to Qin.] *Fangyan*, 127.

²¹⁶ 朝菌不知晦朔, 蟪蛄不知春秋, 此小年也。 [The morning mushroom knows nothing of twilight and dawn; the summer cicada knows nothing of spring and autumn. They are short-lived.] See Watson, 2013, 2 and Major et al. 2010, 472.

²¹⁷ 蟪蛄, 夏蟬也, 生於麥梗, 亦謂之麥節。夏生秋死, 故不知春秋也。Zhuangzi, 7.

²¹⁸ 歲暮兮不自聊, 蟪蛄鳴兮啾啾。 [At the end of the year you cannot rely on yourself, but still the summer cicadas continue to chirp *qiuqiu*] *Chuci*, 202.

4.1.5 蛣蜣, 蜣蜋

The dung beetle *jieqiang* 蛣蜣 (*[k^h]i[t]qqaŋ +) is also called *qianglang* 蜣蜋 (*q^haŋ[r]aŋ). GP states that it is a black and armoured invertebrate, that feed itself with dung and dirt (黑甲蟲, 噉糞土)²¹⁹; XB adds that it possesses wings beneath its shell and enjoys gathering dung in order to make a sphere that it can roll around (翅在甲下 [...] 喜取糞作丸而轉之)²²⁰. XB uses the slightly different variant of *lang* 蜋, *lang* 螂. The first term is not present in any of the *loci classici*, however it is used in the Guo Xiang 郭象 (252 – 312) commentary to the ZhZ in order to make an example and explain a passage in the *Discussion on Making All Things Equal* chapter (*qi wu lun* 齊物論)²²¹. The second term appears in the Jin dynasty text *Baopuzi* 抱樸子 (The Master Who Embraces Simplicity) by Ge Hong 葛洪 (283 – 343), comparing the different needs of a cicada and a dung beetle²²².

4.1.6 蝎 (蠍), 蛣蝠

The wood grub *he* 竭 (*[g]gat) appears three times in the EY, this time glossed by the both rhyming and alliterative compound *jiequ* 结蜫 (*[k^h]i[t][k^h]ut +). Both GP and XB states that it is an invertebrate that eats and destroys wood from the inside (*mu zhong du chong* 木中 蠧蟲). The SW presents an inverted gloss:

"(The character) jie stands for jiequ (qu 蚶 vs qu 蝠), it is a woodworm he.

蛣: 蛣蚶, 蝎也。"

The gloss that explains the character *he* is strongly related to another gloss of the EY (see gloss 4.1.39 and the parallel tautological gloss 4.1.46). The FY entries are also related to that gloss and are not discussed here²²³.

²¹⁹ Erya, 315.

²²⁰ Ibidem.

²²¹【庸讵知吾所谓知之非不知邪?】[What way do I have of knowing that if I say I know something I don't really not know it?] (注) 夫蛣蜣之知,在于转丸,而笑蛣蜣者,乃以苏合为贵。See Zhuangzi trans. by Watson 2013, 14-15.

²²² 玄蟬之潔饑, 不願為蜣螂之穢飽 [The upstanding fasting of the summer cicada, (it is because) it is not willing to act like a dung beetle that fills its stomach with dirt.] *Baopuzi*, 800.

²²³ However, it is of some interest to point out that the character *he* is regarded as a dialectal synonym for the word *dai* 逮 "to seize, to capture": the FY states that "*he* [to consume] and *shi* [to devour] mean 'to capture' *dai*.

4.1.7 蠰, 齧桑

A behavioural gloss, the longicorn (long-horned beetle) *shang* 蠰 (*[s]raŋ +) is described as a "mulberry tree gnawer" *niesang* 齧桑(*[ŋ]ŋet[s]saŋ). Both GP and XB write that it is similar to the long-horned beetle, it possesses long horns and a white spot on its body (似天牛,長角, 體有白點). Moreover, it likes to gnaw mulberry trees and dig holes into them in order to enter inside (*xi nie sang shu, zuo kong ru qi zhong* 喜齧桑樹, 作孔入其 中). The last information given is that to the east of the Yangtze river it is called "hair gnawer" *niefa* 齧髮 (*[ŋ]ŋetpot). HYX argues that this gloss is not accurate since it fails in distinguishing the standard longicorn *tianniu* 天牛 from the *shang*. According to the *Erya Yishu*, it seems that the *shang* has shorter antennae and it lacks the distinguishing white spot of the longicorns.²²⁴

The SW presents a gloss with the character *shang*, but it probably represents another animal since Duan Yucai states that it is "another name for a praying mantis" (*tanglang bie ming* 螗螂別名, see gloss 15)²²⁵.

4.1.8. 諸慮,奚相

The mysterious disyllable *zhulü* 諸慮 (*ta[r]as) appears another time in the EY glossing the term *shanlei* 山櫐 (*sŋrar[r]uj? +, *Shimu* 釋木, 31), an unrecognisable plant. Carr tries to give an explanation translating it as "many thoughts", but it is still unidentified. The second term *xixiang* 奚相 (* [g]ge[s]aŋ) is also unidentifiable; in this case GP always points out that "(it is) unknown (unclear)" *wei xiang* 未詳. When GP writes the "*wei xiang* formula", the sub-commentary of XB is often completely absent. One possibility of interpretation of the first term is that *lü* is a variant of the rarer *lü* 櫶 character, a kind of mountain tree.

In the East and in Qi it is said *he*, in the North and in Yan it is said *shi*. *Dai* is a general term." 蝎、噬,逮也。 東齊曰蝎,北燕曰噬。逮,通語也。*Fangyan*, 88.

²²⁴ 今齧桑蟲形似天牛, 淺黃色, 角差短 [...] 是齧桑、天牛非一物。 [Nowadays, the mulberry tree gnawer bug has a form similar to the longicorn, (but) it is pale yellow, its antennae dissimilar and short...this mulberry tree gnawer is not the same thing as a longicorn.] *Erya Yishu*, 1160. ²²⁵ *Shuowen jiezi*, 1113.

4.1.9 蜉蝣, 渠略

The ephemera fuyou 蜉蝣 (*[b](r)u[N-]ru) is glossed as qulüe 渠略 (*[g](r)a[r]ak); it might be a behavioural gloss since the second term literally means "lines drawn for a ditch", and it does not provide any zoological semantic classifier. GP states that it is similar to a dung beetle (although the similarity lies more in their behaviour rather than in the physical aspect), but with a long and narrow body, it has got antennae and it is yellow and black. At birth, the creatures crowd in the middle of dung and dirt, they are born in the morning and they die at dusk. Swine like to eat them.²²⁶ XB provides an explanation for the second entry of the gloss, writing that "to the east of Nanyang, they are called *fuyou*, while between Liang and Song they are called *qulüe*".²²⁷

The term is retrievable in SJ, Ode 150 as the first word of each stanza, and this EY gloss is possibly related to this ode since the Mao edition already cites the term qulüe as a synonym of fuyou, as well as the important information of the short lifespan of this invertebrate²²⁸. The information is also valid for a passage in the DDLJ, in the Xia Xiao Zheng section:

"The thing that goes by the name of fuyou is the "ditch planner" ephemera. It is born at dawn and dies at the sunset."

浮游者, 渠略也。朝生而莫(暮)死。 229

Another passage in the same text (Yi ben ming 易本命 section) endorses the idea that ephemeras have an extremely short lifespan:

"Each of the natures of the myriad of entities is of a different species: that is why silkworms eat but do not drink, cicadas drink but do not eat, ephemeras do not drink or eat."

萬物之性各異類: 故蠶食而不飲, 蟬飲而不食, 蜉蝣不飲不食。230

²²⁶ 似蛣蜣,身狹而長,有角,黃黑色。叢生糞土中,朝生暮死。豬好啖之。Erya, 315.

²²⁷ 南陽以東曰蜉蝣,梁、宋之間曰渠略。Ibidem.

²²⁸ 蜉蝣,渠略也,朝生夕死。[The ephemera fuyou is (known also as) the "ditch planner" qulie, it is born at dawn and it dies at dusk.] Shijing, 550. ²²⁹ Da Dai Liji, 37.

²³⁰ Da Dai Liji, 258.

This passage quotes completely a paragraph from the HNZ, section "Terrestrial Forms" *di* xing 墬形²³¹, but it is also a reference to another excert from HNZ, section "A Forest of Persuasion" *shui lin* 說林:

"The silkworm eats but does not drink. In thirty-two days it transforms. The cicada drinks but does not eat. In thirty days it sheds its skin. The ant neither eats nor drinks. In three days she dies.²³²"

蠶食而不飲,二十二日而化;蟬飲而不食,三十日而脫;蜉蝣不食不飲,三日而死。

4.1.10 蛂, 蟥蛢。

The *bie* 蛂 ([b]bo[t] +) is a species of beetle glossed in the EY as *huangping* 蝤蛢 (*nkk^waŋ[b]beŋ). GP adds that this animal is green and big as a large bean; he also points out a piece of information that indicates that the EY's gloss is pointing out a regional name for the invertebrate. The style is very similar to the glosses found in the FY:

"It is an armoured animal. It is big as a large bean and green; east of the Yangtze, nowadays it is called *buangping*."

甲蟲也。大如虎豆,綠色,今江東呼黃蛢。233

Even if the *bie* character is considered a *hapax*, there is a passage in the ZhL, section *Kao Gong Ji*, in which there are described some species of animals focusing on how they produce their sounds (*ming* 鳴). Zheng Xuan comments that the ones that produce sound with their wings (*yi yi ming zhe* 以翼鳴者) are animals belonging to the *fahuang* 發皇 category²³⁴. This disyllable is fascinating from a phonetic point of view since it is reconstructed as *əpat[G] G^waŋ, quite similar to a hypothetical disyllable *biehuang* 蚊螨 *[b]bo[t]nkk^waŋ which could represent the same beetle.

The SW presents the character *ping* 蛢 glossed as *yuhuang* 蛹蟥 (*G^{wi}[t]nkk^waŋ), another animal that produces its cry by flapping its wings. It is also identified as *biehuang* 蛂

²³¹ 萬物之生而各異類, 蠶食而不飲, 蟬飲而不食, 蜉蝣不飲不食 [The myriad (living) creatures all are born as different kinds. Silkworms eat but do not drink. Cicadas drink but do not eat. Mayflies neither eat nor drink.] Translated by John S. Major. See Major et al. 2010, 162-3.

²³² See Major et al. 2010, 685. I would suggest changing the word "ant" into "ephemera" since it makes the discourse more coherent with the other passages from the *loci classici*.
²³³ Erya, 316.

²³⁴ Yi ming, fahuang shu 翼鳴, 發皇屬 Zhouli, 1330.

蟥 by Duan Yucai²³⁵, corroborating the fact that probably the EY gloss should be interpreted as *biehuang* 蚊蟥 glossed by *ping* 蛢 rather than the opposite.

4.1.11 蠸, 輿父, 守瓜。

The insect *quan* 蠸 (*[g]^wrar, gon Sch.) is glossed by two different names, *yufu* 輿父 (*mq(r)ap(r)a?, alliterative) [chariot old man] and *shougua* 守瓜 (*stu?kk^wra) [guardian of the gourd]. While the first definition seems quite obscure²³⁶, the second one is justified by GP that states:

"Nowadays, it is an armoured small animal, yellow as the pulp of a gourd; it likes to eat gourd's leaves, thus it is called 'the guardian of the gourd".

今瓜中黄甲小蟲,喜食瓜葉,故曰守瓜。237

This piece of information is supported by HYX underlining that this small insect does indeed eat the leaves of gourds, but it avoids the vegetable itself leaving it intact for the human consummation²³⁸.

The SW gives a self-explanatory definition to this character, stating that it is a generic *chong*:

"(The character) quan stands for an invertebrate. One says that it stings heavily."

The character *quan* is retrievable in both the ZhZ (chapter "Supreme Happiness" *zhi le* 至樂) and the LZ (chapter "Celestial Omens" *tian rui* 天瑞), but the sentences in which it appears present the same six characters, and they are collocated in a long chain of transforming entities²⁴⁰. The meaning of the whole passage is quite obscure (Burton Watson

²³⁵ 蛢: 螭蟥, 目翼鳴者。[(The character) *ping* stands for *yuhuang*, it is something that produces sounds with its wings] Duan Yucai comments: 蛂蟥即鐍蟥也 [The *biehuang* is the same as the *yuhuang*] *Shuowen jiezi*, 1113.

²³⁶ Lu Deming in his *Jingdian shiwen* indicates that the character *fu* can be written as *fu* \triangleq (*p(r)a?). It is then not to be interpreted as "old man", but as the proper name of the invertebrate. *Jingdian shiwen*, vol. 30, 18. ²³⁷ *Erya*, 316.

²³⁸ 常在瓜葉上倉葉而不倉瓜俗名看瓜老子者也。[It usually dwells on gourds leaves; it eats the leaves, but not the gourd; its vernacular name is "the old man that watches gourds"] *Erya yishu*, 1163. ²³⁹ *Shuowen jiezi*, 1110.

²⁴⁰ Mourui sheng hu fuquan 瞀芮生乎腐蠸 "the mou-rui from the fu-quan" trans. by James Legge "Mourui bugs are born from Rot Grubs" trans. by Burton Watson. It is difficult to attest if *fuquan* should be considered a compound word or a certain kind of *quan* (a gourd-grub that is able to make things rot).

calls it a "romp through ancient Chinese nature lore, doubtful at many points"²⁴¹), but it is acceptable to state that one is a partial quotation of the other.

4.1.12 蝚,蛖螻。

The insect *rou* 蝚 (*nu) is glossed by the binomial *manglou* 蛖螻 (*mmroŋ[r]o), which apparently indicates a kind of mole-cricket (see gloss 1), probably a multi-coloured one²⁴². In fact, GP simply states that a *manglou* is a kind of mole-cricket, without specifying anything $else^{243}$. There is a note from XB that points to the FY, chapter 11, where the various dialect terminologies for the mole-cricket are listed: both *rou* and *manglou* are not present. Therefore, XB concludes that they might be alternative names of the same animal.²⁴⁴

The SW presents a different interpretation for this character, but it will be discussed in a successive analysis (see gloss 42). As for the other *loci classici*, the character *rou* is not to be understood with the meaning from neither EY nor SW: the character is retrievable in the *Shiji* and in the *Guanz*²⁴⁵, but as an altered form of the character *nao* \Re (*nnu, extremely similar to the reading of *ruo*/*nu) which presents the semantic classifier *quan* R [dog] instead of *chong*.

4.1.13 不蜩, 王父。

This gloss is marked as "unclear" (*wei xiang* 未詳) by GP, and it has been modified in some successive versions of the EY by adding the semantic classifier *chong* to the character

²⁴¹ Watson 2013, 144.

²⁴² The character *mang* $\stackrel{1}{th}$ presents the character *mang* $\stackrel{1}{th}$ as a phonetic element. The former is retrievable only in the *Erya* and the *Huainanzi*, and it is then considered as a quasi-*hapax*. Since the meaning of the latter is "variegated", "striped", "with mixed colours", it is possible to affirm that the *rou* is a multi-coloured *lou* [molecricket].

²⁴³ 蛖螻, 螻蛄類。[The multicoloured mole-cricket is a kind of mole-cricket]. Erya, p. 316.

²⁴⁴ 然則此言蝚及蛖螻者,亦螻蛄之異名耳。[That being so, these words *rou* and *manglou*, are also alternative names of "mole-cricket" and nothing else.] *Erya*, 316.

²⁴⁵ Apart from the contest, *rou* is identifiable as *nao* since it always appears with the character *yuan* 蝯 (*[G]^{wa}[n]), another kind of monkey. In the chapter *Shi shou*, there is a paronomastic gloss that describes these two animals as "good climbers" *nao yuan, shan yuan* 猱蝯, 善援。See Allyn Rickett (2001) *Guanzi*, "Explanations on Conditions and Circumstances" *Xing shi jie* 形勢解, 59; *Shiji*, "Biography of Sima Xiangru" 司馬相如列傳, and *Erya*, 368.

 f_n 父 in order to create the binomial name *wángfu* 王蚥 (*G^waŋ[np](r)a?)²⁴⁶. The gloss has been interpreted by HYX as continuing the one before it:

"As for the multicoloured mole-cricket *manglou*, Guo Pu has already said that 'it is a kind of molecricket', therefore the gloss 'it is not a cicada' must indicate that (the multicoloured mole-cricket) does not belong to the category of cicadas."

蛖螻,郭璞既云'螻蛄類',則不蜩亦必蜩類。247

Nevertheless, there is another theory for which the character $bu \overline{\Lambda}$ has to be interpreted as $pi \overline{\Delta}$ (*p^hrə) "great, major", which goes along quite well with the glossed name wang Ξ "king"²⁴⁸.

4.1.14 蛄螿, 強蛘。

The rice-eating weevil *gushi* 蛄 塑(*kkaļaj) is glossed as *qiangmi* 強蛘(*nkaŋme[j]?) and this is considered as a paranomastic gloss. In fact, the phonetic reconstruction of rice *mi* 米 is *mm[e]j?, almost identical to the character *mi* 蛘 *me[j]? (also reconstructed as *[mŋ]e(j)? or *me?, Sch.). GP and later commentators suggest that the correct reading of the character is *mi* and not *yang* (an alternative form of *mi* is *yang* 蛘). The gloss presents the disyllable *qiangmi* which can be understood as "the one that dominates rice", an appropriate definition for an insect that is a pest of rice, as GP points out:

"Nowadays, it is a small, black and voracious insect that lives inside rice and cereals." 今米穀中小黑蠹蟲是也。²⁴⁹

However, the etymology of *qiang* might suggest a little caution since its original meaning is the larvae of the corn weevil, an insect very similar to the *gushi* (See gloss 32).

The SW presents a very similar gloss, if not that *mi* is substituted by *yang* \ddagger stating that:

²⁴⁶ According to Ruan Yuan, the semantic classifier *chong* has been added for the first time during the production of Tang period "Classics carved in stone" *Tang shi jing*. 唐石經加"虫"旁,非。[The Classics carved in stone of the Tang period added "*chong*" at its side. It is wrong.] See *Erya*, 316.

²⁴⁷ Erya yishu, 1164.

²⁴⁸ See Hu 2004, 347 and Xu 1987, 296.

²⁴⁹ Erya, 316-7.

²⁵⁰ Shuowen jiezi, 1113.

[&]quot;Biological Classification in Early Chinese Dictionaries and Glossaries: from Fish to Invertebrates and Vice Versa" PhD course "Lingue, Letterature e Culture dell'Età Moderna e Contemporanea" Università degli Studi di Sassari

Duan Yucai is sure that the correct character is *yang* and not *mie*, and he points that out in his commentary stating that the editions with *mi* 蝆 or *mi* 芈 "are all wrong" (*jie fei shi* 皆非是)²⁵¹.

The FY follows along, with another minor graphic variation (gu 姑 for 蛄):

"The rice weevil gushi is also called qiangmi."

姑蛰謂之強蝆。252

Apart from its presence in dictionaries, the rice weevil *gushi* is a *hapax* in Early Chinese texts.

4.1.15 不過, 蟷蠰, 其子蜱蛸。

The gloss opens with a *buguo* 不過 (*pəkkwaj) which does not indicate a *caesura* in the text, but it is apparently a name for the praying mantis²⁵³. GP seems to ignore the first name, focusing only on the second one, the mantis *dangshang* 蟷蠰 (*ttaŋsnaŋ +, rhyming)²⁵⁴. The commentary simply states that *dangshang* is an alternative name for the praying mantis *tanglang* 螳螂 (* [d]daŋrraŋ +, rhyming), which GP writes as *tanglang* 螗蜋 (*[n]rraŋrraŋ +, alliterative and rhyming)²⁵⁵. All of these last three names have evident phonetic relations and it is plausible that they were used interchangeably and completely synonymous.

more plausible, in guo 蝸 (*kkwaj, Liji, 583). Moreover, the character bu不 could be interpreted as pi 丕 [great,

²⁵¹ Shuowen jiezi, 1114.

²⁵² In addition to the information already provided in the EY's comment, in the FY GP simply adds that it is called *jia* 蛪 (*kkraj) to the east of the Yangtze and it is called *mizi* 芈子 (*mm[e]j?tsə?) among the people of Jianping. 江東名之蛩 [...] 建平人呼芈子。It is fascinating that the reconstructed phonetics of *gushi* and of *jia* are similar to some extent (*kkalaj vs *kkraj). *Fangyan*, 129.

²⁵³ The *Shimen* indicates that there are some sources that have *guo* 蝸 (*krroj) [snail] instead of *guo* 過 (*kk^waj). However, it is difficult to establish a link with the names that gloss *buguo*. Could it be that praying mantises were identified as "non-snails"? I personally doubt it. The LJ commentary by Kong Yingda presents another variant,

major] a plausible synonym of $da \neq$ [big] (see gloss 4.1.13).

²⁵⁴ Although I indicated the reconstruction *[s]raŋ for the character *shang* 蠰 (n.b. it has three different pinyin entries in the HYDZD: *nang, shang* and *rang,* each one with a different reconstruction for OC, respectively *nnaŋ, *[s]raŋ and *naŋ?), in this case I opted for an alternative reconstruction *snaŋ essentially because the *Guangyun* presents four different instances of the character 蠰, and the one with most affinities with the phonological hints of the SW (从虫襄聲 [it derives from the *chong* semantic classifier, it has the sound of *xiang*=*s-naŋ]), of GP's commentary ("*shang* 蠰 *s-naŋ it sounds like *xiang* 相 *[s]aŋ") and the *Shiwen* ("*xi* 息 *sək/MC s-ik and *xiang* 詳 *s[G]aŋ/MC z-jang [creates the] *fanqie* [MC s-jiang]") is the one that can be phonologically reconstructed as *s-naŋ. However, the HYDZD indicates *nang* (*nnaŋ) as the standard pronunciation for the character in this disyllable, see HYDZD, 3104.

²⁵⁵ 蟷蠰, 螗蜋别名。[The mantis *dangshang* is another name for the mantis *tanglang*.] Although other versions present the *tang* 螳 character, the *Shinen* says that in this case, *tang* 螳 is read as *tang* 唐, that is why the contemporary versions of the *Erya zhushu* have *tang* 螗. See *Erya*, 317 (footnote 3).

The SW has two tautological glosses regarding the characters *dang* and *shang*, one of which confirms that *buguo* is another name for a praying mantis:

"(the character) dang stands for the praying mantis dangshang, it is (known also as) buguo."

賞: 賞蠰, 不過也。

"(the character) shang stands for the praying mantis dangshang."

蠰: 當蠰也。256

The second part of the gloss, identifies the mantis larvae (*qi zi* 其子 [its children]) with the name *pixiao* 蜱蛸 (*m[p]e[s]ew). GP states that it is an alternative name to *bojiao* 蜱 蟭 (*ppakstew), which presents some phonetic resemblance. XB adds another name to refer to the hatchlings of the praying mantis, using the term *piaoxiao* 螵蛸 (*p^hew[s]ew), this time very similar to the original term of the EY. These two names are both retrievable in the *Guangya*:

The binomial *tanglang* 螳蜋 (*[d]daŋrraŋ, see gloss 4.1.23), a written combination between *tanglang* 螳螂 and *tanglang* 螗蜋, is retrievable in the LJ, chapter *Yue ling*.

"The (period of) slighter heat arrives; the praying mantis is produced"

小暑至, 螳蜋生258

The commentary of Kong Yingda points directly to the EY, with some references apparently ascribable to the FY due to their structure, but that are instead attributed to the first commentator Zheng Xuan²⁵⁹:

"To the south of Tan (Pei) and Lu, it is called *dangshang*, in the citadels of the three rivers, it is called *tanglang*, to the border of Yan and Zhao, it is called *shimang* [great eater], east of Qi and Qi, it is called *magu* [horse-cereal]. Having said that, concerning the name of its larvae, everyone agrees upon calling them *piaolang*."

²⁵⁶ Shuowen jiezi, 1113. The character dang \mathring{I} is a slightly different variant of dang $\stackrel{deng}{l}$, having the semantic classifier *chong* under the phonetic element dang \mathring{I} instead of being on its left.

²⁵⁷ *Guangya*, vol.10, 6.

²⁵⁸ Translation by James Legge. Liji, 583.

²⁵⁹ Many authoritative scholars, such as Kong Yingda and Duan Yucai, ascribed this passage to the FY. However, it is not present in the text. Ruan Yuan points out that Lu Wenchao 盧文弨 (1717 – 1797) attributed the quote directly to Zheng Xuan following an analysis of the Tang period encyclopaedia *Yinen leiju* 藝文類聚 by Ouyang Xun 歐陽詢 (557 – 641). See *Liji*, 538, footnote 4.

譚魯以南,謂之蟷蠰,三河之城,謂之螳蜋,燕趙之際,謂之食厖,齊杞以東,謂之馬穀。然名 其子,同云螵蜋也。²⁶⁰

4.1.16 蒺藜,蝍蛆。

The gloss introduces a quite common term, the war equipment calthrop *jili* 蒺藜 (*[dz]i[t]r[ə][j] +) which is common in the the *Mozi* 墨子 and in texts belonging to the "Experts of Military (strategies)" *bingjia* 兵家²⁶¹; the term probably derives from the homonymous thorny plant that is found in the YJ, the ZZ (where the passage from the YJ is quoted) and the CC; it is glossed in EY, chapter *Shi cao*²⁶². However, its main connotation is not related to the animal world²⁶³. The word is then glossed by the arthropod *jiju* 蝍蛆 (*tsiktsa), which shares partially the phonetic reconstruction for the first syllable (*dzit vs *tsik). This animal is a rare sight in *loci classici*, with just an appearance in the HNZ, in the CC and in the *Guan Yin zi* 關尹子 (also called *Wen shi zhen jing* 文始真經). There are two different interpretations for what kind of animal is: GP states that is "similar to the locust but with a larger abdomen, it has long antennae and it is able to eat the head of snakes";²⁶⁴ its relationship with snake-like creatures is also present in the HNZ:

"The deng reptile (snake) wanders in the fog, but it is endangered by the cricket."

騰蛇遊霧,而殆於蝍蛆。265

In the Guan Yin zi, the sentence analysed partially quotes a passage from the ZhZ:

"The crickets jiju eat snakes, snakes eat frogs, frogs eat the crickets jiju, they mutually eat each

other."

蝍蛆食蛇,蛇食哇,哇食蝍蛆,互相食也。266

"Centipedes enjoy small snakes" (Legge) "Centipedes find snakes tasty" (Watson)

²⁶⁰ Liji, 583.

²⁶¹ See Mozi, book 14, chapters "Fortification of the City Gate" 備城門, "Defense against Attack with Ladders" 備梯, "Preparation against Tunnelling" 備穴. See *The Six Secret Teachings* 六韜, chapters "Agricultural instruments" 農器, "Using the military" 軍用, "Military strategies" 軍略 and "Marching in war" 戰步.

²⁶² *Ci, jili* 茨, 蒺蔾。*Erya*, 272. "Calthrop (T. terrestris); found in the Ch'u [CC] where it is mentioned along with the 江離 Selinium, (13/85B), Hawkes (128): 'tribulus'; the I [YJ], Wilhelm (183, 627): 'thorns and brambles'; and the Tso [ZZ] (where the I [YJ] is quoted), Legge (514): 'brambles'. [...]" Carr 1979, 191.

²⁶³ The *Shimen* indicates that the binomial word *jili* 蒺蔾 can be written as *jili* 螏蟍 or *jili* 螏犂, stating that the term designating this arthropod is a separate word.

²⁶⁴ 似蝗而大腹,長角,能食蛇腦 Erya, 317.

²⁶⁵ Huainanzi, 17.10, 667. Translation by Queen, and Major 2010.

²⁶⁶ Guan Yin zi, chapter 3 Ji 極 [Extremities], 10.

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As we can see, both the translations by James Legge and Burton Watson identify *jiju* as centipedes, and not as crickets (which are much more similar to locusts). This interpretation is widespread in some modern translations of the CC, it is present in the *Guangya*, and the *Yupian* and it is adopted by Michael Carr²⁶⁸. However, XB makes a statement by excluding any relation with that class of animal:

"Concerning the *jili*, one alternative name is *jiju*. The *Guangya* says: 'the *jiju* is a centipede *wugong*.' Guo Pu says: 'it is similar to a locust but with a larger abdomen, it has long antennae and it is able to eat the head of a snake.' Therefore, it is not a centipede. The *Zhuangzi* says: 'the cricket *jiju* finds small snakes sweet', this is it."

蒺藜, 一名蝍蛆。廣雅云: "蝍蛆, 蜈蚣也。" 郭云: "似蝗而大腹, 長角, 能食蛇腦。" 則非蜈蚣也。莊子云 "蝍蛆, 甘帶" 是也。²⁶⁹

In order to solve the issue, HYX tries to exclude again that the *jiju* is a cricket, since it is no bigger than a locust, although it has some similarities. Moreover, there are no records of snake-eating crickets.²⁷⁰

4.1.17 蝝, 蝮蜪。

The locust nymph *yuan* 蝝 (*lon) is glossed by the disyllable *futao* 蝮蜪 (*p^h(r)uk[l]lu); the identification by GP is straightforward:

> "(the nymph yuan) is the offspring of the locust, it has not developed wings." 蝗子未有翅者。²⁷¹

While XB corroborates this thesis, the SW presents another hypothesis:

"(the character) yuan (stands for) the nymph futao. Liu Xin (in his Shuoyuan) says that yuan is the larva of the ants (pifu, *[b]ij[b](r)u). Dong Zhongshu says that it is the nymph of locusts (huang, *[GG]^waŋ)." 蝝: 復陶也。劉歆說: 蝝, 蠶蠹(蚍蜉)子。董仲舒說: 蝗子也。

The ZZ presents an instance in which the nymphs *yuan* are born during the winter. The commentator Du Yu states that the *yuan* are the nymphs of the grasshopper *zhong* 螽 (*tuŋ) which die before turning into their adult form. However, Kong Yingda presents the

²⁶⁷ Zhuangzi, chapter "Discussion on Making all Things Equal" qi wu lun 齊物論 Watson 2013, 15.

²⁶⁸ "*Jiju* is a centipede *wugong*." 蝍蛆吳公也。*Guangya*, vol.10, 7 "The *jili*, or *jiju* is able to eat snakes, it is also called centipede *wugong*." 嫉蟍, 蝍蛆能食蛇, 亦名蜈蚣。*Yupian*, book 25, 5. "This same binom also means a centipede in 15/16A." Carr 1979, 191-2.

²⁶⁹ Erya, 317.

²⁷⁰ Erya yishu, 1166.

²⁷¹ Erya, 317.

various possibilities, opining that Liu Xin and Du Yu are wrong since only the nymphs of the locust *huang* do not possess a pair of wings, while the others do²⁷².

Other texts that have a reference to *yuan*, are the *Guoyu*, which states that they are edible insects²⁷³; the LH confirms that they are indeed nymphs of locust²⁷⁴.

4.1.18 蟋蟀, 蛬。

> "Nowadays, it is (called) cuzhi (*[tsh]oktək). (Another) name is also jinglie (*tseŋ[r][e]t +)." 今促織也。亦名青(蜻) 盈。

The most important passage in which the *xishuai* appears is the homonymous ode n°114 *Xishuai* in the SJ, in the section "Airs of Tang" 唐風:

"The cricket is in the hall, and the year is drawing to a close." (Legge) "The cricket is in the hall, the year draws to a close" (Karlgren)

²⁷²冬, 蝝生。(經) [During wintertime, the nymphs *yuan* are born. (*Chunqiu* text.)] 螽子以冬生, 遇寒而死, 故不成螽。(注) [The grasshopper *zhong* offspring are born during winter, when they come upon the cold, they die. (Du Yu commentary.)] 釋蟲云"草螽, 負蟄。蜇螽, 蜙蝑。"李巡云"皆分別蝗子, 異方之語也。" 釋蟲又云"蝝, 蝮蜪。"李巡云 "蝮蜪, 一名蝝蝝, 蝗子也。"郭璞云"蝗子未有翅者。" 劉歆以為 "蚍蜉有翅者" 非也。(疏) [(The *Erya* chapter) "glosses on invertebrates" says: the verdant grasshopper is called also *songxu*." Li Xun says: "All of these names are variants of locust nymphs, they come from languages of different places." (The *Erya* chapter) "glosses on invertebrates" also says: "the nymphs *yuan* are called *futao*." Li Xun says: "(Regarding) *futao*, one other name is *yuanyuan*, they are the offspring of locusts." Guo Pu says: "the nymphs of the locust do not possess wings." Liu Xin erroneously thinks that "ants possess wings", it is not like that. (Kong Yingda text.)] *Zuozhuan*, 766.

²⁷³ 蟲舍蚔蝝 [Invertebrates abandon larvae *zhi* and nymphs *yuan*] The comment by Wei Zhao 韋昭 (204 – 273) adds that "*Zhi* are ant larvae, they can be processed into minced meat; the nymphs *yuan* are the *futao*, they can be eaten." 蚔螘子也,可以為醢。 蝝復陶也,可以食。*Guoyu*, book 2, Discourses on Lu (first part) 魯語上, 27.

²⁷⁴應時而有蝝生者,或言若蝗。[When simultaneously larvae of locusts were born. Some say that they resemble winged ones.] *Lunheng*, 363 trans. by Forke 1907.

蟋蟀在堂、歲聿其莫(暮)。275

Lu Ji gives us more information about the cricket, reporting that it is similar to the locust, but smaller, that it is so perfectly black that when illuminated by a source of light it shines like lacquer. It has both antennae and wings. He also writes that it has different names: apart from the one already indicated by GP, it is called "King's grandson" *wangsun* Ξ 孫 by the people of Chu.²⁷⁶

The FY presents the same array of alternative names that have been already analysed, with the only exception of having the semantic classifier *chong* to the left of *wang* \pm :

"The cricket *jinglie*, in Chu is called *xishuai*. Some people call it *qiong*. Between the regions south of Chu is called *wangsun*."

蜻蚓。楚謂之蟋蟀。或謂之蛬。南楚之間謂之蚟孫。277

4.1.19 螫, 蟆。

This is perhaps one of the most controversial glosses in all the EY: it is in fact, to my knowledge, the only gloss in the chapter *Shi chong* that describes an animal that is not an invertebrate. The amphibian *jing* 螫 (*kreŋ +) is glossed as the toad *ma* 蟆 (*mmraj +). GP underlines that this animal "is a species of frog (*qq^wre)" *wa lei* 蛙類, however, XB amends his predecessor by stating that "this is a kind of toad *hama* (*[g]grammraj)" *ci zi yi zhong hama ye* 此自一種蝦蟆也. HYX enriches these laconic explanations adding that:

"Toads live on the ground, frogs live in the water. This one is a toad, it is not a frog. The

commentary of Guo Pu missed it."

蝦蟆居陸,蛙居水。此是蟆,非蛙也。郭注失之。278

This statement is partially in conflict with the JJP:

"Water animals are tadpoles, frogs and toads." 水蟲科斗鑼蝦幕²⁷⁹

²⁷⁵ Shijing, odes n° 114, 442.

²⁷⁶ 蟋蟀似蝗而小,正黑有光澤如漆,有角翅。一名蛬一名蜻蛩,楚人謂之王孫,幽州人謂之趣(趨) 織。[The cricket is similar to the locust, but smaller, it is so fully black that light makes it shine as lacquer, it has antennae and wings. One name is *qiong*, one name is *jinglie*, people of Chu call it King's grandson, people of the regions of You call it *cuzhi*.] *Maoshi Cao Mu Niao Shou Chong Yu Shu*, 59.

²⁷⁷ Fangyan, 129.

²⁷⁸ Erya yishu, 1168.

²⁷⁹ Jijiu pian, vol. 3, 6.

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The distinction that HYX makes is probably a successive analysis since there is no evidence of differentiating frogs and toads on the basis of their habitat. However, this could be a hint of why this gloss is in the chapter *Shi chong* instead of being in the chapter *Shi yu*, where all the other amphibians are catalogued: a toad might be seen as a more terrestrial animal than a frog or a salamander. The commentary to the JJP by Yan Shigu adds that *jing* is a common name for toads:

"One other name of the toad hama is jing, It has a big abdomen and short legs."

The SW presents two tautological glosses on *ha* and *ma*, simply stating that the character *ma* represents the toad *hama* and at the same time the character *ha* represents the same animal *hama*. Duan Yucai in his comments states that a toad *hama* is smaller than the toad *chanchu* 蟾蜍 (*[t]amla +), it has black spots on its back (the *chanyu* is spotless) and it is a great jumper, while the *chanyu* is not.

The HNZ has two instances with the disyllable *hama*, the first one in the chapter "The Ruler's Technique" *zhu shu xun* 主術訓 as a collective name for tailless amphibians; the second one is in the chapter "Integrating Customs" *qi su xun* 齊俗訓 describing a metamorphosis of toads becoming quails²⁸¹. Other instances of *hama* that turn into quails are retrievable three times in the LH with the following formula *hama* (*hua*) *chun* 蝦蟆(化)為 鶉²⁸².

There is no other instance of the toad *jing* in the *loci classici*, it is then considered as a *hapax*.

4.1.20 蛝,馬輚。

The millipede *xian* 蛝 (*[g]gra[n] +) is glossed by the name *mazhan* 馬 輚 (*mmra?[dz]zr[a][n]? +). GP adds other names that identify the same arthropod, namely *majuan* 馬蠲 (*mmra?qq^w[i]n +), *jun* 蚐 (*q^wi[n] +)and the vernacular name (*su* 俗) *mazhu* 馬

²⁸⁰ Ibidem.

²⁸¹ Huainanzi, 331, 399. These kinds of transformations are retrievable also in other sections, such as "Terrestrial Forms" (di xing xun 墬形訓), 162 and "Seasonal Rules" (shi ze xun 時則訓), 185.

²⁸² Lunheng, chapter "Unfounded Assertions" (*nu xing* 無形),326; chapter "Taoist Untruths" (*dao xu* 道虛), 336; chapter "Arguments on Ominous Creatures" (*jiang rui* 講瑞), 368.

輕 (*mmra?[l]riwk). XB clearly identifies *xian* as a *chong* 蟲 and confirms the alternative names in the GP's comment.

The presence of this animal in the *loci classici* is limited to the FY:

"The millipede *maxian* (*mmra?[GG]i[n] +), to the north of Yan is called *juqu* ([ts^h]a[g](r)a). A large specimen of it is called *mayou* (*mmra?[l]riwk/*l[u] +)."

馬蚿。北燕謂之蛆蝶。其大者謂之馬蚰(柚)。283

The large variety of names that refer to the same creature is corroborated also by the Guangya:

"The millipede juqu, is (also called) mazhu and maxian."

蛆蝶,馬蛟,馬蚿也。284

4.1.21 蛗螽, 蠜。草螽, 負蠜。蜇螽, 蜙蝑。蟿螽, 螇虾。土螽, 蠰谿。

This sequence of glosses is characterised by the multiple presence of the character zhong 螽 (*tuŋ) which is identifiable as a kind of locust (see gloss 4.1.52). It follows a pattern similar to gloss 4.1.4, where the cicada *tiao* 蜩 was introduced. XB states that the numerous "species" *lei* 類 of the *fuzhong* are vexing and confusing, so that this gloss helps to understand them. Then, the Song commentator quotes numerous sources in order to corroborate the strict relation between *huang* 蝗 (*[GG]^waŋ) and *zhong* 螽: Li Xun says that *zhong* are the larvae of *huang* locusts (or just smaller ones), Lu Ji indicates that "nowadays the term '*huang* larvae' is interchangeably used for '*zhong* larvae', the people of Yanzhou call them *te* 螣 ([dd]ək +)"²⁸⁵.

The first kind of locust is the *fuzhong* 蛗螽 (*[b](r)u?tuŋ), glossed as *fan* 礬 (*[b]a[n] or *[b]rom), which is probably the standard *zhong* locust since XB indicates that the following insects glossed are "typologies of the *fuzhong" fuzhong zhi zu* 蛗螽之族. Moreover, the binome is retrievable in the SJ, odes 14 and 168, with the graphic variant of *fu* 阜 and in a fixed verse that is identical in both odes:

²⁸³ Fangyan, 133.

²⁸⁴ Guangya, vol. 10, 6.

²⁸⁵ 鼠螽之族, 厥類實煩, 此辨之也。[...] 李巡曰: "蝗子也。" 陸機疏云: "今人謂蝗子為螽子, 兖州人謂之螣" [Regarding the typologies of locusts, their species are indeed troublesome, this (gloss) differentiates them. Li Xun says: "It is the larva of the *huang* locust"; the commentary of Lu Ji tells that "Nowadays, people call *huang* locusts larvae as *zhong* locust larvae, the people of Yanzhou call them *te*"] *Erya*, 318.

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"Iôg-iôg (sound) the insects in the grass; jumping are the grasshoppers"

喓喓草蟲、趯趯阜螽。286

The SW presents a variant of the *fu* character 自 in combination with the character that glosses the disyllable *fuzhong*, namely *fan*:

"(The character) fan stands for the locust fufan"

蠜: 自蠜也。

Duan Yucai simply states that this animal is the one present in the ode 14 of the SJ²⁸⁷.

The following species of locust, the "grass locust" *caozhong* 草螽 (*[ts^h]tshu?tuŋ) is glossed by the disyllable *fufan* (or *fuban* *[b]ə?[b]ban), a word that also describes another insect similar to a bedbug, i.e. a smelly invertebrate (*chou chong* 臭蟲, see gloss 4.1.2). From a phonological point of view, there is a slight assonance between *caozhong* and *chou chong* 臭蟲 (*tq^hu(?)slruŋ), although XB stated clearly that the bedbug *fufan* and the locust *fufan* are related only by mistake. Completing the ambiguity that surrounds this invertebrate, we should notice that in odes n° 14 and 168 there is a "grass insect" *cao chong* 草蟲 (*[tss^h]u?lruŋ), phonetically very similar to the other two instances, and that is in juxtaposition with *fuzhong*. Both GP and XB agree on the theory that the *caozhong* is the *cao chong* of the SJ, the former commentator also indicates another synonym for this creature that goes by the name of *changyang* 常羊 (*[d]aŋGaŋ) which apparently is not phonologically related.

The following type of locust is the "stinging locust" *sizhong* 蜤螽 (*setuŋ), sometimes erroneously transcribed as *zhezhong* 蜇螽. It is glossed by the disyllable *songxu* 蜙蝑 (*soŋsra? +) at which GP adds a vulgar, yet strikingly similar synonym *chongshu* 䲠蝚 (*stoŋst^ha?)²⁸⁸. The most comprehensive description of this invertebrate is given by Lu Ji:

"The people of the regions of You calls it *chongji* (*stoŋk(r)ə). The *chongji* are nothing but the *chongshu*, a species of *huang* locust. They are long and green, with elongated antennae and a large abdomen. They can produce

²⁸⁶ Shijing, 82, 702. Translation by Karlgren 1950, 9, 112.

²⁸⁷《召南》: 趯趯阜螽。傳曰: 阜螽, 蠜也。["The Odes of Zhao and the South" (says): the locusts are jumping around. The (Mao Heng) tradition says: *fuzhong* locusts are (also called) *fan.*] *Shuowen jiezi*, 1113.
²⁸⁸ 俗呼蝽蝚 [In the vernacular language is called *chongshu*] *Erya*, 318.

sounds with it. Some people say that they are similar to *huang* locusts, but smaller, with black spots such that their abdomen looks like a tortoise shell."

幽州人謂之舂箕。舂箕即舂黍,蝗類也。長而青,長角,長股,股鳴者也。或謂似蝗而小,班 黑,其股似玳瑁。²⁸⁹

This insect also appears in odes 5 and 154 of the SJ, but with a different character for *si* 蜇 (*si* 斯). Furthermore, the binomial name *sizhong* becomes *zhongsi* 螽斯(*tuŋse) in Ode 5, but the commentaries assure us that the animal is exactly the same:

"The wings of the locusts, they are multitudinous"

<u>螽斯</u>羽、詵詵兮。

"In the fifth month, the locust moves its legs"

五月<u>斯螽</u>動股290

The following type of locust is the *qizhong* 整螽 (*[k^h]i[t]stuŋ), which is glossed as *qili* 螇虾(*kk^he[r]rek +). GP gives us some information, saying that it has a vulgar name that closely resembles the alternative name of the *sizhong* (*songzong* 蜙蜒 *soŋtsoŋ vs *songxu* 蜙蝑 *soŋsra?). However, it could be that the first character was mistranscribed, since an original *gong* 蚣 (*qqoŋ) may have represented both *song* 蜙 (*soŋ +) and *weng* 螉 (*qqoŋ), with a more coherent phonetical assonance with the latter. Since the character *zong* 蜒 appears in the binomial word *wengzong* 螉蜒 (*qqoŋtsoŋ +)²⁹¹, it may be plausible that this vernacular name was coincidentally linked to the one from the previous gloss. Other information on this animal indicates that it possesses a relatively long and thin body and that it produces sound with its wings when flying²⁹². Both the disyllables are considered *hapax* since they do not appear in any of the *loci classici*.

²⁸⁹ Maoshi Cao Mu Niao Shou Chong Yu Shu, 56-57.

²⁹⁰<u>螽斯</u>, 蚣(蜙)蝑也。[The locust *zhongsi* is the locust *songxu*] *Shijing*, 52 <u>斯螽</u>, 蚣(蜙)蝑也。 [The locust *sizhong* is the locust *songxu*] *Shijing*, 587. Translation by Karlgren 1950, 4, 98.

²⁹¹ Duan Yucai still believes that *wengzong* and *songzong* are the same animal. However, the former seems to represent a sort of gadfly or a least an animal that "lives on cattle and horse skin" 蟲在牛馬皮者。 See *Shuowen jiezi*, 1108.

²⁹² 細長、飛翅作聲者[It is thin and long, when flying its wings produce sound.] Erya, 318.

The last typology of locust is the "ground locust" *tuzhong* 土螽 (*tt^ha?tuŋ), that is glossed as *rangji* 蠰谿 (*naŋ?kk^he +). According to GP and XB, it is a smaller locust that is able to jump and it has three alternative names: *tuzhe* 土蝾 (*tt^ha?ttrak, alliterative) as a modern name, *zhemo* 虴蛨 (*ttrak[m]mrak, rhyming) and *zhameng* 蚱蜢 (*[ts]srakmmraŋ +) as local names used south of the Yangtze river²⁹³. HYX notes that there are two subspecies (*zhong* 種) of this "ground locust": a flying locust, small and brown-coloured, and a bigger one with smaller wings, unable to fly, but capable of jumping²⁹⁴.

4.1.22 螼蚓, 蜸蚕。

The earthworm *qinyin* (*q^hrə[r]?[G](r)ə[r]?) is glossed as *qiantian* (*[k]k^hi[n]tt^hə[n]?), the reading *tian* is due to the fact that the last character is not a graphic alternative of *can* 蠶 (*[dz]z[ə]m), but a different character²⁹⁵. GP describes this creature as not possessing a brain, that it is able to dig tunnels in the ground and fight the locust *fuzhong*²⁹⁶. This earthworm has multiple names: the SW does not present the character *yin* 翊, but it uses the cognate *yin* 螾. Duan Yucai comments saying that there are at least three names for only one entity (*yi wu san ming ye* 一物三名也) and that Xu Shen deliberately uses *yin* 螾 for *yin* 翊 (*yin, Xu zuo yin* 蚓, 許作 螾).²⁹⁷ To extend the array of the earthworm's names, GP adds that other denominations are *hanyin* 寒蚓 (*ə[g]ga[n][G](r)ə[r]?) in the regions east of the Yangtze river and *wanshan* 玺蟺 (*[?]o[r]?[d]an? +), literally the "wriggling worm", a name that is present also in the *Guangya*. The only *locus classicus* that this gloss may directly point to is the *Yue ling* chapter of the LJ, although it has *qiuyin* 蚯蚓 (*[k]^{wh}ə[G](r)ə[r]?, phonetically compatible with the gloss) rather than *qinyin*:

"The green frogs croak. Earth-worms come forth. The royal melons grow. The sow-thistle is in

seed."

螻蟈鳴,蚯蚓出, 王瓜生, 苦菜秀。

²⁹³ 今謂之土蝶。江南呼虴蛨,又名蚱蜢,形似蝗而小,善跳者是也。[Nowadays it is called "ground *zhe*". South of the Yangtze river it is called *zhemo*, another name is *zhameng*, its shape is similar to the locust but smaller, this (animal) is very good at jumping]. *Erya*, 319.

²⁹⁴ Erya yishu, 1172.

²⁹⁵ See HYDZD, 3029 and JDSW vol. 30, 19.

²⁹⁶ 蚯蚓, 土精, 無心之蟲, 與蛗螽交者也。[The earthworm, it is specially versed in the ground, it is an animal with no mind, it fights against locusts.] *Erya*, 319.

²⁹⁷ Shuowen jiezi, 1108.

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"The broom-sedge rises up vigorously. Worms curl. The moose-deer shed their horns. The springs of water are (all) in movement."

蕓始生, 荔挺出, 蚯螾結, 麋角解, 水泉動。298

4.1.23 莫貈, 螳蜋, 蛑。

The mantis (*tanglang* 螳蜋 [d]daŋrraŋ, see gloss 4.1.15) *mohe* 莫貈 (*mmak[g]gawk + or more presumably *mmakmmrak, alliterative and rhyming, and consequently the alternative modern *pinyin* transliteration as *momo*)²⁹⁹ is glossed as *mou* 蛑 (*mə). There are no instances of *mohe* and *mou* in the *loci classici*, making them *hapax legomena*. The latter is considered an alternative form of the graph *mao* 蟲, which is respectively another way to write *mao* a^{300} , but this meaning (as well as its phonetics) is not related to this gloss (see gloss 4.1.53)³⁰¹. The FY reports an animal called *mao* 髦 which is a different name for the mantis *tanglang*, it is probably related to the other characters that are read *mao* (蟲-蟊-髦). GP says that the *mohe* (or *momo*) is an animal that possesses "axes" (*you fu chong* 有斧蟲) and that is called *shilang* 石蜋 (*dakrraŋ) to the east of the Yangtze river. XB adds that this animal is the same as the aforementioned *buguo* 不過 (*ji shang "buguo" ye* 即上《不過》也, gloss 4.1.15) and that it has a predator attitude:

"It captures and eats cicadas, it has arms like axes, it raises them (the cicadas) so that when they try to move

away, they cannot escape."

捕蟬而食,有臂若斧,奮之當軼不避。302

²⁹⁸ Liji, 576, 650. Translation by James Legge.

²⁹⁹ The HYDZD: 4167 states that *mo* is an alternative pronunciation of the character *he*. This is due to the fact that the graph *he/mo* is an alternative form both for *he* 貉 [raccoon dog] and *mo* 貊 [a barbaric tribe from the north-east]. The reduplicative phonetic pun *momo* is more plausible than a meaningless form *mohe*: the words *mo* [nothing; not] and *he* [raccoon dog] are not related and they do not appear as a meaningful disyllable in any *locus classicus*. While the same situation is retrievable with the lexeme *mo* [barbaric tribe], the phonetic reconstruction gives us a hint of a quite meaningless phonetic reading.

³⁰⁰ The SW presents this variant of *mao* in his "*chong bu*" 蟲部 chapter. Duan Yucai says that this *mao*, is the same insect in SJ, *Xiaoya*, ode n°212 "Da Tian" 大田, an insect that eats the roots of the cereals 去其螟螣。

及其<u>蟊</u>賊 [we remove the noxious insects from the ears and leaves, and the grubs from roots and stems]. The Mao's version states also that *mao* 蟊 was originally written as *mou* 蛑, corroborating the link between this gloss and the passage from the SJ. See *Shuowen jiezi*, 1128 and *Shijing*, 993. Translation by Karlgren 1950, 166.

³⁰¹ Another meaning of this character is "a kind of marine crab", but it is attested only in later texts. HYDZD: 3046.

³⁰² Erya, 319.

The last comment of XB is that this insect possesses another name, i.e. *hegong* 齕肱 (*m[q]qət[k]kwəŋ) or, citing HYX, *heyon* 齕疣 (*m[q]qət[G]wə); even if the phonetic reconstruction does not present a rhyme between the two binomial *codas*, they still can be considered similar to some extent.

4.1.24 虹蛵, 負勞。

The dragonfly *dingxing* 虰蛵 (*tteŋqq^heŋ) is glossed as *fulao* 負勞 (*[b]ə?[r]raw). GP indicates that there are other synonyms for this animal, namely *qingling* 蜻蛉 (*[sr]reŋ[r]reŋ, rhyming and alliterative +) and *huli* 狐棃 (*[g]g^war[ə][j]), although GP admits that he does not possess any information of these two last denominations (*suo wei wen* 所未聞)³⁰³. There is a FY passage which seems to be contradictory, especially due to the fact that GP comments it:

"The dragonfly *qingling* is (also) called *jiling* (*[ts]ikriŋ). [Commentary by GP] It is an animal with six legs and four wings. [...] to the east of the Yangtze river, its name is *huli* (*[gg]^{wa}[rr]ij). The people south of the Huai river call it *kangyin* (*krraŋ?ij)."

蜻蛉謂之蝍蛉【注】六足四翼虫也。[…] 江東名為狐黎。淮南人呼蠊蛜。304

The SW presents the same exact gloss, with the exception that the character *ding* is written without its semantic classifier:

"(The character) xing (stands for) the dragonfly dingxing, it is (also called) fulao."

輕:丁輕,負勞也。

However, Duan Yucai doubts that Xu Shen identified the *dingxing* as the *qingling* mostly because there is another gloss in the SW that clarifies the meaning of *qingling* and the word *dingxing* is not mentioned at all.³⁰⁵ Nevertheless, it is noteworthy to point out that the phonetical reconstruction of the characters *ding* \mathfrak{V} (*tten) and *ling* \mathfrak{K} (*[rr]en) could match the one of the character *ting* \mathfrak{K} [dragonfly], that can be reconstructed both as *ə[d]den or *llen~lên?/lîn? (Sch.).

³⁰³ Erya, 320.

³⁰⁴ Fangyan, 130.

³⁰⁵ 許意非蜻蛉也。許下文蛉下云: 蜻蛉也。一名桑根。不與此為伍。則許意不謂蜻蛉可知。[The meaning of Xu (Shen's gloss) is not the *qingling*. Later in Xu's text, the gloss "*ling*" will say: it stands for the *qingling*. Another name is *sanggen* "mulberry root" (*[ss]aŋ[kk]**9**[r]). There is no association with this one. Therefore, the meaning of Xu (Shen's gloss) is not understandable as "it is called *qingling*".] *Shuomen jiezi*, 1110, 1117.

4.1.25 蜭,毛蠹。

The caterpillar *han* 蜭 (*[GG][ə]m? +) is glossed as *maodu* 毛蠹 (*mmawttaks) "hairy grub"; it is probably a descriptive gloss since the disyllable presents a description of the physical features of the *han* caterpillar, rather than its alternative name. Both GP and XB simply state that it is a caterpillar (*ji ci ye* 即载也)³⁰⁶, the latter adding that there is a vernacular term that identifies the same animal, namely *maoci* 毛载 (*mmaw[ts^h]eks), it is poisonous and it stings people (*you du, shi ren* 有毒, 螫人)³⁰⁷. This disyllable does not phonetically differ too much from the aforementioned *maodu*.

The same gloss is retrievable in the SW. However, Duan Yucai in his commentary, specifies that *ci* and *han* are two different kinds of caterpillar:

"(The character) *han* is a hairy grub. [Commentary by DYC] As for the grubs, they are animals that reside in wood. The caterpillar *han* does live inside pieces of wood, its aspect is hairy on the outside, it can eat wood, therefore it is called hairy grub.

(The character) *ci* is a caterpillar [literally a hairy invertebrate]. [Commentary by DYC] It cannot be called a hairy grub, it does not reside in wood, but it eats leaves."

4.1.26 螺, 站蟴。

The caterpillar *mo* (*mmək +) is glossed as *zhansi* (*namse +). Another double *hapax*, GP identifies it as belonging to the category of caterpillars (*ci shu ye* 截屬也) and adds that the second term, *zhansi*, is a topolectal name used only in the territories of Qing (*Qing zhou* 青州). XB uses a different category-word, shifting from *shu* 屬 to *lei* 類 (*ji ci lei ye* 即載類 也)³⁰⁹. Another name for this creature is "the stinging eight-horned animal" (八角螫蟲), although this term is not retrievable in the source GP indicates³¹⁰.

The SW presents zhan 站 as the glossed term, but the definition does not change:

"(The character) zhan stands for the zhansi, it is (also known as) mo"

站: 站斯, 墨也。

³⁰⁶ Erya, 320.

³⁰⁷ Ibid.

³⁰⁸ Shuowen jiezi, 1110-11.

³⁰⁹ Erya, 320.

³¹⁰ He simply states that the source, the commentary to the EY compiled by Sun Yan 孫炎 (220 – 265), is lost (*shi zhi* 失之). Ibid.

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Even without the *chong* semantic classifiers, the lexemes are unquestionably the same of the EY and they point to the same invertebrate.

4.1.27 蟠,鼠負。

The woodlouse *fan* (*[b]ar +) is glossed as *shufu* (*[l]a?[b]ə?). The first character is widespread among the *loci classici*; however, it is a homograph that has by extension come to mean "to curl", the most significant action of some species of woodlice³¹¹. Its modern pronunciation is also different: *pan* vs the original *fan*, as well as its phonetical reconstruction (*[b]bar vs *[b]ə?). GP describes the invertebrate as an animal that stays under jars and vases (*weng qi di chong* 甕器底蟲) and XB states that it is identical to another creature that will be analysed later in the chapter, the *yinvei* 蛜威 (*?ij?uj, see gloss 4.1.40).

The SW gloss corroborates the thesis that *fan* was the original meaning of the homograph verb *pan*, since it quotes directly the EY, although with a slightly different character:

"(The character) fan (stands for) the shufu" 蟠: 鼠婦也。

The phonetical reconstructions of both *fu* and *fu* are identical and the two characters are written interchangeably as it is explicated by DYC (*fu you zuo fu* 負又作婦); he also adds that these invertebrates are born thanks to the humidity and that in Suzhou are called "sole animals" *xiedi chong* 鞵底蟲³¹².

Having said that, this could be considered a behavioural gloss since the woodlouse is an animal usually found in the dirt and in "mouse holes",³¹³ and it could have been labelled as the "mouse wife" (*shu fu* 鼠婦) or the "mouse borne" (*shu fu* 鼠負).

³¹¹ Li Xueqin 2012, 1162.

³¹² Shuowen jiezi, 1115.

³¹³ Tao Hongjing 陶弘景 (456 – 536) in his *Bencao jing jizhu* 本草經集注 [*Collected Commentaries to the Materia Medica*] will write that "Many (woodlice) dwell inside mouse holes, they are carried on the back of mice." 多在 鼠坎中, 鼠背負之。

4.1.28 蟫,白魚。

The silverfish *yin* (*nr[ə]m or nrr[o]m³¹⁴) is glossed as *báiyú* (*bbrak[rŋ]a) "whitefish", a descriptive name very similar to its modern English translation. Both GP and XB identify a specific kind of invertebrate that lives inside clothes and manuscripts (*yi shu zhong chong* 衣 書中蟲) and presumably eats them. Its shape is probably similar to a fish, since there are multiple names with the character *yu* that describes it³¹⁵.

The SW gloss is identical to the EY, as well as DYC comment follows the ones by GP and XB:

(The character) *yin* (stands for) the "white fish" [Commentary by DYC] Nowadays, it is the white animal that dwells in clothes and books, (its body) leaves a powder that looks like silver. Another name is

bingyu.

蟫: 白魚也【注】今衣、書中白蟲有粉如銀者是也。一名蛃魚。

This description is validated in the EYY:

"At its birth, the silverfish is yellow, but as soon as it grows up, its body leaves a powder. When it is looked upon, it seems silver, therefore (the silverfish) is called 'white fish'."

蟫,始則黃色,既老則身有粉,視之如銀,故曰白魚。316

The only *locus classicus* where the character *yin* appears is the CC, although the commentary by Wang Yi 王逸 (89 – 158) suggests another meaning for the disyllable *yinyin* 蟫蟫, as well as another reading, i.e. *xunxun*³¹⁷.

4.1.29 登,羅。

The silkworm moth é 蛰 (*ŋŋaj) is glossed as luó 羅 (*rraj), but there are also two graphic alternatives for the first character: it can be also written é 蛾 or é 蝨. This gloss could

³¹⁴ GP says that the character *yin* has to be read as *yin* 淫 (MC yim), however LDM in the JDSW points out that it could be read with another *fangie* combination t[n] (MC du) [n]an (MC nom) fan 徒南反, i.e. tan (MC dom). The phonetical reconstructions of these two different readings of the same character lead us to two very similar results, namely *nr[ə]m for *yin* and nrr[o]m for *tan*.

³¹⁵ GP writes that "another name is *bingyu" yi ming bingyu* 一名蛃魚 *Erya*: 320. There are several other synonyms that compare the invertebrate *yin* with fish. To cite some of them, *yiyu* 衣魚 [clothes fish] (Wang Niansun 王 念孫 (1744 – 1832), *Guangya shuzheng* 廣雅疏證 [Certified sub-commentary to the Guangya]), *duyu* 蠹魚 [gnawing fish], *biyu* 壁魚 [wall fish] (Su Song 蘇頌 (1020 – 1101), *Tujing bencao* 圖經本草 [Illustrated Treatise on Materia Medica]). See HYDZD, 3035.

³¹⁶ *Erya yi*, vol. 24, 9.

³¹⁷ Wang Yi writes: "(The attitude) *xunxun* is a behaviour where one mutually follows the other." *xunxun, xiang sui zhi mao* 蟫蟫, 相隨之貌。Therefore, it has nothing to do with the invertebrate *yin. Chuci*: 302.

be a paronomastic one, since the two characters belong to the same rhyme group (ge bu 歌 部) and their reconstructions have consequently the same coda (a pharingalised consonant followed by *aj): the linguistic pun here could have been to identify the animal that produces silk (silk net is the principal meaning of luo^{318}), that is the silkworm moth. Moreover, it is not attested elsewhere that *luo* can be simply a synonym for *e*, so they have to be connected via a different relationship.

GP simply states that this insect is the *can'e* 蠶蝥 (*C.[dz]z[ə]mŋŋaj), while XB explicates that the term *e* indicates the final transformation of a silkworm chrysalis:

"This is just the thing in which a silkworm chrysalis turns into."

此即蠶蛹所變者也。319

On the other hand, Xu Shen quotes directly the gloss from the EY:

"(The character) e (stands for) a silk net (luo)."

蛾:羅也。320

DYC does not follow the exegesis by GP and XB, stating that e 蛾 is the correct script (*zheng* zi 正字) for *yi* 蟻 [ant], being the latter an alternative form (*huo ti* 或體)³²¹. A similar issue is retrievable in the SHJ³²². This is probably due to the fact that there is another gloss in the SW that describes the silkworm moth, albeit with one of the aforementioned graphic alternatives:

"(The character) e (stands for) a silkworm that turns into a flying moth."

蠽: 蠶匕(化)飛蠽³²³

The presence of this character in the *loci classici* is massive, some of the most representative examples are the ones from SJ, ode n°57 *Shuo ren*, where the moth *e* is used as a metaphor for a pair of beautiful eyebrows (see gloss 4.1.4)³²⁴; in the LZ where the term *e* is

³¹⁸ Le Grand Ricci: Filet d'oiseleur. Prendre au filet; HYDZD: 3124, bu niao de wang 捕鳥的網 [A net for catching birds].

³¹⁹ Erya: 321.

³²⁰ Shuowen jiezi, 1112.

³²¹ "Ancient texts that gloss 'e' [silkworm moth] as 'pifu' [ant] are many. 'E' is the correct script, while 'y' [ant] is an alternative form." 古書說蛾爲蠽蠹者多矣。蛾是正字, 蟻是或體。 Shuomen jiezi, 1112.

³²² However, Fracasso prefers to translate it as "moths": 大蠭其狀如螽。朱蛾其狀如蛾。 [Giant bees are like grasshoppers; red moths are like moths.] *Shanhaijing*, 178. Trans. by Fracasso 1996 (footnote 218). ³²³ *Shuowen jiezi*, 1125.

³²⁴ Shijing, 263 trans. by Karlgren 1950, 38.

used in contraposition to *chong* as an independent animal category in the same way *qin* and *shou* are juxtaposed:

"For the last thing, they gathered animals, birds and every genus of insect."

末聚禽獸蟲蛾。325

In the DDLJ and the HNZ, where there is a similar passage in which creatures are listed by their alimentation and the silkworm moth is the creature that eats leaves *par excellence*:

"Those (creatures) that feed on water excel at swimming and are able to withstand cold. Those that feed on earth do not have minds but are sensitive (DDLJ and do not breath). Those that feed on wood are very powerful and are fierce (DDLJ and are helpful). Those that feed on grass excel at running but are stupid. Those that feed on (DDLJ mulberry) leaves produce silk and turn into moths. Those that feed on flesh are brave and daring but are cruel (DDLJ and are defensive). Those that feed on *qi* (attain) spirit illumination and are long-lived. Those that feed on grain are knowledgeable and clever but short-lived (DDLJ and are skilful). Those that do not feed on anything do not die and are spirits."

HNZ 食水者善遊能寒,食土者無心而<mark>慧</mark>,食木者多力而<mark>奰</mark>,食草者善走而愚,食<mark>葉</mark>者有絲而蛾, 食肉者勇敢而<mark>悍</mark>,食氣者神明而壽,食穀者知慧而<mark>夭</mark>。不食者不死而神。

DDLJ 食水者善游能寒,食土者無心而<mark>不息</mark>,食木者多力而<mark>拂</mark>;食草者善走而愚,食<mark>桑</mark>者有絲而 蛾,食肉者勇敢而<mark>捍</mark>,食穀者智惠而<mark>巧</mark>,食氣者神明而壽,不食者不死而神。³²⁶

In the XZ, chapter fu \notla ("Rhapsody"), there is a long riddle where the silkworm, the solution of the enigma, is considered the mother of the chrysalis and the father of the moth:

"For pupae, this thing acts as a mother, And for moths, the role of father it plays."

蛹以為母, 蛾以為父。327

A final reference is the LH, where the moth lifecycle is presented again:

"The silkworm feeds on mulberry leaves, when it grows old, it sets to spinning, and becomes a cocoon, and the cocoon again is changed into a moth. The moth has two wings, and in its altered form widely differs from the silkworm."

³²⁵ Liezi, 76-81. Trans. by Cadonna 2008. I suspect that the juxtaposition of *chong* and *e* is because the latter is a flying animal. In this way the disyllable *chong'e* (small creatures) becomes a parallel "flying entity/non-flying entity" with *qin-shou* (large creatures).

³²⁶ *Huainanzi*, 161 and *Da Dai Liji*, 259. This passage is almost identical in both works. Trans. by John S. Major, emendments from the DDLJ text by the author.

³²⁷ Xunzi, chapter 26 Fu 賦, 8. Translated by Hutton 2014.

4.1.30 螒, 天雞。

The katydid *han* 螒 (*[g]gars) is glossed as *tianji* 天雞 (*lli̯[n]kke) [celestial fowl]. GP gives us a detailed description of this insect: it is a small animal with a black body and red head and it has two alternative names, both ending with the character *ji* 雞 [fowl], *shaji* 莎雞 (*[s]sojkke or srâikê Sch.) [sedge-grass fowl] and *chuji* 樗雞 (*rakke or thrakê) [ailanthus fowl]. These phonetic reconstructions are somewhat similar and from a semantic point of view they share the same combination of "flora+fauna" character. Remarkably, there is another gloss in the EY, chapter *Shi niao*, that is almost identical to this one with the exception of the semantic classifier of the first character:

"The red-winged pheasant han is (called) 'celestial fowl'."

鶾,天雞。329

Both the characters *han* 翰 and *han* 鶾 can be replaced by the more common *han* 翰 [writing brush] that has the same phonetic reconstruction *[g]gars. However, *Le Grand Ricci* tells us that in BI this character was used with the meaning of "long and prolonged sound of a musical bell"³³⁰; this is probably a linguistic pun making reference to the characteristic of these two animals, one bird and one insect, that might be able to produce persisting cries.

In the SW, the character *han* \hat{P} does not appear, but there is its variant *han* \hat{P} : however, in this case the gloss points directly to the bird *han* \hat{P} rather than the insect, although it also states that the creature has red wings. This could be another characteristic shared by the two animals³³¹.

XB identifies the katydid *han* with the *shaji* of the SJ, ode n°154 *Qi yue* [July], which is the only instance of this gloss in the *loci classici*:

³²⁸ Lunheng: 327 trans. by Forke (1907).

³²⁹ Erya: 343.

³³⁰ "1. [568] Émettre un son prolongé (en parl. d'une cloche musicale)" *Le Grand Ricci*. See also Li Xueqin 2012, 294.

³³¹ 翰: 天雞赤羽也。[(The character) *han* (stands for) the 'celestial fowl' with red wings.] DYC also supports the thesis that this *han* is the one in the *Shi niao* chapter of the EY: 《釋鳥》鶾, 天雞。鶾本又作翰。[...] 天雞, 樊光云一名山雞。[The *Shi niao* (chapter of the EY says that) *han* is the 'celestial fowl'. *Han* was also originally written as *han*. (Regarding the name) 'celestial fowl', Fan Guang says that another name is 'mountain fowl', i.e. pheasant.] *Shuowen jiezi*, 244.

"In the sixth month the grasshopper shakes its wings"

六月莎雞振羽。332

Lu Ji in his MSCMNSCYS states that "it is like a locust, but striped, has red wings and in the month of June it flies and shakes its wings." ³³³, validating that the *han* and the *shaji* are the same invertebrate.

4.1.31 傅, 負版。

The animal *fu* 傅 (*p(r)a(?)s) is glossed as *fuban* 負版 (*[b]ə?ppran?). GP states that this gloss is unclear (*wei xiang* 未詳) and XB does not add anything to its description. If we check the SW, the character *fu* 傅 [assistant] is identified as *xiang* 相 [to assist] and it is glossed in a paronomastic manner as *fu* 扶 [to sustain] in the *Shiming*³³⁴. The expression *fuban*, in addition to being a common disyllable from a phonetic point of view (see gloss 4.1.2 and 4.1.21), means literally "to carry tablets/registers" and it is used in this sense in the LY:

"If he saw a person in mourning, he bowed from the crossbar of his carriage, and he would likewise bow from his carriage to a person carrying population registers." 凶服者式之。式負版者。³³⁵

Therefore, successive commentators like HYX hypothesised that this animal could be

identified as the *fuban* 蝜蝂, a legendary insect immortalised in a Tang period composition by Liu Zongyuan 柳宗元 (773 – 819) named "Biography of the *fuban*" (*fuban zhuan* 蝜蝂傳). HYX writes this description:

"(It has) a black body, it is restless by natural disposition and its back is uneven and irregular. Therefore, it can bear things (on its back) but it cannot discharge them. Nevertheless, its name (*fuban*) is not heard

anymore today."

黑身,為性躁急,背有齟齬,故能負不能釋。但其名今未聞。336

The last sentence might indicate that this kind of insect was indeed considered a legendary one and not a real species. The disyllable *fuban* is acknowledged nowadays as the larva of some species of lacewing³³⁷.

³³² *Shijing*, 587. Trans. by Karlgren 1950, 98.

³³³ 如蝗而斑色, [...] 其翅正赤, 六月中飛而振羽 Maoshi cao mu niao shou chong yu shu, 57-58.

³³⁴ Shiming: 52.

³³⁵ Lunyu, 155. Trans. by Watson 2007, 69.

³³⁶ Erya yishu, 1180.

³³⁷ HYDZD, 3058.

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4.1.32强, 釿。

The rice weevil *qiang* 强 (*nkaŋ) is glossed as *qi* 釿 (*[G]ər). GP simply states that this animal *qiang* belongs to the category of "strokers" that will be analysed in one of the next glosses (4.1.52). XB recalls GP classification saying that since "it likes to stroke and rub itself, it is probably a kind of fly"; ³³⁸ while it is noteworthy that here we can find a first classification of invertebrates by their behaviour, the last sentence is in contradiction with the original EY taxonomisation since flies (and invertebrates akin to flies) belong to a different category (see gloss 4.1.52). The *Yupian* 玉篇 also affirms that *qiang* is "a small animal that is harmful to rice"³³⁹.

The SW has two tautological glosses stating that the character *qiang* represents the invertebrate *qi* and the character *qi* represents the invertebrate *qiang*. DYC points to GP commentary, adding however that this animal uses its legs to rub itself. He also states that these two characters belongs to the category of the so-called "reverse and refocused" graphs (*zhuan zhu* 轉注), although in this case it could just indicate the aforementioned tautological gloss³⁴⁰.

³³⁸ Hao zi mo lü zhe, gai ying lei 好自摩捋者, 蓋蠅類。 Erya, 321.

³³⁹ Qiang mi zhong du xiao chong 強米中蠹小蟲。 Erya yishu, 1180.

³⁴⁰ 強: 蚚也。蚚: 強也。【注】二字爲轉注。《釋蟲》曰: 強, 醜捋。郭曰: 以腳自摩捋。[(The character) *qiang* (stands for the) weevil *qi*. (The character) *qi* (stands for the) weevil *qiang*. (Commentary by DYC) These two characters are reversed and refocused. The "Glosses on invertebrate" chapter of the *Erya* says: "The rice weevil belongs to the category of strokers". Guo Pu says: "it uses its legs to rub and stroke itself".] *Shuonen jiezi*, 1111. Li Xueqin 2012, 1159 says that *qiang* is a "giving form to a sound" character (*xing sheng* 形聲). See also Boltz 2017, 5.

While *qiang* is a fairly common character, its principal meaning is not "rice weevil", but the adjective "strong" in contraposition to "weak" (*ruo* 弱 *newk): this might be related to the fact that there were multiple characters read *qiang* during the Warring States period that were "unified" under the same seal script. The original meaning is now preserved in the SZP script character *qiang* 鑷 (upper right in the following image). DYC confirms this hypothesis saying that *qiang* 强 [rice weevil] became a lent form (*jia jie* 假借) in order to represent the original character *qiang* 彊 [strong, stubborn]³⁴¹.



Image 16 Evolution of the character qiang. Li Xueqin 2012, 1159.

4.1.33 蛶, 螪何。

This is another controversial gloss, both from a semantic and a graphic point of view. The first character is written differently in the EY and the SW, although it refers to the same animal: in the EY it is *jie* or *lie* 锊 (*[r]rot³⁴²) while in the SW it is written as *fu* 蜉, but it is probably a transcription error since DYC's commentary uses the *lie* character³⁴³. The EY and

³⁴¹ 蠶: 籀文強。【注】據此則強者古文。秦刻石文用"強",是用古文爲小篆也。然以"強"爲"彊" 是六叚借也。[(The character) *qiang* 蠶 is the "Scribe Zhou script" form of *qiang* 強. (Commentary by DYC) According to this, the character *qiang* 強 is the old script. In the Qin period stone inscriptions *qiang* 強 was used, this old script character was also used for the small seal script. That being so, the use of *qiang* 強 in order to represent *qiang* 彊 is the application of the sixth script "substituted and lent".] *Shuowen jiezi*, 1111.

³⁴² Although the *Guangyun* 廣韻 presents the readings *lie* (MC ljwet 力輟反) and *luo* (MC lwat 郎括反), the modern pinyin transcription is predominantly written as *jie* (HYDZD and many others). The JDSW also says that the most plausible reading is *luo* (力活反). Both reconstructions of *luo* and *lie* lead to *[r]rot, but I cannot find any evidence for the reading *jie*.

³⁴³ Shuowen jiezi, 1117.

the SW gloss the animal *lie* as the phonetically equivalent *shanghe* 螪何 (EY) or *shanghe* 商何 (SW) (*staŋ[g]gaj). While GP and XB do not add any information about this mysterious gloss (*wei xiang* 未詳), DYC questions the legitimacy of the character *shang*.

"Lu Deming (in his JDSW) says that *shang* (MC syang) is read *shi* (MC syit) + *yang* (MC yang). The "Forest of characters", however, says that it is read *zhi* (MC tsyi)+ *yi* (MC yek) = MC tsjek. In my opinion, the "Forest of characters" is an older text, hence the last reading suggests that the character was originally written as *zhi* (MC tek vs tsjek). Moreover, Xu Shen registered the name as *chihe* (MC syeH, *sk^hes or *lhekh Sch.)."

I personally doubt this interpretation by DYC, firstly because the MC transcription does not match the character *zhi*: a MC tsjek expects a modern *jie* pinyin transcription; secondly, the phonetic reconstructions of *zhi* and *chi* are quite different both in their initials and their *codas*; in addition, the character *zhi* as DYC presents it to us is rare as much as the *shang* character and does not give any further information about the animal *lie*.

The semantic controversy, on the other hand, lies in the interpretation of what kind of animal *lie* or *shanghe* is: while modern dictionaries as HYDZD do not venture to give a precise explanation, there are two distinct hypotheses we can analyse. The first is expressed in HYX and states that the character *he* should be interpreted as *helong* 蚵薑 (*[gg]ajkrroŋ), a kind of lizard retrievable in the *Guangya* and in the *Yupian*, making the *lie* the second non-arthropod animal in the *Shi chong* chapter of the EY. However, the second hypothesis considers *he* 蚵 (*[g]gaj) as *jia* 螢 (*kkraj, see the phonetic assonance) since in the EY there are other phonetic substitution *he* \rightarrow *jia*, the most notable being *qie* 茄 for *he* 苟. In this case, the animal *jie* could be considered another "small black beetle that dwells in proximity of rice" ³⁴⁵. This thesis is somewhat affirmed also in the FY as already pointed out in gloss 4.1.14:

"The *gushi* (*kkalaj) is (also) called *qiangmie* (*nkaŋme[j]?) (Commentary by GP). It is a small black beetle that lives in proximity of rice. To the east of the Yangtze river its name is *jia* (*kkraj)"

姑鑵謂之強蝆。【注】米中小黑甲虫也。江東名之贺。346

Both names might be considered hapax legomena.

³⁴⁴ Ibid.

³⁴⁵ 米中小黑甲蟲。See Hu, and Fang 2004, 350-1.

³⁴⁶ Fangyan, 129.

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4.1.34 魄,蛹。

The chrysalis *gui* 魄(*[k]^wruj +) is glossed as *yong* 蛹 (*loŋ?). GP and XB identify both characters as the silkworm cocoon; the SW has an identical gloss for the *gui* character, but it is slightly different for *yong*:

"(The character) yong is the cocoon that wraps invertebrates."

蛹: 繭蟲也。

While DYC affirms that *yong* is another specific term of the silkworm lifecycle³⁴⁷, the original gloss could instead define a more generic term for the chrysalis that a large number of different insects transforms into before getting to the adult stage.

Nonetheless, both *gui* and *yong* are fairly rare characters in the *loci classici*: the former being considered a *hapax*, and the latter appearing only in the XZ, chapter *fu* \notlack (Rhapsody), where it is used exclusively to describe the chrysalis of the silkworm (see gloss 4.1.29). In the vast majority of EC texts, the term used for "cocoon" is *jian* \notmathbb{m} (*kk[e][n]?). A possible solution, although quite debatable, is given by Sun Yan commentary to the EY, proposed again by the *Piya* and reported by HYX that writes:

"The chrysalis gui is the male, the chrysalis yong is the female."

魄即是雄,蛹即是雌³⁴⁸

4.1.35 蜆, 縊女。

The chrysalis *xian* 蜆 (*n[k]ken?) is glossed as "the hanging woman" *yi nü* (*q[i]ks nra?). A behavioural gloss, the description in GP's commentary explains the meaning of this curious term:

"It is a small and black insect. Its head is red and it delights itself by hanging and staying motionless, therefore it is called 'hanging woman'."

小黑蟲。赤頭喜自經死,故曰縊女。349

³⁴⁷ 許於繭曰蠶衣也,於絲曰蠶所吐也,於蠶曰任絲蟲也,於蠢曰蠶化飛蟲也。蛹之爲物,在成繭 之後, 化蝨之前 [Xu Shen says that the cocoon is the "silkworm's clothes", silk is what the silkworm spits out, the silkworm is the invertebrate in charge of (producing) silk, the moth is what a silkworm transforms into. The object identified by (the character) *yong* is one of these things, it represents (the silkworm) after the production of the cocoon but before the transformation into a moth] *Shuowen jiezi*, 1109. ³⁴⁸ *Erya yishu*, 1181.

³⁴⁹ Erya, 321.

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The SW has an identical gloss and DYC's commentary points directly to the EY and GP commentary. There is no further information about this character and its behavioural gloss in the *loci classici*; HYX describes the chrysalis *xian* in these terms, probably on the basis of his direct observations:

"Nowadays, this insect spits silk in order to wrap itself, from a distance it looks like it is cloaked with a raincoat; it seems like it is hanging in the air but is not really lifeless."

今此蟲吐絲自裹,望如披蓑,形似自懸,而非真死。350

4.1.36 蚍蜉, 大螘, 小者螘。蠪, 朾螘。蟁, 飛螘, 其子蚳。

A fairly long "dimensional gloss", i.e. a gloss that introduces different names for bigger and smaller animals of the same species. It does not follow the structure already found in glosses 4.1.4 and 4.1.21 where different kinds of cicadas and locusts were displayed. Here the main focus is on the size and the attitude of the same kind of insect, the ant. We cannot affirm that the animals presented here are considered different species of ants, but the last instance of the gloss identifies the "child of ants", integrating all the previous information as regarding a single species of invertebrate. A very similar scheme is retrievable in the *Shi chu* chapter of the EY, where the domestic animals are classified mainly by their size (big vs. small) or their age (adult vs. offspring).

It seems that the character yi 螘 (*mqhəj?, with its vernacular variant yi 蟻 *mqh(r)aj? or *ŋəi? Sch.) represents the standard "small ant" in contrast to *pifu* 蚍蜉 (*[b]ij[b](r)u, alliterative), which is glossed as "big ant yi"大螘 (*llatsmqhəj? or *dâsŋəi? Sch.). XB corroborates this hypothesis, stating that "yi is a comprehensive term" (yi tong ming ye 螘通 名也³⁵¹) and by consequence the others are derivative. GP says that the vernacular name for the *pifu* is *mapifu* 馬蚍蜉 (*mmra?[b]ij[b](r)u) "horse-like big ant" which might be the origin of the modern name for "ant" *mayi* 螞蟻 (*mmra?mqh(r)aj?). The SW says that the graphic form *pifu* 蚍蜉 are simplified alternatives to the original alliterative compound (*shuang sheng* 雙聲³⁵²) *pifu* 蠶蠢 (*[b]ij[b](r)u). Nevertheless, this last graphic form is present only in the SW, as the FY reports again the alternative *pifu* from the EY with all the possible regional names:

³⁵⁰ Erya yishu, 1181.

³⁵¹ Erya, 322.

³⁵² Shuowen jiezi, 1128.

"The big ant *pifu*, in the territories between Qi and Lu is called *quxiang* or *quyang* (*k(r)os[d]aŋ? or k(r)o[G]aŋ?), to the west of the territories between Liang and Yi is called *xuanqu* (*[G]G^wi[n]k(r)o), in the regions of Yan is called *yiyang* (*mq^h(r)aj?[G]aŋ?)."

蚍蜉, 齊魯之間謂之蚼蟓, 西南梁益之間謂之玄蚼, 燕謂之蛾蝆。353

By analogy, the gloss continues by stating that "the small ones (*pifu*) are called *yi*". GP makes a reference to the FY saying that small ants in Qi are called *yi*(*yi*)*yang* 蟻(蟻)蛘 (*mq^h(r)aj?[G]aŋ?), however the FY reports that a similar dialectal name is used in Yan and not in Qi. XB confirms this reference. The FY, ultimately, describes the lair in which all of these species live, i.e. the anthill *chi* 抵 (*[d]rij) or *die* 垤 (*[dd]i[t]).³⁵⁴

The next part of the gloss deals with special features of certain kinds of ants rather than their size: the *long* 聾 (*[k]rroŋ) ant is glossed as "rushing ant" *chengyi* 打 螘 (*[d]drəŋmq^həj? or *ttreŋmq^həj?); GP says that it is a mottled big red ant (*chi bo pifu* 赤駁蚍 蜉³⁵⁵), the character *cheng*, although the notes in the SW indicates its reading as *zheng* or *ding* T (*ttreŋ or *tteŋ)³⁵⁶, could be related to the quasi-homophonous *cheng* 赬 (*[tk^h]reŋ), which is glossed in EY, chapter *Shi qi* 釋器 (glosses on objects), as the colour obtained from a double red dyeing³⁵⁷. Nevertheless, DYC commentary to the SW points out another problem of this gloss, stating that it has to be read as "*longzheng* (*[k]rroŋttreŋ), *yi ye* 聾丁, 螘也" [the *longzheng* (or *longding*) is an ant], making the disyllable an alternative name for the simple ant *yi*³⁵⁸.

The gloss on ants continues with the ant *wei* 蟁, that is able to fly (*fei yi* 飛螘). Both this character and a simplified version of it (*wei* 螱, Lu Deming uses it in the JDSW³⁵⁹) are not retrievable in any *locus classicus*, nor in the SW or the FY. GP and XB simply tell us that

³⁵³ Fangyan, 131.

³⁵⁴ Ibid. The first word is clearly related both phonetically and graphically to the character that represents ant larvae *chi* $\mathfrak{K}(*[d]r[ij])$.

³⁵⁵ Erya, 321.

³⁵⁶ Shuowen jiezi, 1112.

³⁵⁷ Zai ran wei zhi cheng 再染謂之赬。 [(The colour obtained) from a second dyeing it is called scarlet red.] Erya, 167.

³⁵⁸ 此當於蠪丁爲逗。各本刪蠪字者,非也。讀《爾雅》者以丁螘爲句,亦非。蠪丁,螘之一名耳。 [At this point (there must be) a punctuation mark after "*longzheng*". All the editions cut off the character *long*, but it is wrong. Readers of the "*Enya*" consider *zhengyi* a word, but it is also wrong. *Longzheng* is simply another name for the small ant *yi*.] *Shuowen jiezi*, 1112.

³⁵⁹ Shiwen, vol. 30, 21.

this kind of ant possesses wings (you chi 有翅). The EYY provides a more detailed description of this flying ant:

"It uses mud in order to build its den, it goes up and down wiggling. When it completes its metamorphosis, wings are born; when it is humid late in the afternoon, it organises itself into a swarm, which soars. It can fly, but not too high."

以泥為房,詰曲而上。往往變化生羽,遇天晏濕,羣隊而出。飛亦不能高。300

The last sentence of this gloss is a reference to ant larvae *chi* 蚔 (*[d]r[ij]), although it is quite ambiguous since it is not clear whether these larvae are those of the ant *yi* or just the ones of the flying ant *wei*. It is likely that this lexeme is a collective name for the larvae of all the species present in this gloss. GP confirms that the larvae *chi* are "the eggs of ants *yi*" (*yi luan* 螘卵), while XB specifies that the creature *chi* is the larva inside the egg (*qi zi zai luan zhe ming chi* 其子在卵者名蛾³⁶¹). XB supports also the SW gloss that says the same thing, namely that *chi* are the larvae and not the eggs (*chi: yi zi ye* 蚔: 螘子也). It also shows two alternative forms of the character, one labelled as a SZP script (*chi shi wen chi* 驫, 籀文蚔) and the other as "ancient script" (*chi gu wen chi* 룑, 古文蚔). ³⁶²

4.1.37次 重, 뙡鼄。 뙡鼄, 鼄蝥。 土뙡鼄。 草뙡鼄。

The next few glosses might be considered "environmental glosses" since they present animals that are very similar, but that live in different environments; in the case of invertebrates, the most prominent contrast is ground versus wood.

This gloss presents some different synonyms that refers to spiders. The first three names indicate the same kind of animals, they differ because, while *cìqiū* 次蟗 (*[sn]i[j]sts^hiw) seems to be a general term, *zhīzhū* 鼅鼄 (*tretro) and *zhūwú* 鼄蝥 (*tromro +) are respectively a topolectal term of the regions to the east of the Central Plains (comprehending Zhao, Wei and their countryside) and a topolectal term of the regions to the west of the

³⁶⁰ Erya yi, vol. 27, 4.

³⁶¹ Erya, 322.

³⁶² DYC comments that the different phonetic element in the ancient script character is that the character *di* 氏 (*ttij) and *chen* 辰 (*[d]ər) had a very similar phonetic value, although this does not seem to be the case from the latest reconstructions. 氐聲辰聲相似。*Shuowen jiezi*, 1113.

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Central Plains (comprehending the territories between Qin and Jin). This information is retrievable both in the GP commentary³⁶³ and in the FY:

"To the west of the Central Plains, in the territories between Qin and Jin, it is called *zhunn*. To the east of the Central Plains, in the countryside of Zhao and Wei, it is called *zhizhu*. Some other people call it *zhunn* (*toklo). *Zhunn* is a substitution for the word *zhunn* [dwarf] (*tono). In the territories between northern Yan, the

Korean peninsula and the river Lie, it is called *duyu* (*[dd]ukla)."

自關而西秦晉之間謂之鼄蝥。自關而東趙魏之郊謂之鼅鼄。或謂之蠾蝓。蠾蝓者,侏儒語之轉也。北燕朝鮮洌水之間謂之蝳蜍。³⁶⁴

The first thing that stands out from this gloss are the onomatopoeic suggestions that come from the phonetic reconstructions: two out of the three synonyms expressed by the EY, as well as the other topolectal lexemes indicated by the FY, are linked by a rhythmical disyllabic structure that can represent more a sound than a physical image. The distinctions between all of these binomial words are related to the different dialects and pronunciations, but we can ascertain that they follow a pattern:

Linguistic Range	Phonetic reconstruction	
Qin – Jin	tromro (alliteration+rhyme)	
Zhao – Wei	tretro (alliteration)	
Alternative Zhao – Wei	<mark>toklo</mark> (reference+rhythm)	
Reference to a quasi-homophone	tono (reference+rhythm+rhyme)	
Northern Yan – Korea	[dd]ukla (reference+rhythm)	

The SW partially corroborates this thesis since DYC explicitly says that *zhizhu* is an alliterative compound (*shuang sheng* 雙聲) and that *zhuwu* is a rhyming compound (*die yun* 疊韻).³⁶⁵ Moreover, DYC points to another gloss in the SW with some relationship with the arachnid world:

"The spider zhuomao (*[t]otm(r)u) weaves cobwebs, it is (also known as) zhuwu."

蠿蟊,作罔鼄蟊(蝥)也。

This disyllable *zhuomao* is evidently linked to the commentary of GP where he adds that "to the east of the Yangtze river it is called *zhuowu* $ext{BB}$ (*[t]otmro +)". It is basically the same definition with minor phonetic and graphic variations.

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³⁶³ Erya, 322.

³⁶⁴ Fangyan, 132-3.

³⁶⁵ Shuowen jiezi, 1134.

The last part of the gloss simply indicates that spiders can be divided into "ground spiders" and "grass spiders". The difference, as XB points out, lies in where they decide to weave their cobweb:

"For the ones with their cobwebs set out in the middle of the ground, the name is 'ground spider'. For the ones with their cobwebs woven as nets and curtains on the grass, the name is 'grass spider'."

其在地中布網者名土鼅鼄。其作網絡幕草上著名草鼅鼄。366

The only *locus classicus* in which the alliterative compound *zhizhu* appears is the LH, a slightly later text if compared with all the others³⁶⁷. It seems that *zhunu* was instead the more ancient compound used to refer to spiders since it is retrievable in earlier texts, such as the *Xin shu* 新書 (New Documents) by Jia Yi 賈誼 (200 – 168 BCE) or the *Lüshi Chunqiu* (Annals of Lord Lü)³⁶⁸.

Finally, in regard to the graphic rendition of the characters related to spiders, it is noteworthy that their semantic classifier is not *chong*, but *meng* 黽 (*mmrəŋ?) [frog or toad].



Image 17 Evolution of the character zhu. Li Xueqin 2012, 1174

There are different hypotheses, including one advanced by DYC saying that the body of a spider does not resemble the one of a simple *chong*, it is larger especially in the abdomen, like a frog. ³⁶⁹ Another hypothesis considers *meng* as a semantic classifier for bigger *chong* able to predate on other *chong*. My opinion is that the OBC script for *zhu* (the older character) is more similar to a "character representing a form" (*xiang xing* 象形) rather than a "character representing a sound" (*xing sheng* 形聲).

³⁶⁶ Erya, 322.

³⁶⁷ 蜘蛛結網, 蜚蟲過之, 或脫或獲。 [When the spider has woven its web, some of the flying insects pass it unharmed, others are caught.] *Lunheng*, 152, trans. by Forke 1907.

³⁶⁸ 昔蛛蝥作網罟,今之人學紓。[In the past, the spider invented the net, men of today have learned to use it]. *Lüshi Chunqiu*, 237. Jia Yi entirely quotes this same passage.

³⁶⁹ 亦蟲之大腹者也。故从黽 Shuowen jiezi, 1134.

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4.1.38 土蠭,木蠭

This gloss follows the last part of the previous one, briefly stating that there are "earth wasps" *tufeng* 土蠭 (*tt^ha?p^h(r)oŋ) and "tree wasps" *mufeng* 木蠭 (*mmokp^h(r)oŋ). GP says that the former are quite large wasps; they dig holes in the ground in order to establish their nest and they are cannibals. The "earth wasp" has several regional names such as *mafeng* 馬 蠭 [horse-wasp] (probably a general term), *dafeng* 大蠭 [big wasp] (east of the Yangtze river) or *dan* 蟺 (*[d]an?, in the territories between Jing and Ba). As for the "tree wasp", it is smaller than the "ground wasp"; it builds its nest upon trees and in the same way is a cannibal since it eats its own offspring (*yi shi qi zi* 亦食其子).³⁷⁰

The SW has a gloss that presents *feng* as a single character (DYC says *dan yan* 單言) where it states that the wasp *feng* is a flying insect which stings human beings (*fei chong zhe ren* 飛蟲螫人³⁷¹). DYC affirms that since the "ground wasp" is already cited in another gloss (see : single, 蒲盧, 細要土蠭也。SW:1114), this single-character *feng* might refer to the "tree wasp".

A more insightful gloss on wasps and their similarity is provided by the FY: "The wasp *feng* [here written with an 'old script' variant]. In the territories between Yan and Zhao it is called *mengweng* (*mmoŋqqoŋ, probably a rhyming compound). A smaller species is called *yeweng* (*qqikqqoŋ, probably a an alliterative compound), some other people calls it *yonyne* (*[?](r)iwlot +). A bigger species that

produces honey is called *hufeng* (*[g]g(w)ap^h(r)oŋ) [flask wasp]."

蠢。燕趙之間謂之蠓螉。其小者謂之蠾螉,或謂之蚴蛻。其大而蜜謂之壺蠭。372

If we exclude the copious presence of the alternative character *feng* 蜂, used prevalently together with the character *chai* 蠆 (*mərra[t]s, a kind of scorpion) as a collective term for venomous invertebrates, the graphic variant *feng* 蠭 is limited to the "literature of dictionaries" and it is not retrievable in the *loci classici*.

4.1.39 蟦, 蠐螬。蝤蠐, 蝎。

This gloss, although without explicit references, follows the pattern of the previous ones and lists the difference of terminology between similar animals that live in different

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³⁷⁰ Erya, 322.

³⁷¹ Shuowen jiezi, 1126.

³⁷² Fangyan, 130.

habitats. The first invertebrate involved is the grub *fei* 蟦 (*[b][u]ts +) which is glossed as *qicao* 蠐螬 (*[dz]zəjntssu), the second is the woodworm *qiuqi* 蝤蠐 (*[dz]u[dz]zəj, probably an alliterative compound) that is glossed as *hé* 䗶 (*[g]gat, see gloss 4.1.6). GP says that the character *he* is a general term (*tong ming* 通名) that identifies the larvae of certain beetles, but that there are some differences between these two groups of glossed names (*suo zai yi* 所在 異): the first kind of larvae (*fen - qicao*) lives on the ground or inside manure (*zai fen tu zhong* 在糞土中), while the second one (*he - qiuqi*) lives inside wood (*zai mu zhong* 在木中). As we can see, the juxtaposition between the ground (*tu* ±) and the grass/trees (*mu* 木) is once again retrievable.

The SW has three separate glosses related to these invertebrates that more or less identify two different species:

"(The character) *qiu* (stands for) the wood grub *qiuqi*. (The character) *qi* (stands for) the ground grub *qiuao*. (The character) *he* (stands for) the wood grub *qiuqi*."



The FY also present a quite complex gloss on the grubs, with their regional names, which, surprisingly, are mutually understandable:

"The grub *cicao* (*tshəjntssu, *ci*/tshəj + substitutes *qi*/[dz]zəj in the FY. The two reconstructions are plausibly overlapping) is called *fei* (*[b][u]ts +). To the east of the Central Plains is called *qiuci* (*[dz]utshəj), some other people call it *juanzhu* (*[k]ro[n]stok), others *xuanhu* (*q^{wh}ar[g]gok +). Between the territories of Liang and Yi, it is called *ge* (*kkrak), some people call it *he* (*[g]gat), others *zhige* (*tlitkkrak). Between the territories of Qin and Jin it is called *du* (*ttaks), some other people call it *tianlou* (*lli[n[r]o]). Although (this term) is identified in every place with a different word, it is (equally) understood."

<mark>蠀螬</mark>謂之<mark>蟦</mark>。自關而東謂之<mark>蝤蠀</mark>,或謂之蛬蠾,或謂之蝖毂。梁益之間謂之蛒,或謂之<mark>蝎</mark>,或謂 之蛭蛒。秦晉之間謂之蠹,或謂之天螻。四方異語而通者也。³⁷³

The curious thing is that from the FY point of view; the ground grub is a common term and the regional lexemes that refer to it also indicate the wood grub. There are two hypotheses: either the comparison between earth and wood does not exist in the FY, or simply the two

³⁷³ Fangyan, 131-2.

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"environmental glosses" do not separate different species, but members of the same species that live in different habitats.

The *loci classici* in which one or more of these terms appears are the SJ, ode n°57 *Shuoren (ling ru qiuqi* 領如蝤蠐 [her neck is like the tree-grub])³⁷⁴, the obscure passage in the ZhZ quoted also by the LZ (*wu zu zhi gen wei qicao* 烏足之根為蠐螬 [The roots of Crow's Feet turn into maggots] or [The buttercup roots become the insects of plants]³⁷⁵). A passage that illustrates the lifecycle of these invertebrates, although it makes turn grubs into cicadas and not beetles, is from the LH:

"Grubs change into chrysalises, and these turn into crickets (ed. cicadas). The crickets (ed. cicadas) are born with two wings and are not of the same type as grubs."

· 蠐螬化為復育,復育轉而為蟬,蟬生兩翼,不類蠐螬。376

4.1.40 蛜威,委黍。

The woodlouse *yiwei* 蛜威 (*?ij?uj, alliterative and rhyming compound) is glossed as *weishu* 委黍 (*q(r)ojst^ha?). While it seems that *yiwei* is indeed another name for the woodlouse *shufu* 鼠婦, GP says that it is an old usage of this lexeme (*jiu shuo* 舊說), and that he is not certain about the actual meaning of this term (*wei xiang* 未詳). ³⁷⁷ However, the SW comes in helpful by unifying the glosses n°27 and n°40 of the *Shi chong* chapter:

"(The character) yi (stands for) the woodlouse yinei, (which is also known as) weishu. The weishu is the woodlouse shufu."

蛜: 蛜威, 委黍。 委黍, 鼠婦也。

The commentary by DYC questions the doubts of GP, but eventually opts for a distinction between *yiwei* and *shufu*: since *yiwei* is considered both an alliterative and a rhyming compound, it might refer to an animal similar but not identical to the woodlouse, but whose form or sound resembles the phonetics *?ij?uj, that could represent a rolling or a wiggling noise. DYC identifies it as the wingless cockroach *dibiechong* 地鼈蟲, which externally looks like a

³⁷⁴ Shijing, 262 trans. by Karlgren 1950, 38.

³⁷⁵ Zhuangzi, 144 trans. by Watson 2013 and Liezi, 13 trans. by Cadonna 2008.

³⁷⁶ Lunheng, 327 trans. by Forke 1907.

³⁷⁷ 舊說鼠歸別名。然所未詳。[In the past it was considered as an alternate name for the woodlouse *shufu*. However, this is unclear (to me).] *Enya*, 323.

woodlouse, but it certainly is a completely different animal (the woodlouse is a crustacean, while the cockroach is an insect). ³⁷⁸

The *locus classicus* in which we can find the *yiwei* (written without semantic classifiers) is the SJ, ode n°156 *Dong shan* [Eastern Mountains]:

"the sowbug is in the chamber, the spider is in the door."

伊威在室、蠨蛸在戶。379

4.1.41 蟰蛸,長踦。

The small spider *xiaoshao* (*ssiwsrew, probably both an alliterative and a rhyme compound) is described as "having a single long leg" (*chang qi*, *əntraŋ[k]^h(r)a[j] +, not properly a behavioural gloss, rather a "descriptive" one). GP specifies that it is a small spider with long legs, and that its vernacular name is "joyful son" *xizi* 喜子 (*q^h(r)ə?tsə?, rhyming compound). The SW goes along with this, with the exception that Xu Shen states that it is a small spider with an elongated abdomen and not legs (*chang gu zhe* 長股者). ³⁸⁰

The *locus classicus* where it is possible to retrieve this animal is once again the ode n°156 of the SJ (see gloss 4.1.40). The most comprehensive description of this small spider is compiled by Lu Ji in his MSCMNSCYS:

"The xiaoshao, one of its names is 'long-legs' chang jiao (*ontran [k]ak), within from the boundaries of the

Yellow River towards the region of Jing, people call it 'joyful mother' xi mu (*qh(r)? m?, again a rhyming

compound). This invertebrate comes onto people's clothes: when there is a welcome guest, it arrives and brings joy. People of the regions of You calls it 'the welcome guest' *qin ke* (*[ts^h]i[n] kk^hrak). Moreover, like a spider, it weaves a cobweb to create a net-like nest."

蠨蛸,一名長腳,荊州河內人謂之喜母。此蟲來著人衣,當有親客至有喜也。幽州人謂之親客。 亦如蜘蛛為網羅居之。³⁸¹

³⁷⁸ 釋蟲以蟠鼠婦與伊威委黍畫爲二條,不言一物。蛜威即今之地鼈蟲與鼠婦異物。 [The *Shi chong* chapter of the EY considers the woodlouse *pan/shufu* and *yinei/meishu* as two separate instances; they are not words for one entity. Nowadays, the *yinei* is the wingless cockroach *dibiechong*, which is an entity distinct from a woodlouse *shufu*.] *Shuowen jiezi*, 1115.

³⁷⁹ *Shijing*, 611-12. The Mao version, the Zheng Xuan annotation and the Kong Yingda commentary and Lu Ji sub-commentary (*Maoshi Cao Mu Niao Shou Chong Yu Shu*) agree on considering *yinvei* as a woodlouse *shufu*, hence the trans. by Karlgren 1950, 101.

³⁸⁰ Shuowen jiezi, 1117.

³⁸¹ Maoshi Cao Mu Niao Shou Chong Yu Shu, 61-2.

4.1.42 蛭蝚,至掌。

The leech *zhirou* 蛭蝚 (*ti[t]snu) is gloss as "palm-reacher" *zhizhang* 至掌 (*ti[t]s[k.t]aŋ?), another descriptive gloss, although less clear than the previous one. GP says that this gloss is "unclear" (*wei xiang* 未詳) and does not add anything³⁸². The SW presents an identical passage so we need to analyse the DYC commentary to understand that this disyllable is an alternative medicinal name for the leech (*shi ming yi wei ji shuizhi ye* 是名醫謂 即水蛭也).³⁸³The character *zhi* is also glossed in 4.2.26.

There is no other reference to this compound in *loci classici*, so it is possible to say that both the name and the descriptive gloss are *hapax legomena*. It is noteworthy that the leech is an animal that will be glossed also in the *Shi yu* chapter. It is difficult to hypothesise why it was also placed in the *Shi chong* chapter. Since DYC states that *zhirou* is only used in medicine, I can cautiously conclude that in this context a leech is not in its natural environment (water) and does not assume its "aquatic status". Of course, this is merely my speculation regarding this gloss.

4.1.43 國貉,蟲蠁。

The larva guohe 國貉 (*[q]q^wək[g]gawk, surprisingly it seems that this compound is neither alliterative nor rhyming) is glossed as *chong xiang* 蟲蠁 (*lruŋ q^haŋ?). GP and XB say that both names refer to a generic "insect chrysalis" *yong chong* 蛹蟲 (*loŋ?lruŋ) also known with the vernacular name *xiang* 蠁 (*q^haŋ? or haŋ? Sch.)³⁸⁴.

The SW has a different gloss concerning *xiang* (the other elements of this gloss do not appear in the SW), saying that it is an invertebrate that recognises sounds (*zhi sheng chong ye* 知聲蟲也)³⁸⁵. DYC points to the GY, which simply adds that the *xiang chong* 蠁蟲 (*q^haŋ? lruŋ, with reversed characters compared to the EY *chong xiang*) is a "ground chrysalis" *tu yong* 土蛹 (*tt^ha?loŋ)³⁸⁶.

³⁸² Erya, 323.

³⁸³ Shuowen jiezi, 1110. ³⁸⁴ Erya, 323-4.

³⁸⁵ Shuowen jiezi, 1108.

³⁸⁶ *Guangya*, vol. 10, 7.

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4.1.44 蠖, 蚇蠖。

This is a tautological gloss concerning the moth caterpillar *huo* 蠖 (*qq^wak) or *chihuo* 蚇蠖 (*t^hakqq^wak, rhyming compound). GP says that nowadays it is known with a disyllable *jizu* 蝍蛾 (*tsiktsruk +, alliterative), retrievable only in the FY with an alternative character as *jizu* 蠀蛾 (*tshəjtsruk +, alliterative). This is considered a short gloss for the standards of FY, chapter 11.

In the SW, this caterpillar is rendered as *chihuo* 尺蠖 (*t^hakqq^wak) and a behavioural gloss on its particular way of moving is then illustrated:

"It is an invertebrate that shrinks and stretches (itself)"

詘申蟲。³⁸⁷

This is also corroborated by the commentary to the FY by GP which states that an alternative name for the *chihuo* is "bending step" *buqu* 步屈 (*məbbas[kʰ]ut).

The *locus classicus* in which this animal is retrievable is the YJ:

"When the looper coils itself up, it thereby straightens itself again; when worms and snakes go into the state of hybernation, they thereby keep themselves alive."

<u>尺蠖</u>之屈,以求信也。龍蛇之蟄,以存身也。³⁸⁸

4.1.45 果贏, 蒲盧。螟蛉, 桑蟲。

The wasp *guoluo* 果贏 (*kkor?rror?, alliterative+rhyming) is glossed as *pulu* 蒲盧 (*[b]ba[r]a, possibly rhyming). GP says that it is a wasp with a thin thorax (*xi yao feng ye* 細署 遙也) and that its vernacular name is *yeweng* 蠮翁 (*qqikqqoŋ, alliterative)³⁸⁹. The SW has the same *pulu* term, but it glosses a character which is quite different but that can be related to *guo*:

"The wasp *guoluo*, known also as *pulu*, has a thin thorax and it is (part of the category of) the 'ground wasps'. Due to natural disposition, it has a thin thorax, there are only males and they cannot have offsprings."

³⁸⁷ Shuowen jiezi, 1112.

³⁸⁸ Yijing, 358 trans. by James Legge.

³⁸⁹ Erya, 324.

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蠣贏,蒲盧,細要土蠭也。天地之性,細要,純雄,無子。

The gloss continues to the second part where the moth 螟蛉 *mingling* (*mmeŋ[r]reŋ, rhyming) is glossed as "the mulberry insect" *sang chong* 桑蟲 (*[s]saŋlruŋ). GP indicates other vernacular names for this creature, i.e. *sangwan* 桑蟃 (*[s]saŋma[n]s +) and *rongnü* 戎女 (*nuŋnra?, alliterative?). The SW presents a different character for *ling* 蠕 (*[r]reŋ), but the gloss is practically identical to the one in the EY.³⁹⁰

The moth *mingling* has a strict relationship with the wasp *guoluo*. In fact, they both appear in the SJ ode n°196 *Xiao wan*:

The mulberry insect has young ones, the solitary wasp carries them on its back

螟蛉有子、蜾蠃負之。391

According to tradition, since the *guoluo* wasp cannot have children, it captures and adopts the ones of the *mingling* moth³⁹². The version of Mao Heng and the annotations of Zheng Xuan continue thus:

"The moth *mingling* is known as the 'mulberry insect'. The wasp *guoluo*, is known as *pulu*. [Annotation by Zheng Xuan] *Pulu* captures the offspring of the 'mulberry insect', it holds them on its back and flies away, raises them with care in order to transform them into its own children."

螟蛉,桑蟲也。蜾蠃,蒲盧也。...【箋】蒲盧取桑蟲之子,負持而去,煦妪養之,以成其子。

4.1.46 蝎,桑蠹。

The grub *he* (*[g]gat), as we have already seen, is a xilofagus larva that lives inside trees. There is no surprise in seeing it glossed also as "vermin of the mulberry" *sang du* (*[s]saŋ[t]aks). GP simply states that *he* is the *jiequ* 蛣蜿 (*[k^h]i[t][k^h]ut) that was already described in gloss 4.1.6.

³⁹⁰ Shuowen jiezi, 1114.

³⁹¹ Shijing, 870 trans. by Karlgren 1950, 144-5.

³⁹² The term *mingling zi* has come to mean "adoptive child", see HYDCD, 949.

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4.1.47 熒火, 即炤。

The firefly *yinghuo* 熧火 ([n]qq^weŋq[q^{wh}]əj?, alliterative) is also called *jizhao* 即炤 (*[ts]iktaws, alliterative)³⁹³. GP says that it flies at night and at the end of its abdomen there is a "fire" (*ye fei, fu xia you huo* 夜飛,腹下有火).³⁹⁴ The character is retrievable in the SW, but never as a part of a definition: it just indicates the sound *ying* in many glosses.

While there is no *locus classicus* where we can find one of the two disyllables, there is a passage in the LJ where XB says that there is a hint of the presence of the firefly *yinghuo*:

"Decaying grass becomes fire-flies"

腐草為螢395

The character *ying* is in fact a monosyllabic version of *yinghuo* as the commentary of Zheng Xuan points out (*ying, fei chong, yinghuo ye* 螢, 飛蟲, 螢火也).

4.1.48 密肌,繼英。

GP marks this gloss as unclear (*wei xiang* 未詳), and XB does not provide any further clarification about it. The only instance where it is possible to find the disyllable *miji* 密肌 (*mri[t]krə[j]) "dense flesh" is in the EY chapter *Shi niao* where we have the gloss:

"Miji is jiying"

密肌, 繋英

GP this time takes a steadier position in indicating that "he doubts that it is again an error" (*yi wu chong* 疑誤重). However, Lu Deming in the JDSW points out that *mi* might be the bird *miji* 鶴肌 and that *ying* could be the akin bird *ying* 鶧. By a transitive propriety, if we look for the same characters but with the *chong* semantic classifier instead of the one representing birds (*niao* 鳥), it is possible to discover in the *Yu pian* the animal *jiying* 繼英 (繼英 or 蠟 蝧) [earwig] (*[k]k[e]s?raŋ) that could fit very well in the *Shi chong* gloss, albeit not present in any *locus classicus*.

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³⁹³ Both GP and XB consider the word $ji \square$ as part of the glossed name, and not the adverbial connector interpretable as "precisely".

³⁹⁴ Erya, 324.

³⁹⁵ Liji, 594. Translation by James Legge.

4.1.49 蚅, 烏蠋。

The caterpillar e 蚅 (*qqr[i]k) is glossed as *wuzhu* 烏蠋(*qqatok). GP says that this larva is similar to a silkworm, but it is bigger, as long as a human finger (*da chong, ru zhi, si can* 大蟲, 如指, 似蠶).³⁹⁶ This character is quite rare and does not appear in the SW text and to my knowledge is considered a *hapax* (see gloss 4.2.29).

4.1.50蠓,蠛蠓。

The midge *meng* 蠓 (*mmoŋ? +) is presented as *miemeng* 蠛蠓 (*mmetmmoŋ?, alliterative) in a tautological gloss. GP states that it is a small insect, similar to the gnat *rui* 蚋 (*nots Sch.) that enjoys flying chaotically in swarms (*xiao chong, si rui, xi fei luan* 小蟲, 似蚋, 喜飛亂)³⁹⁷. The SW reports a double tautological gloss. Surprisingly one is quite far away from the other in the text³⁹⁸:

"(The character) meng (stands for) the midge miemeng. (The character) mie (stands for) the midge miemeng, it is a thin insect."

蠓: 蠛蠓也。蠛: 蠛蠓, 細蟲也。399

There is one *locus classicus* in which the character *meng* appears, and it is in the LZ, chapter "The questions of Tang" *Tang wen* 湯問:

"In the months of spring and summer, there are midges and gnats that are born when it rains and die when they see the sun."

春夏之月有蠓蚋者,因雨而生,見陽而死。400

4.1.51 王, 蛈蝪。

The hole-dwelling spider *tietang* (*llikllan, alliterative) has the character *wang* [king] (*G^wan) as the first entry in the gloss. It is difficult to establish the meaning of the single character *wang*: it could be a marker of size (see gloss 4.1.13 and 4.2.42) or a miswritten

³⁹⁶ Erya, 324.

³⁹⁷ Erya, 325.

³⁹⁸ The first character analysed in the SW, *chong* section is the character number 8739 of the entire SW corpus. The first gloss about *meng* is at the position 8830 (91st character of this section), while the second one, which is simply reversed but identical, is at the position 8894 (155th character), a distance of 64 glosses. ³⁹⁹ Shuowen jiezi, 1117.

⁴⁰⁰ Liezi, 150-1, trans. by Cadonna 2008.

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character, most probably $tu \pm$ [ground], denoting its belonging to the class of "ground spiders" (gloss 4.1.37)⁴⁰¹. The classic commentators GP and XB seem to ignore this problematic structure and simply note that this arachnid has a more common name *diedang* 螳蟷 (*[t]ri[t]ttaŋ, alliterative and very similar to the pattern of "spider names") and that *tietang* is just the way it is called by people that live north of the Yellow River (*jin he bei ren hu tietang* 今河北人呼蛈蜴⁴⁰²). Another alternative name is given by HYX *diandang* 顛當 (*tti[n]ttaŋ), a term that the author describes as "entirely (composed) by two alliterative characters" (*ju shuangsheng zi ye* 俱雙聲字也⁴⁰³). All the three different disyllables present a similar phonological reconstruction.

Both the terms *tietang* and *diedang* are not retrievable in other *loci classici*, making them two probable *hapax legomena*.

4.1.52 蟓, 桑繭。 健由, 樗繭。 棘繭, 欒繭。 蚢, 蕭繭。

This gloss opens the last part of the *Shi chong* chapter, composed of four "organisational glosses". I use this terminology because the focus of these longer glosses is not to present new species of animals, but rather to organise and sum up the whole *chong* broad category into smaller and more specific sub-categories.

This gloss deals with the names of three different kinds of larvae which turn into a chrysalis (繭 *jian*, *kk[e][n]?) distinguished according to the leaves they eat:

Larva's name	Chrysalis' name	Species of tree
xiang蟓 *s[d]aŋ?	sang jian 桑繭 *[s]saŋ kk[e][n]?	Mulberry tree
chouyou 錐由 *[d]ul[u]	chu jian 樗繭 *ra kk[e][n]?	Ailanthus
	ji jian棘繭 *krək kk[e][n]?	Jujube tree
	<i>luan jian</i> 樂繭 *[m]ərron kk[e][n]?	Goldenrain tree
hang 蚢 *[m][g]gaŋ	xiao jian 蕭繭 *ssiw kk[e][n]?	Mugwort

GP interestingly considers all these three kinds of caterpillars as "of the same species of silkworms" and he uses the word *lei* 類 as a sub-categorising mark (*jie can lei* 皆蠶類).⁴⁰⁴

⁴⁰¹ 王軼暢: 土蜘蛛。 [The royal tietang is a ground spider]. Hu, and Fang 2004, 355.

⁴⁰² Erya, 325.

⁴⁰³ Erya yishu, 1194.

⁴⁰⁴ Erya, 325.

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The names of these three caterpillars (*xiang-chonyou-hang*) are not retrievable in any of the *loci classici*. However, GP and XB identify the first one as the common silkworm (*ji jin can* 即今蠶); on a phonetic reconstruction comparison, *xiang* and *can* seem loosely connected (*s[d]aŋ? vs *[dz]z[ə]m), so I would rather not to conclude that the two terms were interchangeable.

4.1.53 翥醜鏬, 螽醜奮, 强醜捋, 蠭醜螸, 蠅醜扇。

This complex organisational gloss describes and classifies different kinds of invertebrates based on their habits and peculiarities. On an overall view, the five arthropods are indeed very different and so I suppose that they are "representatives" of their genus, if not of their order. It features the character *chou* \mathbb{R} (*tq^hu?) as a post-nominal modifier with the meaning of "belonging to the category of"⁴⁰⁵. It is a sub-categorisation inside the *Shi chong* chapter that roughly subsumes five of the principal types of *chong*. The gloss can be analysed in five parts, one for each *chong*:

- A. The animals belonging to the category of "fliers" zhu 翥 (*tas +) have the ability of "cracking" xia (*qq^hraks, probably an onomatopoeia⁴⁰⁶). GP describes the term xia as "ripping open the back of the mother and then be born" (pou mu bei er sheng 剖母 背面生⁴⁰⁷), a characteristic that helps XB to identify this "fliers" insects with cicadas⁴⁰⁸. The use of zhu as cicada is not common, being the character glossed in other sources simply as the verb "to raise" or "to fly lightly", both the *Shuowen jiezi* and the *Fangyan* agree on that.⁴⁰⁹ On the other hand, in later sources like the *Guangyun*, it is possible to find the character zhu 蠚 with the meaning of cicada, but it is certainly a later amendment in order to avoid confusion.
- B. The animals belonging to the category of locusts *zhong* 螽 (*tuŋ) have the ability of "flapping their wings" *fen* 畜 (*(ə)pə[r]s). The character *zhong* has been thoroughly

⁴⁰⁵ XB says that it is a synonym of *lei* 類. Erya, 326.

⁴⁰⁶ In Ruan Yuan collated version, the character is written differently but with the same sound *xia* 罅 vs *xia* 鏬. See Hu, and Fang 2004, 355.

⁴⁰⁷ Erya, 325.

⁴⁰⁸ Xing Bing writes: *chong lei neng fei zhu wei chan shu* 蟲類能飛翥謂蟬屬。 [It is said that the species of animal that flies lightly are the ones belonging to the cicada category.] *Erya*, 326.

⁴⁰⁹ 翥: 飛舉也。[the graph *zhu* stands for flying and rising] *Shuomen jiezi*, 246; 翥, 舉也。楚謂之翥。["to soar" *zhu* is "to rise up" *ju*. It is said *zhu* in (the territory of) Chu] *Fangyan*, 119.

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examined in gloss 4.1.21, a passage which already presents five different kinds of locusts or at least animals that can be classified as *zhong*. Hence, the use of *zhong* as a hypernym for the locust family is acceptable. GP identifies *fen* as "the attitude to flap wings swiftly to make sounds" (*hao fen xun zuo sheng* 好奮迅作聲⁴¹⁰); this term is retrievable other two times in the *Erya*, both identifying the behaviour of a particularly strong specimen of pheasant (*Shi niao*) and chicken (*Shi chu*), i.e. flapping wings vigorously.⁴¹¹

- C. The animals belonging to the category of weevils *qiang* 强 (*nkaŋ) have the ability of "stroking themselves" *luo* 捋 (*[r]rot). The character *qiang* is described in gloss 4.1.32, XB uses the disyllable *qiang-qin* 强蚚 in order to identify the whole category of weevils. The verb *luo* is explained by GP as "using legs to stroke themselves" (*yi jiao* zi mo luo 以腳自摩捋)⁴¹²
- D. The animals belonging to the category of wasps *feng* 蠭 (*p^h(r)oŋ) have the ability of "hanging their abdomens" *yu* 螸 (*lo). The character *feng* is described in gloss 4.1.38 and the rare character *yu* is identified by GP saying that it means "hanging the lower part of their abdomen" (*chui qi yu* 垂其腴)⁴¹³. This explanation comes from the *Shuowen jiezi*: "the character *yu* stands for the lower and fatty part of the abdomen" (*l*. 股下肥也⁴¹⁴), XB adds that wasps do this in order to rest and breathe⁴¹⁵.
- E. The animals belonging to the category of flies *ying* 蠅 (*mrəŋ) have the ability of "self-ventilating" 扇 *shan* (*[l][a][r]s). This is the first instance of the character *ying*, which has the character *meng* 黽 in its structure not only as a phonetic classifier (*mmrəŋ? vs *mrəŋ), but also as a partial semantic classifier. In fact, the *Shuowen jiezi* glosses *ying* as "a creature with a large belly" (*chong zhi da fu zhe* 蟲之大腹者⁴¹⁶), a feature typical of animals represented by characters with the *meng* semantic classifier

⁴¹⁰ Erya, 325.

⁴¹¹ 雉絕有力, 奮。[A particularly strong specimen of pheasant flaps vigorously its wings]; *Erya*, 354. 未成雞 健。絕有力奮。 [A chicken that has not reach adulthood is called *lian*, a particularly strong specimen flaps its wings] *Erya*, 384.

⁴¹² Erya, 325-6.

⁴¹³ Erya, 326.

⁴¹⁴ Shuowen jiezi, 298.

⁴¹⁶ Shuowen jiezi, 1134.

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(see section 3.2.2). The *Fangyan* presents *ying* in a curious way, by highlighting that this animal is called *ying* both in the south and in the west; the only place where it has a different name (*yang* 羊 *Gaŋ [sheep]) is to the East of Qi⁴¹⁷. The action of *shan* is clarified by XB stating that "(creatures belonging to the) species of flies like using their wings to ventilate themselves"⁴¹⁸. *Ying* is a fairly common character in the *loci classici*; as a title of example, the most important passage in which it is possible to find it is SJ ode n°219 *Qing Ying* 青蠅 [The Green Fly] which title is dedicated to this small insect.

4.1.54 食苗心,螟。食葉,蟘。食節,賊。食根,蟊。

and the grubs from roots and stems; may they not damage the young grain of our fields."

不稂不莠、去其螟螣。

及其蟊賊、無害我田樨。419

This gloss is clearly related to ode n°212 because the second stanza presents all the four invertebrates which, according to the *Erya* compilers, have different preferences regarding their food:

A. The insect *ming* 螟 (*mmeŋ) eats sprouts; the character *ming* is analysed in gloss 4.1.45 where *mingling* is a kind of moth, but there are no hints if the two insects are related. I supposed that *ming* could be the caterpillar of the *mingling*. Lu Ji says that it looks like a larva, with a squared, non-red head (*si zi fang er tou bu chi* 似子方而頭不赤). XB says that is deceiving and it is very hard to see it, hence its name *ming*

[&]quot;There is no *lang* weed (Legge says 'wolf's tail grass'), no *yu* weed (Legge says 'darnel'); we remove the noxious insects from the ears and leaves,

⁴¹⁷ *Fangyan*, 131. GP underlines the fact that nowadays (during Jin dynasty) people in Jiangdong do not have a term for "fly" and continue to call them "sheep".

⁴¹⁸ 青蠅之類好搖翅自扇 Erya, 326.

⁴¹⁹ Shijing, 993 trans. by Karlgren 1950, 166.

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(*mingming* 冥冥 "obscure, in secret")⁴²⁰; it is probably difficult to spot due to the fact that eats the core of the sprouts (*shi miao xin* 食苗心). The SW confirms these data⁴²¹.

- B. The insect *te* 蟘 (*[d]dək) eats leaves; there are at least other two graphic variants of this character, the first one retrievable in the SJ *te* 螣 and the second one in the SW *te* 蟘. The sources tells that its name is due to the fact that they are born when someone contracts a debt; this is evidently a pun on the graphic representation of the character *te* → *qi dai ze sheng te* 气 (乞) 貸則生蟘⁴²². Lu Ji says that it is a sort of locust (*te huang ye* 蟘蝗也).
- C. The insect *zei* (*kdzzək) eats stems; the character is used in a general sense with the meaning of "to harm, to destroy" or "outlaw, bandit" and it is incredibly prominent in the *loci classici*. However, there are no instances of its use as this kind of insect, apart from the SJ. Even the SW has only an instance that reads "the character *zei* stands for decay/destruction/defeat" (*zei bai ye* 賊敗也). The use of *zei* as the name of a harmful insect could simply be a rhetorical figure (synecdoche) that isolate a characteristic of this invertebrate in order to be immediately recognised ("the odious, the destroyer"). XB corroborates this hypothesis saying that this insect is "avaricious and vicious, that is why it is called *zei*" (*tan hen, gu yue zei ye* 貪狠, 故曰賊也). Other information comes from Lu Ji stating that it looks like the grub of the peach and the plum tree, with a read head, long body and tiny ears (似桃李中蠹, 赤頭, 身長 而細耳).
- D. The insect *mao* (*m(r)u) eats roots; this character appears frequently with its counterpart *zei* and it could seem that *zei-mao* has to be considered a term for "stem and root eaters". It is worth to mention that there are other three odes of the SJ that have both *mao* and *zei* in their verses, and all of them belong to the section "Greater Odes" *Da Ya* 大雅, "Decade of Dang" *Dang zhi shi* 蕩之什:
 - Ode 257 Sang Rou 桑柔→ "(Heaven) sends down these nocuous insects (on the grain), the husbandry is utterly suffering" 降此<u>蟊賊</u>、稼穡卒痒。⁴²³

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⁴²⁰ Erya, 326.

⁴²¹ Shuowen jiezi, 1110.

⁴²² Ibid.

⁴²³ Shijing, 1383 Trans. by Karlgren 1950, 222.

- 2) Ode 264 Zhan Yang 瞻印→ "nocuous insects gnaw and injure, there is no peace, no moderation" <u>蟊賊蟊疾</u>、靡有夷屆。⁴²⁴
- 3) Ode 265 Shao Min 召旻→ "Heaven sends down crime and guilt, nocuous insects cause disorder in the interior government" 天降罪罟、蟊賊内訌425

While these kinds of animals seem to be related to divine punishment, Mao Heng's recension and the following commentaries suggest that man-zei is a metaphor for wicked officials. Nonetheless, Lu Ji identifies mao as a kind of molecricket (longn ye 螻 蛄也).

4.1.55 有足謂之蟲。無足謂之豸。

"Those that have legs are called *chong* (*lrun; *drul Sch.), those without legs are called *zhi* (*[d]re?; *dre? Sch.)"

This is the only gloss where there is an unequivocal description of what is a *chong* and it is not surprising the last of the chapter. Sub-categories or "wrap-up" glosses appear frequently at the end of Erya sections, so I speculate that this gloss encircles the whole structure of the Shi chong chapter. I already analysed the text in section 3.1.3; XB tries to object by saying that in the Yue Ling chapter of the Liji the term chong is used to describe also snakes, and consequently chong could represent also legless creatures. I strongly believe that in the Liji the word chong has not the value of "invertebrate", but "creature" so that XB comment is somewhat superfluous.

⁴²⁴ Shijing, 1476 Trans. by Karlgren 1950, 236. 425 Shijing, 1485 Trans. by Karlgren 1950, 238.

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4.2 Shi yu [Glosses on aquatic animals]

4.2.1 鯉。

The first six glosses of chapter *Shi yu* are somewhat different from the ones of the chapter *Shi chong* since they do not possess a term of comparison. They simply introduce a character automatically making it part of the *yu* category. The gloss is then necessarily expanded by the later works of GP and XB. Earlier commentators of the *Erya*, like Sun Yan 孫琰, consider the first six fish as three couples of glosses, however, Guo Pu points out that they are 6 distinct fish⁴²⁶.

In this case, the first term is the carp *li* 鯉 *mərə?, a fairly common character that represents an iconic fish. There are 4 instances of it in the SJ, 5 in the SHJ, 5 in the LY, 2 in the HNZ and 5 in the LH. GP and XB say that it is precisely the red carp (*jin chi li yu* 今赤 鯉魚⁴²⁷), a fish that is retrievable for example in ode n°138 *Heng Men* 衡門:

"Why, in eating fish, must one have a carp from the River?"

豈其食魚、必河之鯉。428

Xu Shen follows the older interpretation of *li* and glosses it as "sturgeon" *zhan* 鱣 (gloss 4.2.2), considering the following gloss an alternative name for the first character. Duan Yucai points out the mistake by listing the differences between the two species, especially their size being the *li* 鯉 only 4 - 5 feet of length (ca. 92.4 – 115.5 cm) and the *zhan* 鱣 2 - 3*zhang* (ca. 4.6 – 6,9 metres, evidently a little bit exaggerated)⁴²⁹.

4.2.2 鱣。

The sturgeon *zhan* 鱣 (*tra[n]) is described by GP and XB as a "big fish, similar to the sturgeon *xun* 鱏 (*səl[ə]m), but shorter, with mouth and snout under its chin, its body

⁴²⁶ 樊、孫注指以為三魚,一物二名。 [···] 惟郭氏特正其誤,以為六魚,古無兼名也。[The commentaries of Fan and Sun indicated these (the first 6 glosses) as three fish, two names for one creature (...) But Guo Pu especially corrected their mistakes, considering (the gloss) six fish, in ancient times they were not disyllables.] HYDZD, 5003-4.

⁴²⁷ Erya, 327.

⁴²⁸ *Shijing*, 520 trans. by Karlgren 1950, 89.

⁴²⁹ 鯉[...]縱廣四五尺[...]鱣[...]大者長二三丈。[...] 鱣則絕非鯉矣。[Carps (...) measure 4-5 feet (...) Sturgeons (...) the adults are long 2-3 *zhang*. Sturgeons are absolutely not carps.] *Shuowen jiezi*, 964.

possesses an irregular armour and no scales, its flesh is yellowish, it can grow as big as twothree *zhang*, to the east of the Yangtze river it is called 'the yellow fish'.⁴³⁰"

Its presence in the *loci classici* is well attained, especially in the SJ where it appears in three odes (n°58, 204, 281) where the character *zhan* is always accompanied by the character *wei* 鮪, another kind of sturgeon (*[G]^wrə?, see gloss 4.2.16). Since it is a character that represents a living entity in the SJ, there is a description of this sturgeon by Lu Ji in his subcommentary, but it seems that the depiction is influenced by the wrong juxtaposition with *li* (see gloss 4.2.1). An explanation for that can be found in the HYDZD where a graphic variant of the character *zhan* is written as *zhan* 鯶, indeed very similar to the carp *li* 鯉.⁴³¹

As a final note of remark, there is another creature represented by the character *zhan* 鱣 (read *shan*⁴³², but with the same phonetic reconstruction *tra[n]), it is a kind of eel and it is retrievable in *Hanfei zi*, chapter "Collected Persuasions" *shui lin* 說林: the text clearly says that this fish can be easily mistaken for a snake.⁴³³

4.2.3 鰋。

The mudfish *yan* (*?a[n]?) is described by GP as being white. Even in this case, there are some controversies in the identification of this species since commentators before GP considered a single gloss 4.2.3 and 4.2.4 [鰋, 鮎(也)]. Both XB in EY sub-commentary and Kong Yingda in SJ sub-commentary, note that it can be "witnessed today with their own eyes" that the two are separate species and that "Mao (Heng) explanations are not supported by reality" (今目驗, 毛解與世不協⁴³⁴). HYX identifies *yan* with the character *ba/bo* 鮊 (*bbrak), which represents a white mudfish (goby) both in a graphic and in a paronomastic way. HYX sources are the YP and the GY, but neither of them uses the term *yan*⁴³⁵.

⁴³⁰ 鱣, 大魚, 似鱏而短鼻, 口在頷下, 體有邪行甲, 無鱗, 肉黃。大者長二三丈。今<u>江</u>東呼為黃魚。 *Erya*, 327.

⁴³¹ HYDZD, 5015.

⁴³² HYDZD, 5034.

⁴³³ <u>鳣</u>似<u>蛇</u>, 蠶似蠋。人見蛇則驚駭, 見蠋則毛起。漁者持鳣, 婦人拾蠶 [Eels are like snakes, silkworms like caterpillars. Men are frightened at the sight of snakes and shocked at the sight of caterpillars. However, fishermen would hold eels inhand and women would pick up silkworms.] *Hanfei zi*, 144. Trans. by Liao W.K. 1939.

⁴³⁴ Shijing, 710 and Erya, 327.

⁴³⁵ 白魚名鮊。 《廣雅》云: '鮊,鱎也。'《玉篇》 '鱎白魚也。'今白魚生江湖中, 細鱗白色, 頭尾俱昂, 大者長六七尺也。[The name of white fish is *ba*. The *Guangya* says: "*ba* is also called *jiao*"; the *Yupian* says: "*Jiao* is a white fish. Nowadays white fish are born in lakes and rivers, they have thin and white

This character is retrievable in the SJ (ode n°170, 281) together with other fish names. 4.2.4 鮎。

The catfish *nian* 鮎 (*nem) is traditionally interpreted as another name for *yan* 鰋 (4.2.3). The SW is not an exception to this, and even DYC commentary points out that the words of GP are not true.⁴³⁶ On the other hand, GP identifies *nian* as an alternative name for the fish *ti* 鯷 (*[d]de), with the topolectal name of *ti* 鮧 (*[d]de) or *ti* 鮷 (*[d]de) in the regions to the east of the Yangtze river.⁴³⁷ The SW says that these last two characters are instead used precisely to identify a bigger specimen of the *nian* species (*da nian ye* 大鮎也⁴³⁸).

4.2.5 鱧

The snakehead or tench li denoised in terms and the first terms of the first terms of the first terms the first terms the first terms of terms of the first terms of the first terms of the first terms of terms of terms of the first terms of terms of the first terms of terms of the first terms of terms of

The character is exclusively retrievable in SJ ode n°170 Yu Li 魚麗, and this gloss probably is a reference to it. The nominalistic problem regarding the correct identification of *li* is carried on by Kong Yingda sub-commentary of the SJ, adding that *li* can also be glossed as *huan* 鯇 (*[G]G^wra[r]?, which is the following gloss, 4.2.6) or *hua* 鰈 (*[g]gror?, somewhat phonetically similar to the latter). He finally agrees with Guo Pu in saying that the most correct synonym of *li* is *tong*.⁴⁴⁰

scales, their head and tail are lifted upwards, a big speciemen can measure between six and seven feet."] *Erya* yishu, 1171.

⁴³⁶ 郭別鰋鮎爲二, 非也 [Guo (Pu) distinguish *yan* and *nian* as two different species, it is not like that.] *Shuowen jiezi*, 968.

⁴³⁷ 別名鯷。江東通呼鮎爲鮧 [Its alternative name is *ti*. To the East of the Yangtze river, catfish *nian* are commonly called *ti*] *Enya*, 327.

⁴³⁸ Shuowen jiezi, 968.

⁴³⁹ 今鍾魚也。鮦與鍾, 音義同。[Nowadays is also known as the *zhong* fish. *Tong* and *zhong* have the same pronunciation and meaning.] *Enya*, 327.

⁴⁴⁰ Shijing, 701.

4.2.6 鯇

The grass carp *huan* 鯇 (*[G]G^wra[r]?) is described by GP as *huan* 鯶 (*[g]gur?, the phonetic reconstruction does not match, however, it is quite similar), which looks like a *zun* 鱒 (*[dzz]ə[n]s +) but bigger⁴⁴¹. The old commentary to the *Erya* by *She Ren* identifies it as *li* 鱧 (4.2.5), this misconception is related to the fact that the glosses were viewed as a single one, and XB confirms this theory by supporting GP hypothesis. The SW, on the other hand, does not provide any other information only stating that "it is a fish name" (*yu ming* 魚名).⁴⁴²

The only appearance in the *loci classici* is in the ZhZ, chapter *Tianxia* 天下 "The World"; however it is considered as a mistake: the original passage reads *er bu mian yu huan duan* 而不免於鯇斷 [they could not seem to avoid lopping away from the corners]⁴⁴³, but the character *huan* 鯇 is a substitute for *wan* 輐. Having said that, there are no other instances of this *hapax* in other *loci classici*.

4.2.7 鯊, 鮀。

This gloss opens the second part in *Shi yu* chapter, introducing the return of synonymicon-style glosses. The sand-blower fish *sha* 鯊 (*ssraj) is glossed as *tuo* 鮀 (*llaj). GP explains that it is indeed a "small fish that blows sand, with a round striped and dotted body" (*chui sha xiao yu, ti yuan er you wen dian* 吹沙小魚, 體圓而有文點⁴⁴⁴). This could be considered a paronomastic gloss since the character *sha* 鯊 and *sha* 沙 have the identical phonetic reconstruction *ssraj, beside that *sha* 沙 has both a phonetic and a semantic classifier value (the graph clearly indicates that *sha* 鯊 is a fish involved with sand).

The other fish *tuo* is a *hapax* retrievable only in the SW which glosses it as the catfish *nian* (see 4.2.4)⁴⁴⁵, Duan Yucai justifies it since there is no *sha* character in the SW.

⁴⁴¹ 今鯶魚, 似鱒而大。*Erya*, 327-8.

⁴⁴² Shuowen jiezi, 967.

⁴⁴³ Zhuangzi, 294 trans. by Watson.

⁴⁴⁴ Erya, 328.

⁴⁴⁵ Shuowen jiezi, 968.

The only instance of *sha* is in the SJ ode n°170, the same poem with many characters glossed in the *Shi yu* chapter. Lu Ji provides a description for this animal saying that "it has a small and narrow body, it regularly spreads up its mouth to blow on sand".⁴⁴⁶

4.2.8 鮂,黑鰦。

The fish *qiu* 鮂 (*səlu or *(dz)ziw +)⁴⁴⁷ is glossed as a black (*hei*) zi fish 黑鰦 (*mmək[ts]ə). GP surprisingly describes it as a white (*bai*) *chou* 白鯈 (*[d]ru) fish, noting once again that *qiu* is a topolectal term from the regions east of the Yangtze river.⁴⁴⁸ It is not known why a black fish is related to a white one, it might be possible that the two are very similar, although zi are commonly lighter in colour and *chou* are darker, so that a darker zi may be confused for a white *chou* and vice versa. This is of course my speculation regarding the matter.

Even if both characters are not retrievable in other sources apart from the EY, XB points out that this animal is indeed cited in the SJ ode n°281 with the form of *tiao* 鰷 (*lliw), which seems a graphic variant of *chou* 鯈. Mao Heng's recension, Zheng Xuan's annotations and Kong Yingda's sub-commentary simply add that this *tiao* fish is white.⁴⁴⁹

4.2.9 鰼, 鰌。

The loach *xi* 鰼 (*sgwəp) is glossed as *qiu* 鰌 (*tsu or *ts^hiw)⁴⁵⁰. GP does not add much information to the gloss, saying that "nowadays it is called *niqiu* 泥鰌 (*nn[əj]ts^hiw), mud loach. It dwells in the mud; therefore, it is called by that name."⁴⁵¹ The SW presents two tautological glosses which are practically identical to the one in the EY.⁴⁵²

The only *locus classicus* in which *xi* is retrievable is the SHJ, although the description of it seems quite different from the one provided by GP:

⁴⁴⁶ 魚狹而小, 常張口吹沙。 Maoshi Cao Mu Niao Shou Chong Yu Shu, 55.

⁴⁴⁷ The *Jingdian shiwen* says *cu qiu fan* 徂秋反 → *[dz]za+*ts^hiw, hence the second phonetic reconstruction. ⁴⁴⁸ 即白鯈魚, 江東呼爲鮂。*Erya*, 328.

⁴⁴⁹ *Shijing*, 1565. For a further analysis of the character *tiao*, see Carr, "Tiao-fish through Chinese dictionaries", *Sino-Platonic Papers* 40 (September 1993): 1--68.

⁴⁵⁰ Both GP and the *Jingdian shinen* say that its pronunciation is the same as *qiu* 秋 (*qiu yin* 秋音). However, the phonetic classifier *qiu* 酋 follows a different phonetic reconstruction (*mtsu/tsu).

⁴⁵¹ 即今泥鰌也。穴於泥中,因以名云。Erya, 328.

⁴⁵² 鰼, 鰌也。[(The character) xi stands for qiu] and 鰌, 鰼也。 [(The character) qiu stands for xi] Shuowen jiezi, 967.

"Three hundred fifty *li* farther north stands Trickling-Brilliance Mountain. The Raucous River emanates from here and flows westward into the Yellow River. In it dwell many Xixi-Fish. The Xixi-Fish's form resembles a magpie with ten wings, and its scales are all on the tip of its feathers. It makes a sound like a magpie and can repel fire. Eating it can prevent jaundice."

北三百五十里,曰涿光之山,囂水出焉,而西流注于河。其中多鰼鰼之魚,其狀如鵲而十翼,鱗 皆在羽端,其音如鵲,可以禦火,食之不癉。453

The reduplication of *xi* might be a hint of the fact that it was conceived as a completely distinct creature from the fish *xi*.

4.2.10 鰹, 大鮦, 小者鮵。

This gloss introduces again the concept of what I call "dimensional glosses" (see 4.1.36). Here, the snakehead fish *jian* 鰹 (*kki[ŋ]) is glossed as a bigger individual among the snakeheads *tong* 鮦 (*lloŋ). Moreover, it says also that smaller individuals are called *duo* 鮵 (*llot). This structure puts the middle-sized fish in between the big and small specimens: the character *zhe* 者 both marks that *jian* is a big *tong* and that *duo* is a small *tong* (literally "*jian* is a big *tong*. The small ones are (called) *duo*").

This gloss is evidently intertwined with 4.2.5, which describes the snakehead li 鱧 (*[r]rij?). In fact, GP comments that "in Qingzhou (modern Linzi area in Shandong) people call the small li 鱺 (*[r]rij?) as *duo* 魨"⁴⁵⁴ and XB notes that "the characters *li* and *li* have both the same sound and meaning".⁴⁵⁵ The SW seems to gloss *tong* with another character, *li* i is (*[r]rij?), but it is simply a graphic variant of 鱧.⁴⁵⁶

4.2.11 魾, 大鱯, 小者鮡。

Another "dimensional gloss", the catfish *pi* 魾 (*[b]rə) is a bigger individual among the catfish *hua/hu* 鱯 (*mmqq^wraks +). The smaller ones are called *zhao* 鮡 (*lr[a]w?) instead. The SW has an identical gloss, DYC speculates that *pi* is a "conjoined meaning" (*huiyi* 會意)

⁴⁵³ Shanhai jing, Bei shan jing [Itineraries through the Northern Mountains] trans. by Strassberg 2002, 120-1. ⁴⁵⁴ 今青州呼小鱺爲鮵 Erya, 328.

⁴⁵⁵ 鱺與鱧, 音義同 Ibid.

⁴⁵⁶ 鮦: 魚名。…一曰鱶也。[The character *tong* is a fish name. (...) It can also be called *li*.] Shuowen jiezi, 965.

character since $pi \pm m$ means "great, big" and it could be considered a generic term for "big fish" (see gloss 4.2.23)⁴⁵⁷.

Once again, the only *locus classicus* where there is one of these three characters is the SHJ. In section "Itineraries between the Northern Mountains" we learn that the river Wei 洧 teems with frogs and *hua* catfish.⁴⁵⁸

4.2.12 鰝, 大鰕。

A third "dimensional gloss", but only with one term of comparison, and not two. It is the first "non-piscine" animal of the *Shi yu* chapter: the shrimp *hao* 鰝 (*[gg]u? +) is a bigger individual among the shrimps *xia* 鰕 (*[gg]ra). GP gives a detailed description of this invertebrate saying that "the biggest among the shrimps go out in the open sea and they grow till 2 - 3 *zhang* (4,6 – 6,9 metres ed.), with antennae long some feet."⁴⁵⁹

The SW has a similar gloss, although there is some ambiguity about the character *xia*, which appears three times in the *Shi yu* chapter, and not with the same meaning. DYC is sure that in this case, *xia* is the equivalent to what "nowadays is written *xia* 蝦" i.e. "shrimp", or at least a kind of crustacean.⁴⁶⁰ This is one of the most iconic case studies of a character that needed to be differentiated via a new semantic classifier (*chong* 虫) in order to avoid confusion within the same category. For the other instances of *xia*, see gloss 4.2.21 and 4.2.45.

4.2.13 鯤, 魚子。

The fry *kun* 鯤 (*[k]ku[n]) is a newly hatched fish. Although this character is used in ZhZ and other proto-daoist texts, its connotation is completely different as it represents a

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⁴⁵⁷ 魾: 大鱯也。其小者名鮡。【注】丕訓大,此會意兼形聲也。《爾雅》魴魾,亦謂魴之大者爲 魾。[The character *pi* stands for a big catfish *hua*. The smaller ones are named *zhao*. (Commentary by DY) *Pi* has to be interpreted as *da* "big", this is a double "conjoined meaning/picto-phonetic" character. In the *Erya* (there are) the breams *fang* and *pi* (gloss), even here a *fang* bream who is bigger is considered a *pi*.] *Shuowen jiezi*, 967.

⁴⁵⁸ 洧水出焉, 而東流注于河。其中有鱯、黽。[There gushes the river *Wei*, that flows eastward into the river *He* (the Yellow River ed.). It is rich of *hu* fish and frogs.] Trans. by Fracasso 1996, 52. The phonetic reconstruction suggests the *pinyin hua* and not *hu*.

⁴⁵⁹ 鰕大者出海中,長二三丈,鬚長數尺。*Erya*,28. ⁴⁶⁰ *Shuowen jiezi*,972.

huge legendary fish. In this case, GP points out that "as a matter of principle, *kun* is a generic term for fries and freshly hatched fish".⁴⁶¹

Although this character does not appear in *loci classici* with this meaning, GP writes that *kun* is a graphic variant of the character *guan* 鰥 (*[k]k^wrə[n], phonetically similar) which is retrievable in SJ ode n°104 *Bi Gou* 敝笱:

"The burst fish-traps are by the dam; the fish are bream and knan (guan ed.) fish"

敝笱在梁、其魚魴鰥。⁴⁶²

Albeit Karlgren prefers not to translate what a *guan* fish is, the annotation of Zheng Xuan challenges Mao Heng's recension by writing that "*guan* are fish hatchlings".⁴⁶³

4.2.14 鱀,是鱁。

The river dolphin ji 鱀 (*mk(r)əks) is also called *zhu* 鱁 (*[l]riwk). This is the only mammal in *Shi yu* chapter, however, due to their physical appearance, it is not surprising to find a cetacean here. Both characters are probably a *hapax legomena*, not even to be found in the SW and other early dictionaries; nevertheless, GP provides a meaningful description for this animal:

"The dolphin *ji* belongs to the category of sharks. Its body looks like a sturgeon, its tail is like the one of the blowfish, it has a large abdomen, a small snout, sharp and long, its teeth are disposed as a sifter, disposed equally in the mouth both up and down, its nose is over its forehead, it can produce sounds, it has little meat but a lot of fat. It gives birth to its children (it does not lay eggs ed.), it eats smaller fish. The biggest ones are exceeding a *zhang* in length. There is plenty of them in the Yangtze river."

鱀, 鯌屬也。體似鱏, 尾如鰯魚, 大腹, 喙小, 鮵(銳)而長, 齒羅生, 上下相銜, 鼻在額上, 能 作聲, 少肉多膏。胎生, 健啖細魚。大者長丈餘。江中多有之。464

⁴⁶¹ 凡魚之子摠名鯤 Erya, 328.

⁴⁶² *Shijing*, 409 trans. by Karlgren 1950, 67.

⁴⁶³ Mao Heng says that "guan is a big fish" 鰥, 大魚, while Zheng Xuan writes "guan are fries" 鰥, 魚子也。 Ibid.

⁴⁶⁴ Erya, 328-9.

4.2.15 鱦,小魚。

The fish *ying* 鱦 (*l[i]ŋs) is a small one. Even it seems a dimensional gloss, it has not got a term of comparison. GP says that this term indicates "small fish that have not reached adulthood" and that is a topolectal word from the Jiangdong area.⁴⁶⁵ It is not a small fish *per se*, but possibly a generic term for fingerlings, bigger than fries (see 4.2.13) but still not fully grown.

4.2.16 鮥, 鮛鮪。

The sturgeon *luo* 鮥 (*[kə]rrak) is glossed as *shuwei* 鮛鮪 (*stiwk[G]^wrə?), a disyllable composed of two synonyms that identify a small variety of sturgeon⁴⁶⁶. GP provides a long explanation for this gloss:

"The fish *wei* belongs to the category of sturgeons. The big ones are named 'king (*wang*)*wei*', the small ones are named *shuwei*. [...] there is a fish which looks like a sturgeon *zhan*, but smaller, people of Jianping call it *luozi*, that is this fish."

鮪, 鱣屬也。大者名王鮪, 小者名鮛鮪。…有一魚狀似鱣而小, 建平人呼鮥子, 即此魚也。467

The SW identically says that "the character *luo* 鰫 stands for the small sturgeon *shuwei* 叔鮪", with the only difference being the absence of the *yu* semantic classifier in the *shu* character. DYC points out that GP describes mainly the character *wei* and not *luo*, and that is because the general term for this kind of sturgeon is *wei*: a big sturgeon is, in fact, a *wangwei* \pm 鮪 (*g^waŋ[G]^wrə?, alliterative) "king sturgeon" and a small one is a *shuwei* 鮛 鮪 (*stiwk[G]^wrə?).⁴⁶⁸ Moreover, while *luo* is not a relevant character in the *loci classici, wei* is a prominent fish retrievable in a variety of texts: the SJ ode n°57-204-281⁴⁶⁹, in the LJ, ZL, DDLJ, LSCC, HNZ and the SHJ. Since *wei* is an animal cited in the SJ, Lu Ji describes it in detail:

"The sturgeon *wei* looks like a sturgeon *zhan*, but it is greenish-black, their head is small and pointy and it looks like an iron helmet, the mouth is under the chin [...] the biggest ones are not longer than 7 - 8

⁴⁶⁵ 今江東亦呼魚子未成者爲鱦 [Nowadays, east to the Yangtze river, fingerlings that have not reached adulthood are called *ying*] *Erya*, 329.

⁴⁶⁶ See Yupian 鮛, 鮪也; HYDZD 4996-7.

⁴⁶⁷ Erya, 329.

⁴⁶⁸ Shuowen jiezi, 964.

⁴⁶⁹ Shijing, 260, 923, 1564.

feet (ca. 1.62 – 1.85 metres ed.). People of Yizhou (modern Sichuan ed.) call it *gengmeng* (*[k]kəŋsməŋs +), the big ones are the 'sturgeon kings', the small ones are the *shuwei*, another name is *luo*. The meat is white, the taste is not like the meat of *zhan* sturgeons.

鮪魚形似鱣而色青黑,頭小而尖似鐵兜鍪,口在頷下……大者不過七八尺。益州人謂之 鱣鮪 (DYC writes 魱鰽),大者爲王鮪,小者爲鮛鮪,一名鮥。肉色白,味不如鱣也。470

4.2.17 鯦, 當魱。

The saltwater fish *jiu* 鯦 (*[k](r)u? +) is glossed as *danghu* 當魱 (*ttaŋ[g]ga). A *hapax* only retrievable in the EY and the SW (the latter writes *danghu* 當互, possibly a pure phonetic word, with no semantic classifiers). It is described by GP with the following statement:

"It lives in the sea, similar to the bream but with larger scales, with a tasty flesh and many fishbones; nowadays, east of the Yangtze river, the biggest individual of this species that reach a length of three feet are called *danghu*."

海魚也。似鳊而大鳞,肥美多鯁,今江東呼其最大長三尺者爲當魱。471

As a final remark, DYC notes that this character is curiously placed by Xu Shen in between a series of six characters that are not fish (they are crustaceans and molluscs). However, he is sure that this animal is indeed a fish.⁴⁷²

4.2.18 鮤, 鱴刀。

The fish *lie* 鮤 (*[r]at) is glossed as *miedao* 鱴刀 (*mmetttaw). GP describes it as having two modern names: *jiyu* 鮆魚 (*tsaj[rŋ]a +) and *daoyu* 魛魚 (*ttaw[rŋ]a). The SW, albeit not mentioning neither *lie* nor *miedao*, glosses *ji* as a fish that "does drink but does not eat" and that it is also called *daoyu* 刀魚⁴⁷³, a name that might be related to *miedao*.

The relevance of this creature in *loci classici* is somewhat difficult to attest on the basis of the EY only. DYC points out more than one text where *ji/lie/miedao/daoyu* is cited: for instance, in ZL chapter "Minister of Heaven or of General Governance" *Tian Guan Zhong zai* 天官冢宰 there is a passage where the official "appointed to turtles" *bie ren* 鼈人 is in

⁴⁷⁰ Maoshi Cao Mu Niao Shou Chong Yu Shu, 52.

⁴⁷¹ Erya, 330.

⁴⁷²自"鰕"至"鮚"六字皆字从魚而實非魚者。[From the character *xia* to the character *jie*, these six characters semantically derive from *yu* "fish", but in reality they are not fish.] *Shuowen jiezi*, 972. ⁴⁷³ 歓(飲)而不食,刀魚也。*Shuowen jiezi*, 968.

charge of harpooning "fish, softshell turtles, tortoises, clams and, as a matter of principle, every creature that is hiding (in water)".⁴⁷⁴ The annotations of Zheng Xuan indicates that among this "hiding creatures" there are animals belonging to the category of *miedao*.⁴⁷⁵

4.2.19 鱊鮬,鱖鯞。

The small carp *yuku* (*nq^wi[t]kk^ha + or *[n]rutməbbas, the latter is based on GP commentary) is glossed as *juezhou* (*kot[tp]ə?). It is one of the few double disyllables of the chapter *Shi yu*. GP describes it as a small black fish, similar to a crucian carp. Its vernacular name is "fish-slave" *yubi* 魚婢 (*[rŋ]a[b]e?) and it is called "wife fish" *qiyu* 妻魚 (*[tss^h]əj[rŋ]a).⁴⁷⁶ Regarding this last term, the SW has a gloss on a fish *qieyu* 鱇魚 which it is said that "it comes from the foreign kingdom of Nakrang".⁴⁷⁷

The two disyllables are not retrievable elsewhere, making them hapax legomena.

4.2.20 魚有力者, 徽。

A "behavioural gloss", o better a "qualitative" since it describes the term to identify a strong fish, i.e. *hui* 徽 (*məj). The phonetic reconstruction is noteworthy since it overlaps the one of the character *wei* 微 "tiny". GP does not add much to this gloss, simply confirming that the character represents a fish that is "strong, big and full of strenght"⁴⁷⁸; XB says that a *hui* fish is "different from fish that swims together in shoals"⁴⁷⁹, marking that this term might be a generic term for solitary predatory fish.

To my knowledge, the character is a *hapax legomenon*. Later sources identify this animal as a whale (*jing* 徽鯨).⁴⁸⁰

⁴⁷⁴ 掌取互物。以時簎魚、鼈、龜、蜃,凡貍物。IIs sont chargés de prendre les animaux à coquilles. Aux saisons convenables, ils harponnent les poissons, les tortues des espèces *pie (bie)* et *kouei (gui*), les huîtres, en général tout ce qui se cache au fond de l'eau. *Zhouli*, 123. Trans. by Biot 1851, 107.

⁴⁷⁵ 貍物,亦謂鱴刀含漿之屬。Ibid.

⁴⁷⁶ 小魚也。似鮒子而黑,俗呼爲魚婢,江東呼爲妻魚。Erya, 330.

⁴⁷⁷ 鯜: 魚名。出樂浪潘國。 Shuowen jiezi, 969.

⁴⁷⁸ 强大多力。Erya, 330.

⁴⁷⁹ 凡魚之强大多力異於羣輩者名徽。[As a matter of principle, strong, large and vigorous fish are different from the ones that are in shoals, they are named *hul*] *Erya*, 330.

⁴⁸⁰ Hu, and Fang 2004, 360.

4.2.21 魵, 鰕。

The striped fish *fen* 魵 (*[b]ur) is glossed as *xia* 鰕 (*[g]gra). This gloss presents again the character *xia* 鰕, but this time it is probably a different creature from 4.2.12. GP simply states that "it comes from the kingdom of *huixietou* ('head of depravity and obscenity')", a piece of information that Xu Shen writes in SW.⁴⁸¹ While these comments do not provide any satisfactory knowledge about the nature of this creature, the Qing period commentaries of both SW (by DYC) and EY (by HYX), reveal that *fen* and its synonym *xia* are indeed fish and not shrimps:

"Striped fish comes from a distant realm, their skins are offered as a gift. [...] The striped fish skins come from the *hui* kingdom, during the Han period was given as an ordinary gift. In this case, striped fish are then the fish *fen*."

斑文魚出遠國,獻其皮。濊國出斑魚皮,漢時恒獻之。然則斑魚即魵魚482

HYX also states that *fen* is phonetically similar to *ban* 斑 (*ppran), but I cautiously want to reject this hypothesis since the two reconstructions are not that similar.

4.2.22 鮅,鱒。

The minnow *bi* 鮅 (*pi[t]) is glossed as *zun* 鱒 (*[dzz]u[n]? +). GP describes it as a red-eyed fish, similar to the fish *hun* 鯶 (*[gg]ur?), but smaller.⁴⁸³ The SW confirms what GP says. The character *bi* does not appear in any *locus* classicus, but the character *zun* is retrievable in the SJ, ode n°159 "*Jiu Yu*" 九罠:

"The fish in the fine-meshed net are rudd (minnow) and bream;"

Mao's tradition simply states that *zun* is a big fish; on the other hand, Lu Ji provides a concise description, which is partially quoted by GP in the EY:

⁴⁸¹ 出穢邪頭國 Erya, 330; 魵: 魚名, 出薉邪頭國。[The character fen is the name of a fish, it comes from the kingdom of *huixieton*] Shuowen jiezi, 969. The glosses are practically identical.

⁴⁸² Erya yishu, 1182

⁴⁸³ 赤目魚也。[It is a fish with red eyes.] Shuowen jiezi, 963.

⁴⁸⁴ *Shijing*, 623 trans. by Karlgren 1950, 104.

"The Cyprinus *zun* is similar to a *hun* fish but its scales are thinner and it has got red eyes and many thin

stripes."

鱒似鯤 (鯶) 魚而鱗細於鯤 (鯶) 也,赤眼多細文。485

4.2.23 魴, 魾。

The bream *fang* 魴 (*[b]aŋ) is glossed as *pi* 魾 (*[b]rə) "big fish", a character that is found also in gloss 4.2.11. GP provides only an alternative topolectal name for this fish, saying that "to the east of Yangtze river, it is called *bian* 鯿 (*pe[r])", but nothing more.

The character *fang* is widespread in *loci classici*, however there is a high amount of passages in which it is just a name or surname.⁴⁸⁶ Nevertheless, it a quite common term in the SJ, appearing in as much as seven odes: 4 in "Airs from the States" (10-104-138-159), 2 in "Lesser Court Hymns" (170-226), and 1 in "Major Court Hymns" (261):

"The bream has a red tail, the Royal House is as if burning."

筋魚赬尾、王室如燬。487

"The burst fish-trap are by the dam, the fish are bream and tench."

敝笱在梁、其魚魴鱮。488

"Why, in eating a fish, must one have bream from the River?"

豈其食魚、必河之魴。489

"The fish in the fine-meshed net are rudd and bream"

九罭之魚、鱒魴。490

"The fish fastened in the trap, they are bream and li fish."

⁴⁸⁵ MSCMSNCYS, 54.

⁴⁸⁶ For instance, see the official (*shi*) *Fang* 士魴, written also *shi Fang* 師魴 in *Zuozhuan*, annals of Duke Xiang (years 3, 5, 9, 10, 11, 12, 13, 19, 23).

⁴⁸⁷ Shijing, 67. Trans. by Karlgren 1950, 7.

⁴⁸⁸ *Shijing*, 409. Trans. by Karlgren 1950, 67.

⁴⁸⁹ Shijing, 518. Trans. by Karlgren 1950, 89.

⁴⁹⁰ Shijing, 622. Trans. by Karlgren 1950, 104.

魚麗于罶、魴鱧。491

"What is he angling? It is bream and tench."

其釣維何,維魴及鱮。492

"Very pleasant is the land of Han, the rivers and pools are large, the bream and tench are big [...]"

孔樂韓土、川澤訏訏、魴鱮甫甫…493

The bream *fang* is probably seen as a gregarious fish, often appearing in juxtaposition with other fish, prominently $li
empirismath{imm}$ and xu 鱮 (*[səl]a? +, sla? Sch.), see *Liji* chapter "The pattern of the family" *nei ze* 内則. Lu Ji provides this description of the bream *fang*:

"It is large and with a meagre layer of fat, peaceful and weak. It has thin scales and it is a delicious fish."

廣而薄肥,恬而少力,細鱗,魚之美者。494

4.2.24 鯬, 鯠。

The fish li 鯬 (*r[ə][j]) is glossed as *lai* 鯠 (*mərrək or *[rr]ə, very similar to the other element of the gloss). GP says that it is an "unclear" gloss (*wei xiang* 未詳), and XB does not add anything to it. The SW also does not present any of these two characters. In order to get some information, it is necessary to check the GY which links this gloss to the previous one (4.2.23). It states that *pi* 魾 is glossed as *li* 鯬, unifying the two glosses that could be read as *fangpi* glossed as *lilai* "魴魾, 鯬鯠。".⁴⁹⁵ This is highly speculative especially because it has been already said that *pi* is a generic term for large fish, so the GY might have reasons to gloss *li* in this way without having anything in common with 4.2.23.

4.2.25 蜎,蠉。

This gloss introduces the second part of *Shi yu* chapter, where piscine creatures give way to other aquatic creatures that are not fish. In this case, the mosquito larva (which lives in water) *yuan* 蜎 (*[mkq^w]en?) is glossed as *xuan* 蠉 (*q^{wh}en). GP describes this animal as a

⁴⁹¹ *Shijing*, 706. Trans. by Karlgren 1950, 114.

⁴⁹² Shijing, 1075. Trans. by Karlgren 1950, 114.

⁴⁹³ *Shijing*, 1441. Trans. by Karlgren 1950, 7.

⁴⁹⁴ MSCMSNCYS, 53.

⁴⁹⁵ Guangya, vol. 9, 7. See also Wang Niansun commentary Guangya shuzheng.

red *chong* that lives inside wells.⁴⁹⁶ I am quite sure that the use of the term *chong* states that GP is perfectly aware of the fact that *yuan* is not really a "fish", but of course, to analyse taxonomies and zoology in Jin period is beyond the purpose of this study, and thus I leave the discussion to further studies on the matter. GP mentions another name for these larvae: he calls them as small *jiejue* 蛣蟩 (*[k^h]i[t]kot/kat +), which is written *jiejue* 孑孓 (*[k]ratkot or *k[r][e][t]kwat +) in the GY, a disyllable that probably "represents a form".⁴⁹⁷

The presence of this character is attested in *loci classici*, but with another meaning: the SW consider both *yuan* and *xuan* graphs that represent the way certain invertebrates move.⁴⁹⁸

4.2.26 蛭,蟣。

The leech *zhi* 蛭 (*[t]ri[t]) is glossed as *qi* 蟣 (*[g]əj). The character *zhi* was already cited in 4.1.42, although in a binomial form. GP provides a topolectal name for this invertebrate that legitimates the presence of it in the *Shi yu* chapter:

"Nowadays to the east of the Yangtze river it is called 'aquatic leech' (*shuizhong zhi*), the ones which like to enter in human flesh are called *qi*."

今江東呼水中蛭,蟲喜入人肉者爲蟣。499

Apart from categorising the leech *qi* as a human parasite, the commentary of GP clarifies that this creature lives exclusively in water, making it suitable to be classified as *yu*. XB adds other names that identify the same creature: *maqi* 馬蜞 (*mmra?gə) and *maqi* 馬耆 (*mmra?[g]rij). Despite having very different graphic forms, the phonetic reconstructions are similar to some extent. The *ma* character is probably a "dimensional" attribute ("horse-leech" **>** "big leech").

The SW has *zhi* and *qi* as adjacent glosses; however, the latter must be read and interpreted as *ji* (*kəj?) which is glossed as *shizi* 蝨子 (*srik, "louse eggs"). The two terms are probably intertwined (both are seen as human parasites to some extent), but they are not only semantically but also phonetically distinct. The latter is more prominent in *loci classici*.

⁴⁹⁶ 井中小蛣蟩,赤蟲 Erya, 331.

⁴⁹⁷ *Guangya*, vol. 9, 6.

⁴⁹⁸ 蠉, 蟲行也。 *Shuomen jiezi*, 1118, 1121; The expression *xuan fei ru dong* 蠉/蜎飛蠕動 [Wiggling, flying, crawling, moving] is retrievable more than once in *Huainanzi*, *Lunheng* and other sources. ⁴⁹⁹ *Erya*, 331.
4.2.27 科斗,活束。

The tadpole *kedou* 科斗 (*kk^{wh}ajtto?) is glossed as *huodong* 活東 (*[gg]^watttoŋ). The two terms seem closely related from a phonetical point of view and it is noteworthy to point out that both the disyllables do not display any "zoological" phonetic classifier.

GP simply states that *kedou* are "toad's children" (*hama* zi 蛤蟆子), but XB adds a few lines to the description saying that "their head is big and round, their tail is thin" (*tou yuan da er wei xi* 頭圓大而尾細).⁵⁰⁰ While the SW cannot provide any information since these binomial terms are, I speculate, purely phonetical, *kedou* is retrievable in the JJP as an example of "water creature" (*shui chong* 水蟲) with all its amphibian relatives.⁵⁰¹

The only *locus classicus* where *kedou* is present is the ZhZ, chapter "Autumn Floods" *qiu shui* 秋水:

"I look around at the mosquito larvae and the crabs and tadpoles, and I see that none of them

can match me."

還虷蟹與科斗,莫吾能若也。502

4.2.28 魁陸。

This section introduces the first "armoured creature" of the *Shi yu* chapter. The solitary disyllable *kuilu* 魁陸 (*[kk^h]uj[r]uk) is described by GP with a quote from the *Bencao*, saying that "*kui* has the aspect of a sea clam, round and thick; on the outside, it has vertical and horizontal patterns. Nowadays it is (called) *han* 蚶 (*qq^h[o]m +)".⁵⁰³

The character *kui* might be considered a "dimensional" attribute, since it can mean "great, chief", not only from a hierarchical point of view but also describing the size of an entity.⁵⁰⁴ Despite this, *kui* is probably identifying the form of this mollusc, probably a bivalve

⁵⁰⁰ Erya, 331.

⁵⁰¹ *Jijiu pian*, vol. 3, 6. See gloss 4.1.19.

⁵⁰² Zhuangzi, 294. Trans. by Watson 2013, 135.

⁵⁰³ 魁, 狀如海蛤, 圓而厚, 外有理縱橫。即今之蚶也。Erya 331.

⁵⁰⁴ 3. Grand; fort; robuste. 4. Chef. Le premier; le meilleur. *Le Grand Ricci numérique*; 大, 壯偉 [big, grand, lofty, majestic] HYDZD, 4717.

with two "ladle-like" halves. The SW, in fact, glosses kui as "soup spoon" (kui geng dou ye 魁: 羹斗也).⁵⁰⁵

4.2.29 蜪蚅。

Another single disyllable, *tao'e* (*qqr[i]k[l]lu) is an unclear gloss (*wei xiang* 未詳). The two single characters that form this binomial term, are both retrievable in the *Shi chong* chapter, albeit in different glosses (4.1.17, 49). There is a hypothesis about the fact that *tao* could be a mistranscription of *ju* 螭 "a kind of toad" so that the gloss could be linked with the following one (4.2.30), but it is still highly speculative.⁵⁰⁶

4.2.30 鼁繩,蟾諸。在水者黽。

The toad *quqiu* (*[k]^h(r)apsts^hiw) is glossed as *chanzhu* (*[t]amta, alliterative). GP describes this amphibian as "similar to toads, but that live on land" (*si hama, ju ludi* 似蛤蟆, 居陸地)⁵⁰⁷, a curious exception to the fauna of *Shi yu* chapter since it should encompass only aquatic animals. But the gloss continues explicitly saying that "the ones that live in water are called frogs *meng* (*mmrəŋ?)", immediately returning on topic. However, GP says that a *meng* is not exactly a *quqiu* that lives in water. On the contrary, it is described as "similar to frogs, but with a larger abdomen, another name for them is 'earth-ducks' *tu ya* 土鴨 (*tt^ha??rep)".

The SW has a gloss of a character *shi* 鼅 which exactly corresponds to the same creature:

"The character shi stands for the qiushi, it is a toad."

龗: 繩龗,詹諸也。⁵⁰⁸

It also indicates the SJ (ode n°43, *Xin Tai* 新臺) as *locus classicus* where to find this character, however the received text of the SJ is different.⁵⁰⁹

⁵⁰⁵ Shuowen jiezi, 1197.

⁵⁰⁶ Hu, and Fang 2004, 362.

⁵⁰⁷ Erya, 332.

⁵⁰⁸ Shuowen jiezi, 1133.

⁵⁰⁹ Ibid. The verse cited is 燕婉之求、得此<u>戚施</u>。According to Xu Shen, *qishi* 戚施 (*stt^hiwklaj) is substituted by *qiushi* 離쮙 (*ts^hiwlaj) which is phonetically overlapping.

The ZL in chapter "Ministry of the Autumn or of the Punishments" (*Qiu Guan Sikou* 秋官司寇) cites one time the character *meng* bringing alongside the character *wa* 鼁, possibly forming a binomial term for both big and small frogs.⁵¹⁰

4.2.31 蜌, 螷。

The bivalve *bi* 蜌 (*mppe? +) is glossed as *pi* 螷 (*bbraŋ? +). GP describes it as a "long and narrow" mollusc (*chang er xia zhe wei pi* 長而狹者為螷).⁵¹¹ The SW has a gloss for *pi* that describes it with the character *bi* 陛, which is a good substitution for *bi* 蜌:

"The character *pi* stands for the mussel *bi*. The long ones are called *pi*, the round ones are called *li*."

螷: 階也。脩為螷, 圜為蠇。512

The only *locus classicus* in which *pi* is retrievable is the ZL, chapter "Minister of Heaven or of General Governance" *Tian Guan Zhong zai* 天官冢宰, where this kind of mollusc is prepared and turned into meat-pickle (*hai* 醢) among with other species.⁵¹³

4.2.32 蚌,含浆。

The oyster *bang* 蚌 (*[bb]roŋ?) is glossed as *banjiang* 含漿 (*əmkk[ə]m[ts]aŋ). A fairly common character in *loci classici*, GP s identifies it as a big bivalve *shen* 蜃 (*[d]ər?), while XB adds that "when it grows old, it generates pearls" (*wei lao chan zhu zhe ye* 謂老產珠者也).⁵¹⁴ The SW follows GP essential comment, but with a significant difference since it says that "it belongs to the category of big bivalves" (*shen shu* 蜃屬), immediately stating that *shen* is a wider category than *bang*, which just serves as a hyponym. This is corroborated by the fact that other glosses in SW, are described as "belonging to the category of oysters" (*bang shu* 蚌 屬). ⁵¹⁵ DYC considers *shen* the same as *pi* 螷, which presents a close phonetic value with *bang*

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⁵¹⁰ Zhouli, 1156-7.

⁵¹¹ Erya, 332.

⁵¹² Shuowen jiezi, 1120.

⁵¹³ 祭祀, 共螷、嬴、蚳, 以授醢人。[Lorsqu'il y a un sacrifice, ils fournissent les huîtres, les limaçons, les oeufs de fournis, et les donnent aux hommes qui font les hachis] *Zhouli*, 124. Trans. by Biot 1851, 107. ⁵¹⁴ *Erga*, 332.

⁵¹⁵ Shuowen jiezi, 1120.

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蚌 (*bbraŋ? vs *[bb]roŋ?), I suggest that one character could be simply a graphic variant of the other. ⁵¹⁶

The YJ is an exemplary *locus classicus* where there is *bang* cited with other "armoured creatures"⁵¹⁷, while the ZL has *hanjiang* quoted as a "hiding creature" (*mai wu* 狸物, see also 4.2.18)⁵¹⁸. HYX provides a justification for the name of the second term of comparison *hanjiang*, saying that:

"This species of oyster usually hides in mud, it is fleshy in the inside and it holds a thick liquid, therefore it is named (like this)."

蓋蚌類多薶伏泥中,含肉而饒漿,故被斯名矣。519

4.2.33 鼈三足, 能。龜三足, 賁。

A gloss that identifies two kinds of turtles that possess only three legs instead of four. A softshell turtle *bie* 鼈 (*pet) with three legs is called *nai* 能 (*nnə), while a tortoise *gui* 龜 (*[k]^wə) with three legs is called *fen* 賁 (*[b]ur). The necessity to distinguish a three-legged turtle with a different name is explicated by XB:

> "All of turtles and tortoises have four legs, the ones with three legs are strange, therefore these oddities have their own names."

> > 鼈、龜皆四足,三足者異,故異其名。520

The only *locus classicus* that cite this kind of weird animals is the SHJ:

"Thirty-five *li* to the south-east there is Mount *Cong.* On its top it is rich in pines and cypresses; below there are a lot of bamboos. The river *Cong* gushes at the top and sinks at the slopes. It is rich in threelegged turtles with forked tails. If eaten, one is immune to poisons, curses and plague."

⁵¹⁶ The modern reading *pi* is discredited to some extent by *Jingding shiwen* and GP phonetic notes, providing a different pronunciation and consequently a different phonetic reconstruction. The sources indicate that the reading is *pu meng fan* 蒲猛反 \rightarrow *[bb](a) + (mm)raŋ? = bbraŋ?. *Erya*, 332; *Jingdian shiwen*, vol. 30, 24.

⁵¹⁷為乾卦, 為鱉, 為蟹, 為贏, 為蚌, 為龜。 [It is the sign of dryness. It means the tortoise, the crab, the snail, the <u>mussel</u>, the hawkbill tortoise.] *Yijing*, 392. Trans. by Wilhelm 1950, 559.

⁵¹⁸ Zhouli, 123. Trans. by Biot 1851, 107.

⁵¹⁹ Erya yishu, 1189-90.

⁵²⁰ Erya, 332.

東南三十五里,曰從山,其上多松柏,其下多竹。從水出于其上,潛于其下,其中多三 足鱉,枝尾,食之無蠱疫。521

And also:

"From the southern side, the river *Kuang* gushes out and flows to the south-east into the river Yi. It is rich in three-legged tortoises. If eaten, one avoids the most serious illnesses; they can also heal swellings."

其陽狂水出焉,西南流注于伊水,其中多三足龜,食者無大疾,可以已腫。522

4.2.34 蚶贏, 螔蝓。贏小者, 蜬。

The gastropod *fuluo* 蚶蠃 (*np(r)o?skrroj), is glossed as *yiyu* 轆蝓 (*lajəlo). The smaller ones are identified as *han* 蜬 (əmkk[ə]m) and they are also considered "molluscs that live in water" (see gloss 4.2.38). GP identifies it as a snail species (*ji woniu ye* 即蝸牛也), the bigger ones can be used as goblets for liquor (*keyi wei jiu bei* 可以爲酒杯)⁵²³. The SW has a gloss for *yu* 翰 which points directly to the EY gloss (*si* [yi]yu ye 虒蝓也).

The ZL is the most prominent *locus classicus* where *luo* 嬴 is cited, and both the commentary of Zheng Xuan and the sub-commentary of Kong Yingda point out that *luo* is indeed *yiyu*.⁵²⁴

However, both DYC and HYX say that *fuluo* and *yiyu* are different species, questioning the fact that in Early China were considered as one.⁵²⁵

4.2.35 螖蠌,小者蟧。

The small hermit crab *huaze* 螖蠌 (*noggrutllrak) is glossed as *lao* 蟧 (*[rr]aw). This is a noteworthy gloss since it breaks the sequence of molluscs in this section; however, this crustacean carries an empty shell on its back, so it has to be considered as an "armoured

⁵²¹ Shanhai jing, 111. Trans. by Fracasso 1996, 107.

⁵²² Shanhai jing, 94. Trans. by Fracasso 1996, 90.

⁵²³ Erya, 333.

⁵²⁴ Zhouli, 164.

⁵²⁵ 釋蟲及鄭注《周禮》,許造《說文》皆不云嬴與螔蝓爲二 [In *Shi chong* chapter and in the commentary by Zheng Xuan of the *Zhouli*, also in Xu Shen's *Shuowen jiezi* it is not said that *luo* and *yiyu* are two (different species)] See *Shuowen jiezi*, 1121; 今动物学以蚶蠃、螔蝓为二物,都与蜗牛不同,但都同科。 [Nowadays zoology considers *fulou* and *yiyu* as two different animals, they are both dissimilar to snails, however they belong to the same family.] *Erya yishu*, 1191-2.

animal". GP describes it as belonging to the category of gastropods (*luo shu* 螺屬), similar to a crab, but smaller (*si xie er xiao* 似蟹而小).⁵²⁶

To my knowledge, it can be considered a hapax legomenon.

4.2.36 蜃,小者珧。

Regarding clams *shen* 蜃 ([d]ər?), the small ones are called *yao* 珧 (*law). GP describes *yao* as a small oyster *bang (ji xiao bang* 即小蚌), while XB adds some information to the other term *shen* stating that it is a big clam (*da ge ye* 大蛤也) and that *yao* clams can be used as decorations for sword scabbards.⁵²⁷

While the first term is quite common, the second one is rarer. For instance, the former can be retrieved in LJ and the latter in the SJ (ode n°250):

"Water begins to congeal. The earth begins to be penetrated by the cold. Pheasants enter the great water and become large molluscs."

水始冰,地始凍。雉入大水為蜃。528

"What was he engirdled with? With jade and *yao* stones, (scabbard ornaments =) ornamented scabbard and ceremonial knife."

何以舟之、維玉及瑤、鞞琫容刀。529

The SHJ presents both the character together:

"There it gushes the river Yigao that flows eastward into the river Jinü. It is rich in molluscs shen and yao"

嶧皋之水出焉, 東流注于激女之水, 其中多蜃珧。530

4.2.37 龜,俯者靈。仰者謝。前弇諸果。後弇諸獵,左倪不類,右倪 不若。

A quite complex gloss, it describes the names of six kinds of tortoises based on the direction of their head and neck, as well as the position of their eyes:

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⁵²⁶ Erya, 333.

⁵²⁷ Ibid.

⁵²⁸ *Liji*, 635. Trans. by James Legge.

⁵²⁹ Shijing, 1308. Trans. by Karlgren 1950, 207.

⁵³⁰ Shanhai jing, 66. Trans. by Fracasso 1996, 62.

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- a. A tortoise with the head inclined downwards is called *ling* *[rr]en.
- b. A tortoise with the head inclined upwards is called *xie* *səlaks.
- c. A tortoise with the carapace that protrudes forward is called *guo* *[kk]o[r]?.
- d. A tortoise with the carapace that protrudes backwards is called *lie* r[a]p.
- e. A tortoise with the head that goes on the left is called lei * [r]u[t]s.
- f. A tortoise with the head that goes on the right is called *ruo* *nak.

There is only a *locus classicus* that encompasses all the six tortoises, and it is the ZL with this comprehensive passage:

"Il s'occupe des six tortues et de leurs variétés. Chaque espèce a son nom spécial. La tortue céleste est de l'espèce *Ling*. La tortue terrestre est de l'espèce *I (yi)*. La tortue d'orient est de l'espèce *Ko (guo)*. La tortue d'occident est de l'espèce *Loui (lei)*. La tortue du midi est de l'espèce *Lie*. La tortue du nord est de l'espèce *Jou (ruo)*."

龜人: 掌六龜之屬,各有名物。天龜曰靈屬,地龜曰繹屬,東龜曰果屬,西龜曰靁屬, 南龜曰獵屬,北龜曰若屬。⁵³¹

The names of the tortoises in the ZL corresponds almost completely with the ones in the EY, with the exceptions of yi 繹 and lei 靁; nevertheless, in the light of the phonetic reconstructions comparisons, the names seem to correspond: yi 繹 *lak versus xie 謝 *səlaks and lei 靁 *rruj versus lei 類 *[r]u[t]s. This last tortoise is, according to GP and XB, suitable for divination (yi jia bu shen 以甲卜審).⁵³²

Zheng Xuan's commentary of the ZL adds that each tortoise has a different colour⁵³³, roughly corresponding to the *wu xing* 五行 principle:

EY Tortoise	ZL Tortoise	Feature	Colour	Direction
靈 *[rr]eŋ	靈 *[rr]eŋ	俯 down	玄 dark	天 Heaven
謝 *səlaks	繹 *lak	仰 up	黃 yellow	地 (中) Earth
果 *[kk]o[r]?	果 *[kk]o[r]?	前 forward	青 azure	東 East
類 *[r]u[t]s	雷 *rruj	後 backwards	白 white	西 West

⁵³¹ Zhouli, 759. Trans. by Biot 1851, vol. 2, 47.

⁵³² Erya, 334.

⁵³³ Zhouli, 759.

獵 *r[a]p	獵 *r[a]p	左 left	赤 red	南 South
若 *nak	若 *nak	右 right	黑 black	北 North

4.2.38 貝, 居陸贆。在水者蜬, 大者魧, 小者鰿。玄貝, 貽貝。餘貾, 黃白文。餘泉, 白黃文。蚆, 博而頯。蜠, 大而險。蟦, 小而橢。

This is one of the longest gloss of the zoological chapters of the EY, it analyses various kind of molluscs (*bei* 貝 *ppa[t]s), classifying them based on their habitat, size, colour and form.

- a. The seashell *biao* 贆 (*p(r)aw +), or *biao* 猋, is glossed as a molluse that lives on the land.
- b. The small clam han 蜬(*əmkk[ə]m) is glossed as a mollusc that lives in water.
- c. The bigger examples are called *hang* 航 (*[m][gg]aŋ).
- d. The smaller examples are called ji f (*[ts]ek), purple coloured⁵³⁴.
- e. The black ones are called *yi* 貽(*lə).
- f. The yellow ones with white details are called *yuchi* 餘貾 (*la[d]rij).
- g. The white ones with yellow details are called *yuquan* 餘泉 (*lasnG^war).
- h. The long and sharpened ones are called *ba* 蚆 (*ppra).
- i. The large and thin ones are called *jun* 蜠 (*[g]run?).
- j. The small and narrow ones are called *ji* 蟦 (*sttrek)

4.2.39 蠑螈,蜥蜴,蜥蜴,蝘蜓,蝘蜓,守宫也。

This gloss marks the return to the "scaly creatures" category. It is a quite controversial passage since it reduplicates some of its elements. It literally states that newts *rongyuan* 蠑螈 (*[nq^w]reŋng^war) are lizards *xiyi* 蜥蜴 (*[s]aklek), that lizards are geckoes *yanting* 蝘蜓 (*??e[n][dd]ə[n]?) and finally that geckoes are "the guardian of the palace" *shou gong* 守宮 (*stu?k(r)uŋ). GP affirms that these are not four different names (*bie si ming* 別四名), but

⁵³⁴ 今細貝亦有紫色者 [Nowadays they are tiny shells that are also purple] Erya, 335.

they are a "shifting comparison explanation" (*zhuan xiang jie* 轉相解)⁵³⁵ used to elucidate the ambiguity of these terms in Early China.

The SW comes in help by distinguishing some characteristics of these terms:

"(The ones that live) on the walls are called *yanting* geckoes, (the ones that) live in the grass are called *xiyi* lizards"

在壁曰蝘蜓,在艸曰蜥易。536

The FY also has some references to this kind of this creature:

"In the regions of Qin, Jin and the West-Xia (Ningxia ed.) it is called 'the guardian of the palace', some people call it *luchan* (*[rr]a[d]ra[n]), some others call it *siyi* (*slelek +). The ones that stay in marshes are called *yiyi* (*leklek). To the south, in Chu, it is called *sheyi* 'snake-medicine' (*əlaj?ə), some people call it 'newt' *rongyuan*. To the east of Qi and in Haidai region (from the Bohai Sea to Mount Tai in Shandong ed.) is called *sihou* (*sle[gg](r)o). To the north, in Yan, it is called *zhuting* (*tuk[dd]ə[n]?)."

秦晉西夏謂之守宮,或謂之蠦纏,或謂之蜤易。其在澤中者謂之易蜴。南楚謂之蛇醫,或謂之蠑 螈。東齊海岱謂之螔螏。北燕謂之祝蜓。537

4.2.40 镻, 蝁。

The poisonous snake *die* 镻 (*lli[t]) is glossed as *e* 鼍 (*??ak). GP describes it as a snake belonging to the category of vipers (*fu shu* 蝮屬). It has big eyes and it is very venomous (*da yan*, *zui youdu* 大眼, 最有毒). He also adds that *e*(*zi* 蝁子) is the name used by the people south of the Huai river (*jin Huai nan ren hu ezi* 今淮南人呼蝁子).⁵³⁸

The SW has an identical gloss for *e*, however the one for *die* is slightly different since it states that *die* is "a snake with an enduring poison" (*she du chang* 蛇毒長).⁵³⁹

Both characters could be considered as hapax legomena.

⁵³⁵ Erya, 336.

⁵³⁶ Shuowen jiezi, 1109.

⁵³⁷ Fangyan, 101.

⁵³⁸ Erya, 337.

⁵³⁹ Shuowen jiezi, 768.

4.2.41 螣, 螣蛇。

The flying reptile *teng* 螣 (*lrəm?) is identified as the snake *tengshe* 螣蛇 (*lləŋəlaj, alliterative). GP considers it as a species of dragon, able to raise up to the clouds and mist (*long lei, neng xing yumu* 龍類, 能興雲霧), i.e. a flying snake, probably a legendary creature.

This creature is present in XZ and in the HNZ:

"Though footless, the teng snake moves quick as flying, yet five limbs give the wn rodent no safety."

螣蛇無足而飛,梧鼠五技而窮。540

"Now, the teng snake floats in the fog and soars; the ying dragon rides on the clouds and ascends."

夫螣蛇遊霧而動,應龍乘雲而舉。541

4.2.42 蟒, 王蛇。

The python *mang* 蟒 (*mmrraŋ? +) is identified as a "royal snake" *wang she* 王蛇 (*G^waŋəlaj), making this gloss a "dimensional" one. Usually, the character *wang* denotes the large size of an animal. GP says that it is indeed the longest snake, and that is why it is called "snake king" (*she zui da zhe, gu yue wangshe* 蛇最大者,故曰王蛇).⁵⁴²

There is an instance of this character in the FY, however it is not related with the snake world since it describes a kind of grasshopper (see gloss 4.1.21).⁵⁴³ A part from that, there are no other quotes of *mang* in the *loci classici* analysed.

4.2.43 蝮虺,博三寸,首大如擘。

The viper *fuhui* 蝮虺 (*p^h(r)uk[rJu[j]?) is described as long three inches, with a head large as a human thumb. As already explained in section 3.1, from a palaeographic point of view, this snake might be the original meaning of the semantic classifier *chong* 虫. The SW corroborates this hypothesis.⁵⁴⁴

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⁵⁴⁰ Xunzi, chapter 1 Qin Xue 勸學, 10. Trans. by Hutton 2014.

⁵⁴¹ Huainanzi, 305. Trans. by Queen, and Major 2010.

⁵⁴² Erya, 337.

⁵⁴³ Fangyan, 130.

⁵⁴⁴ Shuowen jiezi, 1107-8.

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The character is quite common in *loci classici*, with notable mentions in the LH chapter dedicated to poisons, in the HNZ and SHJ:

"At that time, birds and beasts, noxious vermin and snakes, without exception, sheated claws and fangs. They stored away their venom and poison, and none of them were disposed to attack or bite."

當此之時,禽獸蝮蛇,無不匿其爪牙,藏其螫毒,無有攫噬之心。545

A final remark by XB justifies the presence of snakes in the Shi yu chapter:

"In reality, it is a *chong*, it possesses scales, therefore it is placed in *Shi yu* chapter. Furthermore, it belongs both to the category of *yu* and *chong*!"

實是蟲,以有鱗,故在釋魚。且魚亦蟲之屬乎。546

4.2.44 鯢, 大者謂之鰕。

The largest salamanders *ni* 鯢 (*ŋŋe) are identified as *xia* (*[gg]ra). The description by GP is somewhat curious, comparing it to other animals:

"Nowadays, the giant salamander looks like a catfish, it has four limbs; on the front it looks like a macaque, from behind it looks like a dog. Its cry seems the wail of an infant, the biggest ones are between eight and nine feet long (1,85 – 2,08 metres)."

今鯢魚似鮎,四腳,前似獼猴,後似狗。聲如小兒啼,大者長八九尺。547

This animal is retrievable in ZZ with its female counterpart *jing* 鯨 (*[g]raŋ).⁵⁴⁸

4.2.45 魚枕謂之丁,魚腸謂之乙,魚尾謂之丙。

This gloss seems to conclude the chapter since it identifies anatomical parts of the yu categories, possibly only fish and not "aquatic animals" as a whole. These three elements are glossed with three Heavenly Stems (*tiangan* 天干) of the *ganzhi* calendar system.

 a. The fish skull *zhen* 枕 (*[t.k][ə]m?) is glossed as the fourth Heavenly Stem ding 丁 (*tteŋ); they have similar phonetic reconstructions.

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⁵⁴⁵ Huainanzi, 225. Trans. by Major 2010.

⁵⁴⁶ Erya, 338.

⁵⁴⁷ Ibid.

⁵⁴⁸ Zuozhuan, 753.

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- b. The fish intestine *chang* 腸 (*lraŋ) is glossed as the second Heavenly Stem *yi* 乙 (*qrət).
- c. The fishtail *wei* 尾 (*[m]əj?) is glossed as the third Heavenly Stem *bing* 丙 (*praŋ?); the Heavenly Stem graphically represents a fishtail.

Starting from this last piece of information, XB confirms that in the seal script (*zhuan shu* 篆書) even the other two characters looks like respectively as the fish skull and the fish viscera.

4.2.46 一曰神龜,二曰靈龜,三曰攝龜,四曰寶龜,五曰文龜,六曰 筮龜,七曰山龜,八曰澤龜,九曰水龜,十曰火龜。

The final gloss of *Shi yu* chapter is a list of ten tortoises names, it might be misplaced since it is similar to some extent to gloss 4.2.37. These ten tortoises are probably the "ten pairs of tortoises" of the *Sun* 損 section of the YJ ("Ten pairs of tortoises cannot oppose it, Supreme good fortune").⁵⁴⁹

- 1) The first tortoise is called *shen* 神 "the god" (*əli[n]), a divine turtle (*shenming* 神明).
- 2) The second tortoise is called *ling* 靈 "the spirit" (*[rr]eŋ), suitable for divination.
- 3) The third tortoise is called *she* 攝 "the conservative" (*kənep), small and with irregularities on the plastron. It likes to eat snakes.
- 4) The fourth tortoise is called *bao* "the treasure" (*ppu?), a precious one.
- 5) The fifth tortoise is called *wen* 文 "the striped" (*mə[n]), it has bluish stripes on its carapace.
- 6) The sixth tortoise is called *shi* 益 "the oracle" (*[d][e][t]s), it is able to hide in the vegetation.
- 7) The seventh tortoise is called *shan* \coprod "the one from the mountains" (*sŋrar).
- 8) The eight tortoise is called *ze* 澤 "the one from the marshes" (*llrak).
- 9) The ninth tortoise is called *shui* 水 "the one from the rivers" (*stur?).
- 10) The tenth tortoise is called *huo* \pounds "the one from the fire" (*[qq^{wh}] \ni j?).

⁵⁴⁹ 十朋之龜, 非克違, 元吉 Yijing, 204. Trans. by Wilhelm 1950, 368.

5. Conclusions

After having outlined the relationship between the human and the animal *cosmoi* in a crucial moment of the Early Chinese history, I would draw some conclusions based on the data gathered up to now. First of all, to analyse hypothetical categories of animals in a remote civilisation without any comparison to modern taxonomy is a challenging quest. Not only the reference material is completely different from the encyclopaedic works of the Western Civilisation, but it is mandatory to travel back in time and investigate these particular "biological classifications" excluding any correspondence with our methods of classifying living beings. As Harbsmeier said:

the Chinese tended to be interested in definitions not in a Socratic way and for their own sake as descriptions of the essence of things, and they were very rarely interested in definition as an abstract art in the Aristotelian manner.⁵⁵⁰

This reference is particularly evident after the analysis of the *Erya* glosses: taxonomies in Early Chinese society are not necessarily related to a better understanding of the biological world, but it is a process relegated principally to a global and standardising nomenclature. The only and fundamental element necessary to recognise and categorise animals were their common name and eventually their local names. In addition, any other relevant distinctions were the ones between big and small, male and female, carnivorous and herbivorous and not between fish, reptile, invertebrate or other contemporary zoological classes, phyla, etc.

My remark is not that the categories analysed until here were not relevant, on the contrary they had to be established or adapted from past taxonomies in order to meet the needs of a certain historical period. This is especially important since great transformations occurred between the end of the Warring States Period and the consolidation of the Han monarchy, not only from a social point of view, but also from a linguistic and subsequently "categorical" ones. The polysemy of *chong* and *yn* are probably one of the numerous outcomes of these mutations: the stratification of texts from different eras, as well as the necessity to mould a harmonised human society within a uniform cosmos, created a lexicographic environment where a single graph could represent more than one category of entities.

⁵⁵⁰ Harbsmeier 1998, 54.

Another important variable that determined the creation of an apparently illogic but standardised taxonomy, was the relationship between the compiler of glossaries and dictionaries and the actual observer. The great variation between graphic forms of certain rare characters and the subsequent homologation and systematisation of them, has origin in the different roles of a glossary/dictionary compilers. It is very likely that the official entrusted with the compilation of an Early Chinese glossary, were not the direct observer of the entities he was recording. This eventually led to a disconnection between semantic classifiers and the representation of the character "as it was supposed to be represented". Since this phenomenon is identifiable in languages with an alphabetic writing system, it seems even more plausible with a logographic writing system, where sound, meaning and representation are not necessarily intertwined. Moreover, some ingenious stratagems were implied to record and homologate the extremely heterogeneous faunistic lexicography, the most important being alliteration and rhyming: the disyllables that survive in the *Erya* possess either one or both characteristics.

Another observation regards the number of *hapax legomena* in these two faunistic chapters; this massive presence of this kind of characters could be explained with two hypotheses: either the *Erya* glossed a large number of texts that are now lost, or it possibly means that the *Erya* compilers created from scratch new characters hopefully to see them implied in new works that could "approach normativeness".

My final remarks are on the perception of Early Chinese taxonomies and future developments of the matter. While the conception of categories, classes or "semantic classifiers" is fundamental to understand a remote civilisation like the Early Chinese one, its flashy appearance in glossaries and dictionaries could mislead the contemporary scholar in thinking that there was a well-established and precise system of categories, where every single word or graph had to be put in and classified for the sake of "correcting the names". I personally doubt it, at least from a zoological point of view. There is evidence of knowledgeable categories such the one of "domestic animals": it would be preposterous to negate that Early Chinese scholar did not identify and group these kinds of animals under a safe hypernym (*chu* \overleftarrow{a} in this case) that could subsume them all.

What I am suggesting is that it would be provocative to imagine Early Chinese taxonomies not as an array of box-like closed categories, but as open and concentric Euler

diagrams, where the animals closest to humans are close to the centre, and the ones with less known characteristics are in the outer space of the diagram. As already said in section 3.1.2, a *chong* in Early Chinese taxonomy could simply be an animal (that is for sure an animal) that do not possess any relevant feature that could place it in an "inner category". This statement could be corroborated by analysing one of the descriptions of the *yn* category: a *chong* that lives in water, i.e. the simple characteristic of living in water changes any "creature" into "fish".



This diagram represents what I suggest to call a "non-inclusive" taxonomy, which I would describe as a taxonomy that does not classify entities basing on their features, but on what they lack to be classified in a category. It is my opinion that the word *chong* is a hypernym that subsumes all the fauna in Early China, but, at the same time, helps to isolate "featureless" animals that do not respond to the characteristics of the other lexicographic categories, i.e. living in water (yu 魚), having two legs and possessing feathered or naked wings (*niao* 鳥), having four legs and hunted by men (*shou* 獸), being domesticated (*chu* 畜). The category of *qin* is a little bit ambiguous, I cautiously define it as either overlapping the *niao* category or a

second level category between *chong* (all creatures) and *shou-niao* (creatures that can be either hunted or captured).⁵⁵¹ In other words, all *yu* are *chong*, and all the *chong* that do not fall in the categories of *yu* or *qin* need to be called *chong* and nothing else.

This is of course largely speculative and requires a more specific research on categories I did not cover in this dissertation. However, it could be a starting point both for a diachronic and synchronic future investigations: the "non-inclusive" taxonomic organisation envisioned through the analysis of the relationship between invertebrates and fish should be supported by an identical examination of winged beasts, wild beasts and domestic animals, in order to discredit or bolster this hypothesis. On the other hand, it would be fundamental to follow the developments of categories in historical periods beyond Early China, researching if there are any premise of the existence of a "non-inclusive" taxonomy that eventually transformed into a different classification system.

This "non-inclusive" taxonomy scheme could even, perhaps in future studies, be systematically applied to other semantic fields that are well-covered in Early Chinese texts, such as rituals, military, botany, geography, etc. in order to establish a new approach to understand the way categories and taxonomies were analysed and employed in Early China's world view.

⁵⁵¹ The term *qin* was an enigma even for later Chinese scholars like Ming dynasty Chen Jiang 陳降 (ca. fl. 1530). For one of his quotes about the matter, see Sterckx 2002, 21.

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