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THE LINGUISTICS OF CHINESE PHILOSOPHICAL KEYWORDS

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A relatively small number of keywords are so important to the study of classical Chinese philosophy that any insight into their etymology and semantic range would amply repay the effort of inquiry. The familiar difficulties of Chinese historical linguistics have impeded the comprehension of these keywords just as they have impeded the comprehension of every other aspect of the language. Philosophical texts in other languages rarely present commensurate hurdles. Most keywords of classical Greek and Roman philosophy, for example, are well understood from a linguistic point of view. Even Sanskrit philosophical terms usually pose fewer linguistic problems than Chinese ones.

As research in the history of the Chinese language progresses, however, some keywords are slowly but surely beginning to reveal their mysteries. Decades having passed since the pioneering research by linguists such as Peter A. Boodberg (1979: 26–40) and Mei Tsu-lin (1994), the time is ripe for review. The following *aperçu* relies primarily on the Old Chinese reconstruction system of William H. Baxter and Laurent Sagart (2014), but many of the relevant phenomena would be discernible in competing systems as well.¹

Methodological Discussion: The Necessity and Limitations of Etymology

The twin pillars of modern lexicography are etymology and usage (e.g., Considine 2013), that is, the study of a word's origins and its range of uses, respectively.² True comprehension requires both. Although premodern Chinese philologists assembled an awe-inspiring amount of information pertaining to usage, they produced virtually nothing pertaining to etymology. For example, the rhyming dictionary *Peiwen yunfu* 佩文韻府 of 1711, which contains approximately 450,000 phrases, with extensive examples of usage, remains one of the most massive lexicographical reference works in any language (e.g., Gimm 1983). But there was no truly etymological dictionary of Chinese before Schuessler (2007) for two reasons: the state of Chinese historical linguistics remained so primitive that it would scarcely have been possible to identify etyma with any confidence before then, and etymological inquiry was hamstrung in China by a conceptual failure to distinguish between words and graphs. Tellingly, both are denoted by the same term in Chinese: *zi* 字, which can mean, depending on the context, either a word or the graph used to write that word.

Consequently, what has passed for “etymology” in most Sinological work has focused not on the origins and history of words, but on the origins and history of graphs. Were it not for the bewitching logographic script, this kind of pseudo-analysis would never have occurred to anyone. (It would be absurd to infer anything about philosophy from the shapes of the letters spelling “philosophy”.) To take a particularly pernicious example: much ink has been spilled over the graph for the word *ren* 仁 (Old Chinese *nin—but see the next section), which denotes a prime Confucian virtue, often translated as “humanity” or “benevolence”. In 仁, a “person” (*ren* 人) seems to be standing next to the graph for “two” (*er* 二). This picturesque representation has led to fanciful suppositions about the “meaning” of *ren* that are at best philosophically innovative (in a nutshell, the idea is that practicing *ren* requires more than one person) but at worst linguistically misguided. (See Liao Mingchun 2005: 53f. for some examples from traditional Chinese philology.)

Even Boodberg fell into this trap:

It is well known that on Chinese bronze inscriptions of the Zhou Dynasty the character *zi* 子, “son”, has often a little ditto sign in the form of two horizontal strokes added to it to express such phrases as “son’s son”, “son after son”. It may well be that Confucius, or some predecessor of his, had borrowed that graphic convention from the vocabulary of the inscriptions to endow the common graph for *ren*, “man”, with a special meaning, perhaps in an attempt to instill into the graph, representing a word in a language devoid of a specific category of plurality, a contrasting singular-plural connotation, such as we would express in English by “man among men”, and had then sublimated it by making it a key locution in his moralistic system. (1979: 37, with Romanization converted)

On this basis, Boodberg went on to propose the preposterous translation “co-humanity” for *ren* (1979: 38). Such suggestions are embarrassing today because we now know that, in palaeographical literature such as the manuscripts excavated from Guodian 郭店, *ren* was commonly written with unrelated graphs: usually either *shen* 身 (*ṣin), “body”, or *qian* 千 (*s.ṣin), “thousand”, over *xin* 心, “heart” (see the range of forms in Zhang Shouzhong et al. 2000: 117–118; and cf. Baxter and Sagart 2014: 239). (*Shen* over *xin* cannot be reproduced in today’s standard character set; *qian* over *xin* is 𠄎, which is attested in Dunhuang 敦煌 manuscripts.) As Wolfgang Behr (2015: 206–211) has explained, *ren* probably does not have anything to do with “body” or “thousand” (any more than it means “man among men” or “co-humanity”); *shen* and *qian* were simply chosen for their convenient phonetic value.³ Thus if we are to indulge in fantasizing about what “Confucius, or some predecessor of his” meant by *ren*, we must remember that he might not have written it as 仁 in the first place.

Elsewhere, I have referred to this practice as “haruspicy” (from *haruspex*, a Roman diviner) because trying to intuit the meaning of a Chinese word by gazing at its corresponding graph is little better than scrutinizing the entrails of a chicken. The results usually say more about the diviner than they do about the chicken (Goldin 2008a: 193). Ezra Pound (1885–1972) and Ernest Fenollosa (1853–1908) were notorious for propagating this misconceived method of interpretation (e.g., Saussy 2001: 38–42), which they seem to have acquired from well-meaning East Asian teachers. Fortunately, the “haruspicy” of Chinese graphs (or in the words of Chang 1988, “hallucinating the other”) is now widely discredited and indeed nearly obsolete in scholarly writing. One of the few fields where one still occasionally finds it deployed is philosophy, where its specious appeal in elucidating keywords like *ren* can prove too powerful to resist. (A regrettable example is Perkins 2014: 92.)

In theory, the graphs that scribes invented might afford a glimpse of how they conceived of the underlying language, but in practice, most Chinese graphs are based on the rebus principle, borrowing graphic components merely for their sound (e.g., Qiu Xigui 2000: 221–260; Boltz 1994: 90–101). Only a small proportion are pictographs. (If *ren* 仁 is a person standing next to “two”, can we say that *xiang* 像, “image”, is a person standing next to an elephant 象?)⁴ Inasmuch as cognate words do sometimes sound similar—in Chinese as in any other language—it stands to reason that true cognates are often written with similar graphs. For one pair among many, consider *cheng* 丞 (*m-təŋ), “to assist”, and *zheng* 拯 (*təŋʔ), “to lift, to sustain”. A related phenomenon is that particular senses of a prolific word are often indicated by the addition of a distinguishing graphic component. For example, *zheng* 正 (*teŋ-s), “rectification”, and *zheng* 政 (*teŋ-s), “government”, are more than just homophones: they are *the same word*, with the component 攴 on the right side of 政 indicating that the specific sense of “government” is intended. The same process is discernible in another philosophically significant pair: *zhong* 中 (*truŋ), “centeredness, impartiality”, and *zhong* 忠 (*truŋ), “loyalty”: here, the added “heart” 心 component in 忠 suggests that this virtue was understood to involve emotions and other mental processes (Goldin 2008b: 170–173).

But it would be a profound error to try to infer rules from such isolated cases. *Zhong* 忠, “loyalty”, may be a special sense of *zhong* 中, “impartiality”, but *wu* 忤, “awareness”, is surely not a special sense of *wu* 五, “five”. Moreover, completely unrelated words are sometimes written with nearly identical graphs; thus, *wang* 王, “king”, and *yu* 玉, “jade”, were so similar in the archaic script that they could even be mistaken for one another (for one such argument, see Shaughnessy 1997: 232).⁵ There were many more coincidental similarities than in the modern *kaishu* 楷書 set, which is the result of centuries of reform and clarification. For example, in oracle-bone and bronze inscriptions, *ren* 壬, the name of the ninth day of the ten-day cycle, often looks like *gong* 工, “work”, and sometimes even looks like *wang* 王, “king”. Of course, it has no *linguistic* connection with either one. Such examples must number in the hundreds.

The fetishization of the writing system is to blame for another common problem: failing to consider unrelated graphs that *do*, in fact, write cognate words (Qiu Xigui 2000: 260). Baxter and Sagart (2014: 29–30) discuss a fascinating example: *she* 設 (*ŋet), “to set up”, and *shi* 勢 (*ŋet-s), “circumstances, setting” (i.e., “the setting”). For most of Chinese history, no one recognized the connection between these words because the graphs give no hint of it;⁶ only through the hard-won gains of linguistic research has it become apparent today.

At the same time, *she* and *shi* illustrate the limitations of etymology for understanding philosophical language. Although there can be little doubt that the two words have a common root, it is far less clear that speakers of the classical language were conscious of this. Baxter and Sagart highlight an instance where a classical writer might have been playing with *she* and *shi*: “The setup of which I am speaking refers to what is set up by men” 吾所為言勢者，言人之所設也 (Chen Qiyou 2000: 945; translation by Baxter and Sagart 2014: 30). But David P. Branner (forthcoming) has dismissed this juxtaposition as a coincidence, largely because it is hard to find any other unimpeachable example. It is not rare for linguists and philologists to identify etymological connections that native speakers would never have guessed. How many native speakers of English are aware that the words *danger* and *dominion* are cognate or that *clue* means “a ball of thread” and refers to the legend of Theseus? Very few, especially beyond the halls of universities.

Thus etymology may help us understand *the language* of classical Chinese philosophers but not necessarily *their conception of their language*. The distinction is crucial. Chinese philosophers were fond of buttressing their arguments with paronomastic sentences that look like attempts at etymology and, as such, are often false (and thus all too easily derided). I believe, rather, that paronomasia in Chinese philosophy supervenes on a Jakobsonian notion of the

non-arbitrariness of language (Jakobson 1990: 407–421): things that sound similar must belong together (e.g., Yu 1987: 37–43; Bao 1990; Behr 2005). Paronomastic associations represent not linguistic assertions so much as ontological ones, and hence, it can be misleading even to characterize them as false etymologies.⁷

One of the most famous paronomastic utterances, “Music is joy”, comes from Xunzi 荀子 (third century BCE) and is questionable if taken as an etymological assertion:

夫樂者，樂也，人情之所必不免也。故人不能無樂，樂則必發於聲音，形於動靜。……故人不能不樂，樂則不能無形，形而不為道，則不能無亂。先王惡其亂也，故制《雅》、《頌》之聲以道之。(Wang Tianhai 2005: 809; for an even earlier example, see Cook 2012: 2.883)

Music is joy; it is what human emotions cannot avoid. Thus human beings cannot be without music. If we are joyous, then we must express it in sounds and tones, and give form to it in movement and stillness. . . . Thus people cannot fail to be joyous, and the joy cannot be without form, but if the form does not comply with the Way, then there cannot but be disorder. The Former Kings detested such disorder; thus they instituted the sounds of the “Elegantiae” and “Hymns” in order to make them comply with the Way.

Here Xunzi is taking advantage of the similarity of the words for “music” (*yue* 樂, *ɲʰrawk) and “joy” (*le* 樂, *rʰawk) to advance a view that is typical of Chinese aesthetics: music is the external manifestation of irrepressible emotions such as joy (Goldin 2020: 179–181; more generally, DeWoskin 1982: 19–27). If there is any true etymological connection between *yue* and *le*, it is beyond our ability to specify today; what is more likely is that the words happen to be near homophones, and thus a modern linguist might reject the whole argument as based on nothing more than a false etymology. But clearly, for Xunzi and his audience, near homophony sufficed to forge *conceptual* links, if not valid linguistic ones.

Another extremely famous example of paronomasia might be a false etymology too: “Humanity is [what pertains to] humans” (*ren zhe*, *ren ye* 仁者，人也), which is repeated in many texts (the earliest may be *Mencius* 7B.16; see also Cook 2012: 2.824–825). Here the cardinal virtue *ren* is associated, on the basis of its sound, with *ren* 人 (*nin), the word for “human beings”, which has been a pure homophone for centuries. Some scholars suspect, however, that *ren* 仁 is cognate with Tibetan *snying* (heart) and thus derives from an older form with a velar final (*niŋ),⁸ which was only later altered to *nin under the influence of the front vowel *-i- (Behr 2015: 214–215), just like “huntin’ and fishin’” in rural American English. If this is correct—I do not consider the evidence dispositive—then the virtue *ren* originally did not have anything to do with the word for “humans”, but as soon as sound change turned *ren* 仁 and *ren* 人 into perfect homophones, the conceptual association became all but inevitable: “humanity” is how “human beings” ought to behave. It is this, potentially false, understanding of *ren* 仁 that animated its usage throughout the history of Chinese philosophy. Hewing to the etymological fallacy would result only in a failure to understand it.

There is another important cultural consideration limiting the usefulness of etymology: the conviction of Chinese philosophers that their writing system encapsulated fundamental truths about the cosmos.⁹ The script was thought to have been invented by a sage, often identified as Cangjie 倉/蒼頡 (Bottéro 2006), and when sages handed down such innovations—like the “Elegantiae” and “Hymns” that we saw in Xunzi’s discussion of music—their purpose was to transmit their insight into the workings of the universe in practicable forms. The myth of the genesis of the divination manual called *Canon of Changes* (*Yijing* 易經) is related: a different sage, named Fuxi 伏羲

or Baoxi 包犧, intuited the patterns of nature from “the patterns of birds and beasts” (*niaoshou zhi wen* 鳥獸之文, Li Xueqin et al. 2000: I, 350; also Jiang Renjie 1996: 3122),¹⁰ and was thereby inspired to create the trigrams and hexagrams (e.g., Pregadio 2020; Zhang 2018: 22; Lewis 1999: 197–202). *Yijing* divination works, in other words, because it is based on patterns in the fabric of the cosmos. It is not magic or some other supernatural art (Peterson 1982: 85–91, 110–116).

Thus, although “haruspicy” is an objectionable practice for linguists in the twenty-first century, classical Chinese writers engaged in it without a second thought (and just as we chastise ourselves for fetishizing the script, we must remember that they fetishized it long before we did). As Kenneth J. DeWoskin has put it,

Understanding what Han scholars saw in a character is important to understanding how they used it. Whether by modern standards their opinions can be sustained or not, their writings on the etymology of a character are part of the mythology of the subject.

(1982: 57n.6)

Xunzi’s discussion of “music” and “joy” relies not just on the near homophony of *yue* and *le* in Old Chinese but also on the scribal convention of writing them with the very same graph: 樂. The implication would have been so obvious in his culture that he did not even need to spell it out: by using the same graph for “music” and “joy”, the sages were telling us that the two are related in ways that we would be advised to examine.

Han Fei 韓非 (d. 233 BCE), who may have been Xunzi’s student (Sato 2013), also relied on the written rather than the spoken word in his explanation of two keywords, *gong* 公 (acting in the interest of one’s sovereign) and *si* 私 (acting in one’s own interest):

古者蒼頡之作書也，自環者謂之私，背私謂之公，公私之相背也，乃蒼頡固以知之矣。(Chen Qiyou 2000: 1105)

In ancient times, when Cangjie invented writing, he called acting in one’s own interest *si*; what opposes *si*, he called *gong*. So Cangjie certainly knew that *gong* and *si* oppose each other.

The graphs for both *si* and *gong* share the element *si* 厶, which Han Fei takes as “acting in one’s own interest”. *Gong* is that which opposes 八 (presumably to be understood as *ba* 扒 or *ba* 拔, “to extirpate”) *si* and is therefore written 八厶, or 公 (Goldin 2005: 58–59).¹¹ Needless to say, this analysis is incorrect both palaeographically and linguistically, but that is not how it would have been judged at the time. If there was a shared belief that Cangjie had embedded such insights into the writing system, Han Fei’s argument would have been received as a fine application of Cangjie’s high-minded purpose.

Another graphic pun akin to the creative misinterpretation of *gong* 公 as 八厶 is “Poetry speaks the will” (*shi yan zhi* 詩言志, Li Xueqin et al. 2000: II, 95),¹² a hugely influential statement in “The Prescript of Shun” (“Shundian” 舜典), a chapter of the *Exalted Documents* (*Shangshu* 尚書) of disputed origin (Kern 2017). The line accomplishes two things at the same time: it asserts a theory of literary creation similar to that of Xunzi (poetry is the verbalization of our irrepressible urges) and does so by providing a pseudo-analysis of the graph *shi* 詩 as *yan* 言, “to speak”, plus *zhi* 志, “will, intention, ambition” (e.g., Zhu Ziqing 1947; Chow 1968: 155–166). As before, the unstated implication is that sages devised the very graph 詩 for the purpose of helping us understand the nature and generation of poetry. The next clause can be read as a pun too: “Songs chant the words” or “Songs make the words endure” (*ge yong yan*

歌永言), depending on whether one reads *yong* as 永, “eternal”, or 詠, “to chant”. The right interpretation, of course, is *both*: by packing them in memorable melodies, songs make one’s words endure. Even today, many of the phrases that people remember from bygone decades are from song lyrics. (For other examples of inventive graphic analysis in early Chinese texts, see Bottéro 2002: 15–20).

An Illuminating Example: *qi* 氣

Opaque morphology, paronomastic usage, and graphic puns are all reasons why etymology is not sufficient for understanding classical Chinese philosophical language—but this is not to say that simply mapping usage is sufficient either. A case in point is the protean word *qi* 氣 (*C.q^həp-s, where *C- represents an indeterminate consonant), for which there has been an enormous range of vague and perplexing translations, such “stuff”, “fluid”, “pneuma”, “ether”, “energy” (sometimes “material energy”), and “vital force”. One accomplished translator has even employed “psycho-physical stuff” (Gardner 1990: 50)—a valiant attempt to capture all the connotations of *qi* in a single phrase but outlandish nonetheless. This sorry state of affairs is the result of relying exclusively on usage rather than etymology. One cannot claim to understand a keyword unless one can say not only *what* it means but also *why*.

Qi has two general sets of meanings: on the one side, “breath”, “vapor”, and “air”; on the other, “matter”, “material”, “the physical substance of the world”, and hence also “the substance of the human body”, “the physical basis of one’s energy”, and even “fighting spirit” (for the last sense, see Lewis 1990: 222–231). In phrases like “flood-like *qi*” (*haoran zhi qi* 浩然之氣, *Mencius* 2A.2), we could be dealing with either of the two. But which came first, and how did these diverse senses emerge? Such questions cannot be answered without evidence from historical linguistics.

Once again, the work by Baxter and Sagart (2014: 170) is eye-opening: their reconstruction of *qi* as *C.q^həp-s discloses its connection with *xi* 吸, *q^həp, “to breathe”. *Qi*, *C.q^həp-s, simply reflects an unknown prefix.¹³ (Before the reconstruction of uvulars, the connection between *qi* and *xi* was not readily discernible.)¹⁴ Little doubt can remain that the basic meaning of *qi* is “breath”, and all the other senses are derived from it. Most previous work, which focused on the shape of the graph—thought to be a representation of vapor (following Jiang Renjie 1996: 77)—failed to reach this insight.

Once the link between *qi* and *xi* is established, it is apparent that *xi* 翕/噏/歛, “to suck in”, belongs to the same family. All three forms are recognizable as *q^həp in the Baxter and Sagart system. This is no minor point, because *xi* 翕 is frequently associated with *qi* 氣 in medical literature, as in the following text from Mawangdui 馬王堆:

幾已，內脊毋動，翕氣，抑下之，靜身須之，曰待贏。(Ma Jixing 1992: 1039)

When you are nearly finished, do not move the inner spine; **suck in** the *qi* and push it down; keep your torso still while you wait for it; this is called “attending to gain”.

This manuscript, which was given the title *Discussion of the Highest Dao under Heaven* (*Tianxia zhidao tan* 天下至道談) by its modern editors, relates methods of macrobiotic self-cultivation by means of sexual intercourse (for such techniques, see, e.g., Li Jianmin 2000: 66–80; Sakade and Umekawa 2003; Goldin 2006). In this particular context, *xi* does not refer to inhalation; the reference is to “sucking in” the *qi* that a woman emits at the moment of orgasm. The phrase “sucking in the *qi*” 翕氣 is *q^həp C.q^həp-s in Old Chinese; the consonance would have been unmistakable.¹⁵

Etymology and Usage in Action: *shu* 術 and *shu* 數

Though there is much more to be said about *qi*, a fuller discussion must be left for a different occasion (Goldin 2020: 229–244). In the remaining space, I would like to show how etymology and usage, applied together, can help unpack another poorly understood term, namely, *shushu* (which can be written either 術數 or 數術). One common translation is “divination”, but this is not completely satisfactory for two reasons: first, there are modes of divination that are not subsumed under *shushu* in most traditional bibliographical systems (notably *Yijing* divination, which is categorized as *jing* 經), and second, *shushu* often means something very different: “statecraft”. This latter sense is likewise not captured by Donald Harper’s translation “calculation and art” (Harper 1999: 825; also Harper and Kalinowski 2017: 5).

Shu 術 (*Cə-lut) and *shu* 數 (*s-roʔ-s) are pure homophones in Modern Mandarin (even their tones are identical), but they were not even close in Old Chinese. Nor are they homophones in modern dialects other than Mandarin, such as Cantonese. They are neither cognate nor phonetically interchangeable.

Shu 術 is the easier term to unravel. Phonologically, it is indistinguishable from 述 (*Cə-lut), “to transmit, to narrate, to follow”. Thus, *shu* 術 and *shu* 述 appear to be simply two ways of writing the same word (like the aforementioned examples of *zheng* 正/政 and *zhong* 中/忠). The following phrase appears in two unrelated contexts:

不合經術 (preface to *Yanzi chunqiu* 晏子春秋, Wu Zeyu 2011: 22; Ban Gu et al. 1962: 978)
... does not accord with what is **narrated** in the canons.

In this context, *jing shu* 經術 means the same thing as *jing shu* 經述, “narrated in the canons”.

Shu 術 is also phonologically indistinguishable from 銖 (*Cə-lut), “needle” (presumably from “to cause the thread to follow”). Some other likely cognates are:

- xu* 誅 (*s-lut), “to beguile” (< “to lead astray”)
- sui* 遂 (*sə-lut-s), “to advance, to proceed, to pursue”¹⁶
- dui* 隊 (*lʰut-s), “troops, squad” (< “the ones that follow”)
- sui* 崇 (*s-lut-s), “noxious influence” (< “to lead astray”?)¹⁷

All these examples imply a root **lʰut, meaning “to follow” or (causative) “to cause to follow”.¹⁸ They also explain the sense of “path, street” (i.e., a pathway to be followed), which is attested in *Mozi* 墨子:

巷術周道者，必為之門 (Wu Yujiang 2006: 885)
You must make a gate wherever lanes and **paths** meet the road around [the city].

Sui 隧 (*sə-lut-s) also has the meaning “path, road”.

I propose the translation “[effective] procedure”,¹⁹ a term from computer science, as explained by Carol E. Cleland:

At the core of our most general concept of procedure is the idea of something to follow. What one follows are instructions prescribing that certain things be done in a prespecified order in time. In other words, a procedure is a prescription for a course of action. This is just as true of the more refined procedures of mathematics (e.g. the Euclidean algorithm) and computer science (e.g. a JAVA program for sorting words) as it is for quotidian (a.k.a. mundane) procedures such as a recipe for Hollandaise sauce or the instructions for assembling a child’s tricycle.

From a pre-analytic, intuitive standpoint, a procedure is effective if correctly following it reliably yields a definite outcome.

(Cleland 2002: 160)

Other common translations of *shu* 術 are less satisfactory. One is “art” (e.g., Ames 1983), which is probably influenced by *yishu* 藝術, an old phrase that was repurposed in modern times to translate this Western term (e.g., Satō 2011: 76–79). “Technique, *tekhnē*” and so on are less objectionable, inasmuch as *tekhnē* can mean “a set of rules, system or method of making or doing” (Liddell and Scott 1996: 1785), but the connotations of this Greek word and its derivatives are still heavily artistic, for example, *tekhnarkhēs*, “master craftsman”, and *tekhnēma*, “work of art, handiwork”. *Shu* 術 can have the sense of “craft, occupation”, as well, as in *Mencius* 2A.7: “Thus one cannot fail to be cautious about **the occupation** [that one chooses]” 故術不可不慎也。

Still, I prefer “[effective] procedure”. One of the most famous examples of the usage of *shu* comes from *Han Feizi*, where the author responds to the legend that Zichan of Zheng 鄭子產 (d. 522 BCE) was able to discern that a certain widow had murdered her husband because her weeping sounded insincere:

或曰：子產之治，不亦多事乎？姦必待耳目之所及而後知之，則鄭國之得姦者寡矣。不任典成之吏，不察參伍之政，不明度量，恃盡聰明，勞智慮，而以知姦，不亦無術乎？(Chen Qiyou 2000: 914)

Someone [i.e. Han Fei] said: “Did Zichan’s governance not [require] many things? One could know of crime only after it had reached one’s ears and eyes, and the state of Zheng apprehended but few criminals. Not enlisting officials of laws and punishments, not observing the ‘government of threes and fives’ [a method of dividing the populace into manageable groups], not clarifying rules and measures, but depending entirely on shrewdness and belaboring one’s wisdom and deliberation in order to know of crime—is this not a lack of an **effective procedure**?”

Years ago, Herrlee G. Creel (1974: 130–131) recognized the similarities with twentieth-century management theory, citing Alex Bavelas (1960: 497): “More and more, organizations are choosing to depend less and less on the peculiar abilities of rare individuals and to depend instead on the orderly processes of research and analysis”.

Shu 數 is more difficult to explain because there are fewer helpful cognates. *Shū* (*s-ro?), “to count”, and *shù* (*s-ro(?) -s), “number”, are straightforwardly related; otherwise, I can find only a single indubitable cognate:²⁰

lū 屢 (*ro(?) -s), “frequently” (< “numerous times”)

Other candidates are far from certain, for example:

lou 樓 (*r^o), “storeyed building” (< “multiple storeys” but maybe rather “built-up thing”, like *lou* 塿 (*r^o?), “mound”)

lū 縷 (*ro?), “thread” (< “counted threads”?)

lou 耨 (*r^o), “a type of plow” (< “numerous furrows”?)

All of the cited examples being speculative, we have to rely primarily on usage rather than phonology to comprehend the range of meanings of *shu* 數. Sometimes the sense is self-evident:

善數不用籌策。(Laozi 老子 27)

One who is adept at **calculating** does not use counting rods.

數甲兵 (Yang Bojun 1990: 1106)

to make an accounting of military resources

不足數於大君子之前 (Wang Tianhai 2005: 510)

[Such matters] are not worth **enumerating** before a great noble man.

“Enumerating” also explains the sense of “upbraiding” (*shuma* 數罵 or *shuluo* 數落 in Modern Mandarin), as in the following examples:

武安君至，使韓倉數之曰…… (Fan Xiangyong 2006: 466)

When Lord Wu’an arrived [at court, the King] deputed Han Cang **to enumerate** [his crimes], saying . . .

事君數，斯辱矣。 (*Analects* 4.26)

To upbraid one’s lord [i.e. enumerate his faults] while serving him—this is disgraceful.

Senses like “divination” (and later commonly “destiny, fate”) derive from the conception of the universe as numbered.²¹ Nathan Sivin (1991: 40n.24) has explained *shu* in this context as “not simply ‘number’ but both quantitative and qualitative regularities that make divination possible” (cf. also Cullen 2017: 133–137). This usage is apparent in the “Appended Statements” (“Xici zhuan” 繫辭傳) commentary to the *Changes*:

極數知來之謂占。 (Li Xueqin et al. 2000: I, 319)

Knowing the future through the utmost **utilization of numbers** is called “divination”.

天一地二，天三地四，天五地六，天七地八，天九地十。天五數，地五數。 (Li Xueqin et al. 2000: I, 336–337)

Heaven is One, Earth Two, Heaven Three, Earth Four, Heaven Five, Earth Six, Heaven Seven, Earth Eight, Heaven Nine, Earth Ten. There are five **numbers** of Heaven and five **numbers** of Earth.

Similar associations are occasionally attested in texts beyond “Appended Statements”, perhaps drawing on similar traditions:

龜，象也；筮，數也。物生而後有象，象而後有滋，滋而後有數。 (Yang Bojun 1990: 365)

The tortoise [yields] an image; milfoil [yields] a **number**. After things (or “creatures”) are generated, there is an image; after there is an image, there is growth; after there is growth, there are **numbers**.

Other examples are readily located:

數有所不逮 (Jin Kaicheng et al. 1996: 756)

There are things that cannot be attained through **divination**.

昔之傳天數者 . . . (Sima Qian 1959: 1343)

In the past, those who transmitted the **numbers** of Heaven were . . .

As mentioned previously, however, *shu* often appears in texts on statecraft, where its sense is not always easy to explain. Sometimes the argument is that the sage kings were able to rule the world because they had mastered the numerical patterns of the cosmos (e.g., Cheng Zhenyi and Jun Wenren 2012: 2; cf. Pankenier 2018: 352n.31). In other instances, J. J. L. Duyvendak's (1889–1954) old suggestion of “statistics” or “figures” seems more plausible for *shu* 數.²² Duyvendak himself discussed the following example (1928: 96–97):

故先王不恃其疆而恃其勢，不恃其信而恃其數。(Jiang Lihong 1986: 132)

Thus the Former Kings relied not on might, but on situational advantage; they relied not on trust, but on **statistics**. (See Duyvendak 1928: 318 for a rather different translation.)

Some other instances:

命之曰地均以實數。(Li Xiangfeng 2004: 89)

This is called equalizing [the tax on] land in accordance with the **statistics** of its produce.

禮法度數 (Guo Qingfan 1961: 468)

Rituals, methods, measures, and **statistics**

故為國之數，務在墾草。(Jiang Lihong 1986: 44)

Thus the **relevant statistics** for governing the state mostly have to do with cultivating grasslands.

But “statistics” in the last example appears strained, and more recent scholars interpret *shu* in this sense as “technique” or “method” (e.g., Pines 2017: 50, 159). There are other contexts where *shu* does not seem to be plausibly interpretable as “statistics” or “figures”, for example:

今夫弈之為數，小數也。(Mencius 6A.9)

Chess is a **skill**, though a minor one.²³

Accordingly, commentators frequently gloss *shu* 數 as *shu* 術.

教訓成俗而刑罰省，數也。

陶鴻慶注曰：數，術也。(Li Xiangfeng 2004: 56)

When instruction perfects customs and punishments are remitted—this is *shu*.

Commentary of Tao Hongqing (1859–1918): “*Shu* is *shu* [i.e. effective procedure]”.²⁴

Creel's suggestion was that *shu* 術 replaced *shu* 數, but he did not explain how this could have happened. He had one very good observation: when later texts discuss the philosopher Shen Buhai 申不害 (fl. 354–340 BCE), who was closely associated with the concept, they always use *shu* 術 rather than *shu* 數, whereas the surviving fragments attributed to him (called *Shenzi* 申子) always use *shu* 數 rather than *shu* 術 (Creel 1974: 125–127). Thus, there does seem to have been systematic replacement. But any theory of replacement must be based on perceived *synonymy* rather than homophony, because, we recall, *shu* and *shu* would have been pronounced very differently in Old Chinese.

Much of the puzzle is resolved by considering a subtly distinct sense of *shu* 數: “[proper] sequence”,²⁵ often encountered in *Xunzi* in particular.²⁶

其數則始乎誦經，終乎讀禮。(Wang Tianhai 2005: 22)

The **sequence** [of learning] is to begin by chanting the classics and to end by reading the rites.

所志於四時者，已其見數之可以事者矣。(Wang Tianhai 2005: 677)

What one records of the four seasons is no more than what is necessary for undertaking [the right] actions after observing their **sequence**.

The sense of “sequence” is attested in other texts as well, such as *Springs and Autumns of Mr. Lü* (*Lüshi chunqiu* 呂氏春秋):

水氣至而不知，數備，將徙于土。(Chen Qiyou 2002: 683)

Water *qi* will reach its limit, and then, without our knowing it, the **sequence** will come full circle and shift back to Earth.

These examples permit the interpretation of *shu* 數 as “following the right sequence”, hence the following four inferences:

1. *Shu* 術 means “[following an effective] procedure”.
2. *Shu* 數 has a broader range of meanings, from “number(s)” to “using numbers in divination” to “using statistics in governance” to “[following the right] sequence”.
3. *Shu* 術 must have replaced *shu* 數 in certain senses because of the perceived synonymy between “following an effective procedure” and “following the right sequence”.
4. But they are not interchangeable, and *shu* 數 should not be misinterpreted as simply an old way of writing *shu* 術. When *shu* 數 occurs in one of its extended senses, finding a philologically sound translation can require some effort, for example:

無數以度其臣者，必以其眾人之口斷之。(Chen Qiyou 2000: 977)

One who has no *shu* with which to measure his ministers must judge them according to the clamor of the populace.

Wang Xianshen 王先慎 (1859–1922) glossed this *shu* as *shushu* 術數, that is, “administrative methods”, but the presence of *duo* 度, “to measure”, demands a word with stronger connotations of numeracy. Maybe “benchmark” or “yardstick”?

Conclusion

This chapter has attempted to demonstrate how the lexicographical depth afforded by considering both etymology and usage can contribute to a finer understanding of classical Chinese philosophical keywords. The allotted space has permitted only a handful of illustrative examples. An exhaustive study of this kind would be daunting not only because our understanding of Old Chinese

remains imperfect but also because, in the long and complex history of Chinese philosophy, key-words were continually reconsidered and reconceptualized. *Qi*, for example, acquired its immense semantic range in part because it has been used, by different writers and for different purposes, over a period of more than 2,000 years. Mere mortals cannot hope to master the entire literature.

Notes

- 1 Notably those of Pan Wuyun 潘悟雲 (2000 and 2012) and Axel Schuessler (2007 and 2008). Many thanks to Christopher P. Atwood, David P. Branner, Li Feng, Michael Lüdke, Gian Duri Rominger, Anna M. Shields, and Robin D. S. Yates for helpful suggestions.
- 2 Noah Webster (1758–1843) had the right idea but insufficient philological knowledge to support his manifold proposed etymologies (Laird 1946).
- 3 Rather less compelling is Shi Chao (2018), who takes *shen* 身 seriously as “body” but cannot explain *qian*.
- 4 Consider the joke, attributed to Su Shi 蘇軾 (1037–1101), that if Wang Anshi 王安石 (1021–1086) explained *po* 坡 (slope) as “the skin of earth” 土之皮, then is *hua* 滑 (slippery) “the bone of water” 水之骨? (Ding Chuanjing 2003: 10.494; the source text is Wang Shizhen 1595: 7B.10b–11a). Ridiculing Wang Anshi’s pseudo-etymologies became something of a literati pastime (Wai-ye Li 2020: xxii–xxiii).
- 5 For my own interpretation of the passage that Shaughnessy discusses, see Goldin 2002: 25–26.
- 6 Baxter and Sagart do not indicate that Schuessler (2007: 570–571) discussed this pair as well. Even earlier, Qiu Xigui (1994: 10–11; 1998) pointed out that the near-homophone *yi* 執 (Old Chinese * η et-s) could be used to write *she* in palaeographical literature. This was an impressive discovery; *yi* and *she* are not listed as a pair in the many dictionaries of interchangeable graphs (*tongjia zidian* 通假字典) that I have consulted.
- 7 Cf. Goldin (2005: 14–18). Several twentieth-century Chinese scholars (see esp. Zhang Yiren 1976, also Long Yuchun 1971: 92–94; Wang Li 1982: 10) recognized that paronomastic sound glosses are of limited value for etymological research, because their primary purpose was to advance traditional ethics.
- 8 Baxter and Sagart (2014: 238–239) also draw attention to *ning* 佞 (Old Chinese * n^{h} in-s), “sly”, which uses 仁 for its sound.
- 9 In the West, thinkers such as Giovanni Pico della Mirandola (1463–1494) and Heinrich Cornelius Agrippa (1486–1535), drawing heavily on Kabbalism, conceived of the origin and alleged power of Hebrew writing in strikingly similar terms (e.g., Eco 1995: 120ff.).
- 10 A similar phrase, “the footprints of birds and beasts” (*niaoshou tihang zhi ji* 鳥獸蹄迹之迹), is said in the postface to *Shuowen jiezi* (Jiang Renjie 1996: 3123) to have been Cangjie’s inspiration; *Lunheng* (Huang Hui 1990: 800) refers to the traces of birds as well. According to the apocryphal *Xiaojing yuanshen qi* 孝經援神契 (Xu Jian et al. 2004: 506), Cangjie imitated the shape of the constellation Kui 奎 (which comprises 16 stars in Andromeda and Pisces).
- 11 This explanation is repeated in *Shuowen jiezi* 說文解字 (Jiang Renjie 1996: 218).
- 12 See also the parallel in *Zuozhuan* 左傳 (Yang Bojun 1990: 1135): “Poetry is for speaking one’s intentions” (*shi yi yan zhi* 詩以言志).
- 13 Two rarer words are easily recognized as cognates: *kai* 慨/慨 (* $C.q^{\text{h}}$ əp-s), “to sigh”, and *kai* 愾 (* q^{h} əp-s), “to sigh, to grow angry”.
- 14 For example, Schuessler (2007: 423, 522) reconstructed *qi* 氣 as * $kə(t)s$ and *xi* 吸 as * $həp$, because his system does not include a uvular series. More recently (private communication), he has reinterpreted *qi* as * $khəps$, that is, *xi* with a * k - prefix and *-s suffix. He also regards the aspirated initial as an indication that the whole word family is sound-symbolic for breathing (2002: 160).
- 15 The unaspirated doublet *yi'ai* 呬優 (* q^{h} əp q^{h} əp-s), meaning “to breathe uncomfortably”, is attested in *Xunzi* (Wang Tianhai 2005: 801; see also Li Xueqin et al. 2000: VI, 1388 and XXIV, 75). I cannot explain why *xiqi* 翕氣 is aspirated and *yi'ai* is not, but once again Schuessler may be right that all these words are onomatopoeic (2002: 160).
- 16 Accordingly, it is not surprising that *shu* 述 is an attested borrowing for *zhui* 墜 (* $m.l$ rut-s) in bronze inscriptions and other early texts (Wang Hui 1993: 679). This phenomenon would be baffling without historical linguistics; Karlsgren (1967: §§1549–1552) was at a loss to explain it.
- 17 It is possible that *sui* 崇 is to be associated rather with *chu* 出 (* t -k $^{\text{h}}$ ut), “to expel”.
- 18 One might also suspect *shuai* 率 (* s -rut), “to follow, to abide by”, and *shuai* 率/帥 (* s -rut-s), “to lead, to command”, but I think these derive from *lü* 率/律 (* l rut), “norm, standard”.

- 19 Morgan (2017: 12 *et passim*) also translates *shu* 術 as “procedures”.
- 20 The reading *shuò* 數 (*s-rok), “repeatedly”, must be related, but the *-k suffix is not well understood (e.g., Schuessler 2007: 70), hence perhaps also *shu* 漱 (*s-rok-s), “wash” (< “scrubbed repeatedly”?).
- 21 Numbers were associated with the structure of the universe, and hence divination, in the Greco-Roman world as well (e.g., Wright 1995: 131–134). Hence Horace (65–8 BCE) speaks of *Babylonios . . . numeros* with reference to astrology in the famous *Carpe diem* ode (I.11; Rudd 2004: 44).
- 22 The very etymology of the word *statistics* (it is cognate with “statism”, “statecraft”, etc.) shows that such techniques were prized for their administrative applications in the West as well (Menand 2001: 187). This is also a good example of the etymological fallacy, for I was unaware of the etymology of “statistics” before reading Menand’s explanation.
- 23 In this context, *shu* might have an effective sense of “properly sequencing one’s moves”. The reference is probably to the game of *weiqi* 圍棋 (i.e., *go* 碁).
- 24 Gao You 高誘 (ca. 168–212 CE) also frequently resorted to the same gloss in his commentaries to *Lüshi chunqiu* 呂氏春秋 and *Huainanzi* 淮南子; likewise Wang Niansun 1978: 609.
- 25 For the significance of proper sequences in certain modes of divination, as well as Yu’s 禹 legendary travels through the Nine Provinces, see Pankenier 2018.
- 26 *Xunzi* also contains three instances of the phrase “This is/was not luck, but **the result of following proper protocols**” 非幸也，數也 (Wang Tianhai 2005: 236, 607, 664).

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