

A Comparison Between the Development of the Chinese Writing System and Dongba Pictographs¹

Seaver Johnson Milnor

milnor@u.washington.edu

1 Introduction

Alongside the Chinese writing system, Naxi Dongba pictographs (納西象形文字 *Naxi xiangxing wenzi*, 東巴文字 *Dongba wenzi*) stand in stark contrast.² Whereas Chinese is one of few known instances in which writing was invented *ex nihilo*, Dongba pictographs developed in a context of contact with other writing systems, among them Chinese and Tibetan. Yet the Dongba pictographic script does not meet all the criteria that define a writing system proper. We shall see that *Naxi xiangxing wenzi* cannot express the full range of the spoken Naxi language. This is in spite of having had the benefit of cultural contact with complete writing systems. The Dongba characters, however, meet the particular needs for which they were designed.

In the Chinese case, writing was a new invention.³ William G. Boltz, following the earlier work of Peter A. Boodberg, argues that, as in ancient Egypt and Mesopotamia, the Chinese “invented writing according to what look like general, I am tempted to say universal, principles and patterns” (1994: 12). Likewise, the Mayans appear to have followed the same paradigm in developing hieroglyphics:

¹ This paper has benefited greatly from the critique of Dr. Zev Handel and two anonymous reviewers for *University of Washington Working Papers in Linguistics*.

² “Naxi,” also written “Na-khi,” refers both to an ethnic minority group native to Southwest China and their language. “Dongba,” also written “dto-mba,” refers to the eclectic religion of the Naxi people as well as its ritual specialists.

³ To state that writing was independently invented in China is conventional, but has not been conclusively proven. Pulleyblank points out, “there were no literate peoples closer to China than the Indus valley from whom the idea of writing could have been transmitted” (1983: 415). See also 414-416; Boltz 1994: 34-38; Cheung 1983: 383.

(a) true writing emerges with logographic signs; (b) the first step toward “phoneticism,” that is, phonetic flexibility in the use of graphs, is “rebus” writing, or what we may call “punning;” (c) phonetic complements, i.e., determinatives, arise; and (d) logographs come to be used for their sound value alone, i.e., they are “desemanticized” (Campbell 1984: 12 paraphrased in Boltz 1994: 12).

If this is the process by which writing systems emerge independently, then what are the implications for a society developing its own only after having come in contact with foreign systems? Specifically, to what extent did Dongbas follow the above stages? Let us turn first to the particular contexts from which 漢字 Hanzi (Chinese characters) and *Naxi xiangxing wenzi* arose.

1.1 Chinese Origins

There is some debate surrounding what constitutes the earliest Chinese writing. Some argue that markings on Neolithic pottery shards — unearthed at sites along the Yellow River basin, some predating even the advent of writing in Egypt and Mesopotamia — represent the formative stages of Chinese writing (Boltz 1994: 34-35). In a survey of 20th century excavations, Cheung Kwong-Yue suggests that the graphs found on pottery at two significant early sites, Banpo⁴ and Jiangzhai, “allow us to propose a date of circa 4000 B.C. for the commencement of a viable, albeit primitive form of Chinese character” (1983: 383). Overturning a previously stated opinion (quoted in Boltz 1994: 37), famed archaeologist K.C. Chang concedes “that some of the pottery marks of Pan-p’o and Chiang-chai were, individually, directly ancestral to the same characters in the writing systems of the Shang and the Chou,” but, nevertheless, maintains that these individual characters did not comprise a writing system (1983: 573). To the contrary, Boltz questions the possibility “that an inchoate attempt at writing would or could remain in a kind of limbo or suspended animations for several millennia before achieving the form of a true writing system” (1994: 38). Among experts, this issue is far from resolved. It may generally be the case that Chinese scholars incline to accept older dates for the

⁴ One of the most important Chinese archaeological sites, located in modern day Xi’an County, dated approximately 4800 – 4200 B.C., and excavated in 1954 – 1957 (Cheung 1983: 323-325).

beginnings of their native writing system, but Western scholars demand a greater burden of proof. For a definitive answer, we can only await the excavation of further evidence.

1.1.1. Oracle Bone Inscriptions and Old Chinese

Oracle Bone Inscriptions (OBI, 甲骨文 *jiaguwen*) from the 商 Shang period (ca. 16th C. – 1045 B.C.) comprise the earliest Chinese collection of graphs indisputably regarded as a fully-developed writing system. These divinatory inscriptions were carved primarily on the scapulae of oxen and on turtle plastrons (Boltz 1994: 31).⁵ Though the connection is rarely apparent at first glance, the characters found on oracle bones are undoubtedly ancestral to the Chinese characters used today.

Of precisely what language then are OBI a written representation? One may reply “Old Chinese;” however, this answer is not without complications.⁶ Theories explicating the sound system of Old Chinese, tenuous in their own right, are based largely upon the language of the 詩經 *Shi Jing*, a heterogeneous collection of 305 poems dating ca. 800 – 500 B.C. Besides the centuries separating late-Shang OBI from the earliest *Shi Jing* poems, it may even be the case that they are unrelated languages. Though Shang characters are certainly ancestral to later Chinese *writing*, the spoken language written on OBI may well not have been ancestral to the Chinese spoken during the 周 Zhou (1045 – 221 B.C.)

A few key characteristics of Old Chinese are as follows: Unlike modern dialects, it is believed to have lacked tones but contained consonant clusters; consonant endings, which affected the pitch of words, are believed to be the source of Middle Chinese (ca. 600 A.D.) tones. Measure words (MW), derived from nouns, were not obligatory, but occasionally – as seen in OBI – appeared in phrases NOUN + NUMBER + MW. Though SVO (Subject Verb Object) word order is most common in Old Chinese, there is evidence suggesting that the underlying word order may have been SOV (Subject Object Verb) in origin (Handel 2004: 110-112).

⁵ Interestingly enough, Dongbas are one of the few groups in the world who still practice divination using bones. See Ge 1999.

⁶ One possible periodization of Old Chinese is as follows: Early, 1300 – 1100 B.C.; Middle, 1100 – 200 B.C.; and Late, 200 B.C. – 200 A.D., roughly coinciding with the Han dynasty (Handel 2004: 93).

1.2 The Naxi Context

The Naxi are one of fifty-five “minority nationalities” (少數民族 *shaoshu minzu*) recognized by the People’s Republic of China.⁷ Their present population of about 289,000 is largely situated in the mountainous Lijiang Naxi Autonomous Region of Yunnan province (Zhang 2000: 62). The Naxi language is a member of the Yi (a.k.a. “Loloish”) branch of the Tibeto-Burman language family (Ramsey 1987: 249-250). Though Naxi is divided into two dialects, western (e.g. Lijiang) and eastern, the latter is more heterogeneous and internally less mutually intelligible. The Lijiang dialect has forty-eight consonants, nine vowels, four tones and “syntactic structure ... much the same as that of other Tibeto-Burman languages spoken in Yunnan” (266).

Writing among the Naxi is particularly interesting. Besides writing *putonghua* (普通話) with Chinese characters, they have two scripts for their own language, one phonetic and the other pictographic. Both forms of Naxi script were used in production of Dongba ritual texts. Sources disagree whether the pictographs preceded the phonetic script, or appeared later (Jackson 1979: 53).⁸ I believe the most likely explanation is that given by Anthony Jackson: a phonetic script, related to that of the Yi people, emerged in the 13th century when both groups were under Mongol rule (60-61). If this was in fact the case, then the phonetic script certainly predates the pictographs.⁹

The pictographic script became ubiquitous throughout Naxi territory during the 18th and 19th centuries and was surprisingly standardized; the phonetic script, however, was more idiosyncratic and less uniform across locales. “The phonetic script was not used as the main vehicle for the ritual texts but was generally employed for spells (where the sound alone was important) and for books of divination (... as a shorthand device for colloquial Na-khi)” (Jackson 1979: 60). The Naxi phonetic script was imperfect in that it lacks diacritic marks to indicate tone — thus, as with Mandarin written in toneless *pinyin*,

⁷ Another name often applied to Naxi people is “Moso.” Resolving the Naxi/Moso distinction is an interesting question, but beyond the scope of this paper. My own understanding is that the Moso are a subset of the Naxi—reputed for the custom of “walking marriage” (走婚 *zouhun*) and matriarchal family structure — living around Lugu Lake on the Yunnan-Sichuan border. For a detailed discussion, see Jackson 1979: 275-296 and Pan 1995: 84-119.

⁸ For a concise summary and appraisal of both arguments, see Pan 1995: 180-186.

⁹ I am indebted to Dr. Chas McKhann, Associate Professor of Anthropology at Whitman College and expert on Naxi religion, for bringing Anthony Jackson’s work to my attention.

ambiguity easily arises. Dialectical variation of course compounds the problem. Pictographs, however, “being *partly illustrative* ... can employ symbols to convey the ideas which are severally represented by one homophone but in different tones” (emphasis mine; 62).

1.2.1 Dongba Manuscripts

Over 5,000 Dongba manuscripts have been collected in libraries across the United States and Europe. The availability of so many of such texts to the western world is largely due to the efforts of explorer Joseph Francis Rock (1884–1962), a prolific collector and translator who resided in southwest China for the bulk of 1922–1949. Rock’s publications, including the translations of approximately 135 Dongba texts, constitute the foundation of western Dongba studies (Pan 1995: 8-9).

From when and where did Dongba pictographs and manuscripts appear? Anthony Jackson tells us that Joseph Rock, relying on a colophon dating a text by the Chinese *tiangan-dizhi* 天干地支 sexagenary cycle, claimed Dongba texts appeared at least as early as the 16th century. However, Jackson convincingly refutes Rock’s assertion and proposes circa 1750 as a more plausible date; certainly no extant Dongba text predates 1703 (Jackson 1979: 52). The political and cultural context of the early 18th century complements this interpretation with an impetus for the promulgation of indigenous pictographs. In 1723, the Qing (1644–1911) government tightened its control over minority peoples, but this did not include Manchus, the minority ethnic group comprising the Qing ruling house. Among the traumatic cultural consequences, forcing the Chinese custom of arranged marriage upon the Naxi resulted in an increased suicide rate. As Lijiang became a center of trade, the standard of living increased. With an increase both in social problems and the means to hire ritual specialists to remedy them, the Dongba religion and its textual tradition flourished. However, the greatest upsurge in Dongba text production occurred after 1830. Particularly considering Lijiang’s strategic location as a trade route, the opium industry became increasingly lucrative after China’s Opium Wars with Britain (1839 – 1842) and the Naxi economy benefited greatly. The population increased along with its disposable income for Dongba ceremonies (Jackson 1979: 54-55, 73; Pan 1995: 156).

Having considered socioeconomic catalysts for the Dongba tradition, now we must consider where their ritual texts came from:

The Na-khi pictographic script consists of little stylized drawings of men, animals, trees, stones, etc., written across the page from left to right, as in Tibetan. The physical layout of the book with its three or five lines of text, the use of a pen or stylus, and even the making of the paper, all show Tibetan rather than Chinese influence.... The plain conclusion is that the Na-khi *dto-mba* manuscripts are modeled on Tibetan books (Jackson 1979: 60).

Looking at all we know of the *dto-mbas* – their dress, their rites, and their scripts – all point to Bön-inspired sources. [Bön is a Tibetan religion rooted in pre-Buddhist animistic shamanism.] If one takes the Bön sect as an ongoing institution and then progressively strips it of its lamaseries, its temples, its books, and bans its monks from their traditional begging as a means of revenue, proscribes them from gathering together in the main towns and villages, and leaves them for a few years: what results? The answer is plainly evident: a peasant farmer with a fund of esoteric means of coping with demons – a *dto-mba* (68).







Jackson distills the evidence into three prerequisites for the founding fathers of the Dongba religion: (1) familiarity with Tibetan bookmaking, (2) Bön symbolism, and (3) knowledge of both written Tibetan and spoken Naxi. Such a person would have been a “Na-khi trained at a Bön lamasery.”

2 What Constitutes Writing?

William Boltz defines writing “as the graphic representation of speech; and a writing system, then, as any graphic means for the systematic representation of speech” (1994: 17). “Later he says that ‘the essential and indisputable feature that must be present for a graph ... to qualify as writing is phonetic representation.’ Thus, ... all graphs that are not associated with pronunciation are excluded from writing” (Bottéro 1996: 575). This definition is narrow and certainly rules out graphs that otherwise may be argued to constitute “writing,” but remains a convenient standard for analysis.

2.1 Notation

Boltz employs a useful system, which I will refer to as “GPS notation,” to describe key attributes of graphs. The abbreviations G, P and S stand respectively for graph, phonetic value and semantic value. The three components together are arranged thus: G : [\pm P, \pm S]. The “plus” (+) or “minus” (-) sign preceding P and S indicate where or not “the feature in question is associated with the graph” (1994: 19). “Plus” of course means that the given feature is present and “minus” that it is not. GPS notation can thus denote four possible types of graphs:¹⁰

(1) G : [-P, -S] This type of graph, lacking both sound and meaning, is clearly not writing. Examples may include the absentminded doodling of a bored student, scratch marks left on furniture by a misbehaving cat, an otherwise “realistic” drawing or painting so poorly executed that no person other than the artist could recognize the intended subject matter, or any graph lacking a conventionalized meaning—e.g. —, , , , .

(2) G : [-P, +S] Also not writing by Boltz’s definition, lacking an associated pronunciation, graphs of this type may include symbols such as the green “Mr. Yuck” poison warning stickers placed on bottles of household cleaners to discourage children from ingesting their contents, the stamp placed upon the back of one’s hand as proof of paid admission to an event, and the hexagrams and *umyang* 陰陽 (Chinese: *yinyang*) found on the flag of the Republic of Korea.

(3) G : [+P, +S] Chinese characters are of this type, with the exception of very few which in modern usage have lost their semantic association as well as the rare sub-morphemic characters (e.g. 玻 *bo* and 璃 *li*, which form the word for “glass;” 咖 *ka* and 啡 *fei*, in the transliteration for “coffee.”) Boltz, by his interpretation, emphasizes, “the graph stands for the word *only* by virtue of standing for the *sound* of the word in question.”

(4) G : [+P, -S] Examples of graphs with phonetic but no semantic association include the letters of the Roman alphabet and *zhuyin fuhao*. Below we will determine the GPS

¹⁰ In each case, I have produced my own examples.

classification of Dongba pictographs as well as the status of the script by the standards of a writing system.

2.2 Are Naxi Pictographs Writing?

Though Chinese is certainly a writing system, the status of Naxi pictographs is debatable. *Dongba wenzi* lie right on the cusp between writing and proto-writing. Fang Guoyu and He Zhiwu, among others, tell us that the pictographs are only used among adherents of the Dongba religion, not Naxi people in general. Within their texts, the pictographs do not record every word, but rather serve as memory aids for recitation (1995: *bianyan* 1-2). As rituals became increasingly complex, pictographic mnemonic devices were employed to help the Dongbas remember the proper sequence of chants (Jackson 1979: 62). *Naxi xiangxing wenzi* texts, omitting many words from the rites they record, do not systematically represent speech and thus do not constitute a writing system by Boltz's definition. One could learn the spoken Naxi language, memorize the meaning and pronunciation of every pictograph in a given manuscript, and would still be unable to recite the ritual in its entirety without having first studied it under the tutelage of a Dongba.

One may then raise the possibility that it is only the *texts themselves*, in omitting certain words, that do not reflect a writing system and not a feature inherent in the pictographic script. It would be easy enough, for instance, to copy down every other couplet from a famous Tang poem, such as Li Bo's *Song you ren* 送友人 and ask a person familiar with it to recite the complete poem from the partial rendering. Such an exercise, analogous to the production of a Dongba text, would certainly not invalidate the status of Chinese as a writing system.

Disregarding the substantial effort required to write entirely in pictographs, could one not choose to produce a complete transcription of the spoken language with *Dongba wenzi*? Actually, no. "While pictographs are excellent in presenting things, they are a little less helpful in expressing certain non-visual abstract ideas, e.g. ethical doctrines, which may account for their surprising absence from the *dto-mba's* texts" (Jackson 1979: 62). Other features distinguishing this script from true writing systems are unread symbols "inserted into a frame only to elucidate the meaning of another symbol" and that "at

other times a drawing may be ‘read’ two or three times even though it appears only once” (Ramsey 1987: 266).

Let us temporarily put aside the requirements of a “writing system” and consider the slightly looser concept of “writing.” Though the Dongba pictographic script as a whole does not meet the definition of a writing system, are isolated pictographs—and even a limited set of complete sentences, perhaps—writing? Two types of graphs are defined by Boltz as writing, $G : [+P, +S]$ and $G : [+P, -S]$. Let us consider two simple entries from A *Glossary of Naxi Pictographs*:

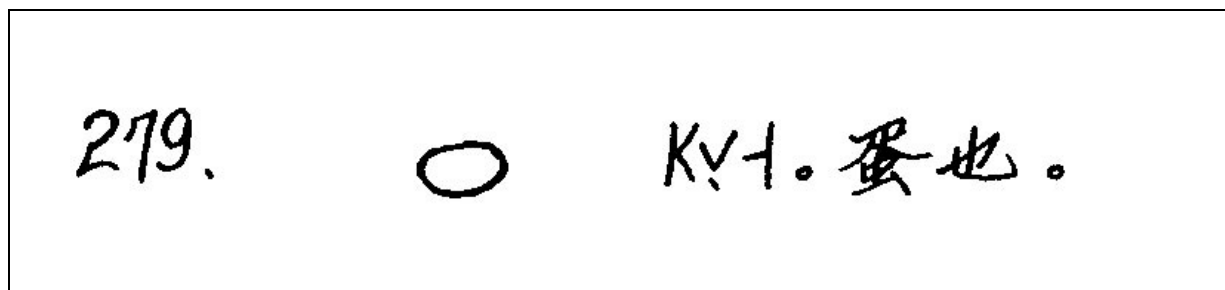


Figure 1: Egg pictograph (Fang and He 1995: 164).

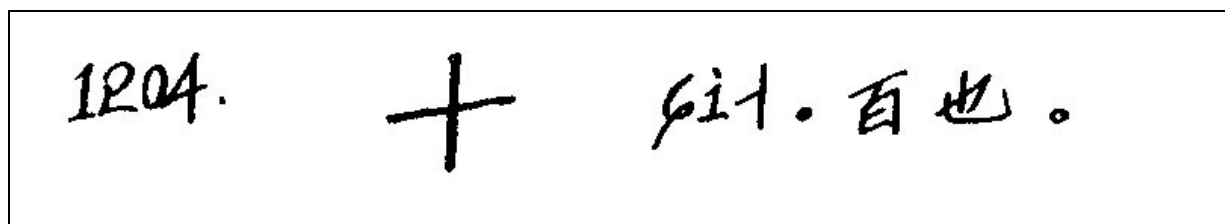


Figure 2: Numeral one hundred (Fang and He 1995: 338).

The pictograph for an egg (#279) is simply an oval.¹¹ Its phonetic value is represented by International Phonetic Alphabet (IPA) symbols. The diagram “-|” indicates it is pronounced with a mid level tone. The meaning is glossed as “egg” (蛋也 *dan ye*). This pictograph can thus be represented $G : [+P, +S]$, possessing both phonetic and semantic values, and is thus a *written* character. The Dongba numeral one hundred (#1204) resembles the Chinese character 十 *shi* (ten). Likewise a $[+P, +S]$ graph, having both a pronunciation and meaning, it too is an example of writing. Perusing the pages of the *Glossary*, it appears that every graph has an associated pronunciation, i.e. $[+P]$, and

¹¹The “egg” graph is nearly indistinguishable from some other ovals, such as pictograph #1208. See Fang and He 1995: 339.

accordingly meets our definition of writing. This is admittedly based upon our presumption — I believe a reasonable one — that Fang and He’s interpretation of the pictographs is accurate.

Counterintuitive though it may seem, whereas individual Dongba characters are writing, the script as a whole does not comprise a writing system by our chosen definition. Each pictograph represents a spoken word, yet in the aggregate they fail to cover the entire spoken lexicon.¹²

3 Developmental Stages

As mentioned in the introduction, the first stage in the development of writing is the use of logographs, i.e., graphs that stand for words (Boltz 1994: 6). Though no longer obvious in modern characters, Chinese was pictographic in origin. The most intuitive way to write a word was to draw a picture of it. Recognizable drawings, however, are time-consuming to produce, so “there is a natural tendency for such graphs to become progressively simplified and stylized” (Norman 1988: 58-59).

The Dongba pictographic script is clearly indigenous to Naxi areas, because of the particular flora and fauna it represents (Jackson 1979: 59; Ramsey 1987: 268). From this early stage of development, Dongba pictographs diverged from Chinese and the world’s other writing systems. Despite their extent of standardization, the pictographs have not been simplified nearly to the extent of any “practical” writing. Quite the opposite of Chinese characters, the meanings of numerous Dongba pictographs are immediately obvious to the untrained observer.¹³ Why have Naxi pictographs not been simplified? Like OBI and *jin wen* 金文 (bronze inscriptions), the earliest Chinese characters, Dongba pictographs were used exclusively in ritual texts. Whereas Chinese characters were later applied to daily life, however, Dongba pictographs were not. Dongbas took the time to produce works of art for religious use — efficiency in production speed was not their top pragmatic concern.

¹² Consequently, this raises the issue — that will not be pursued here — of Chinese dialectal words for which there are no characters.

¹³ Indeed, many characters are so recognizable they are used in modern art, such as the school of 現代東巴畫 *Xiandai Dongba hua* (Modern Dongba Painting), pioneered by Zhang Yunling.

3.1 Logographs

In the absence of a previous concept of writing, a crucial intellectual leap must take place – the realization that a graph can stand for a word, the name of an object, rather than the object itself. It is at this point, once the concept of “word” is realized, that a pictograph [-P, +S] becomes a logograph [+P, +S], regardless of whether the graph’s form has evolved into something simple (Boltz 1994: 54). Once a graph describes a word, it obtains a phonetic value from the spoken language. I suspect in the Dongba case, however, as pictographs were devised they instantaneously became logographs, because the written word was not a new concept.¹⁴

3.2 Rebus Writing

There is a limit to the number of words that can be represented pictographically, as anyone who has played the game “Pictionary” must know. Abstract concepts can be represented to an extent with pictures or diagrams, as seen in the Chinese characters 上 *shang* “above” and 下 *xia* “below.” Nevertheless, to fully represent all possible utterances it is necessary to write some abstract words with homophones. Employing these phonetic loans is called the “rebus” principle or paronomasia. A commonly cited Chinese example was using a logograph that pictorially represented “wheat” (麥 *mai*) to also write the homophonous verb “to come” (來 *lai*) (Norman 1988: 60-61; Boltz 1994: 60).¹⁵

Ramsey (1987: 267) provides three examples of rebus writing using *Naxi xiangxing wenzi*. The word “eye” is a drawing of two eyes; the graph is also used to write the homophonous word “fate.” Likewise, a picture of a covered dish denotes both “food” and its homophone “sleep.” There is no guarantee, however, that a homophone will be available, so frequently a near-homophone must suffice. The goral (goat antelope) pictograph is used logographically to write an aspect marker that differs in pronunciation only by tone. One may think a paronomastic borrowing, such as the Naxi word “fate,” is G : [+P, -S] because its meaning is not related to what the character represents

¹⁴ I have deliberately simplified Boltz’s argument, finding it unnecessary to distinguish logographs from zodiographs.

¹⁵ The characters provided are modern Chinese equivalents.

pictorially. However, Boltz notates it “G : [+P, +S, +S’] where S’ designates a meaning different from S, indicating that the same graph G is used variously for a word pronounced [P] with the meaning [S], or a word with the same ... pronunciation but with the different meaning [S’]” (Boltz 1994: 61). This is the consistent, logical interpretation. A series of [+P, -S] graphs would comprise the beginnings of an alphabet, syllabary, etc., whereas characters with usage extended by the rebus principle are still associated with particular words.

3.3 Determinatives

The third stage in the development of writing is “disambiguation.” One disadvantage to the essential rebus principle is that it creates ambiguity; one graph is used to represent semantically unrelated words. This ambiguity can be resolved through the addition of a “determinative,” also known as a “classifier,” or, in the Western Sinological tradition, as a “radical.”¹⁶ This added element could be either phonetic or semantic. The latter type was used in the case of otherwise identically written rebus phonetic borrowings—e.g., including the “rain” classifier 雨 *yu* in the character 雲 *yun* “cloud” to distinguish it from 云 *yun* “to say” — and the former, for example, to differentiate “the numerous characters for types of birds” in the Chinese case (Norman 1988: 60). The radical *niao* 鳥 means “bird;” it is the semantic component in the compound graphs 鵝 “goose,” 鴿 “pigeon,” 鵬 “phoenix,” 駝 “ostrich,” 鴉 “raven,” et cetera.

Judging from *A Glossary of Naxi Pictographs*, the same process occurred with the Naxi script. The difficulty is finding entries for all the components of compound graphs so the reader (and author) unfamiliar with the Naxi language can make sense of them:

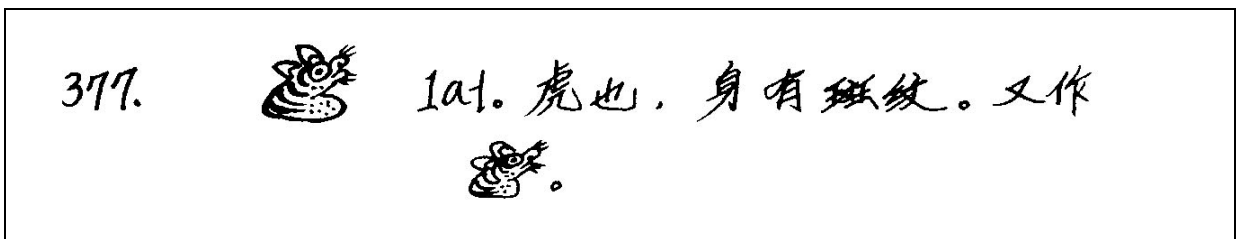


Figure 3: Tiger pictograph (Fang and He 1995: 186).

¹⁶ Boltz distinguished “determinative” and “classifier,” but we need not (1995: 68).

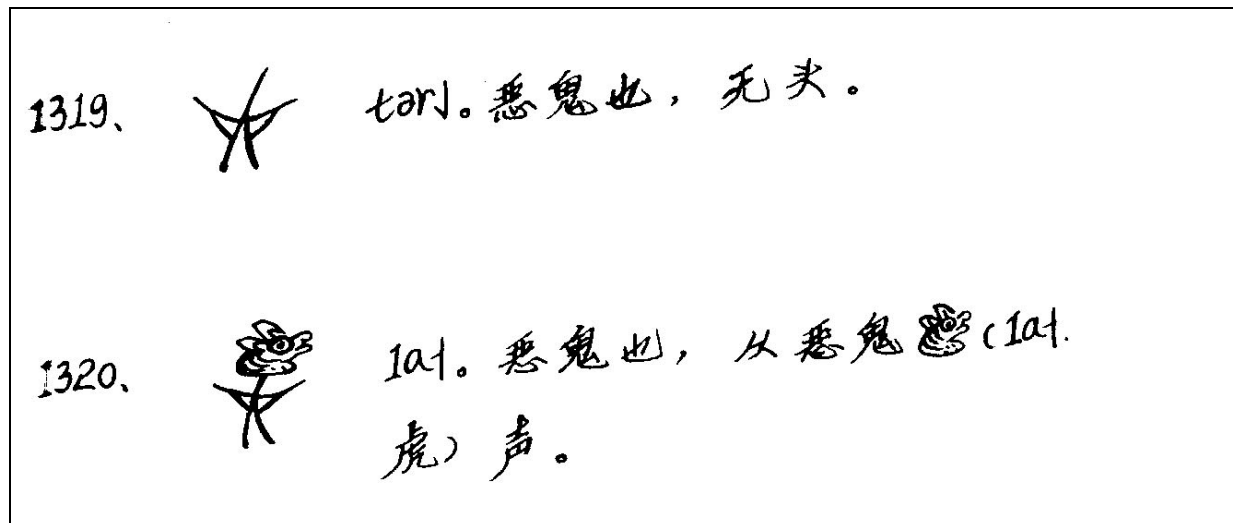


Figure 4: Evil spirits (Fang and He 1995: 359).

(#377) is defined as “tiger.” Its “body has striped markings.” An allograph is also provided. (#1319) is an “evil ghost, lacking a head.” (#1320), also a type of “evil ghost,” is homophonous with (#377). The gloss describing its structure tells us that it comes from “evil ghost” (#1319) which is thus the signific, and “tiger” (#377), not surprisingly, is the phonetic.¹⁷

Summing up these first three stages in the invention of writing systems worldwide, Boltz reaches a broad and exciting conclusion; this is followed by a refined explanation of the synchronicity of these processes in the Chinese case:

What we know or can reasonably infer about the origin and early development of all three great writing systems of antiquity, Egyptian, Mesopotamian, and Chinese, as well as Mayan hieroglyphics in the New World, suggest that up to this point they all evolved stage by stage according to the same basic principles. And in all four cases it is only with the determinative stage that we have a really workable, full-fledged writing system, one capable of transcribing all of the manifold complexities of real speech. The script of the Shang oracle-bone inscriptions includes characters with determinatives, showing very clearly that the writing system had already reached this stage. This is not to say that every character known in subsequent periods of written

¹⁷ The format of these character entries is clearly based upon the 說文解字 *Shuowen Jiezi*. The description of the character’s structure is analogous to that of a 形聲 *xingsheng* (shape and sound) gloss.

Chinese had arisen and taken its modern form by the Shang dynasty ... Thus, while it may be correct to think of individual characters as having passed through these stages sequentially, for the writing system as a whole, it was undoubtedly the case that different characters were being introduced as zodiographs, being used multivalently, and acquiring determinatives all at the same time throughout the formative period of the script (68-69).

Thus, every known instance of writing being created *ex nihilo* followed the same three steps to reach the state of a full-fledged writing system. However, China diverged from the rest of the world in the fourth.

3.4 Desemanticization

Stage four in the development of writing is desemanticization. Graphs' semantic associations are lost, resulting in a purely phonetic writing system [+P, -S]. Desemantization occurred in Mesopotamia and Egypt, but — excluding modern systems such as *zhuyin fuhao* 注音符號 that never replaced *Hanzi* — not in China. As illustrated by Boltz, there were several instances of characters heading in that direction — one character used to represent multiple homophonous words even in cases where distinct characters concurrently existed — but in the end, semantics refused to separate from phonetics. Boltz offers a few reasons why this was the case. The most straightforward is that as Chinese was largely a monosyllabic language, i.e., every syllable had meaning, there was no incentive to write syllables without meaning. Put another way, as there was (with but a negligible number of exceptions) a one to one correspondence among morphemes, syllables, and characters, removing meaning would have been “an intellectual impossibility” (Boltz 1994: 168-177).

In regard to the Naxi Dongba pictographic script, the issue of desemantization is moot, considering: (1) the Naxi already have a phonetic [+P, -S] script; (2) the pictographs are used in religious rather than secular contexts,¹⁸ so the importance of pictographic symbolism in ritual implements usurps any impetus to simplify them; and (3)

¹⁸ The full truth of the matter is that Dongba religion in Lijiang now exists primarily for the demand of tourist consumption of ritual performances and souvenirs with pictographic inscriptions.

this, the only known “living” pictographic script — regardless of anyone’s desire to the contrary — is nearing extinction.

4 Conclusion

Despite emerging from dissimilar contexts, the Chinese writing system and Dongba pictographs show evidence of the same three universal stages in the development of writing. However, the Naxi pictographic script neither conventionalized to the point that it could function efficiently in secular contexts nor reached the stage of development to be considered a complete writing system. Like Chinese characters, Dongba pictographs individually meet the criteria of writing, though the script as a whole falls just short of constituting a complete writing system. Even if the Dongba script were to survive coming decades as more than a tourist’s curiosity, I think it unlikely that it would make the minor developmental leap to becoming a full-blown writing system. It arose a number of centuries ago to serve a particular ritual purpose. As its purpose need not expand to the realm of daily use among non-religious specialists — after all, literate Naxi today, as in the past, write in Mandarin Chinese — at most it will but continue to fulfill the needs of demon exorcism, amusing tourists and the like. Still, it is enticing to think that the script is sufficiently developed for a few Dongba priests or scholars to self-consciously expand it to a writing system proper, capable of expressing colloquial Naxi in its entirety, in the space of an afternoon.

References

- Boltz, William G. 1993. Shuo wen chieh tzu. *Early Chinese Texts: A Bibliographical Guide*. Ed. Michael Loewe. Berkeley: The Society for the Study of Early China and the Institute of East Asian Studies. 429–442.
- Boltz, William G. 1994. *The Origin and Early Development of the Chinese Writing System*. New Haven: American Oriental Society. American Oriental Series, 78.
- Bottéro, Françoise. 1996. Review of *The Origin and Early Development of the Chinese Writing System*, William G. Boltz. *Journal of the American Oriental Society*, 116 (3): 574–577.

- Campbell, Lyle. 1984. The Implications of Mayan Historical Linguistics for Glyphic Research. *Phoneticism in Mayan Hieroglyphic Writing*. Eds. John S. Justeson and Lyle Campbell. Albany: Institute for Mesoamerican Studies, State University of New York at Albany. 1–16.
- Chang, K. C. 1983. Concluding Remarks. *The Origins of Chinese Civilization*. Ed. David N. Keightley. Berkeley: University of California Press. 565–581.
- Cheung, Kwong-Yue 1983. Recent Archaeological Evidence Relating to the Origin of Chinese Characters, trans. Noel Barnard. *The Origins of Chinese Civilization*. Ed. David N. Keightley. Berkeley: University of California Press. 323–391.
- Fang Guoyu and He Zhiwu (1995). *Naxi Xiangxing Wenzhi Pu* [A Glossary of Naxi Pictographs]. Kunming: Yunnan Renmin Chubanshe.
- Ge Agan. 1999. *Dongba Gupu Wenhua* [Dongba Bone Prognostication Culture]. Kunming: Yunnan Renmin Chubanshe.
- Handel, Zev. 2004. *Course packet for CHIN 342/442 The Chinese Language*. University of Washington, Seattle.
- Jackson, Anthony. 1979. *Na-khi Religion: An Analytical Appraisal of the Na-khi Ritual Texts*. The Hague: Mouton Publishers.
- Norman, Jerry. 1988. *Chinese*. Cambridge: Cambridge UP.
- Pan Anshi. 1995. *Reading Between Cultures: Social Anthropology and the Interpretation of Naxi (Na-khi) Religious Texts*. Ph.D. Dissertation, University of Edinburgh.
- Pulleyblank, E.G. 1983. The Chinese and Their Neighbors in Prehistoric and Early Historic Times. *The Origins of Chinese Civilization*. Ed. David N. Keightley. Berkeley: University of California Press. 411–466.
- Ramsey, S. Robert. 1987. *The Languages of China*. Princeton: Princeton UP.
- Wang Yuanlu. 1988. *Han Gu Wenzhi yu Naxi Dongba Wenzhi Bijiao Yanjiu* [Ancient Han Character and Naxi Dongba Character Comparative Research]. Shanghai: Huadong Shifan Daxue Chubanshe.
- Zhang Songquan. 2000. Lijiang and the Naxi People. *The Yunnan Ethnic Groups and Their Cultures*. Ed. Gan Xuechun, (Yunnan University International Exchange Series, I.) Kunming: Yunnan Renmin Chubanshe. 62–75.