A NEW LOOK AT THE TIBETAN INVENTION OF WRITING

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Tibet is one of many cultures that attribute the origin of their writing system to the heroic actions of a single figure.[1] In Ancient Bablyonia, the god Nabu, keeper of the 'Tablets of Faith', was considered the source of the art of writing, while in Ancient Egypt the god Thoth fulfilled the same role. In China, the legend of the invention of written characters took several forms, based on two original stories. In the first version the inventor of the characters was Cangjie, the royal scribe at the court of the legendary emperor Huangdi. In the other it was Fuxi, one of the legendary 'three august ones'.[2]

Tibet's historical traditions are almost unanimous in attributing the invention of the Tibetan script to a figure known as Tönmi Sambhota.[3] It is difficult, if not impossible, to determine whether such a person existed – let alone whether he really did invent a script. Nevertheless, it is quite clear that Tibetan writing as we know it appeared alongside other cultural innovations during the first rapid expansion of the Tibetan Empire in the mid-seventh century. The model for this new Tibetan alphabet was clearly an Indic one, but its exact source is uncertain.

The question of the origin of the Tibetan script excited considerable interest, and disagreement, among Indologists and Tibetologists in the first half of the twentieth century. Some argued strongly for a Central Asian source, others for Kashmir, others for Eastern India and Nepal. Yet despite the fierceness of these disputes, the arguments were based on a limited number of inscriptions, and tended to concentrate on only a few of the Tibetan letter forms.[4] In the second half of the twentieth century, as interest in Tibetan paleography in general waned, it seemed to be accepted that the question of the origin of the Tibetan script was

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2   Boltz 1994: 129–130.

3   While this person is always identified as the inventor of the Tibetan alphabet in Buddhist histories, his name appears in a variety of guises. In some cases his clan name is Tumi (*thu mi*) rather than Tönmi (*thon mi*). In *The Testament of Ba* the second part of his name is Sampora (g*sam po ra*). In some cases he is referred to as "the son of Tönmi (or Tumi) Anu".

4   The most important of these studies are: Francke 1911, Laufer 1918, Thomas 1951 and the *White Annals* of Gendun Choephel (see Dge 'dun chos 'phel. 1994, vol.III: 268–273). For a recent English summary of the latter's argument, see Narkyid 1983.

one that would have to be left unanswered. It seems timely now to revisit the question.[5]

In what follows I will first look at the legend of Tönmi Sambhota, as we find it in the earliest sources, and at what we know about the earliest practice of writing in Tibet from other historical sources. I will then attempt to locate the geographic location of the models for the Tibetan script through a paleographic analysis of Indic inscriptions, employing a larger basis of evidence than that of previous studies. I will argue that the paleography of the inscriptions provides a relatively narrow span of time for direct Indic influence on the Tibetan alphabet, which ends in the mid-seventh century, and that that the North Indian and Nepalese inscriptions provide by far the best models for the Tibetan script.

PART I: LEGENDS AND HISTORICAL BACKGROUND

The Tibetans' first contact with writing

Most of Tibet's post-tenth century historical literature is written by Tibet's Buddhists, for Buddhist readers, concerning Buddhist matters. For this reason all historical events tend to be read through the lens of Buddhist history, and the histories of the origin of Tibetan writing are no exception. According to traditional accounts, the first appearance of the written word in Tibet occured simultaneously with the first appearance of Buddhism in Tibet. This was during the reign of King Lha Totori, who is said to have ruled five generations before the first historically dated Tibetan king, Songtsen Gampo.

The legend, which appears in a very similar form in all post-tenth century histories, states that a casket containing Buddhist texts fell out of the sky and landed at the king's feet, or on the roof of his palace, depending on which account one reads. King Lha Totori was illiterate, along with the rest of the Tibetan state. What he found when he opened the casket differs slightly in various accounts, but is usually said to include a well-known sutra, the *Karaṇḍavyūha*, and a more obscure text called *The Pangkong Homages*. The *Karaṇḍavyūha* sutra is dedicated to the bodhisattva Avalokiteśvara, the embodiment of compassion in the world, and introduced the six syllable mantra of Avalokiteśvara that was to become so popular in Tibet: *Oṃ maṇi padme huṃ*. The sutra appeared first in Kashmir, and became popular in the Central Asian Buddhist kingdom of Khotan—two areas that were to fall to Tibetan expansionism in the seventh century.

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5   We must distinguish here between paleography and calligraphy. Essentially the distinction is that paleography derives theories about the development of scripts from original manuscripts, while calligraphy is a received tradition in which script forms are defined and passed down through teaching and textbooks. Tibet has a strong tradition of calligraphy, and textbooks continue to be published in this field.

The other text, known by numerous names that usually include the mysterious word *Pangkong*, is a prayer of homage and confession that, as the non-Tibetan part of its name suggests, probably comes from China.[6] The prayer begins with a hundred and eight homages directed toward a variety of buddhas, dharma texts and objects, and the sangha of bodhisattvas and arhats, followed by prayers of offering, confession, and aspiration. Both the *Pangkong* prayer and the *Karaṇḍavyūha* sutra stand somewhere at the borderline between late Mahāyāna and fully developed Vajrayāna Buddhism. Their existence as early as the fifth century is doubtful, but they may well have been in circulation by the seventh century, when we enter the first historically attested Tibetan dynasty of Songtsen Gampo.

In any case, the histories tell us that neither the king nor anyone else in Tibet was able to read these heaven-sent texts. The king resealed the casket and gave it a name, *The Secret Potency (gnyan po gsang ba)*. The casket then remained untouched in the palace until it was reopened by Songtsen Gampo, so that the texts could be translated. This version of events was disputed by the thirteenth-century Tibetan scholar Nelpa Pandita, who wrote that the texts were actually brought to Tibet by an Indian scholar and a Khotanese translator. Having presented the king with the texts, the pair discovered that he could neither read them nor understand their meaning, and returned whence they came. According to Nelpa Pandita the story about the casket falling from the skies was made up by the Bönpos based on their reverence for the sky.[7]

Nelpa Pandita's argument was accepted by some scholars, including Gö Lotsawa Zhönupal, and rejected by others, notably the fifth Dalai Lama.[8] In his seventeenth-century work *Song of the Spring Queen*, the Great Fifth launched a highly personal criticism against Nelpa Pandita, and defended the original legend:

6   In one of the earliest versions of this story, Sonam Tsemo's *Introduction to the Dharma* (50a.6), the name of the prayer appears as *Pang kong phyag rgya pa* (*The Pangkong Gestures*). The canonical versions of the prayer tend to have a more Tibetanized name: *Spang skong phyag brgya pa* (*The 100 Salutations Repairing Breaches*). The titles of the various versions of this prayer found in the Dunhuang manuscripts suggest that Sönam Tsemo's title is older, and the Tibetanized forms are a later 'correction'. The fullest title given in the Dunhuang versions is *Pam kong brgya rtsa brgyad* (IOL Tib J 315/4). The first part (*Pam/Pang kong*) is probably a transcription of a Chinese term, for which I have found no overwhelmingly convincing candidate, but may perhaps be *bai gong* (拜 供) 'homage and offerings/confessions'. The second, Tibetan, part means 'one hundred and eight', which makes perfect sense in that the prayer contains a hundred and eight homages, so the alteration of this to *phyag (b)rgya pa* is probably a corruption. In the Dunhuang manuscripts it usually appears in collections of prayers that were probably put together for group recitation. Other Dunhuang versions include IOL Tib J 316/5, P.t.98 and P.t.184.

7   This is a paraphrase of the passage in Nelpa Paṇḍita's *Flower Garland* (see 7a4–7b3 in the edition in Uebach 1987).

8   Gö Lotsawa repeated Nelpa Paṇḍita's account in his *Blue Annals*, and suggested that it seemed to be correct. See *Blue Annals*, pp.63–64. and Roerich 1996: 38.

Nelpa Pandita's belief that it is absurd for a casket to fall from the sky is proof of his limited mind. In the auspicious circumstances in which the teachings were first discovered, the magical activities and compassion of the noble ones are beyond rational thought.[9]

Yet it is likely that individuals made the journey to Central Tibet from neighbouring Buddhist regions before unification in the seventh century. Some of these, whether merchants or missionaries, may have brought books with them, introducing the Tibetans for the first time to the *idea* – if not the actual comprehension – of writing.

In fact both versions of the story suggest in their different ways the same scenario, in a time when preliterate Tibetans, surrounded as they were by literate societies, would have occasionally encountered books and writing from a variety of sources.[10] Both the act of writing and the mysterious objects containing writing would have seemed both secret (*gsang ba*) and potent (*gnyan po*). Some books may well have ended up as cult objects in the king's palace, to be treated with a cautious reverence until the comprehension of foreign scripts, and later the ability to render them in the Tibetan language and script, demystified them.

How did this change in the Tibetans' relationship with books and writing come about? The preliterate Tibetans were surrounded by literate cultures, the oldest being the Chinese, followed by northern India and the more recently literate city-states of the Central Asian Silk Routes, including Kashgar, Khotan and Kucha. While the Chinese used the ideographic characters of the Chinese script, all of Tibet's other neighbours used the Indic Brāhmī script.[11] What was required was a consistent contact between Tibetans and these literate cultures, so that the advantages of literacy could become evident, and a readiness to adapt one of these systems of writing to the Tibetan language. That readiness came with the unified Tibetan kingdom and empire of the seventh century.

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9   *Song of the Spring Queen*, p.13 (section 3.2.4): nel pa paṇḍi tas nam mkha' las babs pa mi 'thad par smra ba ni blo chung gi gtam ste/ bstan pa'i dbu brnyes pa'i rten 'brel du 'phags pa'i gang zag gi sprul pa dang thugs rje bsam las 'das pas so/

10 The debate itself is interesting in that it illustrates how Tibetan historians questioned their sources and made informed choices between alternative versions of key events. The fifth Dalai Lama's statement shows that the role of rational thought *(bsams)* in investigating the sources for Tibet's founding legends was a contentious issue.

11 The Kharoṣṭhī script was popular in Gandhara and Kroraina until the fourth century, when it was generally replaced by the Brāhmī script. The reported existence of Kharoṣṭhī documents from as late as the seventh century from northern Silk Route sites remains uncertain (Salomon 1998: 46–47).

The invention of writing

As we stated earlier, the histories are almost unanimous in attributing the invention of the Tibetan script to a single figure, Tönmi Sambhota. The exception is the historical tradition of the Bönpos, which I will discuss later. In previous discussions of the invention of Tibetan writing, Butön's fourteenth-century history of Buddhism has been presented as the earliest version of the Tönmi story, but this is not the case. There are several versions both earlier and more detailed than Butön's. The earliest sources of the Tönmi story are the treasure text known as *The Pillar Testament* and the clan history called *Testament of Ba*.[12] Let us then look at the traditional story as it appears in these histories.

It was Songtsen Gampo who initiated the invention of a script for writing the Tibetan language. The existence of writing in other cultures was brought to the king's attention when messengers from neighbouring states in China, India and Persia sent letters that were read to the king by the messenger. Resolving to bring a writing system to Tibet, the king sent a number of Tibetans into India to learn Indian writing systems, but all failed, some of them dying in the extreme heat. Then the king appointed a young man from the Tönmi clan to go to India and derive from the Indian scripts an alphabet in which the Tibetan language could be written.[13]

Tönmi at last was successful. With gold given to him by the king, he was able to procure the services of an Indian scholar, a Brahmin called Lijin. Some Tibetan historians reconstructed from this the Sanskrit name *Lipikara*, which is actually a genuine Indic term for a scribe dating back to the Aśokan period.[14] In any case,

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12   I have based the following account on two versions of *The Pillar Testament* (see Bibliography) which differ mainly in the amount of detail that is accorded to different parts of the story. The version of *The Testament of Ba* is the earliest available, as published in Wangdu and Diemberger 2000. The Tönmi story also appears in the early dharma histories *(chos 'byung)* by Sönam Tsemo and Nyangral Nyima Özer, both from the twelfth century. Sönam Tsemo's account is brief, no more than a single line of Tibetan text, and while Nyangral's is much longer, it is based on *The Pillar Testament*. Another important, though later version of the story, incorporating some material not found in any of the above is the fourteenth-century *Mirror Illuminating the Royal Genealogies* by Lama Dampa Sönam Gyaltsen (see Sørenson 1994: 167–176, 539–542).

13   *The Pillar Testament* A: 105.5–8. According to some sources the number of unsuccessful Tibetans was sixteen (Sørenson 1994: 168 n.463). In other sources, Tönmi went to India with an entourage of sixteen (*Maṇi Kambum* 102a.) In *The Pillar Testament* Tönmi is described as the most intelligent among the king's sixteen ministers.

14   While *The Pillar Testament* gives the Brāhmīn's name as *Li byin ti ka*, other versions shorten this to *Li byin*. A more recent attempt to Sanskritize the name makes it *Kaṃśadatta (Sørenson 1994: 168, n.463). Some sources replace Li byin with a different teacher, called Lha Rigpai Sengé (*Lha rig pa'i seng ge*, Skt. *Devavidyāsiṃha*). The earliest appearance of this alternative teacher, as far as I am aware of, is the *Maṇi Kambum* (102a.4). Hypothetically, this could be the personal name of the teacher, as Lipikara (if that is indeed the name behind *Li byin*) is a profession, rather than a personal name.

the story continues with the negotiation between Tönmi and the Brahmin.

> Thönmi asked the Brahmin, "Will you teach me writing?" and offered half
> of his gold. The Brahmin said, "I know twenty different writing systems.
> Which one would you like to study, child of Tibet?" So the Brahmin
> instructed the child of Tibet, using a pillar on the shore of a lake on which
> these twenty different scripts were carved very clearly.[15]

Having learned these twenty scripts, Tönmi returned to Tibet, and formulated
a Tibetan alphabet from the Indian scripts, having found almost all of the letter
forms he needed for a Tibetan alphabet in these scripts. According to The
Testament of Ba, the Brahmin accompanied Tönmi back to Tibet and helped him
formulate the Tibetan alphabet.

No Indian letter form could be found for six Tibetan sounds (*ca*, *cha*, *ja*, *'a*,
za and *zha*) which were not present in the Indic languages.[16] Tönmi adapted
existing letter forms for these. *The Pillar Testament* has an ingenious dovetailing
of the invention of writing with the influence of the Tibetan empire, in which
Tibet's subject neighbours contributes the first letter of their names to the Tibetan
alphabet; it states that Tönmi found *ca* in the country of Chogro, *za* in the country
of Zahor, *zha* in the country of Zhangzhung and *'a* in the country of Azha.[17] On
the other hand, nine Indian letter forms representing sounds that were not found in
the Tibetan language were not used in the new Tibetan alphabet. These were the
palatal sounds *ṭa*, *ṭha*, *ḍa*, *ḍha*, *ṇa* and the aspirates *gha*, *jha*, *dha* and *bha*. This
suggests that at the time of the invention of the Tibetan alphabet the transcription
of Sanskrit was not a priority.[18]

In this way the Tibetan alphabet was born, with its thirty consonants, four
vowel signs, and seven signs attached to the tops or bottoms of consonants. The
alphabet is usually counted as consisting of 41 signs, although by ingenious
methods of calculation this is sometimes increased to the auspicious number
of 108.[19] The rules of grammar are said to have been formulated along with the

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15   *The Pillar Testament* (A): 105.10–106.5: *thon mi sam bho ṭas rgya gar lho phyogs su phyin
     nam bram ze li byin ti ka bya ba'i yig mkhan cig dang mjal nas/ bram ze de la khyed kyis
     nga la yi ge slob dang ces zhus nas gser de'i phyed phul bas/ bram ze na re/ ngas yi ge'i
     lugs mi 'dra ba nyi shu tham pa shes pas/ bod phrug khyod yi ge'i lugs gang la slob zer te
     bram zes bod phrug khrid nas rgya 'tsho'i 'gram na rdo rings cig la yi ge'i lugs mi 'dra ba
     nyi shu tham pa bkra lam me ba bris brkos yod pa de bstan pas/*

16   Strangely, all traditional accounts of Tönmi Sambhoṭa's invention of writing agree that it
     was the letters *ca*, *cha* and *ja* rather than *tsa*, *tsha*, *dza* that did not exist in Sanskrit. See the
     Appendix for further discussion.

17   *The Pillar Testament* (A): 107.1–3. Here Tönmi is said to have thought up (*yid la shar*) the
     other two new letters, *cha* and *ja*, himself.

18   It is interesting that the subfixed *'a*, or *'a chung*, is in the pillar inscriptions interchangeable
     with the final *'a*, and does not imply the lengthening of the vowel.

19   Dungkar 2002: 1418(ii). The thirty consonants (*gsal*) are *ka*, *kha*, *ga*, *nga*, *ca*, *cha*, *ja nya*,

alphabet; two terse grammatical treatises are attributed to Tönmi Sambhota, *The Basic Grammar in Thirty Verses* and *The Guide to Signs*, which are still extant and, supplemented with many commentaries, still form the basis of Tibetan grammar.

Once the alphabet was formulated, it was taught to the king and select members of the royal household. Several Buddhist texts, including those that had remained hidden in the palace as the *Secret Potency* since the time of Lha Totori, were translated into Tibetan. The king shut himself away for some time (four years, according to *The Pillar Testament*) in order to learn to read and write Tibetan. The king's absence caused unrest in the people, which the ministers were willing to capitalize upon.

In *The Pillar Testament* the ministers say: "This king hasn't appeared for four years! He's an know-nothing idiot! The happiness of the Tibetan people is down to us, the ministers." The king, overhearing, thinks: "If they call me an idiot, it will not be possible to control the people." Emerging from seclusion, the king proceeds to set down ten laws for the subjects of the Tibetan empire.[20] This, then, is the semi-legendary account of the genesis of writing in Tibet, which is broadly followed by all Buddhist histories after the eleventh century.[21]

Earlier accounts

The traditional account of Tönmi Sambhota's achievements has been critically investigated by modern scholars, including Tibetans, who question even his historical existence.[22] As for Tönmi's grammatical treatises, the versions that have come down to us bear the signs of having been written, or at least rewritten, after the Tibetan imperial period.[23] One of the earliest examples of writing that we have is the monumental inscribed pillar that stands in front of the Potala in Lhasa, known as the Zhol pillar and dated to circa 767, over a century after the time when Tönmi is supposed to have invented the Tibetan alphabet.[24]

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ta, tha, da, na, pa, pha, ba, ma, tsa, tsha, dza, wa, zha, za, 'a, ya, ra, la, sha, sa, ha, a. The four vowel signs (*dbyangs*) are the *gi gu* (i), the *zhabs kyu* (u), the *'greng bu* (e) and the *na ro* (o). The seven attached signs (*sbyar*) are the superfixed *ra, la* and *sa*; and the subfixed *'a, ya, ra,* and *la*.

20   *PIllar Testament:* 108. This scene is also found in the Testament of Ba, and may go back to an even earlier source, the so-called *Narrative of Legislation and Organization* reconstructed by Geza Uray (see Uray 1972: 23 and 26).

21   A detailed though late version of this story is found in *The White Beryl*: 16–18.

22   A Tönmi (*mthon myi*) clan is referred to in the *Old Tibetan Chronicle* (P.t.1287, l.68, 89). The word *thong myi* appears in the *Old Tibetan Annals* in the year 653—immediately preceding the two years discussed above when the legal code was written down. However the context has nothing to do with writing, and here *thong myi* probably has its ancient meaning of someone involved in a blood feud.

23   Miller 1976: 1–18. See also Dungkar 2002: 1419(ii).

24   Richardson 1985: 1–25; Li and Coblin 1988: 138–185.

Nothing, then, can be traced back with any certainty to Tönmi Saṃbhota, but we do not need to give up the attempt to discover the circumstances in which the Tibetan script appeared. For a start, we have some reason to believe that the Tibetans were writing documents by the middle of the seventh century. The *Tang Annals* mention a letter sent to the emperor by Songtsen Gampo in 634 asking for the hand of a Chinese princess; such a letter would almost certainly have been written in Chinese, not Tibetan, but this does indicate that the technology and aptitude for writing were present by that time in Tibet. According to the same source, Songtsen Gampo is said to have asked the Chinese emperor for craftsmen skilled in the making of paper and ink in the year 648; though this could also have been intended for the writing of other scripts.[25]

Let us turn to the Dunhuang documents. The most important historical accounts from this collection, generally known as the *Old Tibetan Annals* and *Old Tibetan Chronicle*, both have something to tell us about the invention of the Tibetan alphabet. The invention of writing and, on that basis, the legislation and organization of the Tibetan empire is celebrated as the crowning achievement of Songtsen Gampo in a famous passage from the *Old Tibetan Chronicle*:

> Previously there had been no writing in Tibet, but during the time of this tsenpo—from the reign of Tsenpo Tri Songtsen—the entire good basis of Tibet's customs was created: Tibet's great legal and governmental system, the [system of] ministerial rank, the division of ranks into greater and lesser, the rewards for the good, the punishments for the wicked and deceitful, the equal division of fields and pasturelands into *tülka*, *dorka* and *lung*, and the standardization of weights and measures, *bre*, *pül*, *srang* and so on. All men felt a great gratitude for his kindness and in return they called him Songtsen the Profound (Songtsen Gampo).[26]

This brief passage defines the realm within which writing first operated in Tibet; essentially, it implies that the initial impetus for the development of writing, and the sphere within which writing operated in Tibet, was bureaucratic. We get the same impression from the entries in the *Old Tibetan Annals* that record the preparation of a census and the writing of the laws in the years 654 to 655:

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25   See Bushell 1880: 443.
26   P.t.1287, ll.446–455: bod la snga na yI ge myed pa yang/ /btsan po 'di 'I tshe byung nas/ / bod kyi gtsugs lag bka' grims ched po dang/ blon po 'i rim pa dang/ che chung gnyis kyI dbang thang dang/ legs pa zin pa 'I bya dga' dang/ nye yo ba 'i chad pa dang/ zhing 'brog gi thul ka dang dor ka dang/ slungs kyi go bar bsnyams pa dang/ bre pul dang/ srang la stsogs pa/ /bod kyi chos kyi gzhung bzang po kun/ /btsan po khri srong brtsan gyi ring las byung ngo/ myi yongs kyis bka' drin dran zhing tshor bas/ srong brtsan sgam po zhes gsol to.
     Translation based on Dotson 2009: 85.

[654] The year of the tiger arrived. During this year the Tsenpo resided at Merkhe and Prime Minister Tongtsen convened [the council] at Mongpu Saldzong. He divided [the populace] into soldiers and civilians and made the manuals for carrying out the great administration.

[655] The year of the hare arrived. During this year the Tsenpo resided at Merkhe and Prime Minister Tongtsen wrote the texts of the laws at Gorti.[27]

These dates are actually after the death of Songtsen Gampo, and the *Annals* state explicitly that the laws were written down by the order of the minister Gar Tongtsen, the *de facto* ruler of Tibet after Songtsen Gampo passed away. In the later historical tradition the period between 650 and 679, when the Gar Tongtsen and his clan seized power from the Tibetan monarchy, is glossed over. Events that occured during the reigns of the two kings who ruled in this period were simply moved back to the reign of Songtsen Gampo. This may already have taken place by the time of the *Chronicle* passage quoted above. That said, the actual codification and writing of the laws were probably at least the culmination of developments that did occur during Songtsen Gampo's reign, including the invention of writing.[28]

Though later Buddhist histories portray it as based on Buddhist ethics, the early legal code was much more a template for governing an empire that had grown immensely Songtsen Gampo's reign.[29] The censuses, which the *Annals* tell us were carried out again several times in later years, delineated the internal boundaries of Tibet's new administrative units. Tibet was divided into five 'horns' (*ru*), broad territorial divisions, each containing eight 'chiliarchies' (*stong sde*), populated areas from which armies could be recruited.[30] This model was expanded upon, yet remained in place until the fall of the empire. Thus in this early period we see writing operating in the following general areas:

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27   P.t.1288, ll.26–29: @/:/stagI lo la bab ste/ bstan pho mer khe na' bzhugs shIng/ blon che stong rtsen gyis/ mong pu sral 'dzong du' bsduste/ rgod g.yung dbye zhing/ mkho sham chen pho bgyi ba'i rtsis mgo bgyI bar lo gzhig/ @/:/yos bu'I lo la bab ste'/ /btsan po mer khe na bzhugs shing/ blon che stong rtsan gyIs/ /'gor tir/ bka'/ grims gyI yi ge brIs phar lo gchig/
     See also the translations in Uray 1972: 27 and Dotson 2009: 85. Uray interprets the difficult term *rstis mgo* here as a census-taking activity, while Dotson translates *rtsi mgo* as "manual", which suggests a greater sophistication in the form and purpose of written records at this time. Bettina Ziesler suggests the translation "initial account" (personal communication, January 2010). Dotson (2009) discusses his reasons for the translation of *rtsis mgo* as "manual" on p.54, fn.76.
28   This is the conclusion that Uray comes to (Uray 1972: 68).
29   See Uray 1972.
30   The five horns were central (*dbu ru*), right (*g.yas ru*), left (*g.yo ru*), supplementary (*ru lag*) and Sumpa. This structure was later complexified by the addition of further-flung territories including the districts of Zhang zhung in the west and Bde khams in the east. The administrative structure of the Tibetan empire has been discussed in many articles, of which perhaps the most important are Uray 1960, Takeuchi 1994 and Iwao 2008.

(i) Law, being the definition of laws and the punishments for transgression.

(ii) Government, in the definition of the powers of the king and the ministers, including the ranking and organization of the nobility.

(iii) Administration, including the division of land and the standardization of weights and measures. Primarily, this would have involved the apportioning and taxation of land, crops and cattle. Though not mentioned in the above passage, it is clear that this also facilitated the recruitment of armies for the expanding Tibetan empire.

There are striking similarities here with the function of the earliest Tibetan manuscripts. The earliest examples of dated documents – the pillar inscriptions and the Dunhuang manuscripts that can be dated to the Tibetan imperial period – address the same bureaucratic issues that are mentioned in the *Old Tibetan Chronicle*. The early manuscripts and pillar inscriptions contain royal and governmental edicts, and we also find early documents on the ranking and organization of military governmental positions, and registers of land apportionment and tax collection.[31] There are also numerous Buddhist sutras and prayers that can be dated to the Tibetan imperial period.

Yet these inscriptions and documents date from the second half of the eighth century at the earliest, more than a century after the inception of writing in Tibet. So the brief passages from the *Annals* and *Chronicle* are our only clues regarding the use of writing in the seventh and the greater part of the eighth centuries. Some evolution in the orthography and style of written Tibetan is to be expected over this period, and we should not assume the earliest extant manuscripts reflect the use of writing over a century earlier. For a start, the use of writing for religious matters at this early stage of writing in Tibet is not mentioned in the *Old Tibetan Annals* or *Chronicle*. Although the translation of Buddhist texts features as one of the first uses of writing in *The Pillar Testament* and all subsequent Buddhist histories, earlier sources suggest that this was not among the main reasons for the creation of Tibetan alphabet.

Another difference is the democratization of writing that is visible in our documents. By the beginning of the ninth century, many people had access to writing. In the legal sphere, contracts between ordinary land and property owners were put into written form, while in the administrative sphere, tax-collectors used written records in their day-to-day duties. In the military, written notes were the primary method of communication over long distances, and written tags were attached to supplies.[32] Yet it probably took some time for the use of writing to

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31   For the content of the early inscriptions, see Richardon 1985 and Li and Coblin 1987. An important document on the relative ranks of the inhabitants of the Tibetan Empire is found in P.t.1089. There are numerous land registry documents from Dunhuang, which will be discussed in a forthcoming publication by Kazushi Iwao.

32   Some of these tags are found among the wooden slips from Miran and Mazar Tagh in the Stein collection. See Takeuchi 2003.

achieve this level of penetration into Tibetan culture, and the period between the mid seventh and late eighth centuries must have seen a gradual increase in the availability and use of writing.

Written on what?

Given then that the introduction of writing to Tibet had an immediate and fundamental cultural impact, which was remembered in the earliest historical romances of the era, we can turn to a technical question: upon what, and with what, was this writing done? The answer may be found in an early document specifically concerned with the writing of the legal codes, going back to the early ninth century.[33] This document states that the Prime Minister Gar Tsongtsen obtained small stones (*rde'u*) and a piece of wood (*shing bu*) in order to inscribe the laws, implying that these earliest Tibetan records were carved into wood using a stone tool.[34] The other term used in this document, *byang bu*, has several meanings in later Tibetan, one of which is an inscribed rectangular wooden tablet.[35]

The early existence of wooden documents is not unlikely; as we will see below, the Indic letters upon which the Tibetans based their script were inscribed in stone and perhaps wood, but probably not written on paper. During the seventh century the rulers of Tibet rarely stayed in one location for long; the *Old Tibetan Annals* report their regular movements between different locations in central Tibet. Though stone inscriptions are suitable for making proclamations intended for a local audience, they cannot be carried from place to place, and would have been little use to the administrators who needed to consult them. The references in the Annals to "red tallies" (*khram dmar po*) in the seventh and early eighth century may indicate this sort of wooden document.[36]

Though no wooden documents from the seventh century survive, we have many hundreds of examples of wooden documents from Tibet-controlled Central Asia, dating as far back as the late eighth century, though these are almost all written in ink rather than inscribed. The use of wood as a writing support preceded paper in all the regions neighbouring Tibet. Wooden documents were written in India long before the introduction of paper. In Central Asia we find earlier examples of rectangular or wedge-shaped wooden documents written in Kharoṣṭhī and Brāhmī

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33   This document is embedded in the history known as *The Scholar's Feast (Mkhas pa'i dga' ston)* written by Pawo Tsuglag Trengwa (1504–1564/66). Geza Uray recognised the antiquity of these passages, and gave them the name *The Narrative of Legislation and Ornamentation*. See Uray 1972.

34   Another term used here is *khram*, which refers to notches cut into wooden documents.

35   See *Tshig mdzod chen mo* II: 1873. The term *byang bu* also appears in the *Old Tibetan Annals*, where the *byang bu* is used to record the survey or registration of subject peoples (see IOL Tib J 750 l.243).

36   IOL Tib J 750 ll.55, 61, 116, 136, 157, 248. See Uebach 2008.

script, dating from the second to fourth centuries AD.[37] Even earlier, we have Chinese bamboo and wood slips, long thin rectangular documents, writen with ink, dating from the 3rd century BC onwards.

In any case, the examples of inscribed writing that have survived are those that were written on stone. These are found primarily in central Tibet, but other examples remain scattered throughout the former extent of the Tibetan empire.[38] The earliest of these are the Zhol pillar in Lhasa, which dates from the 760s, and the inscription at Lijiang, in the present-day Yunnan province, which dates from before the 790s. The Zhol pillar is an impressively large monument, and is unlikely to have been the first instance of epigraphic inscription in Tibet.

We don't know exactly when writing with pen and ink began to be practised in Tibet. The *Tang Annals* report that Songtsen Gampo requested, and was granted, experts in the production of ink and paper, suggesting that this technology was introduced by the middle of the seventh century. The *Annals* mention that in 744/5 "yellow paper" (*shog ser*) had been substituted for the "red tally" – indicating the increasingly important role of paper.[39] Our earliest evidence of writing in ink comes from the paper documents and wooden slips from Tibetan outposts in Central Asia, which can be dated to the latter part of the eighth century at the earliest. The large number of these Central Asian manuscripts, and the fact that a few came from Central Tibet, suggest that writing with ink – on both paper and wood – had already become well-established throughout the empire by this time.[40] Wooden pens were also found by Stein in Niya and at the Tibetan fort site of Mazar-Tagh (pictured here).

Calligraphic split-nib pen from Mazar-Tagh, 8th–9th c. (IOL Tib J 1149)

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37   See Salomon 1998: 131. Many photographs of wooden documents from Central Asia can be seen on the IDP website (http://idp.bl.uk).
38   See Iwao and Hill 2009.
39   IOL Tib J 750, 1.248.
40   Among these there are a very few manuscripts that can be confidently said to originate in Central Tibet, including P.t.1085 (from Lhan kar) and IOL Tib J 1459 (from 'On cang do).

PART II: THE SOURCES OF THE TIBETAN SCRIPT

We have now some idea that the Tibetan alphabet first came into use during the latter part of Songtsen Gampo's reign, or shortly after his death: i.e. the decades leading up to the 650s. Now, is there any way to get a better sense of the geographical origin of the Tibetan script? The best method of determining this in the absence of other historical evidence is paleographical. That is to say, we need to make a comparison at the level of individual letter forms, paying close attention to the proportions of the letter as a whole, as well as the ductus – the elements that make up the letter.

The first task is to identify the early examples of Tibetan writing that we are to use as a basis for comparison. It seems clear enough that the pillar edicts found in central Tibet represent an officially approved script that can be dated as far back as the 760s. Though this is a century after the first recorded instance of writing in Tibet, these must be our best bases for comparison. As I have argued elsewhere, other versions of the Tibetan script found in the Dunhuang manuscripts generally can be shown to derive from the script of the inscriptions, altered by the exigencies of writing with pen and ink.[41]

The Lhasa Treaty Pillar (photographs courtesy of Kazushi Iwao)

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41   See van Schaik forthcoming(a). Here I also discuss in more detail the palaeographic approach to Tibetan writing.

Having identified a basis for comparison, we can then turn to the scripts that
might have served as models for the Tibetan alphabet. Various candidates for
this role have been suggested within the Tibetan tradition and by scholars of the
last century. The earliest versions of the Tönmi story do not specify which Indic
script was used as the basis for the Tibetan script. Many later versions of the story
state that Tönmi based the Tibetan script on two Indian scripts called Landza
and Wartu. The former was the basis of the 'headed' (*dbu can*) and the latter the
basis of the 'headless' (*dbu med*) scripts. The *Maṇi Kambum* contains the earliest
instance of this statement known to me.[42]

Landza and Wartu themselves certainly were present in Tibet, but not until
long after the imperial period. The name Landza is usually thought to be a
transliteration of Rañjana, a calligraphic script that became popular in Nepal.
Wartu is closely related to Landza, its letters formed in most instances simply
by replacing the flat lines above each syllable with a curved line. In any case,
both are scripts in the late Siddhamātṛka or early Nāgarī styles, in forms that
began to emerge in India in the tenth century, reaching full development in the
twelfth century.[43] At some point after this they were adopted by Tibetans for
the calligraphic rendering of Sanskrit titles and mantras, and other ornamental
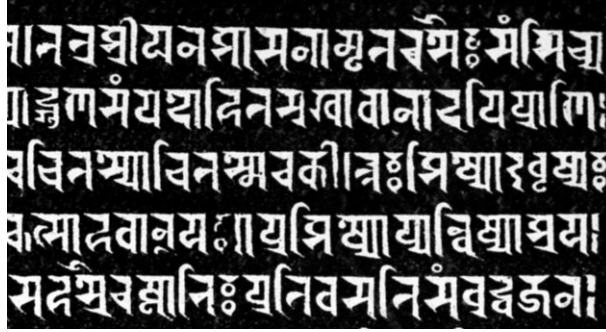functions.

Modern examples of Landza and Wartu (Shes rab nyi ma n.d.)
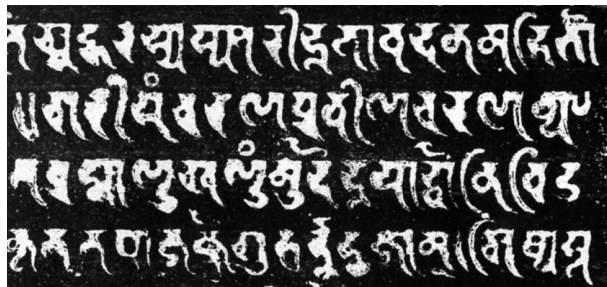
Late Siddhamātṛka script from Chandrēhi village, Rewah state, dated 973 (Banerji 1934)

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42   Usually spelt in Tibetan *la nydza* and *wa rtu*. See Maṇi Kambum 102a.5. The second
     version of the tale in the *Maṇi Kambum* replaces Landza with Nāgarī (186b.5).
43   See Sander 1968, tables 27–28 (Pāla-Schrift).

"Proto-Bengali" or Gauḍī script from Nālandā, dated to early 12th c. (Majumdar 1931)

Thus it seems that the appearance of Landza and Wartu in Tibet was part of the renewed engagement with Indian Buddhism from the late tenth century onwards, known as the "later diffusion" (*phyi dar*).[44] Since they were the Indic scripts that Tibetans were most familiar with by the time the *Maṇi Kambum* was compiled, it is not surprising that they came to be taken as the ancestors of the Tibetan script. However, a glance at the earlier Gupta style makes it immediately obvious that there is no need to seriously consider Landza and Wartu as sources for the Tibetan alphabet.[45] With only minor exceptions, every Tibetan letter traditionally said to have been derived from Indian scripts can be traced to the Late Gupta style found in inscriptions dating from the fifth century through to the early seventh century.[46] We are still faced with a daunting array of inscriptions (as well as a smaller group of manuscripts) from vastly distant locations to compare with the Tibetan script. Let us look at the three most credible possibilities for the geographical location

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44   It is interesting to note that Tibetan calligraphy manuals contain examples of "new scripts" *(yig gsar)* attributed to various figures of the "later diffusion" including Gö Lotsawa (*'gos*, eleventh or fifteenth century), Chak Lotsawa (*chags*, thirteenth century) and Chok Lotsawa (*skyogs*, fifteeth century) and that these are very much in the same vein as Lañja and Vartu. See Shes rab nyi ma n.d.: 65–66, 91–92, 95–96.

45   This point was made by the maverick Tibetan scholar Gendun Chopel (Dge 'dun chos spel), as discussed in Narkyid 1983. The first Tibetan writer on the origin of the Tibetan script who had access to reproductions of the inscriptions of North India, Gendun Chopel also argued that the *dbu med* script developed when the *dbu can* script was written quickly.

46   The classic definition of the Gupta style is Bühler 1904: 65–71. For Bühler the Gupta style was more or less identical with what he termed the *northern alphabets* during the 4th and 5th centuries. Bühler employed the chronological classification of Gupta—>Siddhamātṛkā—>Nāgāri described here. Bühler identifies Siddhamātṛkā inscriptions as early as the sixth century and Nāgāri as early as the seventh, but their appearance as coherent styles should be dated to the seventh century for Siddhamātṛkā and 9th at the earliest for Nāgāri. Lore Sander (1968) subdivides the Gupta alphabet into Gupta A (3rd–4th century), Gupta B (4th–5th century) and Late Gupta (sixth century); it is the latter that forms the basis for most Tibetan letter forms. A.H. Dani (1963) identified many regional sub-classes of Bühler's northern alphabets. His regional classifications, which include Nepal and the Northwest, are very useful, though sometimes the dividing lines between the regional styles are not as clear as they might be. For a summary of these developments see Salomon 38–40.

of the source of the Tibetan script: Central Asia, Northwest India, and Nepal and Northeast India.

Khotan and Central Asia

Early on in the discussion of the origins of the Tibetan script, some scholars argued that the source was not India at all, but the city-state of Khotan. Khotan was one of the great Buddhist cultures of Eastern Central Asia, and an important trading power on the Silk Road in the first millenium AD. Khotan was under the control of the Tibetan empire between 650 and 672, and again between 791 and around 850.[47] It does seem that the Tibetan culture owes something to the Khotanese. Thus the argument that the Khotanese script was also absorbed during this time has a certain plausibility. What lies behind the theory is the discovery of large numbers of ancient Khotanese manuscripts during the late nineteenth and early twentieth century. The manuscripts date from the fifth to tenth centuries, amply covering the period of the inception of Tibetan script. Two scholars who first worked on these Khotanese manuscripts, A.H. Francke and Rudolf Hoernle, argued that they showed the true origin of the Tibetan script.

Francke focussed on the name of Tönmi's teacher Lijin, pointing out that the first part of this name, Li, was the Tibetan name for Khotan. Though this idea was fiercely criticized later by F.W. Thomas who, as we will see below, argued for a Kashmiri origin of the Tibetan script, we do actually find Khotanese people with the name Li in Tibetan documents from Central Asia. Still, a single syllable in a legendary name was always going to be a fairly weak foundation for the argument that the Tibetan script came from Khotan.
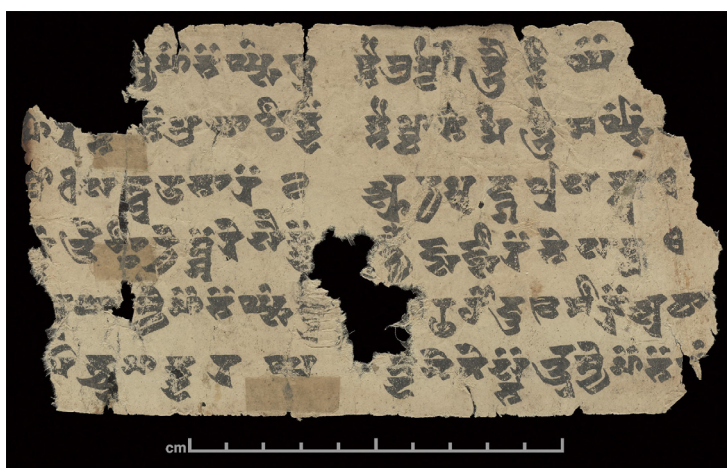
Khotanese formal style (IOL Khot 29/8)

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47   These dates are not undisputed; see Skjaervø 2002: lxv.

Rudolf Hoernle was a great pioneer in deciphiring the newly discovered scripts that appeared in the great cache of manuscripts from Central Asia, or Turkestan as it was known at the time. In his survey of Khotanese writing, Hoernle took up Francke's argument on the origin of the Tibetan script and added his own argument from paleography. He pointed out the fact that the Sanskrit alphabet has different letter forms for the five vowels *a*, *i*, *u*, *e* and *o* when they occur alone or at the beginning of a word. Vowels that occur within words are indicated by diacritic marks added to the letters that precede them. The Tibetan alphabet, on the other hand, adopted only the Sanskrit letter form for *a*, which is modified with those diacritic marks to form the other initial vowel forms *i*, *u*, *e* and *o*. Hoernle argued that the Khotanese manuscripts sometimes followed the latter practice, the one that was adopted by the Tibetans. Unfortunately for Hoernle's argument, the practice of modifying the *a* vowel rather than using the proper letter forms for those vowels seems to have been rather sporadic among the Khotanese scribes, and may not have been used at all before the eighth century.[48] Furthermore, this way of writing was not limited to the Khotanese, as it is also found in some other Indian alphabets.[49] So this too turns out to be a rather tenuous link between the Tibetan and Khotanese alphabets.
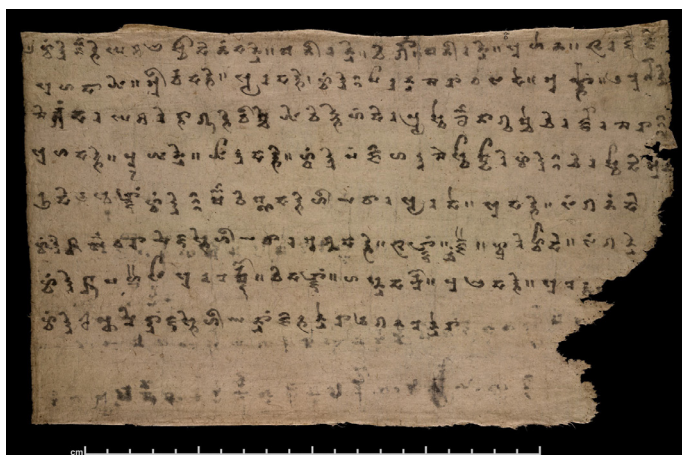
Khotanese cursive style (Or.11344/8)

Hoernle was strongly taken to task by one of his contemporaries, the great Sino-Tibetologist Berthold Laufer, who criticized Hoernle's theory and bemoaned the enthusiasm for all things Central Asian, writing that "Turkestanitis is a new

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48   Personal communication from P. Oktor Skjaervø (2008).
49   Thomas 1951: 154–155.

form of learned disease."[50] If the desire to look for solutions to the questions about Tibet's early history in Central Asia is a disease, the learned are still subject to it. A recent essay on the source of the Tibetan script turned once again to Khotan, emphasising the cultural influence of Khotan upon the Tibetans.[51] The cultural influence of Khotan upon early Tibet is an interesting topic, but the theory that the Tibetan alphabet derives from Khotan is in the end unconvincing because of the lack of consistent similarities between the writing in the Khotanese manuscripts and the early Tibetan letter forms. While there are some similarities in some of the basic shapes of the letters, in every case there are closer similarities in the inscriptions from further south, to where we now turn.

Gilgit and Kashmir

Our next destination in this search for the source of the Tibetan script is the area directly to the west of Tibet where modern Kashmir borders with Pakistan and Afghanistan, where the foothills of the Karakorum and Hindu Kush rise into mountain passes which once led to the ancient cultural centres of Gandhara, Kashgar and Khotan, and to Tibet itself. This area, which crosses modern and ancient disputed borders, I will refer to as the Northwest, that being its orientation with regard to Central India.

The argument for this area as the origin of the Tibetan script is better supported than that for Khotan, supported indeed by no less an authority than the great Tibetan scholar Butön (1290–1364). In his history of Buddhism in Tibet, Butön simply states that Tönmi Sambhota based the forms of the Tibetan alphabet on the Kashmiri script.[52] He was clearly using an alternative version of the Tönmi story to that found in *The Pillar Testament*, but he gives no indication of any controversy on this matter, or argument to explain the derivation of the script from Kashmiri writing.[53] Notwithstanding this, some scholars, including R.A. Stein,

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50   Laufer 1918: 46.
51   Ronas-Tas 1985: 259–260. In this lecture Rona-Tas tentatively floats the 'Khotan hypothesis', citing a personal communication from the great scholar of Khotanese studies, Ronald Emmerick, to the effect that the existence of Tibetan loan-words in Khotanese demonstrates the high level of interaction between Tibet and Khotan during the Tibetan empire. However, in his own paper on the subject (Emmerick 1985), Emmerick states that there are no Tibetan loan-words in Old Khotanese, indicating that consistent cultural interaction only occured quite late (the period of the second Tibetan occupation of Khotan in the late 8th and early 9th centuries) and plays down the significance of the Khotanese loan-words in Tibetan. Emmerick makes no mention here of the question of the origin of the Tibetan script.
52   See Obermiller 1932: 184 and Szerb 1990: 8.
53   There is another tradition (for which I have not seen any written source) that the Tibetan script was derived from the alphabet of the Burushaski people, the inhabitants of the area of Gilgit, in the north of Kashmir.

simply repeated Büton's version of the story as the authoritative Tibetan account.[54]

So let us see whether this tradition can be corroborated with any surviving examples of writing from the area. First of all we have the manuscript caches discovered in Gilgit and Bamiyan. The Gilgit manuscripts are a bundle of Sanskrit palm-leaves discovered inside a stupa in the 1930s, and dating to the sixth or early seventh centuries. These dates make the manuscripts ideal for comparison with early Tibetan writing. The manuscripts from Bamiyan, which were discovered more recently and are now in the Schøyen collection, cover a wider period, from the second to the seventh century. The style of writing in these manuscripts has been termed the Gilgit/Bamiyan script.[55] This style developed from the Aśokan Brāhmī to become increasingly ornate, and by the time of the Gilgit manuscripts was characterized by the alteration of heavy and light strokes, and tapering downstrokes. None of these features are found in the earliest Tibetan writing, and when Tibetan writing did become ornamental, it was clearly a development in a different direction. Thus the source of the Tibetan script was not the contemporary manuscript tradition of the Northwest. The earlier manuscripts from Bamiyan, written before the development of the ornamental script, are somewhat better, but contain many old forms of letters that do not appear in Tibetan, including *ta*, *tha*, *ma* and *a*.

The argument for deriving the Tibetan script from that of the Northwest has been recently revisited by Lore Sander, an expert in Indic and Central Asian paleography. Rather than attempting to derive the Tibetan script from the manuscript tradition, Sander turned to the rock inscriptions from Northern Pakistan. Many more of these inscriptions have been discovered and photographed since the opening of the Karakorum highway in 1979. In principle, looking for the sources of the Tibetan script in rock inscriptions rather than manuscripts is a very good idea. As I mentioned above, the earliest suriving examples of Tibetan writing are not manuscripts but stone inscriptions, and these must be our primary sources when we are looking for the original models on which the Tibetan alphabet was based. Sander makes no claim to an exhaustive treatment of the subject, but it is a pity that she did not compare her material with the inscriptions from North India and Nepal.

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54   Stein 1972: 59. Some Tibetan historians also followed Büton. In his *Genealogy of Ngari*, Ngawang Dragpa states Tönmi was sent to Kashmir (see Vitali 1996: 20).

55   This term was coined by FW Thomas (Thomas 1954), who distinguished two forms, an earlier Gilgit/Bamiyan type I and a later Gilgit-Bamiyan type II. The description of the Gilgit/Bamiyan style was later developed by Lore Sander (Sander 1968: 124–130).
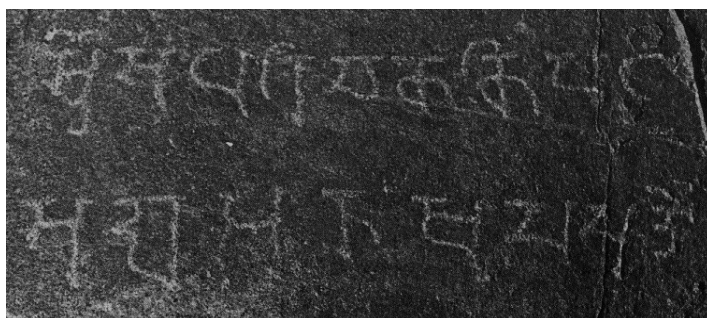
Inscription from Northern Pakistan (von Hinuber 1989, pl.62d)

There are two points against the derivation of the Tibetan script from the Northwest, rather than from North India and Nepal. The first is political: the Northwest region is far from the Tibetan empire's centres of power, and the Tibetan army did not cross the Karakorum range until the 660s, some years after the first instance of Tibetan writing recorded in the *Old Tibetan Chronicle*.[56] Close Tibetan contact with Nepal, on the other hand, is attested in the first half of the seventh century. An alternative hypothesis would be that the Brāhmī script of the Northwest was adapted by the Tibetans of the old kingdom of Zhangzhung and its successors. However, the archaeological evidence from Western Tibet does not support this. Most of the rock inscriptions are pictorial, and the examples of writing that do occur are clearly later than the 10th century (to judge by their palaeographic characteristics, such as the elongated left hook on the *a*).[57]

The second point is palaeographical. The rock inscriptions of Northern Pakistan are mostly written by passing pilgrims, and scratched onto the rock with a pointed stone. This is quite different the edicts of kings written on pillars by professional scribes found in Northern India and Nepal. As one would expect, these Kashmir inscriptions do not appear to represent a distinct tradition of writing, but emulate the writing in the manuscripts. Certain developments in the North Indian inscriptions that were passed into the Tibetan script, such as the looped *na* and *ma*, have not yet been found in the inscriptions of this region, and probably did not arrive there until a much later period.

So why did Butön believe that the Tibetan letter forms were based on the Kashmiri script? Possibly Butön or one of his informants had seen Kashmiri inscriptions and noted the resemblence to Tibetan writing.[58] While the writing

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56   See Beckwith 1987: 30.
57   See the reproductions in Francke 2003 and Bellezza 2001 and 2002.
58   As one bilingual Tibetan/Sanskrit inscription from Kashmir and dated to the 8th–9th century shows, Western Tibetans would have been aware of the similarity between their script and the Kashmiri Brāhmī inscriptions. See Sander 1994. Note however that the date of the inscription, and indeed that fact that the Tibetan script is also present there, means that it cannot support her argument in this article for the original derivation of the Tibetan script

style in the inscriptions of Kashmir developed relatively slowly, by Butön's time the scribes of North India had completely adopted the Nāgarī style. So in Butön's time the Kashmiri inscriptions would in fact have been closer to the forms of the Tibetan letters. But, as we shall see, this was not the case at the time of the genesis of the Tibetan script.

Zhangzhung

We should also consider the alternative Tibetan accounts coming out of Tibet's Bön traditions of how the Tibetan script came into existence. Though there is no inscriptional or manuscript evidence for these accounts, they are still sometimes presented as alternative theories, especially in recent Tibetan scholarship.[59] These accounts are closely integrated with the legends relating how the Bön teachings appeared in the world. Although there is no single authoritative version of the development of the Tibetan script in Bönpo writings, the version that is most often encountered is as follows. The ancestor was a script known as 'Pung script' (*spungs yig*) that came from the region of Takzik, often thought to indicate Western Central Asia or Iran. This script was adopted by the kingdom of Zhangzhung in Western Tibet, where it changed into what was known as 'Mar script' (*smar yig*). This then became the basis of the Tibetan script.[60]

The major problem with verifying the Bönpo account is the lack of ancient inscriptions in the region of Western Tibet that was the home of the rulers of Zhangzhung. Many petroglyphs (images scratched into the rocks) of animals and sacred symbols like the swastika have been found in Western Tibet, very similar to those found a little further west in the Karakorum, but there is no evidence that the Brāhmī writing of the Karakorum crossed over into Tibet. The only writing in the Western Tibetan inscriptions is in Tibetan, and nothing yet found appears older than the inscriptions Central and Eastern Tibet.[61] Similarly, the few manuscripts

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from Kashmir.

59   See for example Dungkar 2002: 1416 and Phun tshogs tshe ring 1997.

60   In a recent lexicon *smar yig* is defined as the script of the Smar region of Zhangzhung, and while *spungs yig* is not defined, *spungs* is said to signify a teacher (*ston pa*) – see Nagano and Karmay 2008. According to the nineteenth-century Bön scholar Tsültrim Püntsog (Tshul khrims phun tshogs 1996: 203), translators from Zhangzhung transformed the great and lesser *spungs yig* scripts into the greater and lesser *smar yig* scripts, and the translators from Tibet transformed the great and lesser *smar yig* scripts into the formal (*rdzab*) and cursive (*bshar*) Tibetan scripts (that is, the *dbu can* and *dbu med* scripts) respectively. According to Dungkar Losang Khrinley (Dungkar 2002: 1416ii), the Tibetan script that is in use today came into existence 1,300 years ago when the *spungs yig* script of Tagzig appeared in Zhangzhung. The letters of this script changed gradually into the Tibetan *dbu can* script. When the *dbu can* script was written quickly, the forms of the *dbu can* letters emerged. According to Dagkar Namgyal Nyima (Namgyal Nyima 2003: 22), Bönpo treasure revealers mention several other names of Zhangzhung scripts including the *drag yig* and *krug yig*.

61   See Bellezza 2001, 2002 and 2008. In the Bellezza's massive study of Zhang Zhung related archeological materials, the inscriptions that bear comparison on paleographic

from Dunhuang that have been said to be written in the Zhangzhung language are in the same Tibetan script as other early manuscripts.[62]

The Pung script of Tagzig (*stag gzigs spungs yig*)

The greater Mar script (*smar chen*)

The lesser Mar script (*smar chung*)

Several Tibetan calligraphy manuals provide examples of the Pung and Mar scripts.[63] For example, a chapter titled "Tibetan writing before Tönmi" in a recent calligraphy manual gives models for the letters of the Pung script of Tagzig, and the greater and lesser Mar script of Zhangzhung.[64] However it is clear that the Pung script of Tagzig is – like Landza – based on a Nāgarī script and cannot be earlier than the eleventh century. The greater Mar script seems to be a composite of elements from Nāgarī and the Tibetan headed script, along with other alterations, such as a swastika in the *nya*. The lesser Mar script is more obviously

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grounds with pre-eleventh century inscriptions (2008: 186, plates 348, 349, 350), are in fact from Northeastern Tibet.

62   The most important of these is the scroll IOL Tib J 755.

63   As well as the calligraphy manuals mentioned here see the script tables and examples compiled by Andrew West at http://www.babelstone.co.uk/ZhangZhung/Samples.html.

64   Bkras lhun dgon 2003. In fact the author presents four types of the Mar script: (i) *zhang zhung smar chen*, (ii) *zhang zhung smar chung*, (iii) *smar chen* and (iv) *smar chung*. They are all variants on *dbu can* except for *smar chen*, which is a variant on the *spungs* script. Similar models are found in Shes rab nyi ma n.d. The other scripts in Bkras lhun dgon 2003 said to originate in this early period include the "letters descended from the gods" *(lha bab kyi yi ge)* and the "onyx script" *(gzi yig)*. Shes rab nyi ma includes various "treasure scripts" *(gter yig)* from Zhangzhung.

a variation on the Tibetan headed script, usually modified with an extra head or a vertical stroke like that of the Nāgari letters.

Most other scripts said to predate Tönmi appear to originate in similar combinations of Tibetan headed writing and Nāgarī. For example, the script 'descended from the gods', is a simplified *dbu can* with the strokes at a 45 degree angle.[65] All of these scripts can be classified as either ornamental or occult scripts, and are mirrored in the Buddhist tradition by ornamental scripts like Landza and Wartu and occult scripts like the 'treasure scripts' (*gter yig*), 'symbolic scripts' (*brda yig*) and 'magic scripts' (*'phrul yig*).[66] Almost all of these scripts, Buddhist and Bönpo, can be seen to be derived either from the Tibetan headed script, from an ornamental Nāgarī, or from a combination of both. There is very good reason to believe that the majority, if not all, of these scripts were developed after the tenth century.

Now, it is quite possible that other forms of writing did circulate in Tibet prior to the reign of Songtsen Gampo. The inhabitants of the Zhangzhung area may have encountered manuscripts brought by neighbouring peoples to the north and west. Possibly the form of writing seen in these manuscripts was the original referent of terms like Pung and Mar. However, we have no examples of what such scripts looked like.[67] It is also important to distinguish the possibility of the mere presence of these examples of writing in Tibet at one time from their becoming the models of a Tibetan script.[68]

It seems likely that the accounts of early script forms in Zhangzhung developed alongside the Bönpo rediscovered treasure (*gter ma*) tradition from the eleventh century onward, where they played a similar role to the use of Landza and Wartu in Buddhist treasure texts. Perhaps the idea of these scripts as the original model of the Tibetan script is best seen as a part of an agenda in the emerging Bönpo movement to situate the centre of Tibetan cultural history in Western rather than Central Tibet. In any case, when we turn to the Late Gupta inscriptions of Northern India and Nepal, we immediately see a series of much more convincing models for the Tibetan alphabet.

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65   It is very similar to the script model called "the new alphabet of blo ldan" in Shes rab nyi ma n.d.

66   Models of these Buddhist occult scripts can also be found in the calligraphy manuals.

67   Narkyid (1983: 212) speculates that these Zhangzhung scripts derived from Early Gupta, whereas the script of Songtsen Gampo's reign was derived from Late Gupta. However I do not see any obvious connection between Early Gupta and the extant examples of *spungs yig* and *smar yig*. Yet the theory that different stages of the Gupta script influence the development of the Tibetan script is worth consideration, and I return to it in the conclusion of the present study.

68   It has also been suggested that one of the Zhangzhung scripts was the basis for the Tibetan *dbu med* script. However, as I argue in van Schaik forthcoming(b), there is no need to look for the origin of *dbu med* anywhere other than as a cursive development of the *dbu can* script.

North India

The Gupta kings ruled over much of India between roughly 320 and 540. The period has been characterized as a golden age of Indic culture; certainly one of the achievements of the age was the development of the elegant and readable script categorized in modern paleography as the Gupta style.[69] This style first appeared in the fourth century, evolving constantly over the following centuries. By the sixth century it is known as *Late Gupta*, and in fact at this stage the Gupta dynasty itself was in rapid decline, and the inscriptions in the Late Gupta style are often from other, newly established dynasties.[70] On this style, Richard Salomon writes:

> In central India the peculiar "box-headed script" began to develop during this period [the fourth through sixth centuries A.D.]. The principle characteristics of this script, namely, the square head mark, is noted in some northern Gupta inscriptions, but its full development, with the letters molded into characteristically square, angular forms, first appeared in the inscriptions of the Vākāṭakas. This highly stylized script enjoyed a long period of popularity in central India, where it continued to be used into the seventh century...[71]

The early sixth-century inscriptions of the Maukhari king Anantavārman, found in the Bodhgayā area, are particularly good examples of this style.[72]
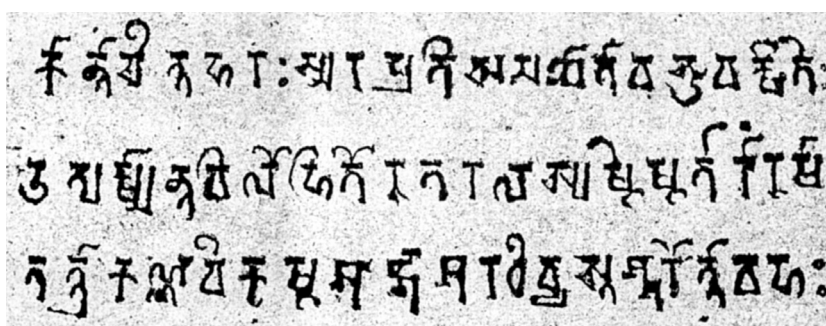
Detail from the Barābar Hill Cave inscription, 500–550 (Fleet 1888, pl.xxx(B))

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69   The extent to which the Gupta period really was exceptional has been questioned in recent historical writing. See Keay 2000: 139, 145–146.
70   On the dynasties of this period, see Davidson 2002: 30–42.
71   Salomon 1998: 39.
72   One of the most useful sources for reproductions of Late Gupta inscriptions remains the third volume of the *Corpus Inscriptionum Indicarum* series (Fleet 1888). The Anantavarman inscriptions are on pl.xxx(B) and xxxi(A&B). See also pl.xiv, xxii, xxiii(A) and xxx(A). Two more recent publications with further inscriptions from this period are Agrawala and Khaneja 1983 and Thaplyal 1985. Other important Late Gupta inscriptions were published individually; see for example Fleet 1886a and 1886b, Śāstri 1917 and Cakravarti 1934. On the Maukharis of the Gayā region, see Thaplyal 1985: 19.

By the seventh century Indic writing had changed enough that paleographers refer to it by another name, Siddhamātṛkā (which seems to have been a traditional term for the style), and by the eleventh century the dominant script in northern India was Nāgarī, the basis of the alphabet used in northern India today.[73] Richard Salomon describes this style thus:

The Siddhamātṛkā script is principally characterized by a strongly angular aspect, with a sharp angle (whence the term "acute-angled script") at the lower right corner of each letter, reflecting the influence of pen-and-ink writing on the epigraphic script; by the extension of the head mark into wedgelike or triangular forms (whence it is sometimes referred to as "nail-headed"); and by a strong tendency toward calligraphic elaboration, especially in the treatment of the vowel characteristics and subscript consonants.[74]

The acute angle at the lower right corner of some letters is characteristic of many letters in the Tibetan script. To put it briefly, in most of the Tibetan letters we see the general proportions of the "box-headed" form of the Gupta script (which of course provides the "heads" of the *dbu can* letters), with some influence from the "acute-angled" forms of the early Siddhamātṛkā script. Some of these acute-angled forms can be seen in the image below, dating to the first half of the seventh century.
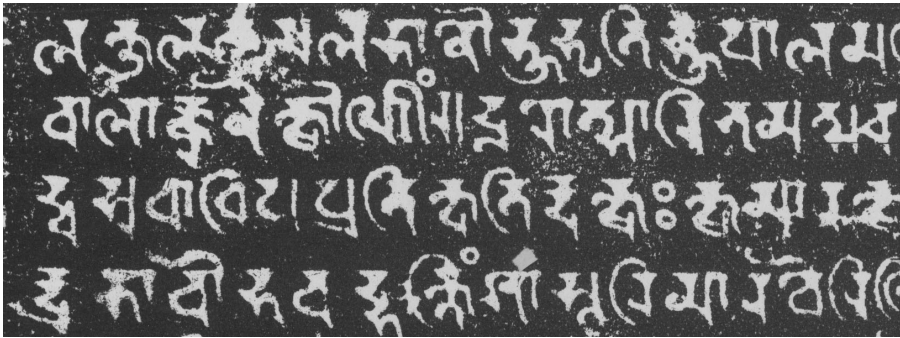
Detail from the Sirpur (Madhya Pradesh) inscription from the reign of Bālārjuna, 590–650 (Dikshit 1957).

Here then we have the basic model for almost all of the Tibetan alphabet (excluding the invented letters). A remaining problem is that the Tibetan form of *ka* is not found in any extant Indic inscription, and may have to be considered a Tibetan invention.[75] The Tibetan *ga* with an open, square head is not the standard

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73 'Northern India' in this article refers to the area beginning with the borders of modern Nepal and extending no further south than the modern state of Madhya Pradesh. Inscriptions from further south do not tend to share the characteristics of Late Gupta described here.

74 Salomon 1998: 39–40.

75 There are two forms of *ka* in North Indian inscriptions of the sixth and seventh century.

form in Late Gupta, though it appears occasionally in North India from the third century.[76] The *ma* on which the Tibetan letter is based is particularly significant, because no close model is seen in any Indic inscription before the 630s.[77] This strongly suggests that those who formulated the Tibetan alphabet were aware of the most recent trends in North Indian scribal practice. Although the basic forms for most of the Tibetan letters were in place in India from the early sixth century, the presence of the looped *ma* in the Tibetan script is evidence for the influence of inscriptions from as late as the 630s.

Further evidence for the influence of these early seventh-century inscriptions is the slanting angle of the lower stroke in Tibetan letters like *pa*, *pha*, *ba* and *ma*.[78] This slanting angle characterizes the evolution of the Gupta style towards the Siddhamātṛkā style in the late sixth and early seventh century. By this stage in Indic scribal practice, other letter forms, including *ya* and *sa*, had changed too, but these new forms were not adopted by the Tibetans.[79] During the early decades of the seventh century many Indian scribes were already abandoning the clear straight lines of the Gupta script; the inscriptions of the great king Harṣa (r.590–647) already have a very ornamental character by 618.[80] The increased ornamentation and curvature in the letter forms of the Siddhamātṛkā style are not found in the early Tibetan script.

Another set of inscriptions from Northern India, a series of inscribed bricks from Gopālpur, also shows many striking similarities to the Tibetan script. These bricks have an interesting history in the debate on the origin of the Tibetan script. They were taken in the 1890s from a temple in Gopālpur in Northern India (near the modern border with Nepal) to the Indian Institute Museum in Oxford, where they were studied by E.H. Johnson, who dated them to around AD 500. In 1938

The first, based on early Brāhmī forms, is a long vertical with a short horizontal cross. The second, developing in the late sixth century, has a loop joining the bottom of the vertical stroke to the left arm of the horizotal stroke. For the evolution of *ka* see Dani 1963: 116. Neither form seems a convincing model for the Tibetan, though Lore Sander did speculate on how the first form, as it appears in Northern Pakistan, could have been transformed into the Tibetan *ka* (Sander 1994: 563).

76   See Sander 1968, Tafel 9, for the looped forms in North Indian sources. The *ga* with a square 'head', very like the Tibetan, does appear in the Northwest, and can be seen in the rock inscriptions discussed in von Hinüber 1989; see pl.135 and 184. This alone however is not enough to argue for derivation from the Northwest, in the absence of a more general correspondance. The more common *ga* also appears in the Northwest; see von Hinüber 1989: pl.126.

77   Bühler stated that the looped *ma* appeared in the eighth century (Bühler 1904: 74), but I have identified examples in inscriptions from the early seventh century. See the Appendix.

78   Note that, contrary to Geza Uray's argument in Uray 1955, the Tibetan *ba* can be shown to derive from the Brāhmī *ba*, and not from *va*. See the entry on *ba* in the Appendix.

79   The letters that had by this time changed into forms radically different from the Tibetan versions include *ya* and *sa*. See Bühler 1904: 68–69.

80   For examples of his script in North Indian inscriptions see Bühler 1896, Dikshit 1957, and Sircar 1961.

Johnson published a paper on the bricks, along with reproductions, which were noticed by the French Sanskritist Jean Filliozat.[81]

Jean Filliozat brought up the similarity between the writing on the Gopālpur bricks to the Tibetan alphabet at a meeting of French orientalists presided over by Paul Pelliot in 1939. Sometime later the Japanese Tibetologist Inaba Shoju followed up this suggestion and wrote that these bricks were so similar to the Tibetan alphabet that no credit could really be given to Thönmi Sambhota for inventing anything. His role, if he truly had one, should be reduced to the creation of an authorized version of an already existing script.[82] This is an overstatement, to say the least; nevertheless, it was repeated by Stephen Beyer in his *The Classical Tibetan Language* in 1992.[83]
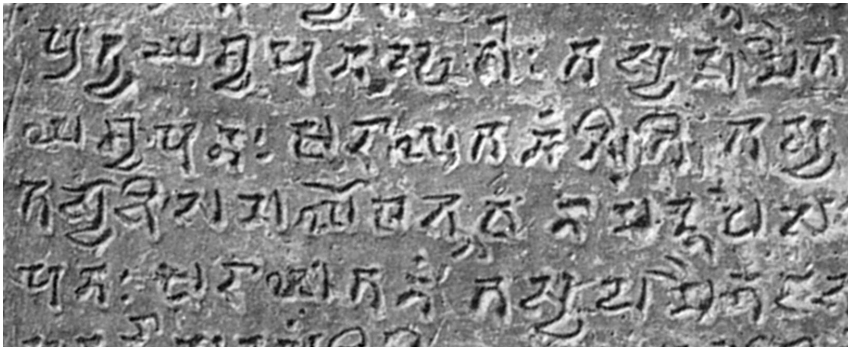
Detail from Gopalpur brick 1 (Johnston 1938, pl.1)

In view of this, it should be emphasized that these bricks are not a magic key to the origin of the Tibetan script. Striking as the similarities are between the early Tibetan script and the Gopālpur bricks, the two do not agree in their forms of *tha*, *ma* and *a*. Rather than being a unique key to the origin of Tibetan writing, the bricks are firmly in the tradition of Late Gupta writing found in many North Indian inscriptions in the sixth century. Other North Indian inscriptions provide the models for *tha*, *ma* and *a* not found in the Gopālpur bricks. So, rather than focussing on a single source, it would be more accurate to say that the North Indian family of inscriptions (in which the Gopālpur bricks are included) is most likely to have been the model for the Tibetan alphabet.

What we appear to have in the Tibetan script is a style based on the simple and elegant Gupta letters of the fifth and sixth century, with some alterations based on the new developments of the early seventh century. However, as we have seen, the

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81   See Johnson 1938 and Filliozat 1939. An earlier publication on the bricks, in 1896, gave an account of their finding, but did not provide any photographs (Hoey and Smith 1896). On a similar set of bricks, from Nālandā, see Chakravarti 1934.
82   See Inaba 1954: 1–2.
83   Beyer 1992: 40–41.

Tibetan alphabet shows no trace of influence from the fully-developed calligraphic Siddhamātṛkā script of the middle and latter half of the seventh century. This places the period of influence in the first half of the seventh century. This is a surprisingly narrow span of time, and perhaps not so surprisingly, it accords with traditional Tibetan account that the Tibetan script was invented in the reign of Songtsen Gampo (618–649).

Nepal

Tibet's closest neighbour, the kingdom of Nepal, continued to use an acute-angled form of the Gupta script, akin in many aspects to the Tibetan script, through to the 640s.[84] The Nepalese inscriptions of the Licchavi rulers of the Kathmandu Valley are very similar to those of North India, especially those between the late sixth and early seventh centuries. They are as close a match to the earliest Tibetan inscriptions as any Indic inscription.
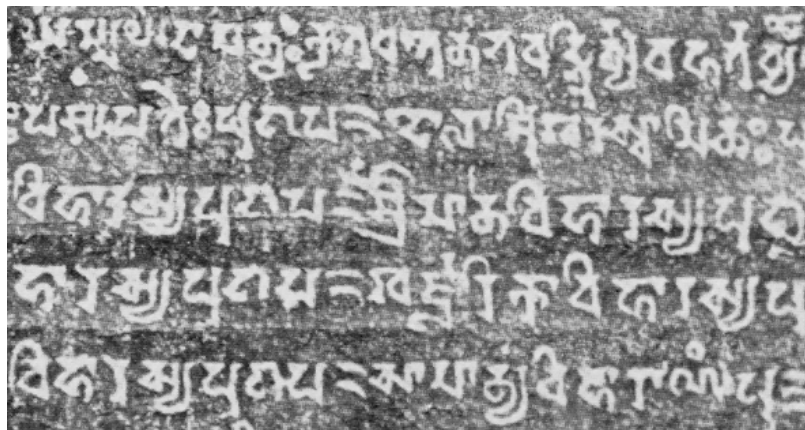
Detail of inscription from Kathmandu Valley, 608 (Regmi 1983, pl. LXXIV)

Traditional Tibetan histories link Tibet to Nepal through the Nepalese bride of Songtsen Gampo. Later histories identify the Nepalese king who gave away the princess with the most significant and well-known ruler of the period,

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84 The Nepalese style was discussed in Dani 1963: 136–140, pl.XI. Lore Sander (2002: 340 n.23) mentions a 1973 study by Hemarāj Śākya which I have not been able to consult, the reliability of which she calls into question. The Licchavi-era inscriptions have been reproduced in several publications; the first major collection was a selection of 23 inscriptions published in 1885 (Indrajī 1885). In the mid-twentieth century the Italian scholar Raniero Gnoli published a massive collection of reproduced inscriptions (Gnoli 1956). The most useful subsequent publication has been the three-volume study by the Nepali scholar D.R. Regmi (Regmi 1985). Citations given here are to Regmi's work. In dating the inscriptions I have relied on Petech's opinion of the two relevant eras being the Śaka era of AD78 and an era established by Aṃśuvarman of AD576 (Petech 1988).

Aṃśuvarman, the power behind the Licchavi throne for several decades. Other, earlier histories do not agree however, and it seems likely that the fame of Aṃśuvarman rather than sound historical sources brought his name into later histories. *The Pillar Testament* and the *Maṇi Kambum* point instead to the king Narendradeva, who restored the rule of the Licchavi dynasty in AD 641/3.[85]

Narendradeva's historical connections with Tibet are also suggested by the appearance of a similar name in the *Old Tibetan Annals*.[86] It seems likely that Narendradeva spent several years in exile in Central Tibet during the 630s, no doubt along with his family and courtiers, before returning to power in Nepal. The Chinese *Tang Annals* imply that when he returned to the throne in Nepal, it was as a subject of the Tibetan empire.[87] But before this, the sojourn of the king and his courtiers in Tibet would have resulted in some exchange of culture and technology. We know that Nepalese craftsmen soon became influential in the architecture and sculpture of Tibet; it is not unlikely that the scribes, or *lipikaras*, of Nepal also came to the attention of the Tibetan monarchy during this period.[88]

The Tibetans' decision to base their new script in Brāhmī may have much to do with the Nepalese presence in Tibet during those formative years. That it was by no means inevitable that the Tibetans should have chosen the Indic script is demonstrated by the example of the Tanguts, a people whose spoken language had much in common with Tibetan. When the Tanguts came to prominence in the eleventh century, they invented a script, much as the Tibetans had done earlier, but in this case, Chinese writing was taken as the model.[89] It is an intriguing possibility that, had the Tibetans chosen to base their script on the Chinese writing system, the character of Tibetan literature and Tibetan Buddhism might have been quite different. We know that Tibet had diplomatic contact with China from the year 608 onwards. The decision not to base a new script on the Chinese implies a strong cultural counterweight, and the Nepalese presence in Tibet could have provided just that.

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85   The various sources of this story, and the different identifications of the Nepalese king, are discussed in Sørenson 1994: 199–200, n.560, 544–545. For a discussion of the Nepalese monarchy during this period, see Regmi 1983, vol.III. The chronology of the Nepalese royal succession in this period is from Petech 1988: 158–159. See also the recontruction of the dates of the Licchavi kings by Kashinath Tamot and Ian Alsop at http://www.asianart.com/articles/jaya/kings.html.

86   P.t.1288, l.10: bal po yu sna kug tI bkum / na rI ba ba rgyal phor bchug / gnag nad chen po byung /.

87   *Old Tang Annals*, chapter 21. The evidence for this reading of history is discussed in Vitali 1990: 71–72. Wang Xuance's statement that the Nepalese king was a vassal of Tibet is in Lévi 1900: 442–443.

88   Several recent studies have emphasised the Nepalese influence on the early Tibetan temples, including the Lhasa Tsuglagkhang, or Jokhang, that may well have been built in the reign of Songtsen Gampo. See Vitali 1990, Heller 2004 and Alexander 2005.

89   The Tangut kingdom was known as *Xixia* to the Chinese. In their own language, they were the *Minyag*. See Dunnell 1996.

Yet despite the many similarities, the Nepalese script cannot have been the exclusive model for the Tibetan script. The Nepalese *ga*, *ma*, *ra*, *sa*, and medial *o* vowel are all different from the Tibetan forms. As we saw earlier, some letter forms adopted by the Tibetans, in particular the looped *ma*, could only have been known through a familiarity with the most recent developments in scribal practice then taking place in Northern India. It is uncertain that the Nepalese scribes, who followed a fairly rigidly defined style (as we can see from the surviving Nepalese inscriptions from the period) would have been aware of these developments. Therefore a Tibetan expedition to India in the early seventh century is perhaps after all the best explanation of how the models for the Tibetan script were selected.

The existence of a route from Tibet through Nepal to India in the seventh century is confirmed by several accounts of envoys travelling to India via Tibet during the mid-seventh century. Envoys between King Harṣa and the Tang emperor travelled back and forth several times in the 640s. The first Chinese mission, in 641, may also have been the delegation that escorted Princess Wengcheng, Songtsen Gampo's Chinese bride, to Tibet.[90] The next mission, in 643, included visits to sacred Buddhist sites like the mountain of Gṛdhakūṭa and the Mahābodhi monastery at Bodhgayā. The delegation included an artisan who drew images of Buddhist architecture and artifacts.[91]

A Chinese inscription discovered in 1990 in Kyirong, near the border between Tibet and Nepal confirms that a route through Tibet existed for this journey. The inscription dated 658, is by the Chinese envoy Wang Xuance.[92] This envoy had already travelled to India via Tibet ten years earlier. The delegation set off in 648 but arrived in India after the death of Harṣa. A new warlord called Aruṇāśa attacked the envoys, and killed all of them except for two who escaped to Tibet. One of these two was Wang Xuance. In Tibet he raised an army of 1,200 Tibetan soldiers and 700 Nepali cavalry. This Tibeto-Nepalese army returned to India and attacked the warlord. After three days of fighting the Indian troops were routed and Aruṇāśa was taken back to China as a prisoner of war. Although there is some disagreement about whether the Tibetans or the Chinese should be credited with this attack there is no doubt that it would not have been possible without the Songtsen Gampo's army and his strong ties with the Nepalese king.[93]

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90   Feng Chenjun 1957:126.
91   See Sen 2001: 8–9.
92   For discussions of the inscription, see Xizang Zizhiqu Wenguanhui Wenwu Puchadui 1994: 619-623 and Hou Wei 1994. See also the map in Sen 2003: 39. On the missions of Wang Xuance, see Lévi 1900.
93   Detailed discussions of this episode are found in Lévi 1900, Waddell 1911. A more recent, and concise, discussion is in Sen 2001. In addition, during the 640s and 650s a number of Chinese Buddhist pilgrims travelled to India via Tibet. They included the monk Xuanzhou, who was given financial help by Songtsen Gampo's Chinese queen Wencheng when he passed through Tibet. As Sen points out (Sen 2001: 24–25 n.81) the route from China to

After Narendradeva's return to the throne in Nepal as a Tibetan vassal in the early 640s, the route from Tibet to India via Nepal seems to have been particularly favoured by travellers on official and religious business.[94] The invasion of 648 brought Songtsen Gampo's Tibetan empire into Northern India, but there may have been Tibetan missions to India before this, or a Tibetan presence in the previous Chinese missions. As we have seen, these missions also gathered information on Indian art and architecture. It would have been quite possible, at sites like Bodhgayā, to gather samples of writing as well. It is also interesting to note that after the invasion of 648 Wang Xuance brought a Brahmin doctor back to China. This doctor was an expert in longevity drugs, and Sen has suggested that Wang Xuance may have been directed by the emperor Taizong to find such an expert.[95] Here we find a similarity—perhaps even an influence upon—the legends of Tönmi's mission to India and the accounts in he brought his writing teacher back to Tibet.[96]

In any case it is clear that the Tibetan court would have had an initial opportunity in the 630s to study the late Gupta writing style of Nepal during the exile of the Licchavi court in Tibet. Subsequent to that there were ample opportunities in the 640s for Tibetans to study writings from Northern India *in situ*, and perhaps to invite Indian experts in writing back to Central Tibet. Then by the middle of the 650s the first official documents in the Tibetan language began to be written down.

Conclusions

We have now settled on the Late Gupta script as it existed in the inscriptions of Nepal and Northern India as the most credible model for the Tibetan script. Unless significant new evidence – that is, inscriptions or manuscripts containing

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India through Tibet is recorded in Daoxuan's *Shijia fang zhi (A Record of the Country of Shakya)* T. 2088: 950c11-23. Yijing's *Da Tang Xiyu qiufa gaoseng zhuan (Biographies of eminent monks who went to the West in search of the dharma during the great Tang)* mentions the two routes back to China from India: the route through Nepal to Tibet and the route through Kapiśa to the Gandhara/Bactria region (Lahiri 1986: 6–7, 11, 15). After this flurry of activity, the Tibet route seems to have been used rather less by pilgrims, and a somewhat later pilgrim is recorded as abandoning the Tibet route: the monk Daoxi Fashi took the Tibet route, but finding it too dangerous, turned back and took the other route. Since Yijing records that he tried and failed to meet him in India, Daoxi Fashi must have been there in the latter quarter of the seventh century (Lahiri 1986: 16–17).

94   Trade may also have played a part, as Sen (2001: 2) suggests.

95   This is the theory proposed in Sen 2001.

96   Pasang and Diemberger's translation of one of the earliest versions of the Tönmi narrative, in the *Dba' bzhed*, has Tönmi bringing the writing expert back to Tibet with him. However, this hinges on whether one reads *khrid* as "to accompany" or "to instruct". The latter would bring the *Dba' bzhed* account into line with the other early versions. See Pasang and Diemberger 2000: 26–27.

previously unseen letter forms – is found in Kashmir or Central Asia, there is no need to consider these regions as the primary location of the source-material for the Tibetan alphabet. We have also suggested that the Tibetan alphabet must have been finalized some time in the 630s or 40s, shortly before the first writing down of the Tibetan empire's legal-administrative codes. Thus far the broad intent of the traditional account is confirmed by the available evidence. We have no confirmation of the historical existence of Tönmi Sambhota, but the paleographical and historical evidence suggests that something similar to Tönmi's expedition to India did actually take place.

Though we can perhaps never rule out the possibility a 'magic key' inscription might yet appear, it is unlikely. The Tibetan letter forms do not mirror any one set of Brāhmī letter forms found in a single inscription. In our paleographical enquiry into the sources of the Tibetan script, we seem to have found two levels of influence, chronologically distinct. The first influence is the Gupta script of the late fifth and sixth centuries, the simple and elegant style that lends the Tibetan script its clarity and ease of execution. The second influence comes from the developments leading to the Siddhamātṛkā script. It is seen in the looped *ma* and in the acute angles of *pa*, *pha*, *ba*, *ya* and *la*.

This raises possibility that the Tibetan alphabet was not invented in the form that we have it, but developed over time. In this hypothesis, Indic writing would have first come into use in Tibet, haphazardly throughout the sixth century, based on contemporary Gupta letter forms from Nepal and North India. The notation of Tibetan words in Brāhmī would first have developed in an *ad hoc* fashion. Then in the following century, by the 640s, Tibetan imperial interest in establishing a "Tibetan script"—formalizing the various methods of transcription in use, and incorporating recent developments in north Indian Brāhmī—led to the first version of Tibetan writing, the direct ancestor of the early inscriptions.[97]

Another hypothesis follows the traditional account more closely. After an initial exposure to the Late Gupta style of the Nepalese court, an expedition went to Northern India in the first half of the seventh century to research sources for the Tibetan script. This research drew upon a wide range of inscriptions, taking account not only of contemporary practices, but also the writing styles of the previous century. As we have seen, this objective may have been added on to a political mission. In either case, palaeographic comparisons show that there must have to have been some contact with the contemporary scribal practice of Northern India in the 630s or 640s. While it is possible that the knowledge of Indic inscriptional styles could have come entirely from Nepalese scribes resident in Tibet, these scribes are unlikely to have provided the models for all of the

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97   Something like this hypothesis is suggested by Ngawangthondup Narkyid (1983: 212) with
     reference to the *spungs yig* and *smar yig* scripts of Zhang zhung. However, as mentioned
     earlier, there is no inscriptional evidence to support this hypothesis.

Tibetan characters, since, as I showed earlier, there are many letter forms which appear consistently in Nepalese inscriptions that were not adopted for the Tibetan alphabet.

Thus the use of contemporary letter forms from North Indian inscriptions suggests that even if Indian scribes did come to Tibet to help formulate the alphabet, they would have to have been invited, which again would necessitate a Tibetan expedition to India. Such an expedition would have required a very strong commitment among the Tibetan court to creating the best possible script, but such commitment is not unlikely if we consider the scale of the task: not just the creation of a script, but the transcription of the complex phonetics of an oral language into written form. This must have been a formidable project, and the complex orthography of written Tibetan is evidence that it was undertaken with genuine commitment. As we now know, the task was also accomplished with great success.

APPENDIX I

The origin of Tibetan letter forms: a graph by graph account

The Tibetan letters here are all from one of the manuscript copies of the *Old Tibetan Annals*, IOL Tib J 750. While ideally I would have liked to use one of the older pillar inscriptions, I do not have access to high-quality images with examples of every letter form, and have chosen instead IOL Tib J 750 as one of the best representations on manuscript of the style of the pillar inscriptions. In any case, the Tibetan letters are provided here only as samples. The Indian and Nepalese letters, on the other hand, are taken from a range of inscriptions and represent the best examples available to me of the kinds of letter forms that may have served as models for the Tibetan alphabet.

 KA: No exact analogue for the Tibetan *ka* is found anywhere in the extant inscriptions. The Brāhmī *ka* was orginally a simple cross. The Early Gupta form added a bar to the top of the cross and elongated the downstroke. In Late Gupta the downstroke curves to the left to join the horizontal part of the cross. In India this form then developed into the Nāgari *ka* from the seventh century onward. Perhaps closest to the Tibetan are certain Nepalese inscriptions in which the top bar of the *ka* extends only to the left.

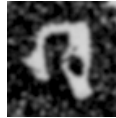| *ka*: Fleet 1888: pl.xxxi(B), 1.14 (500–550) | *ka*: Fleet 1886a: 1.15 (588/9) | *ka*: Regmi 1983: pl.lxxx, 1.1 (615) |

 KHA: Found with a straight line at the top in late sixth and early seventh century North Indian and Nepalese inscriptions.

| *kha*: Fleet 1886a: 1.12 (588/9) | *kha*: Regmi 1983: pl.lxxiv, 1.9 (608) |

 GA: The looped form appears occasionally in North India from the third century. A square loop at the left, very like the early Tibetan ga, is seen in some of the rock inscriptions from the Northwest which may be dated to the seventh century.[98]

| *gu*: Regmi 1983: pl.lxxiv, 1.12 (608) | *gu*: von Hinüber 1989: pl.184, 1.3 (n.d.) |

 NGA: In Brāhmī this letter form is rarely found in inscriptions on its own; rather it appears in conjuncts like *ṅka*. The Tibetan *nga* is similar to the *ṅa* part of these conjuncts in Gupta Brāhmī.[99]

98   The closed *ga* also appears in the Northwest; see von Hinüber 1989: pl.124, 1.2.
99   This letter form (*nga*) and the following four (*ca*, *cha*, *ja* and *nya*) have a more consistent appearance than the other forms discussed here. They attain the shapes seen in the Tibetan forms by the Kushan period (2nd century AD), and these shapes do not change significantly until the advent of the Nāgari script. These forms are also seen over a wide geographic area, including North and East India, Nepal and the Northwest.

ṅka: Regmi 1983: pl.lxxvii, l.10 (613)

 CA: Similar forms are found throughout Gupta Brāhmī.
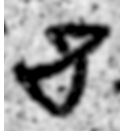
ca: Fleet 1888: pl.xiv(A), l.12 (510/11)

cī: Regmi 1983: pl.lxxvii, l.6 (613)

 CHA: Similar are forms found throughout Gupta Brāhmī.

cchā: Fleet 1888: pl.xxxi(A), l.10 (6th c.)

 JA: Similar forms are found throughout Gupta Brāhmī.
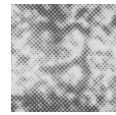

ja: Fleet 1888: pl.xiv(B), l.2 (510/11)

ja: Regmi 1983: pl.lxxvii, l.14 (613)

 NYA: In Brāhmī this letter form is rarely found in inscriptions on its own; rather it appears in conjuncts like *jña*. The Tibetan *nya* is similar to the *ña* part of these conjuncts in most Gupta Brāhmī, except that the latter has a more horizontal orientation.

jña: Fleet 1888: pl.xxxi(B), l.3 (6th c.)

ñca: Regmi 1983:, pl.lxxxvii, l.16 (615)

 TA: In most Gupta Brāhmī the two downstrokes come from the head, and this tendency is still visible in the early Tibetan inscriptions and manuscripts. A form closer to the later Tibetan *ta*, with longer the right leg extending from the left one, is found in the Gopalpur bricks and some of the Nepalese inscriptions. This form is not seen in the Northwest or Central Asia.

ta: Fleet 188: pl.xxxi(B), 1.2 (500–50)

ta: Regmi 1983: pl.lxxvii, 1.8 (613)

tyā: Johnston 1938: IX, 1.8 (6th c.)

 THA: The Late Gupta form with a flat right side and curved top is seen from the sixth century in North Indian Nepalese inscriptions.[100] The *tha* in sixth century Nepalese inscriptions is particularly close to the Tibetan form. This form is rarely, if ever, seen in the Northwest or Central Asia.[101]

thī: Fleet 1888: pl.xxxi(B), l.8 (6th c.)

rtha: Regmi 1983: pl.lxxvii, l.11 (613)

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100   See the Nāgārjunī Hill Cave Inscription of Anantavarman (dated c.500–550): Fleet 1888: pl.xxxi(B), 1.8. The forms most similar to the Tibetan seem to be those in the Nepalese inscriptions; see for example Regmi 1983, pl.LXXVII, l.11 (dated 613) and pl.XCIX, l.10 (no date).

101   As pointed out by Lore Sander (1989: 113), the Gilgit/Bamiyan *tha* is curved on the right, while the North Indian Gupta *tha* is curved on the left. An inscribed metal plate with the latter form of *tha* was found in the Bamiyan area, but the script differs so consistently from the local scripts that, in the opinion of Lore Sander, it was probably carried there from North India or Nepal. See Sander 1994.

 DA: The Tibetan *da* was probably based on the Late Gupta *ḍa* (and not *da*) as found in the some sixth century North Indian and Nepalese inscriptions, including the Gopālpur bricks. This form of *ḍa* is not seen in the Northwest or Central Asia.

ḍa: Regmi 1983: pl.lxxx, l.12 (615)   *ḍā*: Johnston 1938: II, l.10 (6th c.)

 NA: The looped form of *na* is found in sixth and early seventh century North Indian and Nepalese inscriptions.[102] It is not seen in the Northwest or Central Asia.

na: Fleet 1888, pl.xxxi(B),   *na*: Dikshit 1957: l.1   *na*: Regmi 1983: pl.lxxx, l.5
      l.7 (500–50)   (590–650)   (615)

 PA: The Tibetan form is similar to most examples of Late Gupta, especially the acute-angled *pa* of the early seventh century Nepalese and North Indian inscriptions.[103]

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102   Among the Nepalese inscriptions, see for example Regmi 1983, pl.LXXX, l.5 (dated 615). The form is found in the classic North Indian Late Gupta inscriptions; see for example the Barābar Hill Cave and Nāgārjunī Hill Cave inscriptions of Anantavarman (dated c.500–550): Fleet 1888: pl.xxx(B) and xxxi(B). Among the Indian inscriptions a form very similar to the Tibetan is seen in the Sirpur inscription of the time of Balārjuna (dated 590–650, probably towards the end of this period) in Dikshit 1957, l.1. This inscription also contains a form of *ma* that is identical to the Tibetan; however many of the other letter forms, such as *ya*, *la* and *sa*, are later forms which are quite different from the Tibetan.

103   For the basic form of *pa* see the Nāgārjunī Hill Cave Inscription of Anantavarman (dated c.500–550): Fleet 1888: pl.xxxi(B), l.5.For the acute-angled *pa* see the Bodhgayā inscription of Mahānāman (dated 588–9) in Fleet 1886a: l.10. Among the Nepalese inscriptions see Regmi 1983: LXXVII, l.2 (dated 613) and elsewhere; note how similar the forms of *pa* and *ma* are here.

pa: Fleet 1886a: l.10 (588/9)   *pa*: Regmi 1983: pl.lxxvii, l.2 (613)
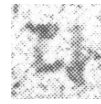
 PHA: The Tibetan form is similar to most examples of Late Gupta, especially the acute-angled *pha* of the early seventh century Nepalese and North Indian inscriptions.[104]

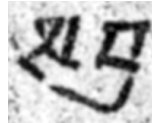
pha: Fleet 1888: pl.xxx(B), l.3 (500–550)   *phā*: Regmi 1983: pl.lxxiv, l.2 (608)

 BA: The Tibetan form is similar to the standard Gupta *ba*. It is especially close to the acute-angled *ba* of the late sixth century Nepalese and North Indian inscriptions. The theory put forward by FW Thomas and then Geza Uray that the Tibetan *ba* was derived from Brāhmī *va* is probably incorrect. See Appendix II below.[105]

ba: Hirananda 1917: l.9 (554)   *bra*: Fleet 1888, pl.xiv(A),   *ba*: Regmi 1983: pl.lxiii,
                                          l.9 (6th c.)   l.6 (598)

 MA: The form of *ma* on which the Tibetan form is based, with a loop at the left, appears in the sixth century in North and East India. A form identical to the Tibetan is seen by the mid-seventh century. This form is not seen in the Northwest or Central Asia.[106]

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104   See the Nāgārjunī Hill Cave inscription of Anantavarman (dated c.500–550): Fleet 1888: pl.xxxi(B), l.6. For the acute-angled *pha* see Among the Nepalese inscriptions, see Regmi 1983, pl.LXXIV, l.7 (dated 608) and elsewhere.
105   See Appendix II.
106   Bühler classified the looped *ma* as a late development which appeared in the eighth century (Bühler 1904: 74). FW Thomas found this hard to reconcile with the dates for the invention of the Tibetan script (Thomas 1954: 163), but it is not necessary to do so.
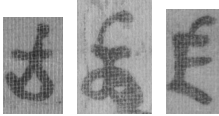
ma: Sircar 1961: l.10 (636/7)

ma: Dikshit 1957: l.13 (590–650)

ma: Regmi 1983: pl.lxxvii, l.9 (613)

 TSA, **TSHA**, **DZA**: These Tibetan graphs are just *ca*, *cha* and *ja* with a tick on the right side. This tick, incidentally, is seen in the North Indian and Nepalese inscriptions, where it indicates a long *ā* vowel.[107]

 ZHA: This invented letter seems to be a variation on the Gupta *sha*.

 ZA: This invented letter is almost certainly just a mirror-image of the Gupta *ja*.

Earlier occurances of the looped *ma* are seen in the Mandasaur inscription of Yaśodharman and Viṣṇuvardhana, in Fleet 1886b: l.2 (dated 533), and in the Baradipada copper plate, in Tripathy 1997: no.24, pl.1, l.1 (dated 500-600). By the early seventh century there are inscriptions with a strikingly similar form of the looped *ma*. The Sirpur inscription of the time of Balārjuna (dated 590–650, probably towards the end of this period) has a *ma* that is identical to the Tibetan form. Note that this inscription also contains a form of *na* that is identical to the Tibetan (see above), but many of the other letter forms, such as *ya*, *la* and *sa*, are later forms which are quite different from the corresponding Tibetan letters.

107   All of the traditional accounts of Tönmi Sambhoṭa's invention of writing agree that it was the letters *ca, cha* and *ja* that did not exist in Sanskrit and had to be added to the Tibetan alphabet. This is surely based on the fact that Tibetan transcriptions of Sanskrit words always employ *tsa*, *tsha* and *dza* to transcribe Sanskrit *ca*, *cha* and *ja*. This is true of even the earliest known transcriptions in the Dunhuang manuscripts. One explanation for this is that the Indian pronunciation that Tibetans were familiar with when they began to transcribe Sanskrit Buddhist words tended to make *ca*, *cha* and *ja* sound more like *tsa*, *tsha* and *dza*. This is implied by Gö Lotsawa's statement that *ca*, *cha* and *ja* are pronounced as *tsa*, *tsha* and *dza* in eastern India (Roerich 1996: 39). See also Thomas 1951: 148 n.2 and Uray 1955: 114–115. Uray raises the possibility that the letter forms with the added tick appeared later; originally *ca* / *tsa*, *cha* / *tsha* and *ja* / *dza* were represented by the same letter.

'A: The only apparent analogue for *'a* in the Brāhmī inscriptions is the hook that is seen underneath the *a* radical vowel to indicate the long vowel *ā* (see *a* below). However, as mentioned above, the pillar inscriptions suggest that the subscribed form of the Tibetan *'a* was not originally used to indicate long vowels.

WA: Although traditionally included in the letters adopted from the Indic scripts, this is partly a Tibetan creation. In the later orthography, it looks like a *ba* surmounted by a *la*. However the early documents show that the original form of this letter was an *'a* with a subscribed triangle, as FW Thomas pointed out. As this is not entirely clear in the IOL Tib J 750 image I included another *wa* here, from IOL Tib J 617. The subscribed triangle (known as *wa zur*) was probably derived from the Brāhmī *va*. We also see this superscribed triangle among the Indic inscriptions in conjuncts like *sva*. Thus, contrary to Geza Uray's suggestion, it need not be considered a subscribed form of *ba*.[108]

va: Fleet 1888: pl.xxx(B), l.3 (500–550)   *va*: Regmi 1983:, pl.lxxvii, l.13 (613)   *sva*: Fleet 1888, pl.xiv(A), l.1 (510/11)

YA: Similar to the tripartite Brāhmī *ya*, common up to the early seventh century when it was replaced by the bipartite *ya*. By the time the tripartite *ya* had evolved into the form with a rounded left curve and a sharply acute-angled right curve (the late sixth century), it also had a loop or curl at the left. The Tibetan *ya* could either be derived from this form of *ya*, with the loop discarded, or from the *gha* of the same period, which is identical to the *ya* but does not have the loop.[109]

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108   See Thomas 1954. Geza Uray (1955) proposed that this subfixed triangle in the early form of *wa* was a *ba* in the subfixed position. He based this on his theory that the Tibetan *ba* was based not on Brāhmi *ba*, but on *va*. As I argue in the note to *ba* in the present appendix, a wider survey of early Tibetan writing does not support this theory. Thus we may also question whether the subfixed triangle in the early form of *wa* represents the same phoneme as *ba*.

109   After the mid-seventh century the tripartite *ya* was replaced by a bipartite (and proto-Siddhamatṛka) form; see Regmi 1983: CXXV, l.7 (dated 666). For an early instance of the bipartite *ya* see the Bodhgayā inscription of Mahānāman (588–9) in Fleet 1886a: l.1.

yā: Fleet 1888: pl.xxx(B), l.3 (500–550)
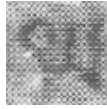
ya: Regmi 1983: pl.lxxx, l.16 (615)

gha: Sircar 1961: l.2 (636/7)

 RA: The form with a lower diagonal stroke appears in manuscripts from Central Asia from the Bower Manuscript onwards. Most Nepalese and North Indian inscriptions have little or no lower diagonal stroke, but this is not always the case. The *ra* with a strong lower diagonal line is seen in the mid-sixth century Jaunpur inscription of Īśvaravarman. The lower diagonal stroke is also clear in some Nepalese inscriptions.

rā: Fleet 1888: pl.xxxii(A), l.6 (6th c.)

ra: Regmi 1983: pl.lxxvii, l.10 (613)

 LA: Similar shape found in most Late Gupta. Especially close to the acute-angled *la* in the Nepalese and North Indian inscriptions of late sixth and early seventh century.[110]

la: Fleet 1888: pl.xxxi(A), l.2 (6th c.)

la: Fleet 1888: pl.xxxii(A), l.9 (6th c.)
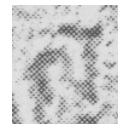
la: Regmi 1983: pl.lxxvii, l.4 (613)

 SHA: Similar to most Gupta Brāhmī *śa*. Form with long right leg and round head seen in sixth and early seventh century North Indian and Nepalese inscriptions.
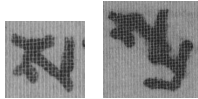
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110 Among the Northwestern inscriptions a similar *la* is sometimes seen, but with a 'tail' on the right; see for example von Hinüber 1989: pl.123, l.3.

śa: Sircar 1961: l.5 (636/7)

śa: Regmi 1983: pl.lxiii, l.3 (598)

  SA: The Tibetan form is identical to the Indic form common from the 5th century in North Indian inscriptions. From mid-sixth century in North India and the Northwest the predominant form has an extra downstroke making a triangle. This latter form is also to be found in all of the Nepalese inscriptions. [111] Note also that the conjunct spa is formed in the same way in this period as the early Tibetan form, with the *sa* to the left of the *pa*.

sa: Fleet 1888 pl.xxiii(A), l.2 (500–520)
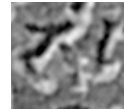
sa: Johnston 1938: pl.IX, l.5 (6th c.)

sa: Regmi 1983: pl.lxxvii, l.2 (613)

spa: Johnston 1938: pl.IX, l.10 (6th c.)

HA: Similar to most Gupta Brāhmī, especially the early seventh century North Indian and Nepalese inscriptions.

ha: Fleet 1888, pl.xxxii(A), l.1 (6th c.)


ha: Regmi 1983: pl.lxxiv, l.11 (608)

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111   The *sa* in the Northwestern inscriptions is less similar to the Tibetan *sa*; see for example von Hinüber 1989: pl.126, l.3. For the *sa* with a triangle at the base see the Barābar Hill Cave inscription of Anantavarman (dated c.500–550): Fleet 1888: pl.xxx(B), l.3. For the same form among the later Northwestern inscriptions, see von Hinüber 1989: pl.184, l.4. This is also the form used in all Nepalese inscriptions from the Licchavi period.
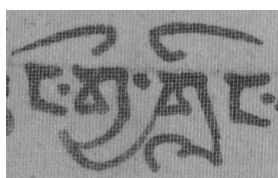
A: The basis for the early Tibetan form (with a short hook at the left) is found late sixth and seventh century North Indian and Nepalese inscriptions. This form is not found in the Northwest or Central Asia.[112]
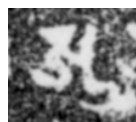
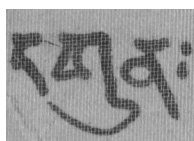*a*: Fleet 1888: pl.xxxi(A), l.6 (6th c.)   *ā*: Fleet 1886a: 15, l.9 (588/9)

I vowel (*gi gu*): Based on Gupta Brāhmī *ī* (not *i*) vowel, which appears with curl in fifth–sixth centuries, continuing into the early seventh century in Nepal.

vī: Fleet 1888 pl.xxx(B), l.6 (500–550)   *śrī*: Regmi 1983: pl.lxxvii, l.3 (613)

U vowel (*zhabs kyu*): Common in Gupta Brāhmī from the fifth century.
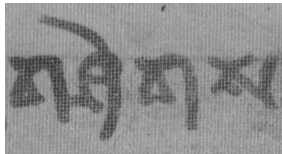
ku: Fleet 1888: pl.xxx(B), l.3 (500–550)   *ku*: Regmi 1983: pl.lxxvii, l.4 (613)
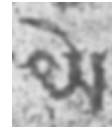
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112   The form of *a* with the left hook extending up to the same level as the head is a later development, a point which may be useful for the dating of manuscripts and inscriptions.
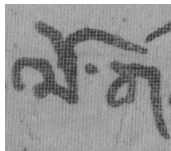
E vowel (*'greng bu*): The simple angled stroke adopted for the Tibetan script is common throughout Gupta Brāhmī.

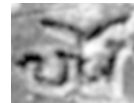*le*: Fleet 1888: pl.xxxi(A), l.2 (6th c.)   *ye*: Regmi 1983: lxxvii, l.3 (613)

O vowel (*na ro*): The wing-like shape is common in Late Gupta inscriptions in North and Northwest India. In Nepal the shape is similar, but the strokes sit much more closely upon the main letter form. By the second half of the sixth century the wing-like shape is usually replaced by a single curled stroke.[113]

to: Fleet 1888 pl.xxx(B), l.5 (500–550)   *yo*: Johnston 1938: pl.IX, l.8 (6th c.)

Subscribed YA (*ya btags*): Common in Late Gupta Brāhmī from the 5th century. By the mid-sixth century in North India and Nepal, a version with a long ascender on the right becomes more popular, but the simple version is also still found in Nepalese inscriptions in the early seventh century.[114]

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113   For the later single-stroke version see the Bodhgayā inscription of Mahānāman (588–9) in Fleet 1886a: l.2. Among the Nepalese inscriptions see for example Regmi 1983: pl.LXIII (dated 598), which has a curled version.

114   For the flourished version of the subscribed *ya*, see the Harāhā inscription of Īśānanavarman in Śāstri 1917, l.1 etc. (dated 533). For a square version, with ascender, see the Barābar Hill Cave inscription of Anantavarman (dated c.500–550) in Fleet 1888: pl.xxx(B), l.6. While the earliest Nepalese inscriptions – e.g. Regmi 1983: pl.1B, l.4 (dated 464) – have the simple *ya*, the version with the ascender later became standard. An exception was where the ascender would be in danger of joining up with the diacritical mark for the long vowel, in which case it was curtailed, as in the example pictured here.

sya: Johnston 1938: pl.IX, l.6 (6th c.)   *yyā*: Regmi 1983: pl.lxxx, l.11 (615)

Subscribed RA (*ra btags*): The straight subscribed line with an acute-angled slant appears in the North Indian and Nepalese from the mid sixth century.

pra: Fleet 1888: pl.xxiii(A), l.5 (500–520)   *pra*: Regmi 1983: pl.lxxvii, l.11 (613)

APPENDIX II

On ba and wa

As mentioned in Appendix I above, the Tibetan *ba* is clearly derivative of the late Gupta *ba*. However, FW Thomas (1954), and Geza Uray (1955) both argued that the Tibetan *ba* was derived from Brahmi *va*. FW Thomas based his assertion on the triangular shape of the Tibetan *ba* in some Central Asian documents. Unfortunately Thomas' sample was very small, and restricted to the military handwriting found in the paper documents and wooden slips from Miran and Mazar Tagh.

Thomas, and subsequently Uray, neglected to consider the Dunhuang manuscripts written with a square *ba*, which include one of the versions of the *Old Tibetan Annals*, IOL Tib J 750. More importantly, they did not take into account the orthography of the pillar inscriptions from Central Tibet, which are contemporary with or earlier than the Central Asian manuscripts, and in which the *ba* is always four-sided. As well as being the earliest clearly dateable sources of Tibetan writing, these pillars can also be considered to represent the closest to an officially-sanctioned version of the alphabet.

The manuscripts from Miran and Mazar Tagh, on the other hand, display a high degree of cursivization, in the development of the Tibetan script towards *dbu med* writing. The triangular form of *ba* in these manuscripts, with a point at the top, and a rounded bottom, can be seen to derive from recognized features of cursivization. This particular feature follows one of the 'graphetic principles' observed and described by Peter van Sommers (1991), that is, the preference for

anchoring lines to a single point.[115]

The differences between the four-sided *ba* and the three-sided *ba* could represent two different letter forms derived from the Brahmi letters *ba* and *va* respectively. However, if we look at a wide spectrum of early Tibetan writing, what we in fact see is not two distinct forms of *ba* but a variety of forms, which appear to be dependent on the context of the manuscript itself.[116] As is apparent here, the forms of *ba* which most resemble the Brahmi *va* are also the forms that are the most cursive; these are found in documents in which all of the Tibetan letters are in highly cursive forms. Usually these are official documents of one kind or another. Here *ba* follows the other letters in the reduction of strokes, the rounding of angles, and the tapering or disappearance of the head.

i	ii	iii	iv	v	vi

The letter *ba*, in imperial-period sources: (i) The Zhol pillar (760s);
(ii) The *Old Tibetan Annals* (IOL Tib J 750, c.840); (iii) the *Aparamitāyurnāma
-sūtra* (IOL Tib J 310.1210, c.840s); (iv) a military communiqué from Mazar Tagh
(Or.8212/1852, early 9th c); (v) an official letter from the regional minister or Bde blon
(P.t.1089, early 9th c.); (vi) an official letter from the Bde blon (IOL Tib J 1126, early 9th c.).

In support of his thesis, Uray also suggested that the *ba* had largely disappeared from Brāhmī by the time the Tibetans created their alphabet, having been gradually replaced by *va*, which had the same phonic value. However, he recognised that the four-sided *ba* was still being used in the areas closest to Tibet up until the seventh century; see also the examples in the previous appendix, from North India in the mid-sixth century and Nepal at the end of the sixth century. In these examples the ba has the same acute-angled lower stroke that is found in the Tibetan *ba*. Therefore at the time when the Tibetan script was formulated this form of ba was available in relatively recent inscriptions.

The other piece of evidence for the original identity of Tibetan *ba* and *wa* is two wooden slips first noticed by A.H. Francke, and then mentioned by F.W. Thomas.[117] The two slips are IOL Tib N 2271 and 2272, from the Tibetan fort in the Khotanese hill station of Mazar Tagh. These contain fragments of the Tibetan alphabet in which *ba* comes between *la* and *sha*, in the usual place of *va* in Indic alphabets. This is taken as evidence that Tibetan *ba* was originally based on

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115   For further discussion of this, please see van Schaik forthcoming(b).
116   For a preliminary typology of the types of writing found in the manusripts and
       inscriptions from the Tibetan imperial period, please see van Schaik forthcoming(a).
117   Thomas 1954: 160–161.

Brahmi *va*. It should be noted, however, that these two slips were found together and seem to represent the same handwriting.[118] Furthermore, an inspection of the originals suggests that they are two separated parts of what was originally, at the time the syllabary was written, a single wooden block. Thus this syllabary appears to represent the work of one Khotanese soldier or attendent in the early stages of learning Tibetan writing. Rather than taking them to be determinative for the nature of the Tibetan alphabet, we should consider their local origin and the effect of the Khotanese student's own linguistic context.[119] In any case, the discarded scribbles of a single Khotanese soldier or attendant learning the Tibetan alphabet are a weak basis for any theory about the origins of Tibetan letters.[120]

APPENDIX III

Spellings of Tibetan names

I have used phonetic transliteration throughout this article, based on the system used in Kapstein 2006. Where the Wylie transcription is not given in the main text, it is provided here.

Azha	*'a zha*
Büton	*bu ston*
Gö Lotsawa	*'gos lo tsa ba*
Lha Totori	*lha tho tho ri*
Lijin	*li byin*
Nelpa Pandita	*nel pa paṇḍi ta*
Sönam Tsemo	*bsod nams rtse mo*
Songtsen Gampo	*srong btsan sgam po*
(Gar) Tongtsen	*(gar) stong rtsen*
Takzik	*stag gzigs*
Tönmi Sambhoṭa	*thon mi sambo ṭa*
Trisong Detsen	*khri srong lde btsan*
Tsenpo	*btsan po*
Zahor	*za hor*
Zhangzhung	*zhang zhung*
Zhol	*zhol*

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118   The site numbers given by Stein are M.Tagh.b.I.007 and M.Tagh.b.I.009, respectively.

119   In this period Khotanese *ba* could represent both the sounds /b/ and /v/, while the letter *va* represented the sound /w/ (personal communication, P. Oktor Skjaervø, January 2010).

120   As Takeuchi (2004: 53) has shown, hill stations like Mazar Tagh were usually occupied by four men: two or three Tibetans and one or two Khotanese.

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