Sino-Bodic

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1. *From Turanian to Tibeto-Burman*

In terms of number of speakers, Tibeto-Burman vies with Indo-European for the title of the world's largest language family. Yet by comparison little is known of its past. In linguistic terms, eastern Eurasia has always been much more of a *terra incognita* than western Eurasia. Speakers of Tibeto-Burman languages occupy a vast area in the heartland of eastern Eurasia, but Tibeto-Burman peoples are by no means the only inhabitants of the Orient. Yet at one time it was believed that virtually all languages spoken by what was impressionistically called 'the Mongoloid race' or 'Mongolian races' belonged to a vast language family known as Turanian. In the middle of the last century, Friedrich Max Müller, a celebrated champion of this theory, divided the languages of the Old World into three language families.

> Languages in general may be divided into three families which have been called the Semitic, the Arian, and the Turanian. ... The Semitic nations appear first on the stage of history. ... The second family of languages is the Arian, or, as it used to be called, the *Indo-European*. The latter name indicates the geographical extent of this family from India to Europe, the former recalls its historical recollections, *Arya* being the most ancient name by which the ancestors of the family called themselves. ... The third family is the Turanian. It comprises all languages in Asia and Europe not included under the Arian or Semitic families, with the exception of the Chinese and its dialects. (Müller, 1855: 23, 27, 86).

Müller reports that the Turanian language family was 'named after the descendants of Tur'. Actually, the name of the family must have been taken from Persian *tūrānī* 'Turkoman' and from *Tūrān*, the Persian name for Transoxiana, especially Turkmenistan. The Persians named Turkmenistan and the Turkomans after Tūr, the heir of Farīdūn, a legendary monarch mentioned in Firdausī's *Shāhanāma* 'Book of Kings', completed in 1010. Farīdūn, and afterwards his eldest son Tūr, ruled an ancient people who were foes of the Persians. Müller divided the Turanian family into a 'Northern or Ural-Altaic division', comprising 'Tungusic, Mongolic, Turkic, Samoiedic, and Finnic', and a Southern division (1855: 86-7).

> The Southern division consists of the Tamulic [i.e. Dravidian], the Bhotīya, comprising the Gangetic and Lohitic [i.e. the languages of the Himalayas and sub-Himalayas, and of the Brahmapūtra basin, respectively], the Taïc, and the Malaïc branches. These two divisions comprehend very nearly all the languages of Asia, with the exception of Chinese. A few, such as Japanese, the languages of Korea, of the Koriakes, the Kam*k* adales, &c. remain unclassed, but in them also some traces of common origin with the Turanian languages have, it is probable, survived, and await the discovery of philological research. (Müller, 1855: 122)

The languages of the Caucasus were classified amongst 'the scattered languages of the Turanian family', and Müller later began to entertain doubts about whether Chinese belonged to 'Northern Turanian', i.e. Ural-Altaic, or 'Southern Turanian' (1881, I: 72-78, 307). Such sweeping classifications were

made possible by a point of view, which now seems quaint, whereby 'language, and particularly Turanian language, is so pliant, that it lends itself to endless combinations and complexities' (Müller, 1855: 124).

It was primarily in Britain that the Turanian theory enjoyed some popularity, and one of its proponents was the eminent British orientalist Hodgson, who wrote that 'Tamúlians, Tibetans, Indo-Chinese, Chinese, Tangús, Mongols, and Túrks are so many branches of another single family, viz., the Turánian' (1849: 453). Partly based on Hodgson's descriptive work, Hunter compiled a *Comparative dictionary of the non-Aryan languages of India and High Asia* which, he believed, 'in spite of its inexactitudes' proved 'that China has given its speech not merely to the great islands of the Southern Ocean, but to the whole of the Eastern Peninsula, to Siam, Tenasserim, Burmah, in a less degree to Central Asia, to many of the Himalayan tribes, and to some of the pre-Aryan peoples of the interior of India' (1868: 20). Even the Mundā languages and Chinese were believed to derive 'from a common source'. Within this grandiose, sweeping view, Hunter clearly expressed inklings that the ethnolinguistic make-up of eastern Eurasia was more complex than it appeared, for he held 'that these fragmentary peoples formed the *débris* of a widely-spread primitive race, and that from the northern shores of the Indian Ocean and the Chinese Sea, traces are to be exhumed of ethnical evolutions and the ebb and flow of human speech far more ancient, and on a grander scale, than the prehistoric migrations of the Indo-Germanic stock' (1868: 30). Schott (1856) and other contemporary scholars criticized the inadequate empirical foundation of the Turanian hypothesis, and by the turn of the century the hypothesis was in the throes of death. In his memoirs Müller, who by then no longer entertained the Turanian hypothesis himself, observed wistfully that it had remained fashionable to criticize this grouping of all 'allophylian, that is, non-Aryan and non-Semitic' languages 'as if it had been published last year' (posthumously 1901: 155). Yet even after the Turanian hypothesis had been abandoned, racial notions would linger on in comparative linguistics for some time and persist in colouring linguistic taxonomy.

The Indo-Chinese language family, an older hypothesis which was to survive Turanian, would undergo several changes in interpretation and became used by different scholars to designate different groups of languages. For most scholars, Indo-Chinese had always been distinct from Dravidian and Altaic, but there was no consensus as to the precise girth of the family. Initially, 'Indo-Chinese' was a nebulous and geographically inspired catch-all, in which Leyden (1808) classified the languages spoken by 'the inhabitants of the regions which lie between India and China, and the greater part of the islanders in the eastern sea'. Leyden held that this vast array of languages from the Great Wall of China to the Andamans and from Pamir to Papua New Guinea, although 'dissimilar', shared a 'common mixed origin' (1808: 158). In an early and somewhat crude lexicostatistical assay to assess the probability of genetic relationship between Oriental languages, Brown (1837) used the term 'Indo-Chinese' in the broadest possible sense to cover any language in eastern Eurasia, including Korean and Japanese. Yet knowledgeable scholars of the day already held a more differentiated view of languages spoken in eastern Eurasia. For example, Julius Klaproth clearly observed that, whereas 'das Tibetische hat viele Wurzeln mit dem Chinesischen gemein', Vietnamese was characterized by 'von den Chinesischen gänzlich abweichende Wurzelwörter', and Siamese (Thai) too 'weicht aber in den mehrsten Wurzeln sehr vom Chinesischen, und anderen benachbarten Sprachen, ab' (1823: 346, 363–4).

Remarkably, it is to this sensitive, early assessment that modern scholarship has now returned.

Schott pointed out that the term Indo-Chinese was 'eine unpassende benennung' with solely geographical meaning in that the languages thus designated existed 'seit undenklicher zeit in einem lande das gewissermaßen zwischen Vorderindien und Südchina sich ausdehnt', and that 'es ist bis heute sogar ungewiß, wie viele unter sich verschiedne familien sie bilden mögen' (1856: 161). Logan (1858) avoided the term Indo-Chinese and distinguished the 'Mon-Anam' languages from 'Tibeto-Burman' tongues, which included Karen. Forbes (1878, 1882) reluctantly adopted the term Tibeto-Burman, but excluded Karen. Forbes retained the all-encompassing Indo-Chinese but divided this language family into the four branches Tibeto-Burman, Karen, 'Shan or Tai', and the languages of 'the Mon-Anam race'. Other scholars retained the name 'Indo-Chinese', but used the term in a new and selective sense, as the designation for a configuration comprising languages such as Chinese, Tibetan, Burmese, Tai and Shan as opposed to languages of the 'Mon-Anam' group, e.g. Forchhammer (1882), Kuhn (1883). Others followed Logan in avoiding the term Indo-Chinese and instead used the term 'Tibeto-Burman' for this same configuration, e.g. Avery (1885).

As more data became available, doubts would arise about the linguistic affinities of Vietnamese, Karen and Chinese within these newly emergent language families. Kuhn (1883) conjectured that the speakers of 'Mon-Annam' languages such as Khmer and Vietnamese represented 'die Aboriginer, mindestens die älteren Bewohner der Halbinsel' of South-East Asia which had descended from the north along the Salween, Menam, Mekong and Brahmapūtra, as opposed to the unrelated linguistic stock comprising 'die Sprachen von Tibet, Barma, Siam und China' (1883: 4–10). Kuhn (1889) conducted a lexical comparison which compellingly demonstrated that, whilst 'wir das Tibetisch-Barmanische einerseits, das Chinesisch-Siamesische anderseits als deutlich geschiedene und doch wieder verwandte Gruppen einer einheitlichen Sprachfamilie anzuerkennen haben', languages such as Mon, Khmer, Khasi, Suk, Stieng, Bahnar, Khmu, Palaung, Nicobarese, Vietnamese constituted a distinct 'Mon-Annam-Familie'. However, Kuhn expressed doubts about the genetic status of Vietnamese within this family, speculating that the shared lexical items could be attributable to a loan influence rather than to actual genetic affinity. The finding that fewer cognate etymologies could be established between Vietnamese and the other Mon-Khmer languages 'lässt die Vermutung nicht ungerechtfertigt erscheinen, dass das Annamitische dem Kreise der übrigen Sprachen ursprünglich fremd war und seine Uebereinstimmung mit ihnen auf spätere Beeinflussung zurückzuführen ist, — eine Vermutung, die sich mit den historischen Verhältnissen sehr wohl verträgt, da die Annamiten ursprünglich vom äussersten Nordosten des jetzt von ihnen bewohnten Gebietes ausgegangen zu sein scheinen' (1889: 219–20).

By the turn of the century, Indo-Chinese was certainly dead in the sense of Leyden's geographical catch-all, and Sten Konow proclaimed that 'the reasons for a relationship between all Indo-Chinese languages have thus proved invalid, and it has been possible to distinguish, instead of one, two linguistic families, the one known as the Mōn-Khmēr family, and the other comprising Chinese, the Tai languages, and the Tibeto-Burman family' (Grierson, 1909: 1). However, the term Indo-Chinese continued to be used for the latter, more restrictive grouping, i.e. excluding the 'mon-annamitische Sprachen'. Conrady (1896) divided Indo-Chinese into a Western branch, 'das Tibeto-Barmanische', and the Eastern branch, 'das Siamesisch-Chinesische'. Tibeto-Burman was in

turn divided into the Tibetan, Nepalese and Assamese groups and Burmic, i.e. 'das Barmanische und seine nähern Verwandten', and 'Siamesisch-Chinesisch' was divided into Sinitic and Kadai (e.g. Thai, Lao, Shan, Khamti, Gelao, etc.), but Conrady felt uncertain as to whether the Eastern Branch also contained Karen, 'dessen verwandtschaftliche Beziehungen noch dunkel sind'. Finck (1909) resolutely identified Karen as the third group within the 'siamo-chinesische' branch of Indo-Chinese. Finck divided the other branch, Tibeto-Burman, into Tibetic and Burmic. Whereas Burmic consisted of Burmese and Kuki-Chin, including Mikir-Meithei, Tibetic consisted of eight groups: (1) Tibetic proper (i.e. 'im engeren Sinne', including rGya-rong, Kanauri, etc.), (2) 'Nepalesisch' (Sunwar, Magar, Newar, Gurung, Limbu, Chepang, etc.), (3) Lepcha, (4) the 'Dhimalisch' group, (5) Northern Assamese, (6) the Bodo group, (7) the Naga group, and (8) the Kachin group (1909: 52–59).

The vacillating positions of Chinese, Siamese and Vietnamese continued to illustrate the fledgling state of the art. Scholars continued to entertain reservations about the non-Indo-Chinese status of Vietnamese, persuaded, as it were, more by Kuhn's reservations than by his comparisons. Schmidt (1906: 67, 82) initially classified Vietnamese within Austro-Asiatic. The other Austro-Asiatic languages according to Schmidt (1906) were (1) Semang-Senoi, to which Schmidt (1926, I: 140) later gave the name 'ältere Malakka-Gruppe', (2) Khasi, Palaung, Wa, Riang, Nicobarese, which he later called the 'Zentral-Gruppe', (3) Mon-Khmer and Munḍā, or the 'südöstliche und nordwestliche Flügel-Gruppe', and (4) a 'südöstliche Misch-Gruppe', i.e. Radai, Jarai, Sedang, Raglai and also, erroneously, the Austronesian language Cham. Schmidt believed that all the languages in this fourth group were 'austroasiatisch-austronesische Übergangssprachen' or the results of 'Mischungen mit austronesischen Sprachen'. Schmidt advanced the Austric theory, which proposed a language family consisting of Austro-Asiatic and Austronesian. Schmidt's Austric was a very inclusive group, which was later even to include Japanese as a predominantly Austric 'Mischsprache' (1930). However, as we shall see, Schmidt was later to change his mind about Vietnamese.

Finck (1909: 43–51) specifically classified Vietnamese within Mon-Khmer and in fact even gave the name 'Kurku-Annamitisch' to a grouping comprising the Munḍā and Mon-Khmer languages. For Finck 'Kurku-Annamitisch', 'Khasi-Nikobarisch' (equivalent to Schmidt's 'Zentral-Gruppe') and 'Proto-Malakkisch' (i.e. Schmidt's 'ältere Malakka-Gruppe') were the three branches of Austro-Asiatic. Misled by structural similarity in the tone systems, Maspéro (1912: 118) believed that Vietnamese was 'le résultat d'un mélange très compliqué de dialectes de toutes sortes', particularly Thai, Mon-Khmer and Chinese, but that genetically it was 'à la famille thai que la langue annamite doit être rattachée'. Schmidt, who had initially classified Vietnamese as Austro-Asiatic, later adopted Maspéro's view of Vietnamese as a 'Mischsprache', which he then classified genetically within the 'Thai-Chinesische' branch of the 'Tibeto-Chinesische' language family (1926, I: 138).

In the 1930s Maspéro, with greater conviction, identified Vietnamese as a Kadai language with a strong Mon-Khmer substrate. Maspéro saw Vietnamese as a 'langue d'un petit groupe de vainqueurs imposée à une population paysanne de serfs eux aussi peu nombreux, le dialecte thai dont l'annamite est sorti n'a pu se faire accepter sans subir fortement l'influence du substrat mon-khmer' (posthumously 1952: 583).[1] In the 1940s, Cœdès again gave voice to

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[1] Henri Paul Gaston Maspéro was murdered at Buchenwald in March 1945, less than one month before American troops liberated this Nazi death camp (Gernet, 1984: 24).

the persistent uncertainty about the genetic affinity of Vietnamese: 'À mon sens étant donné qu'on ne peut pas plus nier le caractère foncièrement môn-khmèr du vocabulaire annamite que le caractère foncièrement t'ai de son système tonique, la question est de savoir ce qui est le plus vraisemblable: qu'une langue môn-khmèr monotonique ait adopté le système tonique du t'ai ou qu'une langue t'ai ait incorporé une partie considérable du vocabulaire môn-khmèr. Dans les deux cas, on aboutit au concept d'une langue mixte: c'est, je crois, celui auquel il est prudent de s'arrêter pour le moment ' (1948: 72).

Decisive evidence was published in 1954 demonstrating that Vietnamese was genetically related to the Mon-Khmer languages and so part of a language family which today is known as Austro-Asiatic (Muṇḍā, Nicobarese and Mon-Khmer), unrelated to Indo-Chinese. This evidence came from France, where the reluctance to accept an Austro-Asiatic status for Vietnamese had been the greatest. This achievement was the result of Haudricourt's Vietnamese sound laws, which not only enabled the identification of Vietnamese as an Austro-Asiatic language, but also constituted the first historical sound laws to provide an account of the linguistic phenomenon of tonogenesis. A century earlier Lepsius had speculated about the mechanisms which give rise to phonological tone. Lepsius had in fact already proposed that Chinese tones arose from the loss of finals and loss of syllables (1861: 492–6). Since Haudricourt, linguists have begun to gain a better understanding of the diverse mechanisms which give rise to phonological tone. Whereas Conrady (1896) believed that Proto-Chinese had eight tones, which the northern dialects had parsimoniously reduced to four, an understanding of tonogenetic sound laws has enabled Old Chinese scholars today to reconstruct an Old Chinese which is no longer a tone language at all, e.g. Pulleyblank (1962, 1973a), Baxter (1992).

Meanwhile Siamese or Thai, today held to be genetically unrelated to Chinese, continued to enjoy full-fledged membership in the Indo-Chinese family and was until recently even viewed as the closest linguistic relative of Chinese. Gustave Schlegel argued that Siamese resembled Malay more than Chinese in some particulars of grammar, although he observed that the Thai lexicon 'consists of the most heterogeneous elements' and that 'it is no easy task to find out whence a word is taken and which was its primitive form' (1902: 7). Yet Schlegel's foreshadowings were only to find vindication four decades later. Meanwhile, what were seen as correspondences between Siamese, Chinese, Burmese, Tibetan and Malay were interpreted by Conrady (1916, 1922) and later by Wulff (1934) as evidence for what Conrady suspected was 'eine wirkliche Urverwandtschaft' beween Indo-Chinese and Schmidt's Austric, i.e. Austro-Asiatic and Austronesian. So, an Indo-Chinese configuration which excluded Mon-Khmer but including Thai was to survive until the Second World War, along with the uncertainty about the linguistic position of Karen expressed by Conrady and the doubts about the genetic affinity of Vietnamese expressed by Kuhn.

In 1942, Paul Benedict presented his new view. (1) He finally evicted Siamese from the Indo-Chinese language family, and to underscore this new configuration he renamed Indo-Chinese 'Sino-Tibetan'. (2) This Sino-Tibetan language family was divided into a Chinese branch and a Tibeto-Karen branch, which Benedict in turn divided into Tibeto-Burman and Karen. (3) Benedict argued that Vietnamese and Mon-Khmer constituted a genetic grouping, following Kuhn and Konow rather than Schmidt and Maspéro, a view soon to be vindicated by Haudricourt. (4) Benedict presented a hypothesis which was later to become known as Austro-Tai, a genetic grouping comprising the Kadai and Austronesian languages. During the war, however, Benedict still adhered to

Wilhelm Schmidt's (1906) Austric theory and so grouped Austro-Tai, Mon-Khmer (including Vietnamese) and Miáo-Yáo (Hmong-Mien) within a single Austric family. It would take some time before Benedict's ideas were to gain general acceptance, and he himself subsequently was to relinquish the Austric theory, which he pronounced 'extinct' in 1991, albeit prematurely (cf. Diffloth, 1994, Reid, 1994).

Shafer (1953, 1955, 1974) adopted the name Sino-Tibetan but applied it not to Benedict's redefined language family, but to the Indo-Chinese language family in the sense of Forchhammer (1882) and Conrady (1896). Nonetheless, Shafer's comparative studies remain useful, and likewise many of his lower-level groupings continue to serve as valid hypotheses to this day. Shafer grouped the Sino-Tibetan languages into six divisions, viz. Sinitic, Daic (i.e. Kadai), Bodic, Burmic, Baric and Karenic. Shafer assessed that Karenic, although the most southern group, 'might almost be called intermediate between Bodic and Burmic' (1974: 8). Shafer's 'Baric Division' consisted of the Bodo-Garo and northern Naga languages and explicitly excluded Qiāngic ('Dzorgaish'), the northern Assamese groups Hruso ('Hrusish'), Digaro ('Digarish'), Abor-Miri-Dafla ('Miśingish') and 'Midźuish' ('Midźu' and 'Meyöl'), as well as the so-called 'minor groups' Newar ('Newarish') and 'Dhimalish' (Toto and Dhimāl). These seven groups were 'not definitely classified in a division' by Shafer, who suspected that they were 'probably sections of Bodic, possibly of Burmic, certainly not of Baric' (1974: 3).

Comparative Kadai studies vindicated Benedict's streamlined conception of Sino-Tibetan, e.g. Li (1977). Shorn of Kadai, Benedict's Sino-Tibetan gained acceptance in the 1970s, as did the phylogeny which he had initially proposed in 1942. Sino-Tibetan consisted of Chinese or 'Sinitic' and Tibeto-Karen. The Tibeto-Karen branch, in turn, consisted of the Karen and the more numerous Tibeto-Burman languages (Benedict, 1972: 6). Although Benedict soon expressed doubts about the superordinate status of Karen (1976), he initially described the relationship of Karen to Tibeto-Burman as being 'much as Hittite stands in relation to Indo-European', putting Tibeto-Karen 'on the same taxonomic level as Indo-Hittite'. Yet the very nature of the criteria would have mystified an Indo-European scholar, for the 'Tibeto-Karen' construct was largely the result of ascribing great significance to the syntactic element order of Karen and to other South-East Asian areal features in which Karen differs superficially from other Tibeto-Burman languages. Comparative work subsequently altered the status of Karen, which is now generally accepted to be a sub-grouping within Tibeto-Burman.[2]

The use of typological traits as indices of genetic affiliation has consistently misled comparativists in the nineteenth and twentieth centuries. The results of syntactic typology, which De Lacouperie called 'ideology' (1887), led to a classification which from the point of view of genetic affinity can only be qualified as bizarre. This has not discouraged scholars from using typological features as indices of genetic relationship to this day. Just as mere typological traits had obscured the linguistic affinity of Vietnamese and the status of Karen, the retention of morphological systems in the conservative languages of the Himalayas puzzled scholars who had decided that the Indo-Chinese language family was typologically a 'monosyllabic' linguistic stock. Here too

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[2] Nishi (1995: 4) writes that 'George van Driem (1993b: 294) classifies, first, Sino-Tibetan into Chinese and Tibeto-Karen, and then the latter into Karen and Tibeto-Burman'. It suffices to consult the given reference in order to ascertain that no Tibeto-Karen taxon was posited. Nishi (1995: 9) also claims that I argue against what he calls 'Nichols' hypothesis'. On the contrary, my discussion relies to some extent on the results of Nichols' investigations and makes no claims at variance with her findings.

an emphasis on superficial typological traits impeded historical linguistic insight. Schmidt (1906) believed that Tibeto-Burman languages of the Himalayas and sub-Himalayas such as Rangkas, Byangsi and Chaudangsi, Manchad and Dhimāl were 'tibetobirmanisch-austrische Mischsprachen'. Konow likewise attributed the conjugational morphology of Kiranti languages in the Himalayas to a Muṇḍā substratum (Grierson, 1909: III (I): 179).

In the 1930s, Maspéro argued that the conjugational morphology of Himalayan languages was not attributable to the influence of a Muṇḍā (Austro-Asiatic) substratum, but probably to the influence of morphologically similar conjugations of neighbouring Indo-Aryan languages (posthumously 1948: 175–6; 1952: 560). Benedict, however, appreciated the archaic status of Kiranti verbal morphology (1972: 156–7), and Bauman (1975) devoted a detailed study to demonstrating that the verbal agreement systems found in eastern Himalayan languages were indigenous systems which could not be attributed to any *action de substrat*.

The genetic position of Thai, Vietnamese and Karen had been established, but the status of Chinese continued to remain a topic of great uncertainty. The best attested Oriental tongue turned out to be the language whose historical development and genetic status were least understood. A major factor contributing to this state of affairs is the nature of the writing system devised millennia ago on the North China Plain for the language which was ancestral to Chinese. Some scholars, amongst whom Miller (1988) has been the most outspoken, contest that Chinese is even related to Tibeto-Burman. Most scholars have therefore understandably felt comfortable with a distant relationship between Chinese and Tibeto-Burman, even more distant than the relationship which was held to obtain between Karen and Tibeto-Burman. It was a tacit appreciation of our ignorance about Chinese historical phonology and, even more so, morphology that made it seem prudent to scholars to assume such a distant relationship.

The awkward position of Chinese as one of the two main trunks in a bifurcated family tree came under scrutiny as more became known about its historical phonology (Bodman, 1980). In the 1980s and early 1990s, dramatic advances were made in the study of Old Chinese historical phonology. Today, the various reconstructed models of Old Chinese resemble each other ever more closely, and the reconstructed language has begun to look like a natural human language rather than an inventory of phonetic formulae as it still seemed in Karlgren's pioneering work. Particularly notable are Starostin's (1989) and Baxter's (1992) methodical Old Chinese reconstructions. In fact, the 'new' Old Chinese has turned out to look rather like just another Tibeto-Burman language. The story of Chinese and Karen teaches us that there is more than just a grain of truth to the comparativist's adage that the less we know about a language or language grouping, the greater the time depth we are inclined to attribute to it.

2. *The Sino-Bodic hypothesis*

The Sino-Bodic hypothesis is based on shared lexical isoglosses and vestiges of a shared morphology and morphosyntax. Sino-Bodic entails a closer relationship between Sinitic and Bodic as a whole, not just between Chinese and Tibetan as in Bodman's (1980) 'tentative new view'. Bodman (1980: 40) himself did not consider the 'tentative new view' to be very probable and instead preferred an explanation whereby,

> the numerous correspondences with Tibetan can be explained as due partly to genetic relationship and partly to widespread borrowings from a

Pre-Tibetan source. These borrowings may not all have entered Chinese at
the same time, since there may have been several waves of invaders speaking
similar varieties of the Pre-Tibetan language. Some of the numerous doub-
lets found in Chinese can be accounted for by their common Sino-Tibetan
origin, and some by borrowings of words in their pre-Tibetan form. Many
doublets of course arose in later times because of dialect divergences.

In contrast to Bodman's substrate hypothesis, the Sino-Bodic hypothesis
posits that the Bodic languages together with Chinese make up a genetic
grouping named Sino-Bodic, or Northern Tibeto-Burman, within the greater
Tibeto-Burman language family. The hypothesis that Chinese constituted one
of the two superordinate nodes in the language family is the very reason why
the family bore the name 'Sino-Tibetan'. The Sino-Bodic hypothesis entails
that the taxon which for over half a century has gone by the name of Sino-
Tibetan is in reality what Benedict (1991) jocularly calls an 'extinct proto-
language'. The demise of Sino-Tibetan is not an extinction in the sense of a
hypothetical genetic relationship which turns out never to have existed, but in
a novel sense of a supposedly remote genetic relationship proving to be a more
intimate one. Just as Indo-Chinese was succeeded by Sino-Tibetan in 1942, the
time was ripe for Sino-Tibetan to yield to a redefined Tibeto-Burman in 1995.
Not only does the name 'Tibeto-Burman' have an older pedigree than 'Sino-
Tibetan', the newer construct also does greater justice to Chinese, which has
for millennia served as the vehicle for one of the world's great civilizations.
The superordinate status assigned to Chinese reflected our ignorance about
Old Chinese phonology as much as the pioneering state of the art in Tibeto-
Burman historical comparison. The lower-order status conferred upon Chinese
by the Sino-Bodic hypothesis is commensurate with the clearer picture we now
have of the older stages of this language, complemented by the many new
accounts of hitherto undescribed Tibeto-Burman languages. The replacement
of Sino-Tibetan by the older Tibeto-Burman is the logical sequel to the many
revisions which the language family has undergone in the past 50 years, e.g.
Benedict (1942, 1972, 1976), Shafer (1955, 1974), Burling (1983), Thurgood
(1985), Bradley (1994a, 1994b), van Driem (1995a, forthcoming a).
    As the hypothetical phylogenetic node of a family tree, Sino-Tibetan may
be more analogous to Indo-Hittite than Tibeto-Karen was held to be. A
dwindling number of Indo-Europeanist scholars still regard the Anatolian
languages as representing one of two main branches of an Indo-Hittite proto-
language, with Proto-Anatolian coordinate with Proto-Indo-European. More
conventionally, Anatolian, although possibly the earliest group to split off, is
viewed as subordinate to Proto-Indo-European. In my essay on Neolithic
correlates of ancient Tibeto-Burman migrations, I predicted that even if a
greater body of evidence is amassed demonstrating the subordinate status of
Sino-Bodic within Tibeto-Burman, 'Sino-Tibetan' will persist for some time
to come and, just as what Puhvel (1994: 315) calls 'the "Indo-Hittite" hydra',
will continue to sprout new heads even after it has been decapitated and
cauterized. Yet the nature of the beast is a different one. The case for the Indo-
Hittite hypothesis is in fact much stronger than are the arguments which might
stay the hand raised to slay the Sino-Tibetan dragon. Yet new comparative
work will have to determine whether the Sino-Bodic phoenix which has risen
from the dragon's funeral pyre can remain airborne.
    In addition to the Sino-Bodic hypothesis, a second, independent hypothesis
which I call the Western Tibeto-Burman hypothesis was first suggested to me
by Benedict, who wrote that Kachin, Konyak and Bodo-Garo make up a

Tibeto-Burman

Western
(Baric, Sal, Kāmarūpan)   Eastern

Northern
(Sino-Bodic)   Southern

North-western   North-eastern   South-western   South-eastern
(Bodic)   (Sinitic)   (Burmic, Karenic) (Qiāngic, Rung)

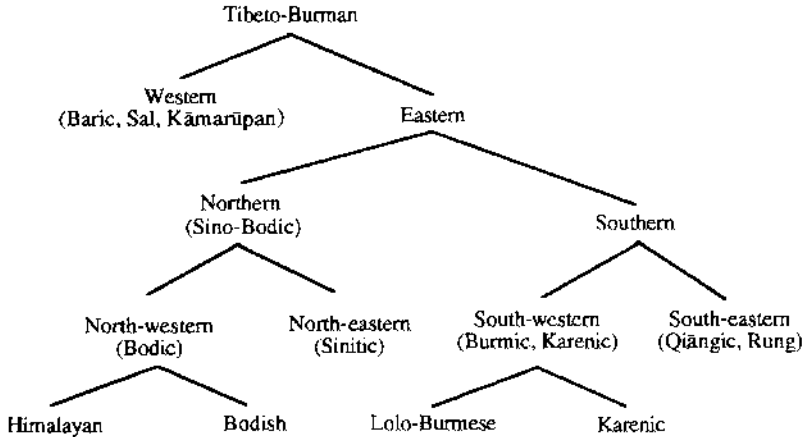Himalayan   Bodish   Lolo-Burmese   Karenic

FIG. 1   The Tibeto-Burman language family tree, reflecting the Sino-Bodic and Western Tibeto-Burman hypotheses.

group, 'perhaps even the earliest to split off of common Tibeto-Burman' and that Kuki-Naga and Mikir-Meithei constituted a related 'supergroup' (7 June 1992). The Western Tibeto-Burman hypothesis proposes a superordinate genetic grouping containing the languages which Shafer classified as 'Baric' as well as a few groups which Shafer was reluctant to classify. The languages which Burling called the 'Sal' languages also form part of Western Tibeto-Burman. I discuss the Western Tibeto-Burman hypothesis in greater detail in my forthcoming Toto treatise. The Tibeto-Burman *Stammbaum* embodying both the Sino-Bodic and the Western Tibeto-Burman hypothesis is reproduced in fig. 1.

The names of the branches of the family refer explicitly to the relative geographical positions of the groups at the time of their branching. Precisely because there have been migrations of peoples speaking Tibeto-Burman languages subsequent to the initial break-ups, these names do not correspond completely to the present-day geographical distribution of the groups thus labelled. In another publication, I have provided a detailed interpretation of the archaeological record in the light of Tibeto-Burman phylogeny (van Driem, forthcoming a). The rise and the spread of well-defined Neolithic cultural complexes furnish probable archaeological correlates for the ancient migrations which led to the present-day distribution of Tibeto-Burman languages and language groups.

3. *Sino-Bodic morphology and morphosyntax*

Like gross word order, the lack of verbal agreement in Chinese earlier seemed to underscore the separate status of Sinitic *vis-à-vis* Tibeto-Burman. It appears that traces of conjugational morphology may have been retained in Chinese either as the clitic rudiments or the clitic remnants of agreement markers. This is compatible with a Tibeto-Burman status for Chinese.

Karlgren (1920) presented decisive arguments that the archaic dialect of Chinese in which the Analects of Confucius, or *Lúnyǔ*, were written preserves a Proto-Chinese distinction between what might be called a *casus rectus* (more precisely a 'nominatif-génitif') and a *casus obliquus* ('cas régime') in the first and second person pronouns. These pronominal forms are given in table 1. Unless indicated otherwise, all Old Chinese forms in this article are cited in

TABLE 1. *Old Chinese pronouns according to Karlgren (1920: 223), with Baxter's (1992, 1995) reconstructions*

	First person	*Second person*
'nominatif -génitif'	吾 *ŋā [wú]	女 (汝) *naʔ [rŭ]
'cas régime'	我 *ŋājʔ [wŏ]	爾 *najʔ [ĕr]

'Version 1.1' of Baxter's reconstruction of Old Chinese, as expounded by Baxter (1995). Version 1.1 differs from Baxter's (1992) reconstruction in that the post-initial palatal glide /-j-/ has been eliminated, whereas the stem vowel has been lengthened in syllables which, in the 1992 version, lacked post-initial /-j-/. Moreover, the Old Chinese medial vowel /i/ is now reconstructed as a schwa /ə/, and the digraph /ng/ is now written as the phonetic symbol /ŋ/ for a velar nasal. The corresponding modern Mandarin forms are provided between square brackets. Unless otherwise indicated, Baxter's English glosses of Old Chinese forms are quoted, and the reconstructed Proto-Tibeto-Burman forms are those given by Benedict (1972). The abbreviations PTB 'Proto-Tibeto-Burman', OC 'Old Chinese' and MC 'Middle Chinese' are used sparingly, and reconstructed Proto-Tibeto-Burman and Old Chinese forms are, conventionally, marked with an asterisk. Proto-Kiranti forms have been extrapolated from modern Limbu forms on the basis of my sound law for initial /y/ in Eastern Kiranti (van Driem, 1990) and Michailovsky's law (1994) for Kiranti initial plosives. Unless otherwise indicated, all Limbu forms appertain to the Phedäppe dialect of Tamphulä village and are taken from my Limbu grammar (1987). Pāñcthare Limbu data cited here were kindly provided by Tej Mān Aṅgdembe.

Occurrences of the pronouns of the upper tier correspond statistically to a nominative or genitive function more so than the forms of the lower tier. The forms in the lower tier occur clitically after verbs and prepositions, whereas the pronouns in the upper tier do not.

Benedict (1994: 634) identifies the Old Chinese verbal agreement form 女 (汝) *naʔ [rŭ] as cognate with the second person agreement marker *⟨-na⟩ of the Proto-Tibeto-Burman verbal agreement system, which Thurgood (1985: 399) claims 'was common to *most if not all* of Tibeto-Burman at one time'. Following Thurgood, Benedict assumes 'the following Proto-Tibeto-Burman pronouns and two related functors':

TABLE 2. *Tibeto-Burman 'agreement system' (Benedict, 1994, after Thurgood, 1985)*[3]

*⟨ŋa^A⟩	pronoun 'I, me'	*⟨na(·)ŋ^B⟩	pronoun 'you'
*⟨-ŋa-⟩	first person verbal agreement marker	*⟨-na-⟩	second person verbal agreement marker

Instead, I have previously proposed that this agreement system is precisely what is reflected by Karlgren's diagram. Karlgren (1920) argues that the

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[3] The superscripts A and B correspond to proto-tones reconstructed by Benedict, the existence of which I believe to be doubtful.

pronominal declension in the dialect of the Analects shows every sign of being a retention of a more elaborate flexional system and that this declension cannot be an innovation. The distribution of pronominal forms studied by Karlgren may represent either the Old Chinese traces of the same verbal agreement system which has been reconstructed for Proto-Tibeto-Burman or the persistence in Chinese of an original Proto-Tibeto-Burman tendency to pronominalize. In the dialect of the Analects, the form 我 *ŋājʔ [wǒ] still fulfils its original function as an agreement clitic often following the verb, but it has already begun to occupy other syntactic positions which constitute a diversification of its original function. The clitic form 我 *ŋājʔ [wǒ] was to gain in frequency and ultimately prevail over the pronoun 吾 *ŋā [wú]. The subsequent development whereby the Old Chinese clitic forms prevailed over the full pronouns is analogous to the Tangut situation whereby verbal agreement markers are far more frequent than the pronouns with which they correlate (Kepping, 1994). Just as the Tangut fashioned special ideograms to represent conjugational desinences when they devised their script in the early eleventh century, the Chinese likewise designed separate ideograms for the full and clitic forms of the first and second person pronouns.

The Old Chinese pronominal declension distinguishing full and clitic forms may represent either the vestiges of a common Sino-Bodic verbal agreement system or the preserved rudiments of an even older Tibeto-Burman pronominal declension which gave rise to the agreement systems in Western Tibeto-Burman (Baric, Sal, Kāmarūpan, Jinghpaw), North-western (Bodic) and South-eastern (Qiāngic, Rung) Tibeto-Burman. The latter phenomenon would be akin to the parallel and independent morphosyntactic developments observed in Indo-European by Schlegel (1808), for which Sapir (1921) later coined the term 'drift'. Tibeto-Burman linguists too will have to distinguish the parallel and independent rise of similar morphosyntactic patterns in different branches of the family from cognate morphology, just as Indo-European scholars did nearly two centuries ago. In so doing, it must be kept in mind that the loss of morphology is a complex process. As a result of an intricate interplay between phonological, morphological and analogical developments, 'present-day French and Provençal seem to be as wholly devoid of case in their substantives as are the Ibero-Romance varieties, Sardinian and Italian; but they have arrived at this state by a different route' (Hall, 1980: 267). The paucity of morphology in some Tibeto-Burman languages, likewise therefore, says little about the complex historical developments which may have led to this state.

Another interpretation of the Old Chinese pronominal declension has been advanced by Sagart, who believes that textual evidence indicates that the pronominal forms 吾 *ŋā [wú] and 女 (汝) *naʔ [rǔ] were originally singular forms, whereas the forms 我 *ŋājʔ [wǒ] and 爾 *najʔ [ěr] originally served as plural pronouns (1995a: 201). Parallels leap to mind whereby plural pronouns in the historical development of languages usurp the role of the singular pronouns and ultimately replace the original singular forms, e.g. English you and Brazilian Portuguese você, the singular pronoun ham 'I' in Sarnāmī, Bhojpurī and Maithilī [< Indo-Aryan oblique asm- ' we'; cf. Hindi ham ' we ']. According to Sagart, the declensional opposition between 吾 *ŋā [wú], which ' served primarily as subject and possessive', and 我 *ŋājʔ [wǒ], which served ' as object or after a preposition', arose secondarily in the mid-Zhōu period from ' the old number opposition '. If enough textual evidence can be mustered to show conclusively that this hypothesis is correct, this would eliminate the interpretation of Karlgren's hypothesis which I have elaborated above, but it would provide different and equally cogent morphological evidence in support

of Sino-Bodic. The two purportedly plural Old Chinese pronouns 我 *ŋājʔ [wǒ] 'we' and 爾 *najʔ [ěr] 'you' would appear to share a plural morpheme *⟨-j⟩, whereby the crucial assumption is of course that the reconstruction of the Old Chinese final is correct. The Old Chinese plural morpheme *⟨-j⟩ in the pronouns 我 *ŋājʔ [wǒ] 'we' and 爾 *najʔ [ěr] 'you' is evidently cognate with the Tibeto-Burman first and second person plural suffix *⟨-i⟩, reconstructible to the level of the proto-language but best reflected in North-western Tibeto-Burman, i.e. Bodic (van Driem, 1993b: 325).

According to Sagart (1995a: 200), 'the simplest explanation' for the first person pronoun found in hundreds of Tibeto-Burman languages as far away from the Yellow River as Nepal and Mizoram is 'that it was borrowed from Chinese' sometime between 700 and 200 B.C. This hypothesis is utterly unlikely. Although the borrowing of pronouns is certainly attested, e.g. English *she*, it remains a rare phenomenon notwithstanding Sagart's suggestion that Oriental languages are somehow different in this regard. Benedict was quite right to say that 'we have no right to assume that Indo-Chinese is *sui generis* in this respect' (1939: 214). Both the tendency to treat Oriental languages as somehow inherently different, abiding by other principles than Western languages, as well as the preference for explanations in terms of loans and contact influence in view of the current dearth of well-established sound laws merely reflect our poor understanding of Oriental languages and their historical phonology. Not only the Old Chinese pronominal system but also other aspects of Old Chinese morphology reflect the Tibeto-Burman affinity of the language.

Some Old Chinese processes vestigially reflect the same old Tibeto-Burman morphophonological and morphological regularities so well preserved in relict areas like the Black Mountains and the Kiranti language area of eastern Nepal. Middle Chinese verbs exhibited morphological alternations in their stem finals of the type /-k ∼ -ŋ/, /-t ∼ -n/ and /-p ∼ -m/, and this ancient morphophonology is preserved in the form of polyphonic readings of Chinese characters in the eighth century *Tángyùn* and in the *Guǎngyùn*, a Sòng dynasty version of the *Qièyùn* compiled in the late tenth and early eleventh century. These polyphonic readings were described by Courant (1903), who also recorded their modern Mandarin reflexes. Benedict (1972: 156–7) claims that 'we are justified in assuming that alternations of this type were the result of assimilation to verbal suffixes which had later been dropped (note the parallelism with verb paradigms in Bahing and many other Tibeto-Burman languages)'. Indeed, the Old Chinese alternations exhibited in the two different readings of ideograms in sets identified by Courant (1903) and later adduced by Benedict (1972: 156) are precisely the type of regular morphophonological alternation manifested by the various classes of verb stem in Kiranti languages such as Limbu and Dumi (van Driem, 1987: 71–4, 1993: 91–118). If the morphological alternations of the Old Chinese doublets are cognate with the Kiranti phenomenon of regularly alternating verb stems conditioned morphophonologically by a following suffix, then the Chinese evidently did not bother to create special characters for their suffixes, unlike the Tangut who fashioned special ideograms for verbal agreement suffixes (Kepping, 1985, 1994).

An instructive example in this regard is the earliest known writing system, which was developed around 3200 B.C. Just like the early Chinese script of the Shāng period, the Sumerian script began as pictographic representations which later became stylized, the result being the well-known cuneiform script. Foreshadowing what would happen in China two millennia later, some Sumerian logograms soon began to function as phonetic symbols, not altogether appropriately termed 'syllabograms', and many new logograms were

designed according to the rebus principle by combining a logogram suggestive of the meaning with a syllabogram suggestive of the pronunciation (Labat, 1948). The structural principles of the early Sumerian script resemble those of the Chinese writing system in other particulars as well (Gong, 1993). In later texts, Sumerian syllabograms representing flexional affixes began to be placed before and after a logogram representing the verb stem. The use of syllabograms to represent flexional affixes remained facultative, however, and they were often left out altogether (Reiner, 1973; Civil, 1973; Green, 1991) and some Sumerian morphological processes are only directly attested during the brief spate of syllabic instead of logosyllabic writing in certain texts from the beginning of the second millennium (Krecher, 1967). The evidence and the analysis of the evidence which enable Assyriologists to deduce facts about Sumerian verbal flexion and stem alternation is complex. A Sumerian verb was often written with just a single logogram, which represented not only the alternating stems of the verb, but also any one of its various inflected forms. Although Sumerian morphosyntax is reminiscent of modern Circassian in terms of its structure and complexity (Thomsen, 1984), the morphology is imperfectly represented and often obscured by the nature of the writing system. If a writing system were to be designed with the intent of concealing the phonology and morphology of a language for historical linguists of the future, few solutions would be as effective as the Sumerian writing system or the script devised for the language ancestral to Chinese.

Modern languages like Mandarin and, *mutatis mutandis*, Cantonese use the Chinese writing system as an ideogrammatic script, in which each character represents a monosyllabic morpheme. Both comparative and internal, historical evidence indicate that now defunct morphosyntactic processes were operative in Old Chinese. It is quite conceivable therefore that Old Chinese had suffixes akin to the Proto-Bodic verbal endings *⟨-u⟩, *⟨-ɛ⟩ or *⟨-i⟩ and verb forms analogous to, say, Limbu *tak* 'it will coagulate' vs. *taktɛ* 'it has coagulated', or *hiptu* 'he struck him' vs. *ahip* 'he will strike us', or *im* 'he will sleep', *ipsɛ* 'he has fallen asleep'. This would entail the view that the Chinese writing system was originally used as a logographic script, in which each character represented a word. Just as Lepsius was before his time in proposing that the loss of *Auslaut* segments had given rise to Chinese tone, he also believed that entire syllables were lost in Chinese and that Chinese ideograms once represented words which may have contained more than just the root syllables whose reflexes are often the only still to survive in the modern pronunciations. In speaking of the units of the Chinese writing system, Lepsius wrote that 'die chinesische Einsilbigkeit ist nicht die ursprüngliche, sondern eine bereits von früherer Mehrsilbigkeit *herabgesunkene* und in verhärteter Einsilbigkeit an der Grenze ihrer Entwickelung angelangte' (1861: 496). Grube later echoed Lepsius' insight, arguing that comparative evidence indicated that 'der Monosyllabismus' of modern Chinese was a secondary state arrived at 'durch Verschmelzung selbständiger Wörter oder auch durch Anfügung von Formelementen' (1881: 18).

These novel insights contrasted sharply with the popular view, expressed by Chalmers, that Chinese had remained typologically unchanged for four millennia and that 'the ancestors of the Chinese were without any system of writing, and spoke at that time a language made up, as a rule, of distinct monosyllabic roots,—without *inflection*, without *agglutination* ...' (1866: 6). This naïve view persists to the present day and reflects a casual and uncritical appraisal of the Chinese writing system. If flexional processes operated in the language spoken millennia ago ancestral to modern Chinese, then it would not

have been an obvious choice to those who devised the script to represent desinences in an ideogrammatic or logographic system of writing. Even modern alphabetical scripts like Arabic and Hebrew often do not specify grammatical information of this kind. It is easy to imagine that an ideogrammatic script could be used to represent derivational, lexical distinctions like 'to set' vs. 'to sit', but not to represent flexional distinctions like 'sit' vs. 'sits' vs. 'sat'.

Just such a type of imperfect graphic distinction may be what is reflected by the Middle Chinese polyphonic readings preserved in the *Tángyùn* and *Guǎngyùn* as described by Courant (1903). Such doublets generally show no semantic differentiation, and, when different meanings are recorded, these appear to represent different senses of a single lexical meaning. These doublets characteristically involve alternation between a stem with a plosive final and a stem ending in the corresponding homorganic nasal, i.e. /-k ~ -ŋ/, /-t ~ -n/ and /-p ~ -m/. This pattern corresponds to a prevalent type of Kiranti verb stem alternation between an ante-vocalic and an ante-consonantal form, i.e. /-ks ~ -ŋ/, /-ts ~ -n/ and /-ps ~ -m/. It may be difficult to find Chinese correspondences for types of Kiranti verb stem alternation not involving alternation between homorganic plosive and nasal finals, e.g. /-kt ~ -k/, /-ŋs ~ -ŋ/, /-pt ~ -t/, etc., for the historical development of Chinese phonology and the loss of flexional suffixes may have effectively eradicated any trace of the second element in the final clusters of ante-vocalic forms of the verb stems. Not only do the Old Chinese doublets involving alternation between homorganic plosive and nasal finals correspond to a prevalent pattern of verb stem alternation in Kiranti languages, but a number of the doublets adduced by Courant also have plausible Limbu cognates:

厭   MC hyap [yè] ~ hyám [yàn]   Limbu ⟨-ips- ~ -im-⟩ 'press',
       'réprimer' (Courant, 1903:   Pāñcthare Limbu ⟨-eːps- ~ -eːm-⟩
       70), OC *·i̯ap [yè] ~ *·i̯am   'press, e.g. extract oil'
       [yàn] 'grasp' (Karlgren,
       1957: 164)

冥   MC miak [mì] ~ miǎn   Limbu ⟨-maːks- ~ -maːŋ-⟩ 'be far
       [míng] 'couvrir, obscur'   away' (An etymological relationship
       (Courant, 1903: 69), OC   of this Limbu verb with Old Chinese
       *miek [mì] ~ *mieng [míng]   *māŋ [máng] 'obscure, confused' is
       'dark, darkness, darken'   also plausible, however. See below.)
       (Karlgren, 1957: 223)

掠   MC lyak [lüè] ~ lyán   Limbu ⟨-leːks- ~ -leːŋ-⟩ 'clear land,
       [liàng] 'piller' (Courant,   denude; cause to disperse'
       1903: 69), OC *gli̯ak
       [lüè] ~ *gli̯ang [liàng]
       'plunder, rob' (Karlgren,
       1957: 200)

剮   MC khwak [kuò] ~ kwán   Limbu ⟨-khɛːks- ~ -khɛːŋ-⟩ 'break off
       [guàng] 'détacher, couper'   a piece, chip off, nick'
       (Courant, 1903: 68)

脅 MC hhyap [xié] ~ hhyám [xiàn] 'contraindre, mettre obstacle' (Courant, 1903: 70), OC *χĭăp [xié] ~? [xiàn] 'sides of the body; throng, constrain' (Karlgren, 1957: 170)

Limbu ⟨-sɔps- ~ -sɔm-⟩ 'make thin by pressing, together on both sides, deflate, e.g. a football; constrain by pressing together at the the sides'

疷 MC tiap [dié] ~ tiam [diàn] 'épuisé, crouler, se renverser' (Courant, 1903: 70), and the etymologically related form

Limbu ⟨-thaːps- ~ -thaːm-⟩ 'let someone fall, trip someone, throw someone or something to the ground'

墊 MC tiap [dié] ~ tiam [diàn] 'sous terre, descendre, plonger' (Courant, 1903: 70), OC *? [dié] ~ *tiəm [diàn] 'throw down, merge in water, overwhelm' (Karlgren, 1957: 181)

Whereas the preceding cognate sets exhibit stem alternation involving the homorganic finals /-k ~ -ŋ/ and /-p ~ -m/, modern Limbu reflexes corresponding to Old Chinese stem alternation involving the homorganic finals /-t ~ -n/ are complex and do not always preserve a nasal reflex. This complexity is reflected in the various Limbu verb stem types and their relative frequency (van Driem, 1987: 71–4). In the first of the following two examples, it therefore appears to be regular that the Limbu cognate ⟨-ɛtt- ~ -ɛt-⟩ 'lock; stop, bring to a halt' lacks a nasal-final alternant. In the second example, there is no way of ascertaining whether the Limbu stem ⟨-sɛt-⟩ shows the paradigmatically conditioned alternation exhibited by its Old Chinese counterpart because the modern Limbu verb only conjugates reflexively, and the reflexive paradigm only allows the ante-consonantal form of a verb stem.

按 MC hat [è] ~ hán [àn] 'arrêter, metter la main sur, comprimer' (Courant, 1903: 69); OC *? [?ĕ] ~ *-ân [àn] 'repress' (Karlgren, 1957: 59)

Limbu ⟨-ɛtt- ~ -ɛt-⟩ 'lock; stop, bring to a halt'

姍 MC sat ['să'⁴] ~ šyān [xiān, shān] 'laisser traîner sa robe; beau, bon' (Courant, 1903: 69); the modern meaning is 'ridicule, laugh at; (said of a woman) be slow and keep others waiting'

Limbu ⟨-sɛt-⟩ in the reflexive verb sɛtchiŋma 'be vain, conduct oneself vainly, be arrogant'

The correspondence of such Chinese doublets with paradigmatically conditioned morphophonological alternations in Kiranti verb stems evinces that the

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⁴ In this modern pronunciation of the ideogram recorded by Courant, the diacritic above the vowel in his notation denotes rù shēng.

script was originally used to represent the different stems of a single verb, albeit inconsistently, and that the reading tradition indirectly reflects vestiges of a conjugation which was not explicitly represented by the script. Whether this ancient morphology involved Kiranti-like patterns of affixation, flexion of the Indo-European type, or unisegmental morphemes of the North-west Caucasian type, as Pulleyblank (1973b) hypothesizes, the new view of Old Chinese which emerges from historical comparison essentially harks back to Lepsius's conception of the Chinese writing system, whereby an ideogram was originally used to represent various inflected forms of a single word, and not just a morphologically inert root or stem.

There is a difference of kind between such doublet readings of single characters recorded by Courant (1903) and word families represented by different characters with different lexical meanings, such as 廣 *kwāŋʔ [guǎng] 'broad' and 擴 *khwāk [kuò] 'broaden'. The latter typically represent the reflex a derivational process, whereas the doublet readings of a single ideogram with a single lexical meaning represent an artefact of morphophonologically conditioned stem alternation, triggered by the phonological shape of attached flexional endings. It is important to distinguish between the remnants of derivational processes and the indirect artefacts of flexional processes in Old Chinese. Some of the Old Chinese sets identified by Courant do not correspond to paradigmatically conditioned stem final alternations of single Kiranti verbs. Instead, some of such paired pronunciations as well as sets of etymologically related verbs represented by different, often related ideograms reflect derivational processes in Old Chinese which are ubiquitously attested throughout the Tibeto-Burman language family, e.g. the causative prefix *⟨s-⟩, the directive suffix *⟨-(n)t⟩ and the causative suffix *⟨-s⟩. Ever since mechanisms underlying tonogenesis have begun to be understood, these ancient Chinese derivational processes have with increasing confidence been attributed to lost segmental morphology, e.g. Downer (1959), Pulleyblank (1962, 1973a), Schüssler (1976). Such sets of related Old Chinese verbs have counterparts in Kiranti languages such as Limbu.

散	*sānʔ [sǎn] 'scatter, scattered' (*sân, Karlgren, 1923: 232)	Limbu ⟨-sɛr- ~ -sɛt-⟩ 'scatter, be spilt, go in separate directions', Pāñcthare Limbu ⟨-sɛːr- ~ -sɛːt-⟩
撒	*sāt [sā] 'disperse, spread, let loose' (Karlgren, 1923: 232)	Limbu ⟨-sɛnd- ~ -sɛn-⟩ 'split up, disperse, break up; move out of one's parental home', Pāñcthare Limbu ⟨-sɛːnd- ~ -sɛːn-⟩
散	*sānʔs [sàn] 'disperse' (Baxter, 1992: 354)	Limbu ⟨-sɛs- ~ -sɛ-⟩ 'scatter, spill, sow', Pāñcthare Limbu ⟨-sɛːs- ~ -sɛː-⟩

Note that it is a regular phenomenon in Limbu that the Proto-Tibeto-Burman directive suffix *⟨-(n)t⟩ yields a cluster with nasal when this dental suffix is attached to a dental stem final, as in the above example. This ancient and regular morphophonological process is well attested in numerous Kiranti verb pairs, e.g. van Driem (1987: 245–67, 1993a: 220).

Karlgren (1933) believed that the many Old Chinese word families whose members exhibit similarity in phonological form and express related meanings indicated diverse, now defunct morphological processes. The sheer abundance of such word families in Old Chinese and in other Tibeto-Burman languages decidedly points in the direction of a morphologically complex proto-language which has undergone drastic simplification. In reconstructing the earlier mor-

phological systems, it will be necessary to distinguish between (1) the paradigmatically conditioned stem alternation of single verbs of the type discussed above, (2) the results of derivation by means of the well-known Tibeto-Burman verbal affixes just mentioned, i.e. the causative prefix *⟨s-⟩, directive suffix *⟨-(n)t⟩ and causative suffix *⟨-s⟩, (3) reflexes of other derivational processes, and (4) morphophonological remnants of various ancient and not yet fully understood flexional processes, probably still reflected to varying extents in the grammars of modern Tibeto-Burman languages.

In addition to the specific verbal and pronominal parallels with Bodic, Old Chinese appears to have preserved traces of Sino-Bodic nominal morphology as well. For example, Baxter (1995) identifies an Old Chinese prefix *⟨k-⟩ in Chinese clan names:

姬	*k-lə	Mandarin Jī
姜	*k-laŋ	Mandarin Jiāng
媯	*k-wraj	Mandarin Guī

The Old Chinese prefix *⟨k-⟩ in clan names appears to be cognate with the highly versatile Limbu third person pronominal prefix ⟨ku-⟩. It is possible that an Old Chinese prefix *⟨k-⟩, cognate with the Limbu prefix ⟨ku-⟩, combined with animal names or toponyms to yield clan names.

Old Chinese also appears to retain postpositions which have cognates in the suffixes of other Bodic languages. For example, the meaning and behaviour of two Old Chinese postpositions described by Schüssler (1987: 503, 513–14) call to mind a Kiranti reflex corresponding to these Old Chinese functors:

| 然 | *nan [rán] 'like' | Dumi manner suffix ⟨-nna⟩ 'manner in which, as, like' |
| 如 | *na [rú] 'like' | |

These Old Chinese postpositions have a cognate in the Dumi suffix ⟨-nna⟩ 'manner in which', which occurs (1) in the adverbs *tetnna* 'in this fashion', *metnna* 'in that way', *mwoːtnna* 'why, in which fashion', *mwoːhoːtnna* 'how come, how', and in the relative adverb *heːtnna* 'like, as, in the fashion of', and which (2) is suffixed to verbs, e.g. *abo-ʔa ya tim mə-dok-nna*... (who-ERG also knowledge not-get-in.that.way) '... in such a way that nobody would find out' (van Driem, 1993a: 300). Shared Sino-Bodic morphosyntax is therefore not limited to the pronominal system but is reflected in verb stem alternations and the derivational morphology of verbs and nouns in Old Chinese.

4. Sino-Bodic lexical isoglosses

The Sino-Bodic hypothesis posits the unity of Sinitic and Bodic at some point after the break-up of common Tibeto-Burman. Sino-Bodic must have left traces such as lexical isoglosses, and this is precisely what is suggested by the lexical data presented below, as well as by Kiranti-like morphophonological alternations in Old Chinese verbs, the nature of the Old Chinese pronominal system and traces of affixal morphology discernible through the veil of the writing system. In addition to Bodman's impressive list of specific Tibetan-Chinese cognates, more than a score of striking cognate pairs between Kiranti and Old Chinese are adduced here which suggest that there exists a significant number of specific Sino-Bodic lexical isoglosses. Ongoing comparison of new Kiranti lexical data being collected at Leiden with Old Chinese, particularly in view of certain refinements which Baxter is currently contemplating, appears to point to the existence of even more specific Chinese-Kiranti correspondences.

Whereas Bodic groups like Kiranti preserved antique traits behind the lofty shield of the Himalayas, Chinese was plunged into a maelstrom of innovations in the versatile cultural development in the Yellow River Basin, although at the time of the Zhōu dynasty Chinese too still retained many of the same antique traits. Sino-Bodic appears, *prima facie*, to be more immediately inspired by common retention than by common innovation, and common retention is only a significant classificatory criterion if there is some other supporting feature, e.g. geographical contiguity. Some major subgroupings are, in fact, largely based on shared retentions and geographical proximity, e.g. Northern and Central Dravidian. In my essay on possible Neolithic correlates of ancient Tibeto-Burman population groups, I have argued the plausibility of geographical contiguity of the Sino-Bodic languages in the recent Neolithic past. The plausibility of such contiguity gives special significance to shared retentions.

In order to answer the question as to why Himalayan languages should retain archaic traits, it is helpful to understand the relationship between Johannes Schmidt's *Wellentheorie* and Bàrtoli's four spatial norms for the retention of archaic traits, viz. *norma dell'aree laterali, norma dell'area maggiore, norma dell'area seriore* and *norma dell'area meno esposta* (1942, 1945). Bolinger (1975: 355) pointed out that three of Bàrtoli's four norms contradict each other. This contradiction is very much in evidence in Coseriu's excellent illustration of Bàrtoli's norms, since the same continental Romance area exemplifies all three contradictory norms. Bàrtoli's *norma dell'aree laterali* is illustrated by the differential lexical conservatism whereby 'las formas españolas y rumanas, que proceden de las formas latinas *formosus, mensa, fervere, tunc, dies, magis*, son más antiguas que las francesas e italianas, que proceden de *bellus, tabula, bullire, illa hora, diurnus, plus*'. The *norma dell'area maggiore* is illustrated by the fact that 'las formas españolas, francesas e italianas, que proceden de *causa, mensis, aperire, et*, son más antiguas que las rumanas', viz. *lucru, lună, a descide, și*. The *norma dell'area seriore* is illustrated by Spanish *comer, miedo, nieto*, French *oncle*, Rumanian *lingură, a duce* vs. Italian *mangiare, paura, nipote, zio, cucchiaio, condurre*, whereby 'las formas conservadas en las provincias del Imperio Romano son más antiguas que las formas italianas' (Coseriu, 1955: 62–3).

Apparent effects of these three contradictory norms are also exemplified by the Indo-European lexical phenomena which gave rise to Johannes Schmidt's *Wellentheorie*, e.g. 'worte, welche nur in den deutschen und arischen sprachen nachgewisen sind', 'worte und wurzeln, welche bisher nur im arischen, griechischen und slawolettischen nachgewisen sind', 'worte und wurzeln, welche bisher nur in den nord-europäischen sprachen nachgewisen sind'. Johannes Schmidt interpreted such phenomena to be the results of various waves of change, whereby each wave 'sich in concentrischen mit der entfernung vom mittelpunkte immer schwächer werdenden ringen ausbreitet' (1872: 27). Johannes Schmidt believed that this model invalidated the idea of descent from a common proto-language or *Ursprache*, which he called 'eine wissenschaftliche fiction' (1872: 31). If this reasoning were valid, the differential lexical conservatism in the continental Romance area would similarly indicate that a single Latin language had never existed.

In fact, the phenomena observed by Schmidt and Coseriu illustrate different processes. Innovations may spread geographically from a central point and not reach the periphery. The Indo-European kentum languages, which occur in western Europe, the Mediterranean basin and Chinese Turkestan, are a case in point. The kentum languages do not constitute a phylogenetic grouping, but, like the foamy residue clinging to the rim of a cup of cappuccino, lay

beyond the periphery of a sound change which seems to have spread from the centre. On the other hand, innovations may start anywhere and may affect a limited area only, leaving the *area maggiore* untouched. However, some of the phenomena inspiring explanations like spatial norms and waves have nothing to do with innovation or archaism as such, but ensue when different languages each only retain part of the original picture. Neither Portuguese *formoso* nor French *beau* is strictly speaking more archaic than the other in that both words reflect semantically related etyma which existed in the Latin proto-language. The same type of phenomena, therefore, inspired both Bàrtoli's *norme* and Schmidt's discredited *Wellentheorie* of linguistic relationship.

Yet Bàrtoli's fourth norm holds a grain of truth, i.e. *norma dell'area meno esposta*. Coseriu illustrates this with the Sardinian forms *kras, domo, mannu, iskire* and *ebba*, whereby 'las formas sardas (logudoresas), que proceden de las formas latinas "clásicas" *cras, domus, magnus, scire, equa*, son más antiguas que las formas toscanas, que proceden del latín "vulgar" (*de mane, casa, grandis, sapere, cavalla*)' (1955: 61–2). This fourth norm is even better illustrated by the conservative nature of Sardinian morphology than by the lexicon. Bàrtoli observed a tendency towards conservatism and retention in areas less exposed to outside influence, e.g. on islands more so than on the mainland, in mountains more so than on the plains, in rural areas more so than in cities. Yet Bàrtoli's norms do not pinpoint the real cause. Apt examples as well as good counter-examples can be found for each of his geographical norms. Icelandic, an insular language, is the most conservative Germanic tongue, but English, likewise insular, is the least conservative. The unifying factor underlying those instances in which spatial norms of retention actually appear to apply is the stability of a linguistic community. By contrast, both exposure to outside influences as well as indigenous cultural revolutions stimulate language change.

The ethnolinguistic ancestors of modern Kiranti communities probably colonized the Himalayas in the third millennium B.C. Although the topography did not render the Kiranti linguistic communities absolutely impervious to outside influence, their relative isolation was conducive to greater continuity through time which contrasts strongly with the cultural advances and constant social change which marked the more complex societies on the North China Plain. Language evidently changes more rapidly in rapidly evolving societies. A literate Georgian layman can manage to read a sixth-century Georgian translation of the gospels set in modern Georgian typeface, although the style of the language will strike him as noticeably old-fashioned. By contrast, a modern Englishman must be forgiven for not recognizing a randomly chosen passage of *Beowulf* as English at all.

Benedict's use of the word 'dyschronicity' to describe Chinese is telling. Many divergent features of Sinitic are likely to be secondary developments. The apparently anachronistic nature of Chinese is analogous to Albanian, which has been heavily infiltrated by Latin, Slavic, Greek and Turkish, whereas the native portion of the core lexicon is astonishingly limited. Albanian grammar is highly innovative, and its flexional morphology has evolved into a form which virtually precludes recognition of the language as Indo-European. The historical phonology of Albanian is complicated in the extreme. At the beginning of the nineteenth century, Rask classified Albanian as Indo-European (posthumously 1834, I: 156–7), and Xylander (1835) clearly demonstrated that Albanian was Indo-European, but the Albanian lexicon has been so heavily influenced by other languages and the grammar exhibits so many innovative traits that even as recently as 1887 Pott (1887: 10–38) grouped the Albanians

linguistically amongst the 'Nichtindogermanen'. The early intractability of determining the genetic affinity of Albanian is reminiscent of some recent thinking on Chinese which, for example, Sagart (1990, 1994, 1995a, 1995b) claims to be genetically related to Austronesian rather than, or more so than, to Tibeto-Burman, a view criticized by Blust (1995), Li (1995), Pulleyblank (1995) and Starostin (1995a, 1995b).

In the same vein, the enigmatic complexity of Albanian never warranted positing an Indo-Albanian language family consisting of Indo-European on one hand and Albanian on the other. Nor does the inscrutability of Chinese historical grammar and phonology warrant positing 'Sino-Tibetan' as the main arch of the language family. Albanian is considered to occupy a central position within Indo-European, sandwiched in between Germanic, Italic, Greek, Armenian and Balto-Slavic, and Chinese now occupies a more central position within the Tibeto-Burman language family than it did as one leg of a bipedal Sino-Tibetan organism. As the most north-easterly group within Tibeto-Burman, the position of the Old Chinese language in the family as a whole is perhaps most analogous to that of the language of the ancient Romans, the most south-westerly group within Indo-European.

Tibeto-Burman comparitivists are still generally at a loss to distinguish with confidence between loanwords, the results of sound laws and the effects of analogy. In Spanish, one can distinguish between inherited words which have undergone the sound changes which brand them as natively Spanish and cognate Romance loanwords taken from early Italian, Provençal, medieval French, modern French and Latin. This degree of refinement has not been attained in Tibeto-Burman lexical comparison by any stretch of the imagination, whereas we have every reason to suspect that the historical situation in individual Tibeto-Burman languages may be at least as complex as it is in Spanish. Yet it is quite possible that Chinese represents a more complex puzzle for the historical linguist than Spanish, one which may in some ways be comparable to Albanian.

Nonetheless, in comparison with Albanian, the intimate resemblance of Baxter's (1992, 1995) Old Chinese reconstruction with Tibeto-Burman, and with Bodic languages in particular, is comfortably reassuring. Other recent Old Chinese reconstructions, such as that of Jaxontov (1959, 1965), Li (1974, 1983), Coblin (1986), Schüssler (1987), Starostin (1989) and Pulleyblank's reconstructions of Middle and Early Middle Chinese (1984, 1991), had already contributed to making Chinese look less outlandish from the Tibeto-Burman point of view. Even so, Coblin and Norman (1995) and Coblin (1995) have raised fundamental epistemological questions concerning the very nature of the proto-language reconstructible by the means traditionally employed by Old Chinese scholars. Although these questions must be seriously addressed, the refined Old Chinese reconstruction, itself the product of great methodological rigour, for the time being furnishes a valid entity for the purposes of Tibeto-Burman historical comparison.

The comparisons presented here, primarily involving Phedāppe Limbu and Old Chinese, suggest the more rigorous hypothesis called Sino-Bodic. The comparative evidence presented is also compatible with the Western Tibeto-Burman hypothesis. Lepsius (1861) first investigated phonological correspondences between Chinese and Tibetan, and later, based on Karlgren's *Analytical dictionary,* Simon (1929) assembled an impressive battery of possible Tibetan-Chinese cognates, many of which are still held to be cognate etyma today. Benedict (1972), Bodman (1980) and Baxter (1994) adduce a number of Old Chinese etyma which characteristically correspond to forms in North-western

Tibeto-Burman (Bodic) and in Western Tibeto-Burman, which is especially well reflected in Bodo languages.

泣	*khrəp [qì] 'weep'	PTB *krap 'weep',
年	*nīn [nián] 'year'	PTB *s-niŋ 'year',
血	*hwīt [xuè, xuě] 'blood'	PTB *s-hwiy 'blood',
織	*tək [zhī, zhì] 'weave'	Limbu ⟨thaːk⟩ 'weave' (Proto-Kiranti *taːk)
涼	*g-raŋ [liáng] 'cold'	PTB *graŋ 'cold'
立	*C-rəp [lì] 'to stand'	Limbu ⟨-yɛb- ~ -yɛp-⟩ 'stand' (Proto-Kiranti *rɛb ~ rɛp)
鹽	*ram [yán] 'salt'	Limbu ⟨yum⟩ 'salt' (Proto-Kiranti *rum)
獨, 特	*dək [tè] 'single'	PTB *tyik 'one', cf. Limbu ⟨-thik-⟩ 'one, single' (Proto-Kiranti *tik)

Such correspondences suggest a specific affinity between Western Tibeto-Burman and Northern (Chinese and Bodic).

Yet many roots are widespread throughout the Tibeto-Burman family. On the basis of Karlgren's Archaic Chinese reconstruction, Benedict (1972) relates:

悉	*si̯ĕt [xī] 'know, understand', (Karlgren, 1923: 236)	PTB *syey 'know'
見	*kian ~ *kien [jiàn] 'see' (Karlgren, 1957: 78), Baxter's *kēns	PTB *(m-)kyen 'know'

Although both etyma are particularly well reflected in Bodic, etyma such as these are often, as one might expect, reflected in several if not all branches of Tibeto-Burman. Another such example are the Chinese forms listed below for which Benedict proposed cognacy with Proto-Tibeto-Burman *buw 'carry on back or shoulders' (1972: 20, 185). However, in cases such as this one the modern Limbu cognate often provides a more precise phonological and semantic correspondence with the Old Chinese reconstruction.

背	*pāks [bèi] 'back, posterior' *ɦpāks 'turn the back'	Limbu ⟨phok-⟩ in ⟨phoktaŋ⟩ 'shoulder' (Proto-Kiranti *pok)
負	*ɦpə(k)? [fù] 'carry on one's back')	

Some correspondences adduced by Bodman involve not only Bodic languages other than Tibetan but also Western Tibeto-Burman languages. For example, Bodman (1980: 70) relates:

黑	*hmək [hēi] 'black'	Tibetan *mog-pa* 'dark-coloured', *smag* 'dark, darkness', *smug-po* 'dark bay, purple-brown'
墨	*mək [mò] 'India ink'	

The same etymon is also reflected in other Bodic languages, e.g. Limbu ⟨-mak-⟩ 'black'. Notably, such reflexes contrast with the forms having initial

/n-/ attested elsewhere in Tibeto-Burman which appear to be cognate with Tibetan *gnag* 'black, wicked' and *snag* 'ink', which Bodman relates to Old Chinese:

惡   *hnək [tè] 'evil, wrong'.

The etymon underlying the Chinese verb
飛   *pəj [fēi] 'fly'

corresponds to Proto-Tibeto-Burman *pur ~ *pir 'fly'. This etymon is widely reflected in Bodic and Western Tibeto-Burman, where final *-r has been retained, as in Bodman's (1980: 75) Old Chinese *pùr. It should be noted that Baxter has done away with Old Chinese final *-r altogether and that Baxter's 'coda *-j generally corresponds to Karlgren's *-r and to Li Fang-Kuei's *-r or *-d' (1992: 293), although Baxter is presently reconsidering this feature of his reconstruction (letter of 4th June 1996).

Benedict (1972: 170) relates the following Old Chinese form to Proto-Tibeto-Burman *śrik 'louse', and Bodman (1980: 157) compares it with Tibetan *śig* 'louse'.

蝨   *sryik [shī] 'louse'   Limbu ⟨si?⟩ 'louse'
           (Bodman 1980: 157)   Tibetan *śig* 'louse'

This etymon too is widely reflected in Bodic and Western Tibeto-Burman. Bodman (1980: 121) relates the following forms.

芒, 茫   *māŋ [máng] 'obscure,   Jinghpaw ?mām 'dimmed, blurred (of
confused'   eyesight)',
                                                     Lepcha *tür-môm* 'hazy (of
                                                     atmosphere)'

The Limbu verb ⟨-maːks- ~ -maːŋ-⟩ 'be far away' is also a potential cognate. It is of phylogenetic significance that Old Chinese, which represents the earliest reconstructable stage of Sinitic, reflects finals which are well preserved in Bodic and Western Tibeto-Burman.

Bodman (1980), Coblin (1986) and Baxter (1992) relate:

巷   *grōŋs [xiàng] 'lane,   Tibetan *groñ* 'house, village'
           crossroads'

Cognate forms also occur in East Bodish, e.g. Bumthang *kroŋ* 'village'. Coblin (1986: 65-6) relates:

支, 枝   *ke [zhī] 'branch,   Tibetan *hgye-ba ~ gyes-pa* 'to be
separate; branch of a tree'   divided, separate; to part' and *hgyed-
                                                     pa ~ bgyes ~ bkye* 'to divide'

Limbu ⟨-khɛːr- ~ -khɛː?-⟩ 'split bamboo or wood lengthwise along the grain' [< Proto-Kiranti *kɛːr ~ *kɛ:?] may, like the second of the two Tibetan verbs, preserve a *-t directive derivative of the same etymon. Coblin (1986: 149-50) identifies as cognates:

結   *kīk [jié, jiē] 'tie'   Tibetan *hkhyig-pa* 'to bind', cf. PTB
                                                     *kik 'tie'
髻   *kīks [jì] 'knot in hair,
           chignon'

Limbu ⟨-kheːks- ~ -kheːŋ-⟩ 'tie' [< Proto-Kiranti *keːks ~ keːŋ] again evidently reflects the same etymon.

Bodman adduces an impressive array of correspondences between Old

Chinese and Tibetan which appear to be specific Sino-Bodic lexical isoglosses, and there appear to be many more such specific correspondences. Bodman (1980), Coblin (1986) and Baxter (1992) relate:

砌   *tsik [jì] 'masonry'   Tibetan *rtsig-pa* 'to build, to wall up;
                                                 a wall, masonry'

Yet, this etymon may, as Lubotsky (forthcoming) proposes, represent an Indo-European loan into Tibeto-Burman languages peripheral to the Tocharian speaking area in what is today Chinese Turkestan. These two particular words may have no Tibeto-Burman etymology but form part of the Tocharian lexicon relating to charioteering and town building borrowed by the ancient Chinese along with the technologies they represent. Current thinking on the introduction of charioteering techniques into China is recapitulated by Shaughnessy (1988). Bodman suspected that 'the numerous correspondences with Tibetan can be explained as due partly to genetic relationship and partly to widespread borrowings from a Pre-Tibetan source' (1980: 40). It may be that in Tocharian, therefore, Lubotsky has identified Bodman's 'Pre-Tibetan source' language. Outside of this set of identifiable Tocharian loans into Chinese, the many other etyma shared between Old Chinese and Bodic languages as well as common morphology and morphophonology point toward a closer genetic relationship, whereby Bodic (i.e. North-western Tibeto-Burman) and Chinese (i.e. North-eastern Tibeto-Burman) constitute a discrete branch, known as Sino-Bodic or Northern Tibeto-Burman, within the language family as a whole.

Coblin (1986: 138) relates:

呂   *g-raŋ [lǚ] 'backbone'   Tibetan *gra-ma* 'the awn, bristles or
                                                 the ears of cereals (which often have
                                                 a symmetrical arrangement); the
                                                 bones or skeleton of a fish (which has
                                                 the appearance of layered,
                                                 symmetrical bristles); a lattice, trellis,
                                                 frame'

Yet many of the Old Chinese etyma adduced by Bodman can be related to Bodic languages other than Tibetan, and Bodman does so explicitly in some cases. One such example is:

甜   *lim [tián] 'sweet'   Tibetan *źim-pa* 'sweet, delicious'
          (Bodman, 1980: 99)   (which Bodman derives from *lyim),
                                                 Manang *lim* 'sweet, delicious',
                                                 Thulung *lem* 'sweet'

Limbu ⟨-limd- ~ -lim-⟩ 'taste sweet' and Dumi ⟨-liːm- ~ -lɛm-⟩ 'be sweet' can be added to this list. Note that the Bodic languages in the Himalayas more faithfully preserve initial *l- or *ly- than the dialects of the Tibetan plateau. Likewise, for the following Tibetan-Chinese cognate set adduced by Baxter (1992: 473) corresponding Limbu forms can be readily adduced.

劈   *prāk ~ *phrək [pì] 'split,   Tibetan *phrag* 'intermediate space,
          cut open'   interstice, interval'; Pāñcthare Limbu
                                                 ⟨-pɔks- ~ -pɔŋ-⟩ 'be split open,
                                                 rupture, explode', Phedāppe
                                                 Limbu ⟨-phɔkt- ~ -phɔk-⟩ 'go off,
                                                 explode, rupture, cave in' vs. Limbu
                                                 (both Phedāppe and Pāñcthare
                                                 dialects) ⟨-phɔks- ~ -phɔŋ-⟩ 'split
                                                 open; let go off, allow to explode'

副   *phrək [fù] 'cleave, divide'   Limbu (both Phedāppe and Pāñcthare
                                     dialects) ⟨-phɔːks- ~ -phɔːŋ-⟩ 'divide'

One Himalayan language which reflects a considerable number of Sino-Bodic lexical isoglosses is Phedāppe Limbu. This modern Kiranti language in the eastern Himalayas which has preserved finals well, in many cases evidently because root finals have been shielded from erosion by flexional suffixes. This applies especially to Phedāppe Limbu verb roots, where vocalic suffixes, such as Limbu preterite ⟨-ɛ⟩, have facilitated the retention of final clusters which elsewhere, due to the rise of phonological restrictions in Kiranti syllable structure, have become simplified at the end of monosyllabic words. Baxter's (1992) reconstruction of Old Chinese brings to mind a number of possible correspondences with Limbu:

避   *beks [bì] 'go away from,   Limbu ⟨-peːk-⟩ 'go' (Proto-Kiranti
      avoid'   *beːk)

登   *tə̄ŋ [dēng] 'ascend'   Limbu ⟨-thaŋ-⟩ 'come up' (Proto-
                                     Kiranti *taŋ)

手   *huʔ [shǒu] 'hand'   Limbu ⟨huk⟩ 'hand, arm' vs. PTB
                                     *lak ~ *g-lak 'arm, hand'

王   *wyāŋ [wáng] 'king'   Limbu ⟨haŋ⟩ 'king'

玷   *tēmʔ [diàn] 'flaw, defect'   Limbu ⟨-thɛm-⟩ 'criticize, point out
                                     someone's bad points' (Proto-Kiranti
                                     *tɛm)

卒   *tsut [zú] 'finish, end,   Limbu intransitive ⟨-cur- ~ -cut-⟩ 'be
      exhaust'   finished, be completed' and its
                                     transitive derivative ⟨-sur- ~ -sut-⟩
                                     'complete, finish', the latter reflecting
                                     the Tibeto-Burman causative prefix
                                     *⟨s-⟩;

游   *jū [yóu] 'float; swim;   Limbu ⟨-iːr- ~ -iː-⟩ 'wander, loiter,
      wander, ramble'   stroll about; (of birds) fly about
                                     aimlessly';

撮   *tshōt [cuō, cuò] 'pinch   Limbu ⟨-cutt- ~ -cut-⟩ 'add a pinch
      with the fingers'   off'

插   *tshrōp [chā] 'foot-driven   Limbu ⟨-cup-⟩ 'get filled in (of a
      rice thrasher, whereby rice   hole or cavity)', ⟨-cups- ~ -cum-⟩ 'fill
      in a cavity is pounded by a   back in, fill back up (of a hole or
      stone attached to the end   cavity)'
      of a lever which repeatedly
      falls into this cavity'
      (*tsʼāp, Karlgren, 1957:
      168)

蓋   *kāps [gài] 'cover,   Limbu ⟨-khaps- ~ -kham-⟩ 'cover
      conceal'   oneself with bedclothes' (Proto-
                                     Kiranti *kaps ~ *kam)

葺   *fikāp [gài] 'to thatch,   Limbu ⟨-khapt- ~ -khap-⟩ 'to thatch,
      cover'   cover with bedclothes' (Proto-Kiranti
                                     *kapt ~ *kap);

會 | *gōps [huì] 'collect, unite, assemble; jointly; combine' | Limbu ⟨-khɔps- ~ -khɔm-⟩ 'pick up or gather what has been scattered'(Proto-Kiranti *kɔps ~ *kɔm) and its *⟨-(n)t⟩ directive derivative in Limbu ⟨-kupt- ~ -kup-⟩ 'take one's chicks under one's wings, stand alongside one's pup or whelp' (Proto-Kiranti *gupt ~ *gup)

顏 | *ŋrān [yán] 'face, countenance' | Limbu ⟨na, nara⟩ 'face, countenance'

莫 | *māk [mò] 'there is not' | Limbu ⟨-mɛk-⟩ 'run out (of a supply), become depleted'

割 | *kāt [gē] 'to injure, to harm' | Limbu ⟨-khɛʔr- ~ -khɛʔ-⟩ 'afflict with disease (said of the water nymph); cause to be ill (of foodstuffs due to non-observance of a taboo)' (Proto-Kiranti *kɛʔr), Limbu ⟨-kaːnd- ~ -kaːn-⟩ 'be injured or wounded' (Proto-Kiranti *gaːnd ~ *gaːn) and its transitive derivative ⟨-khaːnd- ~ -khaːn-⟩ 'injure, wound' (Proto-Kiranti *kaːnd ~ *kaːn), the latter reflecting the Tibeto-Burman causative prefix *⟨s-⟩

亡 | *maŋ [wáng] 'not have, not exist; die; be gone' | Limbu transitive ⟨-mɛks- ~ -mɛŋ-⟩ 'cause to be depleted; blunder, botch up, mismanage'

使 | *sraʔ [shǐ] 'send, employ, cause' | Limbu irregular verb ⟨-sa- ~ -s-⟩ 'deliver, escort'.

息 | *sək [xī, xí] 'breath' | Limbu ⟨sɔkma⟩ 'breath'

閼 | *·āt [è] 'obstruct, stop' (Karlgren, 1957: 85) | Limbu ⟨-ɔtt- ~ -ɔt-⟩ 'obstruct, bar the way, prevent, veto'

心 | *səm [xīn] 'heart' | Limbu ⟨sam⟩ 'soul'

集 | *dzup [jí] 'assemble, gather together' | Limbu ⟨-cups- ~ -cum-⟩ 'assemble, gather, accumulate, form a crowd' (Proto-Kiranti *dzups ~ *dzum)

逆 | *ŋrak [ni] 'go upstream, go against the grain, go against what one has been taught' ~ *ŋraŋ 'contradict, deny' | Limbu ⟨-naːks- ~ -naːŋ-⟩ 'jump or step across a border or obstacle, bypass a point'

敖 | *ŋāw [áo] 'fry, roast' | Limbu ⟨-nɔy- ~ -nɔː-⟩ 'fry, roast'

邦 | *prōŋ [bāng] 'country' | Limbu ⟨paːŋpheː⟩ 'village', ⟨paːŋdzum⟩ 'market, bazaar'

包 | *prū [bāo] 'wrap up, bundle up' | Limbu ⟨pruk⟩, complement of the verb coːkma 'do' in the expression pruk coːkma 'collect (things) together'

腸   *glaŋ [cháng] 'intestines'   the second element in Pāñcthare
                                           Limbu ⟨thigya:ŋ⟩ 'stomach' (as an
                                           internal organ); cf. Phedāppe Limbu
                                           ⟨thɛŋya:n⟩

In the cognate sets proposed above, the Old Chinese initials correspond in a regular fashion to the initial of the corresponding Proto-Kiranti forms. However, the Old Chinese initials in the following four possible cognate sets correspond more closely with the initial of the modern Limbu forms. Ultimately, all such patterns will have to be accounted for in a systematic way.

當   *tāŋ [dàng] 'match, equal'   Limbu ⟨-tɔŋ-⟩ 'match, be equal, fit'
                                           (Proto-Kiranti *dɔŋ)

燧   *thək(s) [chì] 'blaze'   Limbu ⟨-tukt-∼-tuk-⟩ 'light, ignite'
                                           (Proto-Kiranti *dukt∼*duk)

衝   *thoŋ [chōng] 'assault,   Limbu ⟨-thɔks-∼-thɔŋ-⟩ 'incite to
          butt'   fight, instigate someone to fight'
                                           (Proto-Kiranti *tɔks∼tɔŋ)

堲   *tsit [jí] 'coaled part of a   Limbu ⟨-ti:r-∼-ti:t-⟩ 'burn' (said of
          burning torch, burn or   a fire or flame)
          scorch earth which is to be
          placed around a coffin as
          grave lining'. (This same
          ideogram is used to write
          the word for masonry, a
          possible Tocharian loan,
          adduced above.)

The cognate sets proposed above suggest the existence of regular sound correspondences. Yet our present knowledge of Tibeto-Burman historical phonology is still so limited that it is sometimes still difficult to decide whether to admit or reject a semantically plausible cognate set which makes a poor or even improbable phonological match, e.g. 酒 *tsuʔ [jiŭ] 'wine' (*tsi̯ôg, Karlgren, 1957: 283) vs. Limbu ⟨thi:⟩ 'millet beer'.

Finals which are reflected in Chinese and which have mutated elsewhere are retained not only in the conservative Phedāppe dialect of Limbu but are often preserved more faithfully in other Bodic languages. In many but not all cases, Old Chinese final */-ts/ corresponds to Limbu final /-tt/.

愛   *ʔəts [ài] 'to love; to   Limbu ⟨-i:tt-∼-i:t-⟩ 'think,
          grudge'   remember'

藹   *ʔāts [ǎi] 'ample,   Limbu ⟨a:ttitti⟩ 'much, numerous'[5]
          numerous'

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[5] I initially identified the Limbu adverb a:ttitti as a Nepali loan, although no such word exists in Nepali. If the word is borrowed from Nepali, it could represent a reduplicated form of Nepali ati 'exceedingly, that much more', whereby the /t/ underwent gemination when the word was borrowed into Limbu so that the consonant would not be realized as the intervocalic allophone [d] of Limbu /t/. Alternatively, as I first suggested (1987: 405), the source of the Limbu adverb could be Nepali tyatti, tyati 'that much' or even an innovative blending of Nepali ati and tyatti, tyati by Limbu speakers of the Phedāp, who also use this adverb when speaking Nepali. The problematic nature of the possible Nepali etymologies has recently led me to believe that the Limbu adverb could be a native word. Yet if the word has an Indo-Aryan etymology, then the comparison with Old Chinese proposed here is invalid.

㙅	*gijʜ (Baxter's Early Middle Chinese notation) [jì] 'arrive, attain'	Limbu ⟨-kɛʔr-~-kɛt-⟩ 'arrive' (Proto-Kiranti *gɛʔr~*gɛt)
既	*kəts [jì] 'finish, complete'	Limbu ⟨-kɛtt-⟩ 'get to a place, fulfil' (Proto-Kiranti *gɛtt)
悖	*būts [bèi] 'be disorderly, silly'	Limbu ⟨-poːtt-⟩ 'err, lose one's way, become disordered (of things)' (Proto-Kiranti *boːtt) and ⟨-phoːtt-⟩ 'make someone lose his way, make a fool of someone' (Proto-Kiranti *poːtt)
畀	*pits [bì] 'give'	Limbu ⟨-piːr-⟩ 'give' Lohorung ⟨-pit-~-piʔ-⟩ 'give'
奪	*lōt [duó] 'take away, deprive'	Limbu ⟨-lɔːtt-~-lɔːt⟩ 'remove, take away'

Bodman (1980: 101) relates the following Old Chinese forms to Tibetan *legs* 'good, happy, comfortable', Tibetan *rje* 'to barter, exchange'.

易	*leks [yì] 'easy' *lek 'change'	Limbu ⟨-lɛks-~-lɛŋ-⟩ 'turn over, flip over, change form or behaviour', Limbu ⟨-lɛkt-~-lɛk-⟩ 'trade, exchange' or, when conjugated intransitively, 'be traded, be exchanged (e.g. of a commodity)'.

Because of the loss of finals outside of Bodic, the final cluster retained in Chinese and Tibetan does not appear in Benedict's reconstruction Proto-Tibeto-Burman *(r-)ley. Yet the final cluster of this Tibeto-Burman etymon has not only been retained in Tibetan and Chinese, but can also be found intact in other Bodic languages such as Limbu. Limbu offers both more precise semantic and formal correspondences with the Old Chinese forms.

Even within Bodic, Tibetan may not be as conservative as some languages without as old a literary tradition, just as many Indo-European languages with a literary tradition dating from the Middle Ages are in many respects less conservative than Lithuanian, with a literary tradition dating only from the sixteenth century. Some Sino-Tibetan comparisons are not convincing. For example, Bodman (1980: 116) relates the following Old Chinese form to Tibetan *ħbub* 'be overthrown, destroyed'. However, Bumthang and Limbu both provide more plausible cognates.

没	*mūt [mò] 'disappear, sink, be exhausted, be eliminated, die'	Bumthang *mut*, existential 'not to be' Limbu ⟨-maːr-~-maːt-⟩ 'be used up' and its transitive counterpart ⟨-maːnd-⟩ 'use up', reflecting the Tibeto-Burman *⟨-(n)t⟩ directive suffix

Bodman (1980: 147) relates:

半	'half', for which he gives the forms *prals, *p(r)ans, *puân [bàn]	Tibetan *ħphral* 'to separate, to part'

Limbu offers perhaps better candidate cognates, e.g. ⟨-mphrɛːŋ-⟩ in

⟨kumbhreːŋ⟩ 'half, half of it' [<Proto-Kiranti *(m)prɛːŋ]. Two Limbu verbs could be etymologically related to this Limbu form, the Old Chinese form or the Tibetan verb, i.e. ⟨-paːks- ∼ -paːŋ-⟩ 'come undone, become untangled, separate' [<Proto-Kiranti *baːks ∼ baːŋ-] and its transitive derivative ⟨-phaːks- ∼ -phaːŋ-⟩ 'undo, untangle, separate' [<Proto-Kiranti *paːks ∼ paːŋ-], the aspirated initial of the latter reflecting the Tibeto-Burman causative prefix *⟨s-⟩.

Despite the considerable number of Sino-Bodic correspondences which can be identified on the basis of the Old Chinese and Phedāppe Limbu material alone, the Sino-Bodic hypothesis proposes that Sino-Bodic, or Northern Tibeto-Burman, involves a close genetic relationship between the Bodic languages collectively and Chinese. The Sino-Bodic hypothesis does not preclude the existence of a special relationship between Chinese and a specific Bodic group, such as Kiranti. Yet at present the latter conjecture is not supported by some possible cognates such as the following, where the Chinese form corresponds to forms in the Bodish languages, Tibetan and Bumthang, and Limbu has ⟨-hɛt-⟩ 'red' in kuhɛtla 'red', hɛttaŋba 'red, a red one, red', hɛt kɛlɔʔba 'appearing red'.

赤   *khak [chì] 'red'   Tibetan khrag 'blood'
                                        Bumthang kak 'blood'

The temptation to explain the Limbu final in ⟨-hɛt-⟩ 'red' as the result of assimilation to the Limbu colour suffix ⟨-la ∼ -ra⟩ should be resisted, for no such assimilation is in evidence in Limbu kuhikla 'green, blue'.

The following cognate set involving Old Chinese *tluk [zhōu] 'rice gruel' and Limbu tɔk 'cooked rice' likewise appears to be a Sino-Bodic lexical isogloss and not a specific Chinese-Kiranti correspondence.

粥   *tluk [zhōu] 'rice gruel'   Limbu ⟨tɔk⟩ 'cooked rice'

Both forms correspond to Dzongkha to 'cooked rice', currently written lto [<*ltog] in the Bhutanese 'Ucen (dBu-can) script. Related to this Dzongkha substantive is the Dzongkha verb ⟨to ∼ tou⟩ 'be hungry', presently written lto ∼ ltow, e.g. Chö toukêyig'a? 'Are you hungry?', written Khyod ltow-bkyes-yi-ga. This Dzongkha verb is evidently the same verb as Tibetan ltogs 'be hungry', and the Tibetan spelling in conjunction with the comparative evidence suggests that both the Tibetan and Dzongkha verb derive from *ltog 'cooked rice' through affixation of the Tibeto-Burman verbal suffix *⟨-s⟩. The metathesis of the elements in Tibetan initial clusters of this type represents a regular correspondence. Significantly, the modern forms, Limbu tɔk and Dzongkha to, refer not only to cooked rice, but to any cooked grain eaten as a staple food. In fact, Limbu maŋdɔk refers specifically to cooked millet, an indigenous Kiranti staple and also the main staple of the Neolithic cultures identified with Northern Tibeto-Burman or Sino-Bodic cultural complexes in the archaeological record (van Driem, forthcoming a).

Often a Kiranti form provides a better match for reconstructed Old Chinese forms, evidently because Kiranti more faithfully preserves finals and final clusters. Bodman (1980: 138) relates:

簸   *pājʔ/s [bǒ] 'to winnow,   Proto-Lolo-Burmese *pwa·y² 'husks,
            sift'   chaff', Benedict's PTB *pwa·y

The final *-s in Baxter's reconstruction is supported by Limbu ⟨-phoːs-⟩ 'stir

about grain which is drying in the sun' [<Proto-Kiranti *poːs]. By contrast, if the following set represents a cognate verb pair, then even Limbu is fallible in the retention of final segments, for transitive ⟨-maːs-⟩ 'lose' would then have lost the stem final *-ŋ whilst retaining the 'post-final' causative suffix *⟨-s⟩.

喪   *smāŋs [sàng] 'lose'   Limbu transitive ⟨-maːs-⟩ 'lose', reflecting the Tibeto-Burman causative *-s suffix

The following Chinese-Limbu cognate sets correspond rather well in form and meaning.

有   *waʔ [yǒu] 'there is;   Limbu ⟨-way- ~ -waː-⟩, existential 'to
     possess'   be'
靡   *m(r)ajʔ [mǐ] 'there is not'   Limbu intransitive ⟨-məy- ~ -maː-⟩ 'be or get lost'

Two Old Chinese copulas, listed below, appear to belong to the same word family. Baxter suspects a possible etymological relationship between the first of these and the Tibetan copula *yin* (letter of 25 July 1995). The initial in Baxter's reconstruction corresponds more closely to the Bumthang form *wen*, equational 'to be', but the finals correspond imperfectly.

隹, 惟, 維   *wij [wéi] equational   Tibetan yin, equational 'to be',
'to be', esp. in focus   Bumthang *wen*, equational 'to be'
constructions (Schüssler,
1987: 632–634)

為   *waj [wéi] 'act as, be;
make do' (Schüssler, 1987:
635, No. 8)

The following frequent Old Chinese form represents a possible Sino-Bodic isogloss, for which I here provide the likely Limbu cognate.

之   *tə [zhī] 'go'   Limbu irregular verb ⟨ta-⟩ 'come, show up, make an appearance'

Undoubtedly, some of the correspondences proposed above between Old Chinese and Limbu may prove to be as coincidental as Greek θεός 'god' and Latin *deus* 'god', but a Limbu correspondence often seems more promising than correspondences with Tibetan or other languages which have previously been proposed.

Starostin (1994) adduced a 'small but significant list of lexical isoglosses' between Kiranti and Chinese, which he believed constituted evidence either for a special relationship between Kiranti and Sinitic or for an early trifurcation of the Sino-Tibetan language family into a Proto-Kiranti, a Proto-Chinese and a Proto-Tibeto-Burman branch. Starostin kindly provided me with his list of cognate Proto-Kiranti and Old Chinese forms, and I reproduced this list in a footnote, stating rather optimistically that 'at our present state of knowledge, Starostin's evidence can also be interpreted as lending support to the Sino-Bodic hypothesis' (1995a: 254). At the time, it was evident to me that Starostin's Proto-Kiranti reconstructions required considerable modification. My tentative assessment now is that six of the 11 Proto-Kiranti reconstructions used in Starostin's Sino-Kiranti cognate sets find some kind of potential correlate in Limbu.

熟	*d(h)uk [shú, shóu] 'ripen, cook'	Limbu ⟨-thoːkt-⟩ 'cook' (Proto-Kiranti *toːkt 'cook'); cf. Starostin's Proto-Kiranti *thok ~ *thuk 'ripen, cook', contrast Limbu ⟨-tums-⟩ 'ripen' (Proto-Kiranti *dums 'ripen')
雀	*ćekʷ [què] 'bird'	Limbu *tikwa* 'grey jungle fowl Gallus soneratii' (Proto-Kiranti *dikwa 'grey jungle fowl'); cf. Starostin's Proto-Kiranti *cík 'bird'
請	*shēŋʔ [qǐng] 'ask'	The preverb *seːn* 'inquiry' in the Limbu verb *seːndoːma* 'ask'; cf. Starostin's Proto-Kiranti *sìŋ 'ask'
溶	*loŋ [róng] 'melt'	Limbu ⟨-yoːnd-⟩ 'melt' (Proto-Kiranti *⟨-roːnd-⟩ or *⟨-yoːnd-⟩); cf. Starostin's Proto-Kiranti *jòŋ 'melt'
粉	*pənʔ [fěn] 'flour'	Limbu ⟨-putt- ~ -put-⟩ 'sift, strain'; cf. Starostin's Proto-Kiranti *phùl
汗	*gāns [hàn] 'sweat'	The first element in Limbu *hoːmbrikwa* 'sweat'; cf. Starostin's Proto-Kiranti *ghàl 'sweat'

I have not yet been able to ascertain to which modern forms the other five of Starostin's Proto-Kiranti reconstructions correspond. The possible cognate sets adduced by Starostin are few in number precisely because few recent descriptions of Kiranti languages were available to him in what used to be the Soviet Union. These circumstances are but an exaggerated miniature of the overall state of the art in Tibeto-Burman linguistics.

Fortunately, we can look forward to ever more detailed descriptions of hitherto undescribed Tibeto-Burman languages, but this example vividly illustrates why priority which must be given to descriptive work over historical comparison. Grammatical studies enable internal reconstruction and provide the analysed data for identifying cognate sets on the basis of which sound laws can be deduced and linguistic prehistory reconstructed.

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