The Tibeto-Burman theory dates back to the eighteenth century, when scholars observed that Tibetan was genetically related to Burmese. Later, in 1823, the contours of the Tibeto-Burman family were delineated by Julius Heinrich Kloproth, who showed on the basis of common roots that the language family comprised Chinese, Tibetan and Burmese and those languages which could be demonstrated to be genetically related to these three, whilst he explicitly excluded Thai and other Daic languages as well as Vietnamese, Mon and other Austroasiatic languages. The Tibeto-Burman theory has in principle always remained agnostic about subgrouping within the family, whilst it encompassed all those languages which could be shown to be related to the key defining member languages - Chinese, Tibetan and Burmese. Early proponents of the Tibeto-Burman theory, such as Carl Richard Lepsius and Wilhelm Grube, mooted reflexes of Tibeto-Burman historical morphology in Chinese. The Tibeto-Burman theory became widely accepted and was soon taken for granted. Tibeto-Burman even became an ingredient in grander theories of linguistic relationship, such as Turanian and Indo-Chinese (Fig. 19.1).

For most of the nineteenth century, Friedrich Max Müller championed the Turanian theory, which grouped together into a single large Turanian family all of the 'allophylian' languages of the world, i.e. languages which were neither Indo-European nor Afroasiatic. Yet Müller expressed uncertainty about how to group Sinitic, for he could not decide whether Sinitic belonged to the northern branch of Turanian, together with the phyta which we know today as Uralic and Altaic, or to Southern Turanian, along with Tibetan and the languages of Southeast Asia. After enjoying much popularity, particularly in the British Isles, Turanian was discredited, and Müller himself abandoned the theory before he died in 1900. Scholars who propounded the Turanian theory, such as Hodgson (1849) and Müller (1855), removed Sinitic from the original Tibeto-Burman family and so created a new truncated 'Tibeto-Burman' at variance with the original Tibeto-Burman theory. Another equally vague theory of linguistic relationship was Indo-Chinese, widely known today by the name 'Sino-Tibetan', which, according to John Casper Leyden who conceived it, encompassed most of 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' (1808, 158). The shape and girth of Indo-Chinese would wax and wane to accommodate the hunches and impressions of whichever scholar used the term. However, in the nineteenth century, adherents of the Indo-Chinese theory such as Ernst Kuhn (1889) and August Conrady (1896) not only adopted the Turanian approach toward Sinitic by treating it as a subgroup distinct from the rest of the Tibeto-Burman family, but went a step further and grouped Sinitic together with Tibetan and the languages of Southeast Asia, as Hodgson (1849) and Müller (1855), removed Sinitic from the original Tibeto-Burman family and so created a new truncated 'Tibeto-Burman' at variance with the original Tibeto-Burman theory. As Auguste Comte once observed, 'on ne connaît pas complètement une science tant qu’on n’en sait pas l’histoire' (1830, 82).

The return of the original Tibeto-Burman theory
Shafer adopted the new term ‘Sino-Tibetan’ for Indo-Chinese. Shafer soon realized, however, that Daic did not belong in the Indo-Chinese or Sino-Tibetan family and in 1938 ‘prepared a list of words showing the lack of precise phonetic and semantic correspondence’ between Daic and other Indo-Chinese languages. Armed with this list, Shafer travelled to France before the outbreak of the Second World War ‘to convince Maspero that Daic was not Sino-Tibetan’ (1985, 97–8). Instead, Henri Maspero managed in the end to convince Shafer to retain Daic within Sino-Tibetan. When Paul Benedict moved to Berkeley in 1938 to join Kroeber’s Sino-Tibetan Philology project, he likewise abandoned the name Indo-Chinese for ‘Sino-Tibetan’. Benedict (1942), however, was more resolute than Shafer in ousting Daic from the family. This operation resulted in rump Sino-Tibetan theory and the Tibeto-Burman theory was the heuristic artefact that proponents of Sino-Tibetan treated as word order. Later, Karen was put back into ‘Tibeto-Burman’, but Sinitic has, for advocates of the Sino-Tibetan theory, that all of truncated Tibeto-Burman was a valid subgroup which collectively underwent shared unitary innovations independently of Sinitic. From the mid nineteenth century to the Second World War, as an essential feature of the Indo-Chinese or Sino-Tibetan theory was that Daic was seen as the closest relative of Sinitic, very much at variance with Klaproth’s original Tibeto-Burman theory, which saw Sinitic, but not Daic, as part of Tibeto-Burman.

In the United States, Alfred Kroeber and Robert Benedict moved this model. The explicit assumption built into the Sino-Tibetan theory, that all of truncated ‘Tibeto-Burman’ was a valid subgroup which collectively underwent shared unitary innovations independently of Sinitic, is now recognized to be false. The Sino-Tibetan or Indo-Chinese theory has now effectively been superseded by the original Tibeto-Burman theory because: 1) the Tibeto-Burman character of Sinitic has been amply demonstrated; 2) no uniquely shared innovations have been adduced which could define Proto-Tibeto-Burman as a separate coherent taxon that would exclude Chinese and be coordinated with Proto-Sinitic; 3) evidence has been adduced, suggesting that Sinitic in fact more closely allied with certain Tibeto-Burman groups, e.g. Bodic or Kiranti, than with others; and 4) evidence in the form of isoglosses has been identified which may represent possible lexical innovations indicating that a more primary bifurcation in the language family is between certain other subgroups, e.g. Brahmaputran or Sal, and the rest of the Tibeto-Burman family including Sinitic. This emerging insight has recently been bolstered by the identification of uniquely shared morphological innovations in Brahmaputran.

The Sino-Tibetan hypothesis, that the first split in the language family at its greatest time depth was between Sinitic and the rest of the family, remains unsupported. No evidence has ever been adduced to demonstrate the existence of shared innovations which define Tibeto-Burman excluding Sinitic as a unified group. Sinitic shows greater affinity with certain Tibeto-Burman subgroups such as Bodic, and it is amply evident today that certain Tibeto-Burman subgroups such as Gongduk show greater divergence from mainstream Tibeto-Burman features than Sinitic does. These insights have led to the abandonment of the Sino-Tibetan theory in favour of the older Tibeto-Burman theory.

**Figure 19.1. The Tibeto-Burman theory.**

**Figure 19.2. The Sino-Tibetan or rump Indo-Chinese theory, incorporating the truncated Tibeto-Burman hypothesis. The latter presupposes that all of ‘Tibeto-Burman’ underwent defined shared unitary developments independently of Sinitic.**

**Figure 19.3. This patch of leaves on the forest floor has fallen from a single tree, which we know as Tibeto-Burman. We cannot see the branches of the tree, but we are beginning to see the shadows they cast between the leaves on the forest floor. This schematic geographical representation provides an informed but agnostic picture of Tibeto-Burman subgroups. The extended version of the Brahmaputran hypothesis includes Kachinic, but for the sake of argument this diagram depicts the short variant of Brahmaputran, viz. excluding Kachinic. Kachinic comprises the Sak languages and the Jinghpuan dialects. Lepcha, Tangut is separately depicted, although Tangut is likely to be part of Qiangic. Digirish is Northern Mishmi, and Midzhusih is Southern Mishmi, i.e. the Kaman clan. Bâi is listed as a distinct group, whereas it may form a constituent of Sinitic, albeit one heavily influenced by Lolo-Burmese. Tujia is a heavily sinitized Tibeto-Burman language of indeterminate phylogenetic propriety spoken by about three million people in an area which straddles the provinces of Sichuan, Hubei, Hunan and Guizhou. The Sino-Bodic hypothesis encompasses at least the groups called Sinitic, Kiranti, Bodish, West Himalayish, *gylar*-rongic, Tamangic, Thanglapha, and Lhodup and possibly Lepcha. Other hypotheses, such as the inclusion of Chepang and perhaps Dura and Raai-Raute within Majaric, are discussed in my handbook (van Driem 2001).**
es with a more chequered history than the more
agricultural Tibe-Burman theory. Since 1823, Chinese,
Tibetan and Burmese have been the three defining
members of the Tibe-Burman family, but the Tibe-Bur
man theory as such is still essentially as agnostic about
subgrouping today as it was in the days of Julius
Klaproth. The Tibe-Burman phylogenetic model
also provides the empirically best-supported and
most neutral framework within which to test new
higher-order subgrouping proposals within the lan-
guage family. The Tibe-Burman phylogenetic model
provides a more informative framework than a false
tree. The recognition of the primary branches of
Tibetan-Burman makes it possible to target sample
population groups for genetic assays in an ethno-
linguistic manner. However, no shared innova-
tions have been found which could support a
Tibetan-Burman (i.e. Tibe-Burman minus
Sinic), 'Kamarupu', 'Jyibrish', 'Rung' or simi-
lar obsolete constructs. Instead, grammatical and
linguistic studies have led to the identification of many
language groups of the Himalayas and northeastern
Asia as high-order branches of the language family.
The Tibe-Burman situation is precisely anal-
ogous to Italo-Celtic and Balto-Slavic, with the addi-
tional value of this new, more candid, but
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tionary metaphor of punctuated equilibria (1997). According to Dixon, conventional family tree phylogenies work well under circumstances of linguistic evolution characterized by ‘punctuation’, i.e. by the expansion and branching of an original language community, but the language family model would purportedly not work during periods of equilibrium characterized by cultural and linguistic stasis. Structure and diffusion and the genetic affiliates of languages blur when language communities coexist in a state of cultural and demographic stasis through a vast expanse of time. Dixon considers Australia to be the prototypical example of a long-term diffusion zone, in which egalitarian communities engaged in low-key interaction for tens of thousands of years, and he also considers such prolonged periods of stasis to have been the norm rather than the exception in the history of hominid prehistory. Pawley & Ross (1995) argued that it is easier to identify subgroups defined by shared innovation when the ancestral groups have travelled a long distance from their original habitat or when there has been intermediate language extinction, and that elsewhere a mesh of groups may result where innovations may have developed in overlapping sets.

In this context, Pawley and Ross distinguish between innovation-linked and innovation-defined groups. If the initial spread was rapid and geographically extensive, Ross (1997) argues that a chain of subgroups that exhibit a ‘rake-like’ phylogeny results. The notion of the diffusion or spread zone has also been applied to the Eurasian heartland by Johanna (1992, 1998), but Michael Fortescue (1998) has shown that such notions can only be meaningfully and productively implemented when the comparative method has first been rigorously applied.

This has certainly not been done in the case of Tibeto-Burman. Therefore, the use of a bubble diagram to schematically represent the language family should not be construed as indicating that a family tree is an innovation-linked model for the Tibeto-Burman languages. The reticulate structure of the Tibeto-Burman language family in northeastern India, the Indo-Burmese borderlands and the eastern Himalayas is most probably not the result of a single linguistic expansion. As recently as the early second millennium BC, the now extinct Tibeto-Burman group Fyu was supplanted by the Burmese. Moreover, the complex evolution of the Fyu subfamily in northeast India, the Indo-Burmese borderlands and the eastern Himalayas must be seen against the background of the complex topography and original ecology of the region as well as the gradient of endemic disease barriers in the area, which were no doubt exacerbated by the gradual conversion of the dense jungles, which used to blanket areas like the Brahmaputran plain, into agricultural land.

**Genes, material culture and linguistic dispersals**

The Neolithic Revolution and the spread of agriculture are widely thought to have been important factors in the dispersal of ancient populations and the spread of language families. However, the Fertile Crescent itself attests to the fact that agriculture was adopted by ethnolinguistically unrelated populations and that agriculture spread effortlessly across ethnolinguistic boundaries without affecting them in any significant manner. Furthermore, Fula, Longana, Paluan, Hattic and other languages of early agricultural civilizations which have left no surviving linguistic descendants bear witness to the permeability of linguistic boundaries for the dissemination of agriculture. Certainly, a Neolithic wave of advance cannot be a universal explanation for the dispersal of language families, and Indo-European is perhaps the best illustration of a hypothetical Indo-European homeland in Anatolia, which is of great significance. Other such examples are the Proto-Indo-European family. This has certainly not been done in the case of Sinitic. Furthermore, the linguistic forebears of Sinitic are believed to have moved from the Fertile Crescent into the Yellow River basin, where they adopted the Chinese ideograms devised by a pre-Tibeto-Burman population (1972, 1979), though the prosperous agricultural civilization on the North China Plain may have lured the linguistic forebears of Sinitic, or perhaps Sino-Bodic, long before the Shang period. Quite often the archaeological record may not directly reflect such linguistic intrusions. Instead, archaeology shows the regional discrepancies in technical development which may have been the result of linguistic intrusions, both in the case of the early displacement of Sinitic outside the Tibeto-Burman core area as well as in the case of the advent of Indo-European groups to the Near East, such as the Hittites in Anatolia and the Mitanni in the Jazira. Not only did agriculture spread across linguistic boundaries from the very outset, the direction of linguistic intrusions is often difficult to determine since episodes of prehistory may have been diametrically opposed to the direction of the spread of agriculture.

My reconstruction is based on a family tree model of the Tibeto-Burman, which presumes a clustering of groups and suggests a relative chronology. Yet the model is not purely a phylogeny as such.

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Tibeto-Burman Phylogeny and Prehistory
In addition to the limited set of lexical isoglosses, I have described morphological features that appear to bolster the identification of Sino-Bodic as a subgroup (van Driem 1997). Recently, Laurent Sagart reconstructed an Old Chinese Tibeto-Burman prefix "<C->" (1994, 279-81). This reconstruction was also adopted by William Baxter (Baxter & Sagart 1998, 45), thus replacing Baxter's earlier "<C->" (1992). Starostin has told me on several occasions that this prefix is best reflected in Kiranti, Bodish, Sinitic and West Himalayish. If this is correct, this morphological element bolsters the case for Sino-Bodic. However, if the feature is a shared retention rather than a shared innovation, then the distribution of the phenomenon is merely suggestive.

By contrast, the constellation of subgroups which I collectively name Western Tibeto-Burman represents a number of primary branches which I assume had split off at an early stage and settled in northeastern India, originating from a Tibeto-Burman proto-homeland which I locate in Sichuan. British scholars in the nineteenth century had already located the Tibeto-Burman homeland in Sichuan, even though they could not yet have known the linguistic, archaeological and genetic evidence which today argues for a Tibet-Burman homeland in Sichuan. Here I shall briefly outline the model again and adduce additional supporting arguments from recent research on haplotypes on the Y chromosome. I shall also point out linguistic and archaeological weaknesses in the model, which leave room for an alternative version of the reconstructed linguistic theory about the population history of the Tibetan-Burman area informed by linguistic insights about the primary nature of subgroups in the Himalayas and northeastern India. From a phylogenetic perspective, Western Tibeto-Burman is analogous to the Formosan language groups within Austronesian. Like Formosan, Western Tibet-Burman is not a single taxon, but a collection of primary taxa within the family. Rather, it is the remaining branch, Eastern Tibet-Burman, which may constitute a possible genetic unit, just as Malayopolynesian is a single primary branch within Austronesian. It is therefore more fitting to speak of an Eastern than of a Western Tibet-Burman hypothesis, if there is such a thing.

The various ways of reconstructing prehistory, i.e. archaeology, linguistics and genetics, measure three independent quantities which are merely probabilistically correlated and which, moreover, may divide into taxa which may correspond to quite different time depths. Discrepancies between the chromosomal and the linguistic pictures of the past indicate that in some cases a larger incursive population may have adopted a language of a smaller population already resident in the area which they had settled, e.g. the case of Bulgarian, whereas some languages borne by ruling elites have been adopted by a larger dominated resident population, e.g. the case of Hungarian. The racial heterogeneity of Tibet-Burman populations is in particular the phenotypic difference between Brahmaputraan language communities and other Tibet-Burman groups in the northeast, has been noted ever since the earliest British accounts of the area.

In genetic terms, two apparently conflicting sets of findings have recently been obtained by teams of geneticists looking at Tibet-Burman populations in China and the greater Himalayan region. The discrepancy between these findings may be more apparent than real and may very well correspond to different realities situated at different time depths. The hypothesis of a Tibet-Burman homeland in Sichuan has recently found unexpected corroborations in the findings of the Chinese Human Genome Diversity Project, whose ethnonationally informed assays of population groups in China have shown that the Chinese did not originate in the Yellow River basin but migrated to this area in a northeasterly direction from southwestern China (Chu et al. 1998). This information was still unavailable when I first proposed that the Tibet-Burman homeland lay in Sichuan on linguistic grounds. Another team of geneticists has found a strong genetic affinity amongst population groups of the Tibet-Burman language family in the form of the prevalence of a T to C mutation at Y chromosome locus M122, whereas the extremely high frequency of HB, a haplotype derived from M122C, reflects the results of a genetic bottleneck that occurred during an ancient southwesterly migration (Su et al. 2000). The latter group of geneticists attempted to relate the geographical distribution of Tibet-Burman populations with a migration from the middle Yellow River basin about 10,000 years ago, and to conjecture that the earliest Neolithic cultures of this area might have been associated with the putative Tibet-Burman homeland. However, there are two flaws in this interpretation. First of all, the study by Su et al. (2000) sampled only six individuals from the pivotal, ethnonationally most heterogeneous Tibet-Burman heartland in northeastern India. The samples from this area were limited to a 'Kachari' individual, a Rabha, a Naga, an Adi, a Nishi and an Apatani. Their study left most key Tibet-Burman population groups untouched. Conjectures were advanced about prehistoric migrations to the Himalayas but, other than the three samples from Arunachal Pradesh, no Himalayan populations were tested. Fifteen samples, con-
stuting half of the test material, were obtained from individuals representing Han Chinese populations settled in various provinces of China. The remaining samples were from several Tibeto-Burman populations resident in China, i.e. Nakhi, Bai, Yi, Jino, Jinhpaw, Yunnan Lahu and Tuja. Finally, there were two Tibetan samples, one from Lhasa and one from Yunnan, and a single Karen sample from Southeast Asia. The assay was therefore limited and did not sample most of the key Tibeto-Burman language communities in the Himalayas about whose ancestors inferences were made. The second problem is that the interpretative framework was based on the phylogenetic model presented by Matisoff (1991), in which an Indo-Chinese or *Proto-Sino-Tibetan* Ursprache at its deepest time depth is presumed to have split east-west into *Proto-Chinese* and *Proto-Tibeto-Burman*. Problems with this model have been discussed above.

At a far greater time depth, ethno linguistically informed assays of the population of eastern Asia on the basis of thirty microsatellites made by Chu et al. (1998) have shown that the ethno linguistic composition of China is reflected in the genetic complexity, and that the peopling of eastern Asia probably occurred in a northward movement from Southeast Asia. These results have been corroborated in a study of nineteen biallelic loci on the Y chromosome, which demonstrated that northern populations in eastern Asia only represent a subset of the haplotypes found in southern populations, which show greater polymorphism on the whole than northern populations (Su et al. 1999).

Craniomeral and skeletal evidence is still routinely used by archaeologists and palaeoentologists to reconstruct population history. For example, Brown (1998) and Demeter (2000) argue for major morphological changes in population in the Far East between various phases of the post-Pleistocene or between the Mesolithic and Neolithic periods. Hopefully, it will be possible in future to make such findings square with the new insights of genomic studies. Particularly in view of the phenotypic variation sometimes observed within single populations, it will hopefully be undertaken to extract DNA from such crania for study. Recent work by Ding et al. (2000) has also shown that northern and southern haplotype clusters blend across a cline without any abrupt change, so that there is little genetic support in evidence for linguistic theories connecting Chinese to Caucasian, e.g. the Sino-Caucasian theory advocated by Starostin, or for connecting Chinese genetically with Indo-European, as Pulleyblank does. Yet all these investigations have merely scratched the surface of a vast terrain which lies to be charted and that archaeologists may give younger estimates for the third millennium bc.

Three arguments support the identification of Sichuan as the Tibeto-Burman homeland. The first is the centre of gravity argument based on the present and historically attested geographical distribution of Tibeto-Burman language communities. Sichuan encompasses the area where the upper courses of the Brahmaputra, Salween, Mekong and Yangtze run parallel to each other within a corridor just five hundred kilometres in breadth. The second argument is that archaeologists identify the Indian Eastern Neolithic, associated with the indigenous Tibeto-Burman populations of northeastern India and the Indo-Burmese borderlands, as a Neolithic cultural complex which originated in Sichuan and spread into Assam and the surrounding hill tracts of Arunachal Pradesh, the Meghalaya, Tripura, the Chittagong, Mizoram, Manipur and Nagaland before the third millennium bc. Archaeologists have estimated the Indian Eastern Neolithic to date from between 10,000 and 5000 bc (Thapar 1985; Sharma 1989). If these estimates are taken at face value, it would mean that northeastern India had shouldered adzes at least three millennia before they appeared in Southeast Asia. Whilst some archaeologists may give younger estimates for the Indian Eastern Neolithic, a solid stratigraphy and calibrated radiocarbon datings are still unavailable for this major South Asian cultural assemblage. The Indian Eastern Neolithic appears intrusively in the northeast of the Subcontinent and represents a tradition wholly distinct from the other Neolithic assemblages attested in India. Assuming that the Indian Eastern Neolithic was borne to the Subcontinent by ancient Tibeto-Burmans, then if the younger esti-
Sichuan before the migrations, as I have suggested, groups would have had to have occurred earlier in this cultural assemblage can be substantiated by solid dating, the linguistic fracturing of subregions continued to trickle into Thailand from Yunnan in recent history.

Southeast Asia had begun by the first millennium BC, just before the dawn of the Dadiwan and Peiligang-Cishan assemblages, the first Neolithic agriculturalists of the Dadiwan and Peiligang-Cishan assemblages, despite several points of divergence, were closely related cultural complexes, and the people behind the civilizations shared the same preference for settlements on plains along the river or on high terraces at confluences. Whereas the Sichuan Neolithic represented the continuation of local Mesolithic cultural traditions, the first Neolithic agriculturalists of the Dadiwan and Peiligang-Cishan assemblages may be identified tentatively with innovators who migrated from Sichuan to the fertile loess plains of the Yellow River basin. The technological gap between the earlier local microlithic cultures and the highly advanced Neolithic civilizations which subsequently came into flower in the Yellow River basin remains striking. Yet a weakness in this third argument lies in the archaological state of the art. Just as it is difficult to argue for a possible precursor in Sichuan in face of a lack of compelling archaeological evidence, neither can the inadequate state of the art in Neolithic archaeology in southwestern China serve as an argument for the absence of such a precursor.

Moreover, agricultural dispersals and linguistic intrusions may be distinct issues altogether. The concentration within a contiguous geographical region of all major high-order Tibeto-Burman subgroups other than Tujia and Sinitic constitutes a linguistic intrusion into the area that today is northern China. If the Dadiwan culture in Gansu and Shanxi and the contiguous Peiligang-Cishan assemblage along the middle course of the Yellow River shared common patterns of habitation and burial and employed common technologies, such as hand-formed tripod pottery with short firing times, highly worked chipped stone tools and non-perforated semi-polished stone axes, the Dadiwan and Peiligang-Cishan assemblages, despite several points of divergence, were closely related cultural complexes, and the people behind these civilizations shared the same preference for settlements on plains along the river or on high terraces at confluences. Whereas the Sichuan Neolithic represented the continuation of local Mesolithic cultural traditions, the first Neolithic agriculturalists of the Dadiwan and Peiligang-Cishan assemblages may be identified tentatively with innovators who migrated from Sichuan to the fertile loess plains of the Yellow River basin. The technological gap between the earlier local microlithic cultures and the highly advanced Neolithic civilizations which subsequently came into flower in the Yellow River basin remains striking. Yet a weakness in this third argument lies in the archaological state of the art. Just as it is difficult to argue for a possible precursor in Sichuan in face of a lack of compelling archaeological evidence, neither can the inadequate state of the art in Neolithic archaeology in southwestern China serve as an argument for the absence of such a precursor.

Moreover, agricultural dispersals and linguistic intrusions may be distinct issues altogether. The concentration within a contiguous geographical region of all major high-order Tibeto-Burman subgroups other than Tujia and Sinitic constitutes a linguistic intrusion into the area that today is northern China. If the Dadiwan culture in Gansu and Shanxi and the contiguous Peiligang-Cishan assemblage along the middle course of the Yellow River are indeed primary Neolithic civilizations, then the eccentric location of Sinitic and Tujia may even trace the route of the early migration out of Tibeto-Burman homeland to the affluent and more technologically advanced agricultural societies in the Yellow River basin. In other words, since the linguistic evidence puts the Tibeto-Burman homeland in southwestern China and northeastern India, an archaeological precursor in Sichuan for the Dadiwan and Peiligang-Cishan cultures would fit the hypothesis that the displacement of Sinitic towards northern China was the result of an early Tibeto-Burman archaeological dispersal. The absence of any such precursor in Sichuan would fit a theory of early migration from the northern end of the ancient Tibeto-Burman dialect continuum to the affluent areas of pre-Tibeto-Burman agriculture along the Yellow River.

I collectively refer to the ancient Tibeto-Burman populations, who either bore with them from Sichuan to the loess plateau the technologies of polished stone tools and cord-marked pottery or were enticed to the loess plateau by the affluence of the technologically more advanced agricultural civilizations there, as 'Northern Tibeto-Burmans'. I identify these Northern Tibeto-Burmans as the likely linguistic ancestors of the Sino-Bodic groups. Subsequent technological developments were both innovated and introduced comparatively rapidly in the north, whereas relatively egalitarian small-scale agricultural societies persisted in southwestern China until the Bronze Age. This hypothesis places the split between Northern and Southern Tibeto-Burman in the seventh millennium BC, just before the dawn of the Dadiwan and Peiligang-Cishan civilizations.

I identify the spread of Bodic groups from Sichuan with the dispersal of the Majiayao and Yangshao Neolithic cultures and the cultivars broomcorn millet, Panicum miliaceum, and foxtail millet Secale Italicum, first domesticated on the North China Plain, into the Himalayan region in the third millennium BC. Sino-Bodic would have split up into Sinitic and Bodic, and the two subsequent migrations proceeded along two routes. The Majiayao Neolithic culture spread westward along the main ancient Inner Asian trade route across the Himalayas to establish the genetically related Northern or Kashmir Neolithic in Kashmir and Swat. At the same time, the Majiayao cultural assemblage spread southward from Gansu through eastern Tibet into southeastern Tibet, Bhutan and Sikkim to establish the Neolithic cultures of Chang-mdo and northern Sikkim, both of which have been identified as colonial exponents of the Majiayao Neolithic. Moreover, these colonial exponents make their appearance in Kashmir, eastern Tibet and Sikkim in the second half of the third millennium BC, so that the final phase of these movements coincides precisely with the Banshan phase of the Majiayao cultural assemblage, which covers the period between 2200 and 1900 BC and is characterized by a marked geographical contraction of the original Majiayao core territory.

My reconstruction of Tibeto-Burman dispersals, presented in greater detail elsewhere (van Driem 1998; 1999; 2001), is outlined here in Figures 19.6 to 19.9. On the whole, this reconstruction still fits the known facts well. Yet the weaknesses in this model must be recognized. First of all, Sichuan and southwestern China in general remains archaeologically inadequately researched, despite the significance of the area's prehistory. A second problem is that the linguistic state of the art gives us no real relative chronology for the splitting off of the main taxa of the language family, as shown in Figure 19.3. Nevertheless, the sheer number of high-order subgroups in the Himalayan region and the northeast of the Subcontinent provides a good idea of where and when it would be most fruitful to look for likely archaeological correlates for the dispersal of ancient Tibeto-Burman populations. The lopsided geographical distribution of most major Tibeto-Burman groups in the Himalayas and northeastern India, the likely linguistic affinity of Sinitic with Bodic, and the possible affinity of 'Deep Southern' with 'Central' Tibeto-Burman groups have inspired the tree schema outlined in Figure 19.5.

An alternative proposal to a Tibeto-Burman homeland in Sichuan would be to identify the earliest Neolithic cultures along the Yellow River basin and on North China Plain with the Tibeto-Burman homeland. However, if the Tibeto-Burman homeland were to have lain in the Yellow River basin, then we would be hard pressed to find a plausible archaeological correlate for the spread of Brahmaputra language communities, which once extended beyond Bhutan and the Himalayas but which have eroded much of the area that is now Bangladesh and West Bengal. It must be kept in mind that the early
Neolithic civilization on the Yellow River is distinct from the cultural assemblages of the middle Yangtze basin, the succeeding stages of which ultimately spread as far afield as Oceania in the course of the Millennium. Both the Yellow River and the middle Yangtze civilizations represent ancient agricultural societies nearly as old as those of the Fertile Crescent.

Clearly, the first and foremost desiderata are that the archaeological sites of Sichuan and northeastern India be better understood, that a fine-grid and ethnological basin, the succeeding stages of which ultimately include over thirty very basic items which decidedly involve a remote linguistic relationship with Tibeto-Himalayan region be carried out, and that a new archaeology of Sichuan and northeastern India be carried out, and that a new archaeological reflection of intense interaction between ancient Northern Tibeto-Burmans on the Yellow River and ancient Daic peoples on the middle Yangtze, sometime after the Lower Neolithic of the Quinling and Ishihage culture, which expanded from the middle Yangtze into peripheral regions rapidly and on a grand scale, even replacing the Yangshao culture in southern and southeastern Han in the middle of the third millennium BC (Zhang 1996).

References
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