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## CHAPTER SIXTEEN

## BONAN

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Bonan (also Baoan, Baonan) is spoken by two separate populations, living in the Chinese provinces of Gansu and Qinghai. Originally, the ancestors of Bonan speakers lived together in and around the town of Baoan, built in the thirteenth year of Ming Wanli (1585) in Central Amdo north of the Tibetan monastery of Reb.gong, the historical centre of the modern Tongren County of Huangnan Tibetan Autonomous District, Qinghai. Because of the increasing impact of Muslim elements (Hui and Salar) in the region, some of the Bonan speakers adopted the Islamic religion, while others entered, or remained within, the sphere of Tibetan Buddhism. It was possibly this religious division that led, in the early years of Qing Tongzhi (1856-75), to the emigration of the Islamic Bonan speakers first to Xunhua in Qinghai and then further to the region of Linxia in Gansu.

The Islamic Bonan speakers in Gansu are today concentrated in the villages of Ganhetan, Dadun, and Lijiacun, located in Dahejia Township of Dongxiang Salar Jishishan Autonomous County of Linxia Hui Autonomous District. Although no longer living in Baoan, this population is officially recognized as a distinct minority nationality bearing the very name Bonan or Baoan (Baoan zu). By contrast, the Buddhist Bonan speakers still remaining in the region of Baoan are officially registered as belonging to the 'Monguor' nationality ( $T u z u$ ). These people inhabit a compact belt of three villages, the names of which are (in Tibetan spelling:) gNyan.thog, sGo.dmar, sKa.gsar. A fourth village, in the immediate vicinity of Baoan, is known as (in Chinese Pinyin:) Baoan Xiazhuang.

The Bonan in Gansu are one of the smallest minority nationalities of China, numbering $c .12,200$ people (1990). The use of the native language among these people seems to be declining in favour of the Hezhou language, the local Chinese-based 'creole'. The education system functions in Chinese, though Arabic is also taught in mosque schools. The Bonan speakers in Qinghai form an even smaller population, comprising perhaps 3,500 people (1980), but they are linguistically vigorous and continue to transmit the native language to growing children in at least the villages of gNyan.thog, sGo.dmar, and sKa.gsar. A separate Chinese-Tibetan 'creole' language is spoken in the nearby village of Wutun. The education system for all these villages functions in Tibetan, which is also the language of the Buddhist communities in the region.

Historically, the Bonan do not seem to have had a common ethnonym, though they retain a certain consciousness of their connection with the Mongols (Tibetan Sog) or the 'Monguor' (Tibetan Hor). The local Tibetans have called them by the name Durdu (Dor.do), an appellation of unclear origin, which is today regarded as derogatory. The Buddhist Bonan speakers prefer to emphasize their close ties with the surrounding Tibetans, though they are still distinguished from the latter not only by their different language, but also by cultural features, such as the details of clothing. The 'Bonan nationality' (Boongan merig) remains an artificial concept for most Bonan speakers, though it is used by the Islamic Bonan in Gansu in reference to their original source region.

## DATA AND SOURCES

Bonan is among the least studied Mongolic languages. The first scholarly notes on the Bonan speakers were made by G. N. Potanin (1893), who identified them as belonging to the 'Shirongol' complex. It was, however, not until the Sino-Soviet expedition of 1955-6 that systematic material from the Bonan language was gathered for the first time. As a result of this fieldwork, B. X. Todaeva published a relatively comprehensive grammar with text samples and glossary (1966), accompanied by an ethnographic description (1965) as well as two concise grammatical sketches $(1963,1997)$, based mainly on materials from Gansu.

On the Chinese side, the first attempt to describe the Bonan language was marked by the brief grammar of Buhe and Liu Zhaoxiong (1982). A more comprehensive project was undertaken in 1980-1 by Chen Naixiong and the present author, who collected fresh field material from the Bonan speakers in Qinghai, especially in the village of gNyan.thog. As a result, a vocabulary and a volume of texts were published by Chen Naixiong et al. (1985, 1986), accompanied by a comparative-diachronic assessment of Bonan by Chen Naixiong and Chingeltei (1986). Chen Naixiong (1994) also has prepared a dialectological study. These works still remain the largest published corpus of material on Bonan, and they have also served as the principal database for the present description.

In the current state of research, both the genetic position of Bonan (within the Mongolic family) and its areal status (with regard to the neighbouring languages) are insufficiently understood. For the latter aspect of the language, it is crucial to get more information not only on Amdo Tibetan and Qinghai Mandarin, the two regional languages of relevance to the Bonan speakers, but also on the variety of the more local ethnic languages. Preliminary sources on Amdo Tibetan include the grammar of George N. Roerich (1958) and the phonological analysis by Juha Janhunen and Kalsang Norbu (2000). Some information on the Hezhou and Wutun 'creoles' is summarized by Mei W. Lee-Smith and Stephen A. Wurm (1996), but most of the work still remains to be done.

## DIALECTS

Practical information from native speakers suggests that Bonan is mutually unintelligible with regard to the other Mongolic languages of the Gansu-Qinghai complex, notably Mangghuer, Mongghul, and Santa. On the other hand, Bonan itself, although also divided into several local forms of speech, seems to form a single language, whose speakers all understand each other. The main dialectal division goes, not surprisingly, between the Buddhist Qinghai Bonan (officially ‘Monguor') and the Islamic Gansu Bonan (officially Bonan). Even these two groups, though no longer in regular contact, are, however, when needed, reported to be able to communicate with each other in the native language.

The difference in religion, geographical location, and synchronic ethnic environment has nevertheless resulted in considerable differences between the idioms spoken by the Qinghai Bonan (the Tongren dialect) and the Gansu Bonan (the Jishishan dialect). At the grammatical level, these differences are largely due to the different basis of local bilingualism (Amdo Tibetan in Qinghai vs. the Hezhou 'creole' in Gansu), while at the lexical level they are enhanced by the different sources of religious and cultural vocabulary (Tibetan vs. Arabic). The two dialects have been developing on diverging lines long enough to have significantly affected the internal coherence of the Bonan speech community.

There are also more local differences, in that, basically, each Bonan-speaking village is characterized by a subdialect of its own. On the Qinghai side we may therefore speak of the gNyan.thog, sGo.dmar, sKa.gsar, and Xiazhuang subdialects, while the Gansu Bonan are divided between the Ganhetan, Dadun, and Lijiacun subdialects. The subdialectal differences are generally small, and they are typically manifested in minor phonological (or even just phonetic) details, as well as occasional lexical retentions and innovations. A diachronic evaluation of these differences shows that the subdialects of Gansu Bonan all derive from a source close to the subdialect of Xiazhuang in Qinghai, while the subdialects of gNyan.thog, sGo.dmar, and sKa.gsar, form another primary historical group.

A further analysis of the dialectal differences suggests that the village of gNyan.thog is the ultimate source of all Bonan speakers. The gNyan.thog subdialect occasionally retains features lost in all other dialects by a common innovation, as in *mölsü/n 'ice' > (gNyan.thog) milsung vs. (all other dialects) *minsu. On the other hand, there are examples of sGo.dmar and sKa.gsar sharing a retention with gNyan.thog, while Xiazhuang shows an innovation that is also present in the Gansu subdialects, as in *ebesü/n 'grass' > (gNyan.thog with sGo.dmar and sKa.gsar) iwsung vs. (Xiazhuang and Gansu) wesung. This suggests that the population of Xiazhuang arrived from sGo.dmar and sKa.gsar after the speech in the latter had developed differences with regard to gNyan.thog.

## SEGMENTAL PHONEMES

Qinghai Bonan is normally considered to have six basic distinctive vowel qualities, which are realized roughly as [a e $\partial$ i $\theta$ u]. Of these, however, only the five qualities [a e $\partial \theta \mathrm{u}$ ], but not [i], can occur word-initially. On the other hand, the five qualities [a e i $\theta u$ ], but not [ə], can occur as long or doubled. This suggests that Bonan actually has only five vowel phonemes, which may be denoted as a e io $u$, all of which can occur initially, and all of which also have long counterparts. In this interpretation, the phoneme $e$ corresponds to the qualities [ə] and [e:], while the phoneme $i$ corresponds to the qualities [e] and [i:]. Incidentally, a five-vowel system is also reported to be present in Gansu Bonan (Todaeva).

There are, however, indications that the Bonan five-vowel system is not a simple vowel triangle. Rather, it follows the pattern of the surrounding Amdo Tibetan dialects, which have a four-vowel system consisting of the three corners $a u i$ and the central vowel $e$. In Bonan, the symmetry of this system is broken by the extra vowel $o$ (Table 16.1).

Diachronically, the Bonan vowels are in a complex relationship to their ProtoMongolic origins. Basically, however, the vowels $a$ o $u\left[\begin{array}{lll}\mathrm{a} & \mathrm{u}] \text { represent original } *_{a}{ }_{o}{ }_{o} \text {. }\end{array}\right.$ *ü, respectively, as in xara 'black' < *kara, more 'horse' < *mori/n, unang 'cow' < *üniye/n. Original ${ }^{*} \ddot{\partial}$ and ${ }^{*} u$ are also represented as $o$ and $u$ without any simple rules, as in kol 'foot' $<$ *köl, kugo 'blue' < *kökö, ghordung 'fast' $<$ *kurdun, ghurang 'three' < 'gurba/n.

TABLE 16.1 BONAN VOWELS

| $u$ |  | $i$ |
| :--- | :--- | :--- |
| $o$ | $e$ |  |
|  | $a$ |  |

The vowel $e[ə]$ seems to be primarily the reduced reflex of $* i$, as in mene 'my' $<$ *mini, but it can occasionally also derive from other sources, as in texa 'poultry' < *takiya, belag 'spring [of water]' $<{ }^{*}$ bulag. The vowel $i$ [e], finally, is the main reflex of $* e$, as in timer 'iron’ < *temür.

Many problems are connected with the synchronic and diachronic status of the vowels $e i$. While original ${ }^{i} i$ is normally reduced into $e[ə]$, it is phonetically 'preserved' as [i] after palatal consonants, as in cesung [tcisey] 'blood' < * cisu/n. In the same position, original ${ }^{*} e$ is represented by its regular value as [e], as in cirig 'army' [tcerəg] < *cerig. Since the quality [ə] is not attested in this position, there is no distributional obstacle for analysing the values [i] vs. [e] as allophones of $e$ vs. $i$, respectively, but in view of the phonetic substance the values could also be interpreted the other way round.

In non-initial syllables, a regular reductive merger of the high vowels ${ }^{*} i * u * \ddot{u}$ into $e$ can be observed, as in (*i:) gholer 'flour' < *gulir, (*u:) nase 'age' < *nasu/n, (* $\ddot{\text { : }}$ ) under 'high < *öndür. The vowel *e is also often, but not invariably, reduced, as in inde 'here' $<$ *ende. As in the initial syllable, $e$ is realized as [i] when preceded by a palatal consonant, as in pece [pətci] 'letter' < *bicig. Additionally, there are positional neutralizations depending on the consonant environment. Most importantly, before a final velar nasal $n g$ there seem to be only two contrasting vowel qualities (high vs. low), which may be analysed as (high) $u[\Theta \mathrm{u}]$ and (low) $a[\mathrm{a} \Lambda]$, as in nodung 'eye' $<$ *nidün, gigang 'bright' < *gegexen.

The long vowels are normally attested in the initial syllable only. As in other Mongolic languages, they derive from original contracted vowel sequences, including diphthongs, as in baasung 'excrement' < *baxasu/n, oolung 'cloud' < *exüle/n, uula 'mountain' < *axula, keele 'belly' < *kexeli, xiice 'scissors' < *kayici. The status of the long vowels is, however, unstable. Examples of sporadic shortening are common, as in toli 'hare' < *taulai, julang 'soft' < *jüxelen, while cases of secondary lengthening are also encountered, as in (Qinghai) hootang 'star' < *xodu/n. The interpretation of some sequences is open to alternative analyses. For instance, the initial sequence wii [wi], as in wile 'work' < *üyile, is often analysed as containing a short vowel. The actual short sequence wi [we] is, however, present in wire 'daughter-in-law' < *beri.

Altogether, information on the long vowels is often contradictory. In some cases, for instance, a quantitative opposition in the one dialect seems to correspond to a qualitative one in the other dialect, as in (both Qinghai and Gansu) narang 'sun' < *nara/n, as opposed to (Qinghai) naarang vs. (Gansu) narung 'fine' < *narin. Considering the fact that Amdo Tibetan does not have long vowels but, instead, vowel sequences ending in the (reduced) vowel $e$, a similar situation might be valid at least for Qinghai Bonan. This would allow the reanalysis of the 'long' vowels as the sequences ae oe иe ee ie. Indeed, long vowels are often recorded from Bonan in items containing vowel sequences in Amdo Tibetan, as in diirew 'century' (Amdo dieraw). Unfortunately, there are many inconsistencies and perhaps inaccuracies in the data.

Although original diphthongs have often been simplified into either long or short monophthongs, a few words still preserve the diphthongoid sequence $e i$ in a non-initial syllable, e.g. ghaghei 'pig' < *gakai, noghei 'dog' < *nokAi. Other diphthongoid sequences are mainly attested in Chinese loanwords, e.g. yanghui 'cement', doufu 'beancurd'. Sequences beginning with the high vowel qualities [i] or [u] are best analysed as containing an initial cluster with a medial, as in pyo 'ticket', gwa 'melon' (both borrowed from Chinese). The labial medial is also attested in native vocabulary, but only after velars, as in ghwar 'two' < *koxar, suggesting the possibility of a separate labiovelar set of consonants.

Due to Tibetan influence, the Bonan consonant system is characterized by a considerable degree of diversification. The consonants of Qinghai Bonan may be divided into labials ( $p b f w m$ ), dental non-sibilants $(t d l h l n)$, dental sibilants $(t s d z s z$ ), retroflexes ( $t r d r s r r$ ), palatals ( $c j \operatorname{shzhny} y$ ), as well as velars and post-velars ( $k g x g h n g h$ ), plus the possible labiovelars. Stops and continuants show a distinction between strong (aspirated and/or voiceless) and weak (unaspirated and/or voiced) segments; according to this parameter, even the liquids $l r$ may be classified as members of the obstruent system. Apart from the obstruents, there are four nasals ( $m n n y n g$ ) and two glides $(y h)$, yielding a minimum of 30 consonant phonemes altogether (Table 16.2).

The strong (voiceless) lateral $l h$, the dental sibilants $t s d z z$ (but not $s$ ), the retroflexes $\operatorname{tr} d r s r$ (but not $r$ ), and the palatals $z h n y$ (but not $c j \operatorname{sh} y$ ), occur only in loanwords, borrowed from both Tibetan and Chinese, but synchronically fully nativized in Bonan. The status of $f$ is most marginal, since it is in an almost perfect complementary distribution with $h$, the former occurring before the vowel $u$ and the latter before all other vowels. There are, however, a few examples suggesting that the distinction has become phonemic, mainly due to loanwords, e.g. fadung+ ge- 'to start (a machine)' (from Chinese).

In native words, the velar (phonetically laryngeal) glide $h$ represents Proto-Mongolic *x, as in hawrang 'ten' < *xarba/n. In the position before (*) $u$, this same segment yields secondarily $f$, as in fulang 'red' $<* h u l a n g<* x u l a x a n$. In a few words, the vowel $u$ in the sequence $f u$ has dialectally developed into other qualities, corroborating the distinctive status of $f$, e.g. (gNyan.thog) hii vs. (Xiazhuang) $f i$ (possibly fii) $<$ *hui $<$ *xoi. The strong velar fricative $x$, on the other hand, represents the velar stop $* k$ before an original back vowel, as in xorung 'twenty' < *kori/n. Due to vocalic neutralizations, $x$ can synchronically contrast with $k$. A similar contrast has developed between the corresponding weak segments $g h$ vs. $g$, which basically represent original ${ }^{*} g$, as in $g h o l$ 'channel' < *gol, gir 'house' < *ger. The contrast between the two segments is also common in loanwords, as in gha 'fox' vs. ga 'column' (both from Tibetan).

Like the other languages of the Gansu-Qinghai complex, Bonan shows a tendency of assimilatory and/or dissimilatory mixing of the strong and weak series of stops. Assimilation is present in, for instance cexang 'white' $<$ *ceghang $<$ *cagaxan, while dissimilation is exemplified by (gNyan.thog) jasung vs. (Xiazhuang) cawsung 'snow' $<*$ casu/n. The rules are, however, not clear-cut, and contradictive forms are common, e.g. (assimilation) pecag 'bean' < *burcag vs. (no assimilation) bicang 'monkey' < *beci/n. The representation of the original initial velars $g k$ is particularly chaotic, cf. e.g. (weakening) ghoni 'sheep' < *koni/n vs. (strengthening) xal 'fire' < *gal. The presence of dialectal differences only complicates the picture, and in some cases we may again be dealing with inaccuracies in the data.

TABLE 16.2 BONAN CONSONANTS

|  | $t$ | $t s$ | $c$ | $k$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $p$ | $d$ | $d z$ | $d r$ | $j$ | $g$ |
| $b$ | $l h$ | $s$ | $s r$ | $s h$ | $x$ |
| $w$ | $l$ | $z$ | $r$ | $n y$ | $n g$ |
| $m$ | $n$ |  | $y$ | $h$ |  |
|  |  |  |  |  |  |

## WORD STRUCTURE

The Bonan phonotax lacks many original Mongolic features, including, for instance, vowel harmony. On the other hand, with the introduction of Tibetan loanwords and structural interference, a number of non-Mongolic patterns have entered the language, many of which have parallels in the other languages of the Gansu-Qinghai complex. The Tibetan influence is particularly strong in Qinghai Bonan, which may well be regarded as the most throroughly Tibetanized form of Mongolic.

Most importantly, the syllable structure of Qinghai Bonan incorporates the Tibetan system of preinitials: a limited set of consonants which can occur before the basic initial consonant, thus yielding initial consonant clusters (Table 16.3). The proper identification of these clusters is one of the most intricate points of Bonan phonology. It it therefore not surprising that their presentation in the extant sources involves many misunderstandings and misinterpretations. Since, however, the initial clusters typically occur in Tibetan loanwords, the natural clue to their analysis lies in the Amdo Tibetan system of preinitials.

As in Amdo Tibetan, there are two types of preinitial in Bonan: nasal and non-nasal. A nasal preinitial can only precede a stop consonant of the weak series and conforms to the latter's place of articulation, resulting in a set of six homorganic clusters: $m b n d n d z$ $n d r n j$ (nyj) ngg. Since the quality of the nasal plays no distinctive role, it could also be analysed as a single archiphonemic nasal segment ( $N$, perhaps best written as $v$ in accordance with the current Romanizational praxis for Tibetan, i.e. $v b v d v d z v d r v j v g)$. In the present analysis, however, the phonetic notation, specifying the identity of the nasal ( $m n n g$ ), is preferred.

The basic non-nasal preinitial, pronounced as a laryngeal fricative, may be identified with the phoneme $h$. It can precede both weak and strong stops (pronounced in this position as voiced vs. voiceless unaspirated), though the combinations actually attested in Bonan (ht hts htr hc $h k$ vs. $h d h d z h d r h j h g$ ) exclude the labials due to reasons of Amdo Tibetan dialectology. The preinitial $h$ can also occur before weak fricatives ( $h l \mathrm{hz} \mathrm{hzh}$ ), nasals (hn hny hng), and the palatal glide (hy). It is true, the total system of actually attested Bonan initial clusters has two unsystematic gaps (marked as *), which are apparently only due to the incompleteness of the available recorded materials. The corresponding clusters ( $h g h \mathrm{hm}$ ) are established beyond doubt for Amdo Tibetan.

The most important feature of the Bonan system of initial clusters is that there is another non-nasal initial, which in many Amdo Tibetan dialects has merged with $h$, but

TABLE 16.3 BONAN INITIAL CLUSTERS

| preinitials clusters |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $N$ | $m b$ | $n d$ | $n d z$ | $n d r$ | $n j$ | $n g g$ |
| $h$ |  | ht | hts | htr | hc | hk |
|  |  | hd | $h d z$ | $h d r$ | hj | $h g$ |
|  |  | hl | $h z$ |  | hzh | * |
|  | * | hn |  |  | hny | hng |
|  |  |  |  |  | hy |  |
| $r$ | $r p$ | $r t$ | * | * | $r c$ | rk |
|  | $r b$ | $r d$ | * | * | * | rg |
|  | rm | * |  |  | * | rng |

which seems to be distinct in Bonan. This is the retroflex $r$, realized as voiceless [s] before the strong stops (rprtrcrk) and as voiced [ $[\mathrm{l}$ ] before the weak stops and the nasals ( $r b r d r g r m r n g$ ). Again, some of the theoretically possible clusters ( $r$ ts $r t r r d z r d r r j r n$ rny) are not attested in the data, but they are likely to be present in both Bonan and the immediately surrounding dialects of Amdo Tibetan.

Of greatest interest for comparative Mongolic studies are the native words in which Bonan has, by eliminating the vowel of the original initial syllable, created initial clusters which follow the pattern provided by the Tibetan loanwords. Examples can be found for all the three preinitials. The non-nasal preinitials $h$ and $r$ represent in native words, in a rather complex pattern, original $*^{*} *_{s} * k$, as in rko 'big' < *xike, rtung 'tooth' < *sidü/n, rtoghe 'knife' $<$ *kituga, htung 'hard' < *kataxu/n, or also a secondary prothetic * $x$, as in $h k u$ - 'to die' $<* \ddot{ } k u ̈ \ddot{-}$, rter 'long' $<* h u t u r<* u r t u$. The nasal preinitial normally derives from the first component of an original internal cluster, as in mbaa- 'to bathe' < *umba-, but it can also represent a prothetic segment, as in ndang 'door' < *exüde/n.

It has to be noted that Bonan can hardly have initial clusters not attested in Amdo Tibetan. Although phonetic notations like [sme] 'arrow' suggest the presence of non-canonic clusters, they must have a phonemic explanation corresponding to the regular phonotax of the language, in this case probably semo 'arrow' < *sumu/n. A particularly common noncanonic distinction in the data is [ gG$]$ vs. [ gg$]$, suggesting phonemic $n g g h$ vs. $n g g$. Since both sequences occur in Tibetan loanwords, and since Tibetan does not have a corresponding distinction, the Bonan data are probably best analysed as containing an invariable $n g g$, as in [ $\eta_{\mathrm{Ge}}$ ] nggo 'head' (Tibetan mgo), [ $\mathrm{\eta gexger}$ ] nggohkor 'rod' (Tibetan mgo.skor).

The ultimate factor that has allowed the initial clusters to spread to native vocabulary is word stress, which in Bonan falls on the last syllable. Because of this final stress, the vowel of the initial syllable can also be lost when not preceded by a consonant, as in se (if not ze) 'water' < *usu/n. This has in some cases led to new non-Mongolic phonotactic patterns, such as the occurrence of the liquids $r l$ in initial position, as in laa- 'to cry' $<*$ uyila-, re- (or er-) 'to come' $<{ }^{*}$ ire-. Although generally not distinctive in Bonan, stress can occasionally be located on a non-final syllable, signalling a juncture in obscured compounds, as nude 'today' < ine+ uder 'this day', dirarang 'forty' < dirang+hawrang 'four-ten'.

## WORD FORMATION

A survey of Bonan lexical material reveals a considerable number of both Mongolic and Tibetan derivative suffixes, most of which are, however, non-productive. Productive suffixes are mainly encountered in the deverbal categories (voice, aspect, nominalization). The different types of derivative suffix may be illustrated as follows:

Denominal nouns: .ce (Mongolic) [occupation, involvement], e.g. asung 'livestock' : asung.ce 'herdsman'; .ca (Tibetan) [id.], e.g. zhow 'lie' : zhow.ca 'liar'; .rce [cover of ], e.g. ghore 'finger' : ghore.rce 'finger gloves'; .te (Mongolic) [possessive adjectival nouns], e.g. ujer 'pointed end' : ujer.te 'pointed'; .ro (Tibetan) [id.], e.g. hiw 'greediness' : hiw.ro 'greedy'; .lug [adjectival nouns], e.g. targhung 'fatness' : targho.lug 'fat'. Two special formatives are: $-g u$ [nominatives from local case forms], e.g. xar 'hand' : dat. xar$d a: x a r-d a-g u$ '[something] being at hand'; .sang [honorific reference], e.g. ta 'you' : ta.sang 'your (respected) family’, tere 's/he’ : tere.sang 's/he (respected one)'.

Deverbal nouns: .sung, e.g. shi- 'to urinate' : shi.sung 'urine'; .dung, e.g. xana'to cough' : xana.dung 'cough'; .gha, e.g. nede- 'to pound with fists' : nede.gha 'fist'; shewa- 'to plaster' : shewa.r 'mud'. Deverbal adjectival nouns: .gor [doing easily],
e.g. laa- 'to cry' : laa.gor 'easily-crying'; .rig [doing often], e.g. shi- 'to urinate' : shi.rig 'urinating often'; .ng, e.g. dugla- 'to cripple' : dugla.ng 'crippled'; .ug, e.g. meer- 'to bend' : meer.ug 'curved'. Lexicalized participles: .gu (part. fut.), e.g. ndi- 'to eat' : ndi.gu 'food'; .ang [part. imperf.], e.g. tar- 'to plant' : tar.ang 'crop'; .sang [part. perf.] dule- 'to dance': dule.sang 'dance'; .cang [part. ag.], e.g. bel- 'to rob' : bel.cang 'robber'.

Denominal verbs: .la- [translative], e.g. bayang 'rich' : bayang.la- 'to become rich'; .ta[id.], e.g. ghor 'short' : ghor.ta- 'to become short'; .r- [id.], e.g. gigang 'bright' : giga.r- 'to become bright'; .l- [id.], e.g. caatang 'close' : caata.l- 'to come near'; .ca- [factitive], e.g. xolung 'hot' : xol.ca- 'to heat'; .ra- [id.] e.g. niitang 'wet' : niita.ra- 'to drench'; .da[instrumental], e.g. belu 'whetstone' : belu.da- 'to sharpen'; .sa- [id.], e.g. amang 'mouth': am.sa- 'to taste'. The most productive element forming denominal verbs is + ge- $(<+* k i-$ 'to do'), e.g. wiile 'work' : wiile+ ge- 'to work'; it is also used to verbalize nouns borrowed from other languages, e.g. gungzo 'work' (from Chinese) : gungzo+ ge- 'to work'.

Deverbal verbs: .gi- and .gha- [causative], e.g. kur- 'to reach' : kur.gi- 'to send', uje'to look' : uje.gha- 'to show'; .l.de- [reciprocal], e.g. kil- 'to speak'; kil.de- 'to quarrel'; .ci- [collective], e.g. tani- (or possibly tanye-) 'to know' : tani.ci- 'to become acquainted'; .la- [iterative], e.g. jawce- 'to chop' : jawce.la- 'to mince'; .ra- [inchoative], e.g. yada- 'to be unable to' : yada.ra- 'to become tired'.

Some derivational patterns are observed mainly in colour terms: .wer [diminutive], .xang [augmentative], e.g. boro 'brown' : boro.wer 'a little brown' : boro.xang 'more brown'; .ee- ~ .ii- [translative verbs], in xara 'black' : xal.ee- 'to become black', fulang 'red' : ful.ee- 'to become red', cexang 'white’ : cex.ii- 'to become white'; .ra- ~ .la- [id.], in kugo 'blue' : kugo.ra- 'to become blue', shera 'yellow' : sher.la- 'to become yellow', noghung 'green' : noghung.la- 'to become green'. Bonan also retains the old reduplicative construction of the type (sKa.gsar) fu.w fulang 'very red', she.w shera 'quite yellow', though it has dialectally lost its transparency, as in (gNyan.thog) howlang 'very red', shewrexang 'quite yellow'.

Final reduplication is used in Bonan to create generic words, both nouns and verbs. In the basic construction, the word to be generalized is followed by a rhyme beginning with m, e.g. asung 'livestock' : asung masung 'livestock and the like', noghei 'dog' : noghei moghei 'dogs and the like', uu- 'to drink' : conv. imperf. uuje muuje 'drinking or something', pece- 'to write' : conv. imperf. peceje meceje 'writing or something'. If the word itself begins with $m$, a preposited structure with the same consonantal skeleton but with the vowels replaced by $a$ is used, e.g. more 'horse' : mara more 'horses and the like', mide- 'to know' : part. perf. madesang midesang 'known or something'. Alternatively, the generalizing particle ma may be used, e.g. ghoca 'book' : ghoca ma 'books and the like'.

In addition to suffixally formed derivatives, Bonan has a large number of fixed phrases functioning as compound words. The functional status (part of speech) of such compounds is determined by the last component, while the other components can represent a variety of formal categories. In the most typical case, however, the headword is a noun, as in irte xolo 'breakfast' ['early meal'], ire kung 'man' ['male person'], awsang okung 'step-daughter' ['taken daughter'], igce du 'sister' ['elder-sister younger-sibling'], xolung kitang 'temperature' ['hot cold'].

## NUMBER AND CASE

Bonan has a regular inflexional plural marked by the suffix -la (Gansu Bonan -le). The singular is either unmarked or also, dialectally (gNyan.thog and Gansu), marked by the suffix -n'ge (after vowel stems) or -ge (after consonant stems), e.g. jentu 'pillow' (in
general) : sg. jentu-n'ge 'a pillow' : pl. jentu-la 'pillows', torung ‘head' (in general) : sg. torung-ge 'a head' : pl. torung-la 'heads'. The origin of the plural marker is uncertain, though it might derive from the suffixally used quantifier olung 'many' < *olan. In any case, the singular (singulative) marker derives transparently from the numeral stem + nege 'one' and could perhaps alternatively be analysed as a postposited (enclitic) indefinite article.

The plural in -la denotes, in principle, large numbers of individuals or objects. For small numbers (paucal), the ending -ghula is used, e.g. more 'horse' : pl. more-la '(many) horses' : more-ghula '(some) horses'. Diachronically, -ghula would seem to derive from the collective numeral +ghulla 'three together'. The material similarity between -la and -ghula would perhaps also allow the synchronic segmentation of the latter as -ghu-la (with -ghu-functioning as the actual paucal marker).

The case paradigm in Bonan comprises only four suffixally marked forms, which may be labelled as: connective, dative, ablative, and sociative. Of these, the sociative is a secondary development (shared with Santa), while the connective represents the merger of the original genitive and accusative cases. The case markers are loose suffixes with no morphophonology involved. The Gansu dialect shows minor innovations, which are also present in Qinghai Xiazhuang (Table 16.4).

The basic form, or the nominative case (which may be marked for number), functions as subject, nominal predicate, indefinite object, and adnominal attribute, e.g. ndencug doore noghei-n'ge [subject] wa 'there is a dog under the table'; ine sreyin [subject] batune ime [nominal predicate] 'this commune member is Batu's wife'; ce ime [indefinite object] awarce ba 'are you married?' (literally: 'have you taken a wife?'); alma rake [attribute + nominal headword] 'fruit wine'.

The connective case can be used both adnominally and adverbally. In adnominal use it expresses a variety of attributive relations (genitive), e.g. xiinag-ne gujung 'yak's neck', uder-ne wiile 'day's work', jomug-ne gir 'brick house'. It also occurs in combination with postpositions, e.g. ndrukang-ne imela 'opposite the hotel'. In adverbial use it expresses the direct definite object (accusative), e.g. ce tere jejang ghoca-ne abcer 'you, bring that thick book!'. However, even a definite object can occasionally occur without the connective suffix, leaving the rules of object marking somewhat vague (or, at least, unclarified).

The dative (dative-locative) and ablative cases are used adverbally in local and temporal expressions, e.g. (dat.) ojang hnyantug-da suuji 'he lives in gNyan.thog'; be tere sara-da irwa 'I came in that month'; (abl.) ghwar-sa jerghung kurla willegeji '[he] works from two [o'clock] till six [o'clock']'. The dative also expresses the indirect object, e.g. gha caazhi-ghula-da kilgudane . . . 'when the fox said to the children . . .', while the ablative (ablative-comparative) is used in the comparative construction, e.g. [pronominal example] in-sa samo more gina 'there is no horse cheaper than this one'. The ablative is

TABLE 16.4 BONAN CASE MARKERS

|  | function | marker | Gansu |
| :--- | :--- | :--- | :--- |
| conn. | genitive-accusative | $-n e$ | $-n e$ |
| dat. | dative-locative | $-d a$ | $-d e$ |
| abl. | ablative-comparative | $-s a$ | $-s e$ |
| soc. | sociative-instrumental | $-g h(w)$ ala | - ghale |

also required by some verbs, such as aye- 'to be afraid', e.g. be moghei-sa ayena 'I am afraid of snakes'. A lexicalized dative is present in kete 'home, at home' (< *ger-tü); the corresponding ablative is kete-sa 'from home' (with double declension: dat. + abl.).

The sociative (sociative-instrumental) case ending derives from the postpositional meaning 'together with' of the suffixally used collective numeral +ghwala 'two together'. In Qinghai Bonan, this form mainly denotes instrument, e.g. towa-ghala 'with a hammer', or also material, e.g. shangca-ghala '[made] of wood', while the function of a sociative (comitative) is filled by the postpositional construction genitive + hamde 'together' (< *kamtu), e.g. olung kung-la-ne hamde 'together with many people'. In Gansu Bonan (as well as in the Qinghai Xiazhuang subdialect) the sociative case is also used in the sociative (comitative) function, either with or without a postpositional complement.

Both the plural markers and the case endings, as well as the basic nominal stem, can be followed by the Common Mongolic third person possessive suffix -ne (<*-ni), as in muzhe-ne rkurce 'his cat is dead', borsugne awu-da-ne [dat. px sg. 3p.] oke 'give the cake to his son!'. The same element, when attached to adjectival nouns or numerals, functions as a substantivizer, e.g. fulang-ne srage, cexang-ne me srage 'the red one is good, the white one is not good'; nege-ne omceje, nege-ne pecejo 'one [of them] reads and the other writes'. There are no other possessive or reflexive forms in Bonan. As elsewhere in the Gansu-Qinghai complex, the single remaining possessive suffix is formally identical with the syncretic connective case ending -ne. The two suffixes can, however, be combined, e.g. more 'horse' : conn. px sg. 3p. more-ne-ne 'of his horse'.

## NUMERALS

In spite of its otherwise numerous Tibetan elements, Bonan retains most of the original Mongolic numerals. The items for the basic digits are: 1 nege, 2 ghwar, 3 ghurang, 4 dirang, 5 tawung, 6 jerghung, 7 dolung, 8 nimang (perhaps still phonemically niimang), 9 yersung ~ yesung. Of the original system for the tens, only 10 hawrang ~ harang and 20 xorung are preserved, while the rest of the items have been replaced by secondary compounds (digit x 10): 30 ghur.arang, 40 dir.arang, 50 taw.arang, 60 jergh.arang, 70 dol.arang, 80 nim.arang, 90 yers.arang, all of which show some dialectal variation in the details. Of the higher numerals, only 100 njung ( $<*$ jaxu/n, with an irregular nasal preinitial) is preserved.

It may be noted that all the numeral stems, with the exception of those for 'one' and 'two', end in the velar nasal $n g$ (originally the unstable */n). The numerals 10 hawrang and 20 xorung have, however, the additional variants haran+ resp. xoren+, which are used in the intermediate numerals for the ranges 11-19 and 21-29, respectively, e.g. 11 haran + nege, 15 haran + tawung, 23 xoren + ghurang, 27 xoren + dolung. In combination with the numeral 9 yersung, the shorter forms hara+ and xore+ are normally used: 19 hara + yersung, 29 xore + yersung.

In current Qinghai Bonan speech, the numerals from 'thirty' upwards are expressed by the corresponding Amdo Tibetan words, which are, for the tens: 30 zem.ce, 40 hzhiw.ce, 50 hngaw.ce, 60 drig.ce, 70 hden.ce, 80 hja.ce, 90 rgew.ce; and, for the powers of ten: 100 hja , 1,000 rtung $\sim$ rtung.so, 10,000 tre, 100,000 mbom, 1,000,000 saya $\sim$ tsaya, 10,000,000 zhiwa, 100,000,000 dungsher. In complex numerals, the hundreds are normally counted in Tibetan, while the tens and digits below 'thirty' are expressed by the native Bonan words, e.g. 101 hja.ra nege, 505 hnga.wja.ra tawung, 999 rge.wja.ra rgew.ce go.rge. In Gansu Bonan, the Chinese numerals 1,000 can and 10,000 wan are used.

Functioning as attributes to a noun, the basic numerals can either precede or follow their headword, e.g. dolung kung 'seven people', drewa ghwar 'two guests' (literally: 'guest two'). The numeral 1,000 rtung (as well as, apparently, the other numerals expressing the higher powers of ten) also functions as a noun and normally precedes the modifying digit, e.g. 1,000 rtung nege, 3,000 rtung ghurang. The concept of zero in the slot for the hundreds is expressed by the native postposition diire 'above, also', e.g. 1,001 rtung nege diire nege. Apart from terms for actual units (of length, area, weight, currency), there are no numeral classifiers.

Other numeral categories are formed either syntactically or by means of derivative suffixes. Syntactic formations include the ordinals, which are expressed by the Tibetan particle ang ~ angge, e.g. ang/ge nege 'first', ang/ge tawung 'fifth'. The native numerals can also completely be replaced by the Tibetan ones, e.g. (native) angge dolung $\sim$ (Tibetan) angge hdem.ba 'seventh'. In Gansu Bonan, a different formation is used, involving the third person pronoun njang preceded by the connective form of the numeral, e.g. nimang-ne njang 'eighth'. Alternatively, the local shapes of the Mandarin expressions can be used, e.g. $j i-y i$ 'first', $j i-e$ 'second'.

Approximatives can be expressed by juxtaposing two consecutive numerals of the same order, e.g. nege ghwar 'one or two', xorung zemce 'twenty or thirty', while distributives are expressed by repeating a numeral, e.g. ghurang ghurang 'three each'. Other approximative constructions are formed by using the postpositional phrases yaman'ge 'something' and nege kutungge (kutung 'how many'), or the preposition halcer 'about', e.g. hawrang nege kutungge, hawrang yaman'ge, halcer hawrang 'about ten'. A similar meaning can also be expressed by yanca manca 'about', from yanca 'over' and manca 'almost', e.g. hawrang yanca 'over ten', hawrang manca 'almost ten', hawrang yanca manca 'about ten'.

Multiplicatives can be formed by any of the words rkor, yang, tang 'time/s'. In combination with yang, the numeral stems lose the final nasal and end invariably in the vowel a, e.g. nega yang 'once', dira yang 'four times', tawa yang 'five times'. In combination with tang, by contrast, the stems for 'one' and 'two' add a final nasal: negen tang 'once', ghwaren tang 'twice'. Finally, in combination with rkor, the stems for 'three' and 'four' lose the final nasal, while the other stems seem to replace it by $r$ (possibly generalized from ghwar 'two): ghura rkor 'three times', dira rkor 'four times', tawer rkor 'five times', jerghar rkor 'six times'.

Suffixally formed numeral derivatives in Bonan comprise only the delimitatives in .xang, e.g. nege.xang 'only one', as well as the collectives in .la (Gansu Bonan .le). The latter incorporate several irregular stem alternations: ghwa.la 'two together', ghul.la 'three together', di.la 'four together', tawu.la 'five together', jerghe.la 'six together', dole.la 'seven together', nime.la 'eight together', yerse.la 'nine together', hawer.la 'ten together', xore.la 'twenty together' (with considerable dialectal variation). The collectives can also be used in the approximative constructions, e.g. hawerla nege kutungge 'about ten together'.

## PRONOUNS

The Bonan pronominal system generally preserves the Common Mongolic pronominal stems, but shows morphological complications and simplifications corresponding to the changes in the nominal paradigm. An important idiosyncracy shown by the personal (and personally used demonstrative) pronouns, as opposed to both regular nouns and other pronominal categories, is that there is a separate case form functioning as the genitive,

TABLE 16.5 BONAN PERSONAL PRONOUNS

|  |  | 1 p . |  | 2 p . |
| :---: | :---: | :---: | :---: | :---: |
| sg. | nom. | be |  | ce |
|  | gen. | mene |  | cene |
|  | dat. | nada |  | coda |
|  | abl. | nasa |  | cosa |
|  |  | excl. | incl. |  |
| pl. | nom. | man'ge | bede | ta |
|  | gen. | mane | bedane | tane |
|  | dat. | manda | bedanda | tanda |
|  | abl. | mansa | bedansa | tansa |

while the role of the accusative is filled by the dative (dative-accusative, a multifunctional oblique case). In all details of pronominal inflection, there is considerable dialectal variation.

As far as the personal pronouns are concerned, the original system seems to be best preserved in the sKa.gsar subdialect of Qinghai Bonan (Table 16.5). Here, the singular pronouns 1 p. be $(<* b i): 2$ p. ce $[\mathrm{tçi}](<* c i)$ have separate declensional stems for the connective ( ${ }^{*} \min -:{ }^{*}$ cin-) and the rest of the forms ( ${ }^{*}$ na-ma- : * ci-ma-), while the plural pronouns 1 p. incl. bede $(<* b i d a): 2$ p. ta $(<* t a)$ have a single declensional stem (*tan- : *bidan-) used for all the suffixally marked case forms. The original first person plural exclusive pronoun ( ${ }^{*} b a:{ }^{*}$ man-) is preserved only in the declensional stem man-, which also serves as the basis for the secondary nominative form man'ge.

Among the many dialectal deviations from this basic scheme, the following may specially be noted: In sGo.dmar and Xiazhuang, the presumably older stem sg. 2p. co(dat. coda : abl. cosa) has been replaced by ca- (dat. cada : abl. casa), apparently on the analogy of the first person pronoun. In gNyan.thog, on the other hand, the singular pronouns have the uniform declensional stems men- : cen- also in the dative (menda : cenda) and ablative (mensa : censa). Also in gNyan.thog, the pl. 1p. incl. stem bede appears with the declensional stems bede- (conn. bedene) : be- (dat. beda : abl. besa). In Xiazhuang and Gansu Bonan, all personal pronouns have the postpositional sociative in -ghale $<$ +ghale (be-ghale : ce-ghale : man'ge-ghale : bede-ghale : ta-ghale).

A further complication is that, in all subdialects, the plural pronouns may add the plural marker -la, yielding forms of the type (gNyan.thog and sKa.gsar) pl. 1p. incl. man'ge-la : excl. bede-la : 2 p . ta-la. The plural marker can also be present in the inflected forms, e.g. conn. man'ge-la-ne : bede-la-ne : ta-la-ne, dat. man'ge-la-da : bede-la-da : ta-la-da. In the second person pronoun, the plural marker plays a potentially distinctive role, in that the unmarked forms (and only these) can be used in addressing a single person in honorific speech.

Reference to the third person can be expressed by the demonstrative pronouns ine $\sim$ ne 'this' ( < *ene) and tere $\sim$ te 'that' ( $<$ *tere), or also nogo 'that one' (<*nögüxe), all of which follow the regular nominal declension, e.g. conn. ine-ne : dat. ine-da : abl. ine-sa : com. ine-ghale. As a pronominal feature, however, the dative form of the demonstratives can also function as the object case (alongside the connective). The corresponding plurals are ine-la 'these' and tere-la 'those', and correlative derivatives include: inde $\sim$ (Xiazhuang) nende 'here' vs. tende 'there', ingge- 'to do this way' vs. tengge- 'to do that
way', emtig ~ (Xiazhuang) nemtig 'this kind of' vs. temtig 'that kind of', as well as (with +nege 'one') emten'ge vs. temten'ge, emiin'ge 'this much' vs. temiin'ge 'that much'.

Another stem that is used in reference to the third person is ojang, dialectally also ajang $\sim$ ejang $\sim$ njang : pl. ojang-la (with corresponding variants). These seem to derive from the noun *ejen 'master', which in other languages of the Gansu-Qinghai complex is used as a reflexive pronoun. In Bonan, the function of the reflexive pronoun is filled by the stem goozhi $\sim$ gooji (from Chinese), dialectally also (Xiazhuang) goojang ~goonang $\sim$ goojinang (apparently containing the otherwise obsolete reflexive ending -nang). The original reflexive pronoun also survives as sg. orung (<* ̈̈xer-i-xe/n) : pl. orse $\sim$ ose, but it is mainly used in indirect speech in reference to the quoted speaker (reported first person). It can also occasionally replace the regular first person pronoun in direct speech.

The principal interrogative pronouns and related verbal and adverbial words are: ane 'which’ (< *ali), kang ‘who’ (< *ken), kudung ~ kutung ‘how many’ (< *kedün), kece (< *kejiye) ~ kece-xangnang 'when', hala 'where' (<*kaxa-), yang 'what' < *yaxu/n), yanggeda 'why', yamtig 'what kind of', yamten'ge 'how much' (with +nege 'one'), yangge- 'to do what'. The corresponding indefinite expressions are formed by the conditional and concessive converbs wisa, wida, wisada (all probably wii-), e.g. kang wisa 'whoever', yang wisa 'whatever', hala wisa 'wherever'. Another construction is present in yaman'ge < yama nege 'something' (< *yaxuma ~ *yamar + nege) and kama nege 'somebody'.

A special type of pronominal derivative is formed by the possessive pronouns in -ghang ( $<$ *-ki/n), which are substantival words functioning as nominal predicates. The possessive pronouns are based on the genitive stem of the personal pronouns, e.g. sg. 2 p. ce 'you' : gen. cene 'your' : poss. cen-ghang 'yours' (or possibly cen-e-ghang $<$ * cin- $U$ $k i / n)$. The corresponding interrogative pronoun is, however, based on the basic form of kang 'who' : poss. kang-ghang (or possibly kang-gang) 'whose'.

## VERBAL FORMS

The verbal conjugation in Bonan incorporates the four Common Mongolic formal categories: imperatives, finite indicative forms, participles, and converbs. The basis of the functional differences within each category varies from personal reference (imperatives) to temporal-aspectual (participles and finite indicative forms) and other circumstantial distinctions (converbs). A special category which Bonan shares with the other languages of the Gansu-Qinghai complex is perspective. Verbal suffixes are generally less loose than nominal ones, and, at least dialectally, some suffixes beginning with an obstruent show a trace of the Common Mongolic variation between strong and weak segments ( $g j$ vs. $k c=G J$ ).

In the imperative sphere, Bonan has only three forms, which refer to the three subject persons respectively. The unmarked basic verbal stem (plain imperative) refers to the second person, e.g. ce ghordelaje yawu 'you, go quickly!'. First person reference is expressed by the voluntative suffix (*)-ya (dialectally >-i), e.g. (gNyan.thog) be cenda nokorge-ya 'let me help you!'. The third person is referred to by the ending -ge, which seems to reflect the Common Mongolic permissive ( ${ }^{-}-g V$, with possible syncretic influence of other primary imperative forms), e.g. ojangghula yangge yarsa yare-ge 'let them do what they want'. The system is, thus, similar to that recorded from, for instance, Mangghuer.

In the non-finite sphere, Bonan retains the futuritive, perfective, and agentive participles, as well as a dialectally varying number of converbs and petrified quasiconverbs (Table 16.6).

TABLE 16.6 BONAN NON-FINITE VERBAL MARKERS

|  | function | marker |
| :---: | :--- | :--- |
| part.fut. <br> perf. | aorist-future | $-G u>-G e$ |
| ag. | past-perfective | actor noun |
| conv.mod. <br> imperf. | modifying | - cang |
| cond. | coordinative | co-ang |
| conc. | conditional-temporal | - -Je |
| term. | concessive | - sa |
| fin. | terminative | - sa $=d a$ |
| abtemp. | final | - tala, -sala |
|  | progressive | - la |
|  |  | - ser |

The participles typically act as adnominal attributes, e.g. part. fut. ode-gu uder 'the day to go', part. perf. ser-sang ghoca 'the book that has been studied'. The agentive participle, however, often occurs as an independent substantival noun, which can have a modifier in the connective case, e.g. ine-ne mide-sang 'the one who knows this' (functionally either accusative: 'the one knowing this', or genitive: 'the knower of this'). The perfective participle can also be used as a nominal predicate, with or without a copula, e.g. nogo kung ode-sang 'that person has gone'. The temporal reference of the participles can vary. The perfective participle, in particular, can also occur in a futuritive function, as in magshe bede ghwala jalghasung war-sang yi 'tomorrow we shall [go and] catch fish'.

The modal converb retains the simple marker -ng $\left(<^{*}-n\right)$ only in the Gansu dialect, and even there the rules of vowel phonotax require the replacement of any stem-final vowel by $a$, e.g. (Gansu) njase kel-ang yudo 'they went away speaking'. In Qinghai Bonan, the suffix variant -ang has received an initial hiatus-filling palatal glide, yielding $/ y$-ang, e.g. laa/y-ang xarajo '[he] cried and cursed'. Finally, in some subdialects, the suffix has lost the final nasal, yielding -ya (with nothing left of the original substance), as in (gNyan.thog) ndi-ya uujo '[he] ate and drank'. The modal converb typically expresses a minor modifying action taking place either before or at the same time as the main (finite) action. In practice, the difference with regard to the imperfective converb is minimal.

The imperfective converb has the marker -Je $\left(<*_{-} J i\right)$ and expresses an action coordinated with another action, e.g. daara-je olorjo '[he] is freezing and starving'. It can, however, also imply a serial ordering of actions, e.g. (Xiazhuang) njang xarne ghwa-je yame jaldo '[he first] washed his hands and [then] prepared food'. While this form normally shares the subject of the following (finite) verb, there are occasional examples of subject change, e.g. (Xiazhuang) ce re-je be bisedo 'I am glad that you came' (literally: 'you came and I am glad').

The conditional converb in -sa (Xiazhuang and Gansu -se) expresses conditional or temporal subordination, e.g. magshe or-sa tege ode 'if it rains tomorrow, do not go!'. The same form, or possibly a homonymous form based on the Common Mongolic expanded optative (*-sU-xA.i), is also used independently (elliptically) to express a wish or intention, e.g. be nege kil-sa 'let me say something' (literally: 'if I say something'). The concessive converb is formed from the conditional converb by adding the particle $+d a$, with the word boundary still remaining prosodically marked, e.g. (Xiazhuang) conv. cond. be
hor re-se njang ayedene 'if I get angry, he will be frightened', conv. conc. ce hor rese + de be le ayem 'even if you get angry, I will not be frightened'.

The terminative and final converbs in -tala (Gansu -tela $\sim$-tele) and -la (-le), respectively, are used in their Common Mongolic functions, e.g. conv. term. (Gansu) ta xoro ol-tele saaghe 'you, wait until it becomes evening'; conv. fin. ojang se aw-la odo 'he came to fetch some water'. Occasionally, the terminative marker merges with the final marker into -la, as in kur-tala ~ kur-la 'until'. Due to a confusion with the conditional marker -sa, the terminative converb can also end in -sala (-sele), e.g. be cenda er-sala saaghaya 'let me wait until you come!'.

The abtemporal (quasi)converb in -ser ( $<{ }^{*}-g_{S} A-x A r$ ) expresses the continuity or progression of action and is normally used in combination with the auxiliary suu- (dialectally seu-) 'to be in the action of' ( $<$ *saxu- 'to sit'). This form is attested only in Xiazhuang and Gansu, e.g. (Gansu) bede njasene saaghe-ser suuji 'we are (continuously) waiting for them'. In the other subdialects of Qinghai Bonan, the same function is expressed by the imperfective converb, or also by the unmarked verbal stem (sequential converb in -Ø), followed by the required form of the verb suu-, e.g. (gNyan.thog) bede gerkelangsane dawu zhawa wiilege-je suuji ~ wiilege-Ø suuji 'we have been working together since last night'.

There are also several secondary quasiconverbial structures based on the participles. The local case forms of the participles are regularly used to indicate temporal or causal relationships, e.g. (part. perf. dat.) ce ersang-da be ngga hgageji 'when you came, I was very glad'. The futuritive participle serves as the basis for the complex forms in -gu-ma 'as soon as', -gu-je id. (<*-gu+ge-je 'intending to'), and -gu-re-da 'while' (with -re- 'to come'), e.g. (Gansu) man'ge njigede ace-guma yudo 'as soon as we had loaded the donkey, we left'; (Qinghai) tere kung er-gu-je inesang ojangda ca rcaljo 'as soon as he came, the family ['these respected ones'] cooked tea for him'; (Qinghai) ojang omce-gu-re-da pecejo 'while reading, he is writing'. Another secondary converb ends in -texang, e.g. (Gansu) njang re-texang be hcedeye 'as soon as he comes, I will go!'.

In the finite indicative sphere Bonan retains reflexes of the Common Mongolic narrative, durative, terminative, and resultative forms. All of these are synchronically used mainly in a temporal function (Table 16.7). From the formal point of view, the narrative marker appears to represent the primary short variant of the suffix ( ${ }^{*}-m$ instead of *-mUi), while, somewhat incongruently, the durative marker represents the secondarily shortened variant of the original suffix ( ${ }^{*}-n A<{ }^{*}-n A m \sim{ }^{*}-n A i$ ).

The narrative and durative are mostly interchangeable and normally refer to the future tense, e.g. magshe be ode-na ~ode-m 'tomorrow I will go'. Dialectally, however, only certain types of verb seem to be used with the durative ending, while the narrative ending has no such restrictions. The two past tense forms have probably slightly different

## TABLE 16.7 BONAN FINITE TENSE-ASPECT MARKERS

|  | function | marker |
| :--- | :--- | :--- |
| narr. | present-future | $-m$ |
| dur. | present-future | $-n a$ |
| term. | simple past |  |
| complex past | $-w a>-o$ |  |
|  |  | $-(r-) \mathrm{Je}$ |

functions (here termed simple vs. complex), though it is not immediately clear what the difference is. In many concrete examples, the two forms are used, as it seems, in a more or less identical function, cf. e.g. (Gansu) njang aameghale yud-o [term.] 'he left with [his] mother' vs. njase gude yude-je [res.] 'they left yesterday'. It is also not clear how these forms differ in function from the predicative use of the perfective participle.

## THE CATEGORY OF PERSPECTIVE

As in Mongghul and Mangghuer, the category of perspective (also known as 'evidentiality') in Bonan represents an areal feature ultimately connected with the Tibetan impact on the local non-Tibetan languages. This category is differentiated into what may be termed the subjective and objective perspectives. The forms expressing the subjective perspective have normally (in the unmarked case) a first person referent, while the forms expressing the objective perspective have a second or third person referent, without regard to the category of number. The personal references of the forms can, however, also be reversed (implying a marked case).

The available information suggests that perspective in Bonan is not formally incorporated into the system of the simple temporal-aspectual suffixes of the finite conjugation. Rather, the distinction is primarily only present in the copular and existential verbs. From the latter, it has been secondarily extended to two complex finite forms, which may be termed the periphrastic progressive and future (Table 16.8).

The basic existential verb has the forms subj. wi (probably more currently phonemized as wii) : obj. wa, which seem to represent a syncretic merger and secondary (re)differentiation of the original copula *bUi and the auxiliary *ba(y)i- 'to be'. The existential verb also serves as the basis for the emphatic copula with the forms subj. mbi (or mbii) : obj. mba, which additionally appear to include a prefixed trace of the pronoun *mön 'that very' (used as a copula in Mongol proper). The existential verb is probably also the source of the copular set subj. $y i$ (or $y i i$ ) : obj. $o(<* w a)$, though the details of this differentiation remain somewhat unclear. The distribution between the existential set wi : $w a$ and the copular set $y i: o$ is also open to different interpretations, and there may be dialectal differences. For the copular shape $y i$ the possibility of Tibetan influence cannot perhaps be ruled out (cf. the Amdo Tibetan copula yen).

In principle, the copular set, including the emphatic copula, is used with a nominal (including adjectival) predicate, while the existential set is used in existential sentences, including the possessive construction, e.g. (Xiazhuang) (cop. subj.) ne mene gar yi 'this is my house'; (cop. emph. subj.) ne mene more mbi 'this is my horse'; (cop. obj.) njang

TABLE 16.8 BONAN PERSPECTIVE MARKERS

|  | subjective | objective |
| :--- | :--- | :--- |
| exist. | $w i$ | $w a$ |
| cop. | $y i$ | $o$ |
| cop. emph. | $m b i$ | $m b a$ |
| exist. neg. | $g i(-w a)$ | $g i-n a$ |
| cop. neg. | $s h i$ | $s h o(-w a)$ |
| progr. periphr. | $-J i$ | $-J o$ |
| fut. periphr. | $-G i$ | $-G w a>-G o$ |

janig o 'he is Chinese'; ne gar hanisa onder o 'this house is the highest of all'; (exist. subj.) mene agu yadzede wi 'my daughter is in Xunhua'; (exist. obj.) cade temer more wa 'you have a bicycle'. The copular set is, however, also used with some converbs, while the existential set seems to be combined with the predicatively used perfective participle e.g. (conv. + cop. subj.) be xolone uutexang yi 'I have just had my breakfast'; (part. perf. + exist. subj.) be lawrangde hcesang wi 'I have been to bLa.brang'.

The negative existential subj. gi (perhaps gii) or gi-wa (gii-wa) : obj. gi-na (gii-na, dialectally gi-ne or gii-ne) transparently reflects the Common Mongolic negative noun *ügei. The negative copula subj. shi (or possibly shii) : obj. sho (<*shi+o) ~ sho-wa likewise derives from the Common Mongolic negative particle *bisi. The distribution of these elements is basically analogous to that of their affirmative counterparts, e.g. (Xiazhuang); (exist. neg. subj.) nade more gi 'I do not have a horse'; (exist. neg. obj.) bedane diwade bedane gacene le medecung gine 'in our village there is no one who would not understand our speech'; (cop. neg. subj.) njang lizhiba sho 'he is not a cadre'.

Because of their general lack of verbal morphology and their inherent differentiation for the category of perspective, the copular and existential verbs could perhaps synchronically also be analysed as perspective particles. The existential stem wi (in this case invariably < *bayi-) retains, however, still part of its non-finite verbal paradigm, in that it has all the three participles and a few converbs: part. perf. wi-sang : fut. wi-gu (also conv. wi-gu-ma) : ag. wi-cang, conv. cond. wi-sa : conc. wi-sa $=d a$. In the Gansu dialect, the stem $y i$ is also attested in the fully lexicalized converbial forms conv. cond. yi-se 'if' : conc. $y i$-se $=d a$ 'although'. All of these non-finite forms lack any notion of perspective.

The periphrastic progressive in subj. -Ji (possibly -Jii) : obj. - Jo and future in subj. -Gi (possibly -Gii) : obj. -Go (gNyan.thog -Gwa) are based on the imperfective converb in $-J e$ as well as the futuritive participle in $-G u$ (Xiazhuang $>-G e$ ), to which the clitically used copular set $y i: o\left(<*^{*} w a\right)$ has been added. These two complex forms serve as the most common expressions for the present and future tenses of the indicative conjugation, e.g. (Xiazhuang) (progr. periphr. subj.) ce resangde be bise-ji 'I am glad that you came'; (progr. periphr. obj.) fi jore kung nege yu-jo '[there] is a man going in [along] the forest'; (fut. periphr. subj.) magshe cawsung se orse be hce-gi 'if it does not snow tomorrow, I will go; (fut. periphr. obj.) njang cenazhe re-go 'he will come the day after tomorrow'.

Due to the perspective reference they contain, the periphrastic progressive and future seem to be replacing the simple narrative and durative forms, which are undifferentiated with regard to the category of perspective. Dialectally, there is also a third periphrastic form ending in subj. -sang-ni : obj. -sang-no, based on the perfective participle, e.g. (Xiazhuang) (subj.) be hkude lang kile hce-sang-ni 'yesterday I went to hand over grain'; (obj.) ne pejigne wang stuji peje-sang-no '[it was] secretary Wang [who] wrote this letter’. The functional status of this complex form remains to be clarified, but from the formal point of view it has to be noted that the elements $-n i:-n o$ are perhaps not simple traces of the copula, but also contain the possessive suffix -ne, which here seems to function as a substantivizer.

Diachronically, the periphrastic progressive is the form that may be assumed to have the longest history in Mongolic. It is therefore not surprising that the construction conv. imperf. + wi (wii < *bayi-) is also attested in Bonan in a secondary non-finite form, ending in $-J-i-g u$ (possibly $-J-i i-g u<*_{-} J i+b a y i-k u$ ) and functioning as a progressive participle, as in mene mer-c-i-gu mamug datrang wi 'what I am wearing is a cotton coat'. The progressive participle is not used as a nominal predicate, which suggests that it possibly remains outside of the regular participial system. On the other hand, as a nominal form of wi(-), it is indifferent with regard to the category of perspective.

## AUXILIARY VERBS

In addition to the copular and existential verbs (which can apparently also be analysed as perspective particles), Bonan has several other verbs which clearly function as auxiliaries, conveying various meanings of aspectuality, directionality, or modality. Most auxiliaries have close parallels in the other languages of the Gansu-Qinghai complex, and they typically derive from well-known Common Mongolic sources.

The Bonan auxiliaries may be divided into three main groups: (1) those expressing directional or aspectual relationships, e.g. er- $\sim r e$ - 'to come; to begin' ( $<*$ ire-), xar- 'to come out; to begin' (< *gar-), od- 'to go; to finish' (<*od-), ware- 'to finish' (< *bara-), suu- 'to sit; to continue' (<*saxu-); (2) those expressing ability or necessity, namely rta'to be able' (<*cida-), yada- 'to be unable' (<*yada-), ol- 'to become; to be possible' ( $<$ *ol- and/or *bol-), ker- 'to be necessary' ( $<$ *kere-); and (3) those indicating the beneficiary of the action: aw- 'to take; to do for oneself' (<*ab-), oke- 'to give; to do for somebody else'.

In the typical auxiliary construction, the auxiliary is preceded by the semantic main verb in a converbial form. The most common form in these cases is the imperfective converb, e.g. xara-je erena '(he) begins to curse'; ndangne nee-je oke '(please) open the door (for me)'; hol-je ile olna '(he) is not able to run'. In some cases, other converbs, notably the final converb, can be used, e.g. xara-la xarto '(he) began to curse'. However, the auxiliaries ware-, suu-, ker-, rta-, and yada- can also be preceded by the zero-marked verbal stem, which in this particular construction may also be analysed as a suffixally unmarked converbial form (sequential converb), e.g. be yegine pece-Ø waro 'I finished writing the letter'; tere kung dawu hol-Ø suujo 'that person is still running'; ce diiso nimangsa ngguuda kur-Ø kerna 'you must arrive before eight o'clock'.

A special formative expressing the perfective aspect, synchronically a mere suffix but diachronically probably to be connected with the auxiliary *od- 'to go' is -de- or (gNyan.thog) -te-, as in (gNyan.thog) oke- 'to give' : perf. oke-te-, (Xiazhuang and Gansu) kel- 'to tell' : perf. kel-de-, yu- 'to go' (< 'yabu-) : perf. yu-de- . Most probably, the construction originally also included a converb suffix, possibly that of the perfective converb (otherwise unattested in Bonan), e.g. perf. term. yu-d-o '(they) went' < *yabu$x a d+o d-b a$. Parallels are known from the other languages of the Gansu-Qinghai complex, most transparently from Shira Yughur. There are indications that some other auxiliaries, notably $d a$ - 'to be able', can also in some dialects of Bonan be synchronically interpreted as suffixes, e.g. re $+d a->$ (Gansu) re-da- ' to be able to come'.

A special type of auxiliary is formed by the quotative verb ge- 'to say', which shows that the preceding clause involves reported speech, often stressed by the presence of other indicators of verbal expression, such as kil- 'to speak' or asexa- 'to ask'. Interestingly, however, the quotative verb stem can also be reduced to zero, leaving only its verbal endings functioning as quotative markers, e.g. manba mene ner cexiirce Ø-jo, yang hdasa mene hungda mung wa Ø-ji kiljo 'the doctor said that I looked pale (literally: 'my face was white') and that smoking is bad for my health'; ghwilajegune yanggeje od kerna Ø-sa . . . 'as to [literally: 'when saying'] how to make an offer of marriage . . .'. The quotative verb is also used after descriptive expressions, as in tinggerig jala jala Ø-je orjo 'it rained continuously' (literally: 'the sky rained saying: jala jala').

A somewhat similar case of zero-marked verbal stem is present in the clause-final particle part. perf. Ø-sang : poss. Ø-sang-ne, also converbially conv. imperf. Ø-sang-je, which indicates reference to the past tense, e.g. tere ghurang hungne ngguune dondag sang 'it (was an incident that) took place three years ago'; tere ghurang hungne ngguune
dondag sang-je ide tege kil 'since it happened (already) three years ago, do not mention it now!'; terna yang bedela hdign'ge ujeto sang-ne 'we had a difficult time then'; This element comes close to the category of copulas, and it may, indeed, represent a lost copular stem, possibly simply wi-.

## SYNTAX

The basic unmarked word order in Bonan is subject-object-predicate (SOV), but deviations from this pattern are possible for the purpose of topic marking, cf. e.g. (unmarked SOV) cena nogheine joorje 'the wolf bit the dog' vs. (marked OSV) nogheine cena joorje 'the dog was bitten by the wolf'. In sentences beginning with the object, the predicate is occasionally expressed by a causative derivative, signalling the emergence of a passive, though the object is still in the connective form, e.g. (OV) gha ghwala-ne war-gha-rje 'two foxes were caught' (literally: 'made themselves caught'). A modifier normally stands before its headword, but, again, deviations are possible. Adverbs of degree, for instance, can also follow an adjectival noun, as in ngga yagsa ~yagsa ngga 'very beautiful'.

As in other Mongolic languages, negation and interrogation in Bonan are expressed by syntactic particles. For negation, several particles are used, depending on what particular form is to be negated. The postpositionally used negative copula shi : sho(-wa) negates nouns, including participles, e.g. (part. fut. + neg. cop. subj.) bede kelge shi 'we will not tell'. Participles, as well as converbs, can, however, also be negated by the negative existential gi(-wa):gi-na. The negative existential is also used to negate the periphrastic progressive and future, in which case the synthetic construction is replaced by an analytic one, e.g. (conv. imperf. + neg. exist. subj.) be taa-je gi 'I am not sleeping', (conv. imperf. + neg. exist. obj.) ojang taa-je gina 'he is not sleeping'.

In the finite conjugation, four prepositional negative particles are used: (i)le (<*ülü) for the present-future forms (narrative and durative), (i)se ( $<$ *ese) for the past forms (terminative and resultative), and tege ( $<$ *bitegei) or be $(<* b u \sim * b u u$, preserved only in the sGod.mar subdialect of Qinghai Bonan) for the imperatives, e.g. (narr.) kama nege da kurgu ndaaje ile olem 'no one should come too late'; (dur.) magshe ojang tende ile odena 'tomorrow he will not go there'; (term.) rkude ojang ende ise erwa 'he did not come here yesterday'; (imp.) tege dangla 'do not stop [them]!'; (sGo.dmar) ce be er 'you, do not come!'.

Question is indicated by the Common Mongolic interrogative particle $u(<*=U)$, though in Gansu Bonan the Chinese particle $m a$ also occurs. The particle $u$ regularly amalgamates with a preceding finite form, yielding: narr. $-m-u$, dur. $-n-u$, term. $-w-u>$ $-u$, dialectally also conf. $-j-u$, e.g. narr. interr. ode-m-u 'will [he] go', dur. interr. ode-n-u id., term. interr. (gNyan.thog) ir-w-u>(Xiazhuang) $r$-u 'did [he] come' ( $<*$ ire-be+ $\ddot{u}$ ), conf. interr. (Xiazhuang) $h-c-u$ 'did you go' $(<* o c i-j i-u)$. The existential wi and the copular mbi yield exist. interr. wu resp. cop. emph. interr. mbu, e.g. ce tilang ghaghalje wu 'are you chopping wood?', magshe ce tilang ghaghalgwa mbu 'tomorrow you will chop wood, won't you'. In sentences containing an interrogative word, no corrogative particle is used, e.g. tane kete kutung kung wi 'how many people are (there) in your house'.

Other syntactic particles play a role in the discourse. For instance, the particles $y a$ and $r i$ (both from Tibetan) as well as sii, express certainty or emphasis, e.g. ta ghwala nege hung olwa ya 'you two were really born in the same year'; xolung wa ri 'it is hot, indeed'; be tenggeje odeje sii 'I went that very way'. Uncertainty or assumption is expressed by ba or yo, e.g. temten'ge mba ba 'it may be so', ojang kete haajorje yo 'he has probably been back home'. Imperative forms can be reinforced by the particles ree
and see, e.g. man'gela yawuya ree 'let us go!', ce nege uje da ree $\sim$ ce nege uje da see 'please have a look!'. The latter have been tentatively explained (Chen Naixiong) as the prescriptive and desiderative forms of some subsequently lost verbal stem (another zero-stem), i.e. Ø-ree $<*^{*}$-xArAi vs. Ø-see $<*$-xAsAi. It should, however, be noted that the prescriptive and desiderative are forms otherwise unattested in Bonan.

## LEXICON

Owing to its prolonged and intensive interaction with the neighbouring non-Mongolic languages, the influence of the written languages of Buddhism and Islam, and the almost total bilingualism or trilingualism of its speakers, Bonan has absorbed considerable amounts of alien vocabulary. According to a count made in the 1950s, only $c .23$ per cent out of a total of 3,020 lexical items in Gansu Bonan were of Mongolic origin. A similar count for Qinghai Bonan yielded a proportion of $c .22$ per cent out of a total of 3,032 words. In a more recent survey, based on a somewhat larger corpus comprising 3,596 words of Qinghai Bonan, the proportion of native lexical items was established at $c .29$ per cent.

It goes without saying that the native lexical items dominate the basic vocabulary, including terms for body parts and body functions, basic actions, colours, pronouns, postpositions and other grammatical items, as well as the basic numerals. Bonan also has Mongolic terms for many domestic animals and, importantly, for several agricultural concepts. On the other hand, the kinship terminology seems to have undergone considerable changes under the impact of the neighbouring languages. Altogether, a count based on $c .700$ items of basic vocabulary yields a proportion of $c .42-4$ per cent of native words in both dialects. The text frequency of the native vocabulary is, of course, even higher.

Correspondingly, the cultural vocabulary connected with recent and regional phenomena, including religion, is almost completely non-Mongolic in Bonan, with Tibetan and Chinese being the two most important source languages. The relative roles of Tibetan and Chinese vary considerably between the dialects and subdialects. Generally, Qinghai Bonan has a larger proportion of Tibetan loanwords, ranging from $c .43$ per cent in Xiazhuang to $c .54$ per cent in gNyan.thog, while the figure for Gansu Bonan is only c. 17 per cent, as counted from the total recorded lexical corpus. The proportion of Chinese loanwords, on the other hand, ranges from as low as $c .9$ per cent in gNyan.thog to $c .14$ per cent in Xiazhuang and to over 40 per cent in Gansu Bonan.

Apart from the Tibetan and Chinese elements, there are a few easily recognizable Turkic loanwords, like yagsa 'good', borrowed from Salar, as it seems. These, as well as the possible elements of unknown origin in Bonan, remain to be investigated in the future. Another issue requiring a detailed diachronic analysis is the dating of the Tibetan loanwords. Most of the Tibetan elements in Bonan are, of course, very recent, so recent that they are 'reborrowed' on a daily basis in the speech of bilingual individuals. However, there must also be older layers which are perhaps distinguishable by phonological or semantic criteria.

One phenomenon which seems to distinguish some of the Tibetan elements in Bonan from their regular Amdo Tibetan counterparts is the frequent sporadic nasalization of the non-nasal preinitial $h$, as in ndom 'spider' $<$ *hdom (Amdo hdom, Written Tibetan sdom), (Gansu) nggar vs. (Qinghai) hgar 'temple’ < *hgar (Amdo hgar, Written Tibetan sgar). Since similar variation (nasal prothesis) is encountered in native Bonan words, it may reflect internal tendencies in the language. It may, however, also have a background in the local Amdo Tibetan dialects.

## REFERENCES AND FURTHER READING

Buhe and Liu Zhaoxiong (1982) Baoanyu Jianzhi [Zhongguo Shaoshu Minzu Yuyan Jianzhi Congshu], Beijing: Minzu Chubanshe.
Chen Naixiong [Cev Nai Siyuivg] et al. (1985) [published 1986] Buu vAv Galav u vUigas (Baoanyu Cihui) [= Muvgqhul Tuirul uv Gala vAyalqhuv u Sudulul uv Cuburil / Menggu Yuzu Yuyan Fangyan Yanjiu Congshu 011], Guigaquda.
Chen Naixiong [Cev Nai Siyuivg] et al. (1986) [published 1987] Buu vAv Galav u vUigae Galalgae jiv Materiyal (Baoanyu Huayu Cailiao) [= Muvgqhul Tuirul uv Gala vAyalqhuv u Sudulul uv Cuburil/Menggu Yuzu Yuyan Fangyan Yanjiu Congshu 012], Guigaquda.
Chen Naixiong [Cev Nai Siyuivg] and Chingeltei [Cavggaldai] (1986) [published 1987] Buu vAv Gala bae Mungqhul Gala (Baoanyu he Mengguyu) [= Muvgqhul Tuirul uv Gala vAyalqhuv u Sudulul uv Cuburil/ Menggu Yuzu Yuyan Fangyan Yanjiu Congshu 010], Guigaquda.
Chen Naixiong (1994) 'Baoanyu ji Qi Fangyan Tuyu', in Edward H. Kaplan and Donald W. Whisenhunt (eds) Opuscula Altaica: Essays Presented in Honor of Henry Schwarz, Bellingham, Washington: Western Washington University, pp. 265-85.
Janhunen, Juha and Kalsang Norbu (2000) 'Aspects of Amdo Tibetan phonology', Studia Orientalia 85: 249-76.
Lee-Smith, Mei W. (1996) ‘The Hezhou Language’, in Stephen A. Wurm, Peter Mühlhäusler, and Darrell T. Tryon (eds) Atlas of Languages of Intercultural Communication in the Pacific, Asia, and the Americas [= Trends in Linguistics, Documentation 13], vol. II.2: 865-73.
Lee-Smith, Mei W. and Stephen A. Wurm (1996) 'The Wutun Language', in Stephen A. Wurm, Peter Mühlhäusler, and Darrell T. Tryon (eds) Atlas of Languages of Intercultural Communication in the Pacific, Asia, and the Americas $[=$ Trends in Linguistics, Documentation 13], vol. II.2: 883-97.
Potanin, G. N. (1893) Tangutsko-tibetskaya okraïna Kitaya i central'naya Mongoliya, vols. 1-2, S.-Peterburg: Izdanie Imperatorskago Russkago Geograficheskago Obshhestva.

Roerich, Georges Nicolas (1958) Le parler de l'Amdo: Étude d'un dialecte archaïque du Tibet [= Serie Orientale Roma 18], Rome: Istituto Italiano per il Medio ed Estremo Oriente.
Todaeva, B. X. [Ch.] (1963) 'Einige Besonderheiten der Paoan-Sprache', Acta Orientalia Hungarica 16: 175-97.
Todaeva, B. X. (1965) 'Baoan’, in Narody mira: Narody Vostochnoi Aziï, Moskva \& Leningrad: Nauka, pp. 665-6.
Todaeva, B. X. (1966) Baoan'skii yazyk, Moskva: Nauka (AN SSSR: Institut narodov Azii).
Todaeva, B. X. (1997) 'Baoan'skii yazyk', in Mongol'skie yazyki - Tunguso-man'chzhurskie yazyki - Yaponskii yazyk - Koreiskii yazyk, Yazyki Mira, Moskva: Rossiiskaya Akademiya Nauk \& Izdatel'stvo Indrik, pp. 29-36.

