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*Intertwined model of syntactic borrowing in the Gansu-Qinghai linguistic area*

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### ABSTRACT

This paper studies two grammatical cases in the Gansu-Qinghai linguistic area. Accusative-dative, a syncretic case largely attested in Sinitic languages, is also found in Bao'an and Tu, even if in a very limited use. The Sinitic languages have acquired this syncretic case marking through pattern reduplication due to language contact, while Bao'an and Tu have this innovation owing to the internal mechanisms of their language. The second phenomenon concerns possessor constructions in which the subject-possessor must be marked by a dative case. This marking is seen in all non-Sinitic languages in the Gansu-Qinghai linguistic area and has begun to appear in Sinitic languages. Multiple paths for borrowing between and inside languages in this area present an intertwined model of language borrowing. Linxia City and its closest counties should be the spreading center of these new syntactic devices, and Muslim populations speaking different languages may form a spreading net.

### KEYWORDS

syncretic case, possessor construction, intertwined model, spreading net

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# *Intertwined model of syntactic borrowing in the Gansu–Qinghai linguistic area\**

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## **1 Introduction**

The Gansu–Qinghai frontier region presents a linguistic area in which languages belonging to different language families share common syntactic features. The region focused on in our studies is located around the Gansu–Qinghai border and partially overlaps the Silk Road. The Gansu–Qinghai area is inhabited by different ethnic groups: Amdo Tibetan, Chinese (Han), Hui (Chinese Muslims), Dongxiang (Santa), Bao’an (Baonan), Tu (Monguor),<sup>1</sup> Kangjia, Salar, etc. As is well-known, the Dongxiang, Bao’an, Monguor, and Kangjia languages belong to the Mongolic group, while Salar is part of the easternmost branch of Turkic languages, and the Amdo Tibetan group is classified in the Tibetic languages.

Many scholars have studied languages spoken in this area, such as Zhang (1980, 2006), Wang and Wu (1981), Liu (1981), Buhe and Liu (1982), Ma (1982, 1985), Li (1983, 1985), Ibulaheimai (1985), Chen (1986), Li (1987), Qinggertai (1988), Rindzin Wangmo (1991), Wang (1993), Jia (1991), Dwyer (1992, 1995), Zhu et al. (1997), Slater (2003a, 2003b), Dede, (2003, 2007), Nugteren and Roos (2006), Janhunen (2006, 2007, 2012), Zhong (2007), Janhunen et al. (2008), Xu (2011, 2014, 2015, 2018), Djamouri (2013, 2015), Yang (2014), Peyraube (2015, 2017) and Zhou (2019) among others. Dwyer (1995: 144 note 2) identifies the northwest of China as a *Sprachbund* with a large geographic region. Slater (2003a), who works on Mangguer (Tu in Minhe), proposes a “Qinghai–Gansu Sprachbund.” Janhunen (2004) agrees with this point of view, using the term “Amdo Sprachbund” (Amdo is one of the major Tibetic languages). In this paper, I will use the term “Gansu–Qinghai linguistic area” including non-Sinitic languages as well as Sinitic languages (Chinese languages including Hui/Muslim populations speaking Chinese) spoken at the borders of these two provinces.

What is happening in Gansu and Qinghai is of great interest for general linguistics. Sinitic languages show a clear convergence towards non-Sinitic languages: borrowing is not limited to words and word orders, but also includes morphology, and even parts of the phonological system. Sinitic languages in this area, like the non-Sinitic languages, begin to use case marking, object-verb (OV) word order, alien suffixes, and also begin to lose their tone systems in some locations; all of these changes are completely opposite to Sinitic languages spoken out of the Gansu–Qinghai

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<sup>1</sup> Tu or Monguor, including Mongghul in Huzhu and Mangguer in Minhe. Both are spoken in Qinghai.

area. Sinitic languages tend to copy syntactic devices from non-Sinitic languages, while non-Sinitic languages tend towards lexical borrowing from Sinitic languages (Xu 2017, 2018).

In this paper, we will observe an intertwined model of syntactic borrowing.<sup>2</sup> This means that alien syntactic elements may come from different languages that belong to different language families. In other words, new syntactic elements introduced into a target language often have origins from more than one language. At the present stage, languages that were dominant during different historical periods may no longer have their dominant status. This intertwining has been attested not only between Sinitic and non-Sinitic languages, but also among languages from which each of these groupings. One of the problems we will deal with in this paper consists of a syncretic case, i.e. accusative (ACC) and dative (DAT). The second phenomenon we will study is closely linked to the first one; possessor constructions in Sinitic languages have progressively acquired DAT marking, which is largely attested in non-Sinitic languages.

After this introduction, we will discuss in section 2 the extended use of the syncretic case of ACC and DAT that is attested in Sinitic languages and found partially in the Tu and Bao'an languages. In section 3, the widespread use of possessor constructions in which the possessor has to be marked by DAT will be analyzed. A tentative explanation about the spreading of these new syntactic devices will be proposed in section 4. Finally, preliminary concluding remarks will be given at the end.

## **2 The Syncretic Case ACC-DAT in the Gansu-Qinghai Area**

In our target region, Sinitic languages (including their local varieties, i.e. Wutun, Tangwang and Gangou), have all adopted *accusative alignment* instead of *ergative alignment*. These two markings constitute core case (accusative and ergative) markings. These marking strategies are both seen in the Gansu-Qinghai area. It is evident that the ACC marking in Sinitic languages is borrowed from Mongolic or Turkic languages, but not from Tibetan languages, which are the sole languages using ergative (ERG) marking in this linguistic area.<sup>3</sup> Wutun is profoundly influenced by Amdo Tibetan, but it has adopted ACC marking like other Sinitic languages, instead of ERG marking. However, it is worth noting that the two markings, i.e. ACC and ERG, should have competed several times throughout the past in Wutun, and that ACC system finally became the winner (see Xu 2021). This fact can be found in early investigations by pioneering scholars. Even in research from the 1990s, the competition between ERG and ACC markings can be seen in examples by Rindzin Wangmo (1991: 13) in Hanjiaji (also named Linxia County), close to Linxia City, with both markings coexisting in his investigation.<sup>4</sup> Except for his work, all published documents about the Linxia dialects report the ACC marking. Undoubtedly, the mainstream tendency in this area is the generalization of ACC alignment.

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<sup>2</sup> Only syntactic borrowings are considered here. Lexical borrowing does not play a decisive role in typological change in a language (Xu 2017).

<sup>3</sup> This does not exclude unknown dialects close to the Tibetan zone that could use ERG marking.

<sup>4</sup> Cf. examples by Ringdzin Wangmo (1991: 15-16), who takes ACC marking to be “passive” marking.

## 2.1 The Syncretic Case ACC-DAT in Sinitic and Non-Sinitic Languages

In Sinitic languages, the syncretic case ACC-DAT with a pronunciation [a/xa] is overwhelmingly used in this region.<sup>5</sup> A few examples of [a/xa] in Sinitic languages will be given here:

- (1) **Linxia (Lanzhou Daxue 1996: 199)**
- a. *wǒ ha gǎwá xiǎng le*  
 1SG ACC child think PRF  
 ‘My child misses me.’
- b. *gǎ wáng ha wū gè shìqīng nǐ shuō gěi*  
 Ga Wang DAT DEM CL thing 2SG tell to  
 ‘Tell it to Ga Wang.’
- (2) **Tangwang (Xu 2017: 102)**
- a. *nà sū xa khě xa liǎo*  
 3SG book ACC read RES PRF  
 ‘He has read the book.’
- b. *vā nà xa mǎzi a thǎo kǐ tǎe*  
 1SG 3SG DAT sweaterACC knit to DUR  
 ‘I am knitting a sweater for him.’
- (3) **Xunhua (Yin 1985: 107)**
- a. *ni (=ni+a/xa) mafan le*  
 2SG-ACC trouble PRF  
 ‘(I) have troubled you.’
- b. *ŋa (=ŋa+a/xa) kha*  
 1SG-DAT give  
 ‘Give me (that).’
- (4) **Wutun (Janhunen et al. 2008: 63, 85)<sup>6</sup>**
- a. *ya ngu nia din-yek*  
 ok 1SG 2SG-ACC wait-SUBJ  
 ‘I am waiting for you.’
- b. *ngu nia mi-sho-zhe-ya*  
 1SG 2SG-DAT NEG-say-CONT-PART  
 ‘I did not tell you.’

<sup>5</sup> The syncretic case ACC-DAT is also attested outside of the Gansu-Qinghai area. See Zhou (2018).

<sup>6</sup> The terms taken from the authors of the *Wutun* are as follows: SUBJ: subjective; CONT: continuative.

In the above sentences, [a/xa] can be either ACC or DAT depending on context. This case marker tends to coalesce with first and second personal pronouns in several Sinitic languages. Sometimes, a double marking can be found such as in Linxia, Tangwang, and Wutun.<sup>7</sup> For the sake of brevity, examples in other Sinitic languages will be not presented here. Readers can easily find the syncretic case [a/xa] in published papers. A summarized overview of the situation is provided in Table 1:

Languages	Linxia	Tangwang	Xiahe	Wutun	Xunhua	Xining	Gangou
ACC marking							
N+a/xa [ACC]	+	+	+	+	+	+	+
1SG+a/xa [ACC]	ŋa	va	nga	nga	ŋa	nɔ xa	wo ha
2SG+a/xa [ACC]	ŋia	nia	nia	nia	nia	ŋi xa	ni ha

Table 1. Syncretic case ACC-DAT found in Sinitic languages<sup>8</sup>

The Linxia, Tangwang, and Xiahe languages are spoken in Gansu, while the Wutun, Xunhua, Xining, and Gangou languages are used in Qinghai. Table 1 shows that the coalescence of first and second person pronouns with [a/xa] is not attested in Xining and Gangou, whereas this phenomenon is frequent in other Sinitic languages. In reality, the coalescence is progressive. In the 1980s, this phenomenon was already shown in Xunhua (Yin 1985), while it was absent in Tangwang (Ibrahim 1985). Wang (1993) has indicated this change in Linxia, although the *Linxia fangyan*'s authors (1996) did not mention this issue. Today, except in Xining and Gangou, this coalescence has already become common for first and second person pronouns in the above mentioned locations. The third person pronoun has begun the coalescence process but with an evident lag (see the works by the authors mentioned in note 8).

All these mentioned languages employ the same phonetic form [a/xa] as the ACC-DAT case marker. Various papers have already discussed the syncretic case of ACC and DAT in Sinitic languages. The question was, and remains, “what is the origin of this marker”, since [a] or [xa] have nothing to do with the phonetic form of ACC or DAT in Mongolic and Turkic languages. Some scholars, such as Wang and Wu (1981), and Dede (2007),<sup>9</sup> think that [a/xa] is pause marker-like, while Janhunen et al. (2008) consider it to be a “focus marker” in Wutun. Some others, such as Xu (2014, 2015a), propose that [xa] originated from a Chinese topic marker, whereas Sandman (2016) shares the point of view of Dede (2007), calling it an “anti-ergative” marker. Du (2005) links the marker [xa] with a postposition *hang*<sup>10</sup> attested in the literal translation in Chinese of the

<sup>7</sup> One can find *ŋa xa* in Linxia, *va xa* in Tangwang and *nga ha* in Wutun. In actuality, *ŋa*, *va* and *nga* present a coalesced first singular personal pronoun with the case marker [a/xa].

<sup>8</sup> The symbol “+” means “present”. The transcriptions in Table 1 are taken from the following authors: the marked pronouns in object position in Linxia comes from Wang (1993), those in Tangwang from the author’s investigation, Xiahe from (Nakajima Motoki, 1992), Wutun from Janhunen et al. (2008), Xunhua from Yin (1985), Xining from Zhang (1980), and Gangou from Zhu et al. (1997).

<sup>9</sup> More precisely, Dede has proposed that [xa] is an (2007: 877) “IU [intonation unit] boundary marker,” adapted to “marking the anti-ergative.”

<sup>10</sup> In the *Secret history of the Mongols*, the literal transcription in Chinese *hang* corresponds to ACC, DAT, LOC, GEN, and ABL in Middle Mongolian (Yu 1992: 53). This means that the grammatical word *hang* in Chinese corresponds to different Mongolian morphemes indicating case marking.

*Secret History of the Mongols* (13<sup>th</sup> century AD). Finally, Yang (2014) and Zhou (2019) believe that [xa] came from the homophone postposition [xa] meaning “down, under” in Northwestern Chinese dialects. Apparently, the cited scholars all agree that [xa] is a Sinitic element.<sup>11</sup> Based on published data from the 1960s Xu (2021) shows that in the earliest examples where an object became preverbal in Gansu dialects,<sup>12</sup> two situations are found: either no marking is present or a phonetic form [a] is used to mark the preverbal object. These earlier examples do not support the idea that the syncretic case came from the postposition [xa] ‘down, under’ in Chinese, since, phonetically, [xa] ‘down, under’ has nothing to do with the first attested form [a]. Furthermore, semantically and syntactically, [xa] ‘down, under’ cannot have a natural relationship when an object has changed from post-verbal position to preverbal position. On the other hand, a pause marker or topic particle is naturally the best candidate to become a new marker for a preverbal object.

This syncretic use is also attested in non-Sinitic languages, such as in Bao’an and Tu, for first and second person singular pronouns. This phenomenon is amazing since in Common Mongolic languages, according to my limited knowledge, an identical case marker for both ACC and DAT is not attested. Let us compare examples given by different scholars in Table 2:

Pronouns & cases Languages	First person singular		Second person singular		Sources
	ACC	DAT/LOC	ACC	DAT/LOC	
Bao’an	надэ бэдандэ		чандэ		Todaeva (1957: 38)
	<i>nadə</i>		<i>tɕiodə</i>		Buhe, Liu (1982: 33)
	<i>mənda</i> <i>nada</i> <i>nadə</i>		<i>tɕhinda</i> <i>tɕhada</i> [not seen]		Nian <sup>13</sup> Guo Gan. Chen (1986: 174-6)
Tu	нда намиду		чиму чимиду		Huzhu dialect Minhe dialect Todaeva (1957: 34)
	<i>nda:</i>		<i>tɕ<sup>h</sup>ɔmɔ</i> <i>tɕ<sup>h</sup>imi</i>		Qinggertai (1988: 192; 195)
	<i>nangda</i>		<i>tɕ<sup>h</sup>imeɪ</i>		Slater (2003a: 83)

Table 2. Syncretic case ACC-DAT/LOC seen in Bao’an and Tu

The transcription [tɕ] by Qinggertai,<sup>14</sup> (as other Chinese scholars have also written in their works) actually designates [tɕ<sup>h</sup>], an aspirated voiceless affricate. To avoid confusion, I have added the aspiration symbol. In his work, Slater (2003b: 314) indicates that some irregular forms exist in

<sup>11</sup> Li Keyu (1987: 28) thinks that this marker [a/xa] in Sinitic languages may be introduced from Turkic languages, and may also be related to the DAT *-ka/-ke* in Khazak and *-a/-e* in Chuvash.

<sup>12</sup> Cf. *Gansu fangyan gaikuang* (Overview of Gansu dialects) published in 1960 by Lanzhou University.

<sup>13</sup> The Bao’an language is used by two communities living in Qinghai and Gansu. Nian is Nianduhu, while Guo is Guomari; these varieties are spoken in Qinghai, whereas Gan is Ganhetan and is located in Gansu.

<sup>14</sup> See his consonant table at page 79.

case marking for first and second person pronouns. He confirms that “the original first person singular pronoun forms acc. *namei* (< \**nama-i*) and dat. *nangda* (< \**nan-da* < \**nama-da*) have been partly confused.” Georg (2003: 298) also remarks that “there is a tendency to merge the accusative and dative forms of the singular pronouns” in Mongghul (Tu in Huzhu). Wu (2003: 335–336) points out that in the Bao’an language, “there is a separate case form functioning as the genitive, while the role of the accusative is filled by the dative (dative-accusative, a multifunctional oblique case).” It is important to note that this syncretic usage happens only with first and second singular personal pronouns, with the third person pronoun behaving as the noun taking two separate syncretic uses: genitive (GEN)-ACC and DAT-LOC, just as other Mongolic languages (i.e. Dongxiang and Eastern Yugur) in Gansu<sup>15</sup>. This reorganization of case marking merits more attention. It seems to be a singular innovation in Bao’an and Tu languages with respect to other Mongolic languages.

## **2.2 Common Innovation or Parallel Development?**

In a paper devoted to case syncretism by Baerman et al. (2001), the authors have chosen 200 samples from inside and outside of Indo-European languages to avoid “particular IE bias,” and in 41 languages case syncretism of some types is present. However, no case is seen in their work for ACC-DAT syncretism except for the sample cited from Todaeva in Bao’an, where ACC-DAT is used in first and second singular personal pronouns. It is then striking to observe that not only that almost all Sinitic languages spoken in the Gansu-Qinghai area use the same phonetic form *a/xa* for ACC-DAT, but also that non-Sinitic languages have simplified their case marking system using the syncretic ACC-DAT case in first and second singular person pronouns. In actuality, the syncretic use of ACC and DAT does exist and is sporadically found in the world languages (cf Kittilä et al. 2009: 558), such as in Spanish (Romance languages), Hindi (Indo-Aryan), Kham (Tibeto-Burman), Maltese Arabic (Afro-Asiatic), Awa Pit (Barbacoan), and so forth. Several syncretic cases, such as DAT-LOC, GEN-ACC, and INST-COM, seem to be more frequent or more familiar to the linguistic community. However, works devoted to the syncretic use of the case ACC-DAT are lacking.

Several factors favor the hypothesis that this unusual use in Sinitic languages on the one hand and in non-Sinitic languages such as Bao’an and Tu in the other, may have developed independently. This assumption can be supported by diachronic evidence and historical layers of this syncretism formation.

Diachronically speaking, the languages in this area such as Dongxiang (Santa), Bao’an, Tu, and Salar constitute newly formed languages dating from the 14<sup>th</sup> century to the 16<sup>th</sup> century (cf. Lin and Gao 1994, Zhou 2004, Zhong 2007, Qie 2009, Xu and Wen 2017, among others). Languages heavily impacted by non-Sinitic languages, such as Wutun and Tangwang, have not been formed earlier than these languages (cf. Janhunen et al. 2008, Xu 2014, 2017). Let us observe these non-Sinitic languages which have influenced the Sinitic languages in this area. Janhunen

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<sup>15</sup> See two examples of the third person pronoun in Bao’an in which ACC and DAT are used as different case markers (Bu He and Liu Zhaoxiong 1982: 40):

*bü ndzaŋ-nə hoedədzi ei-g(ə)-o.* 1SG 3SG-ACC/GEN chase-out go CAUS EVID ‘I have chased him out’.

*bü ndzaŋ-də nəgə kal-e!* 1SG 3SG-DAT/LOC one say-IMP ‘I will talk with him’.

(2003: 13) indicates that in Proto-Mongolian basic cases had different and independent morphological markings. According to Chen (1986: 100), ACC and GEN could already have been altered or used as a syncretism in the *Secret history of the Mongols*, considered to be Middle Mongolian, and that the same phenomenon is also attested for DAT and LOC (p109). Janhunen (2003: 46) also remarks on these phenomena.<sup>16</sup> The work by Rybatzki (2003) confirms that the full merge did not happen. Regardless, it appears that in Middle Mongolian, based on various documents, and especially on the *Secret History of the Mongols*, syncretic use of ACC-DAT is not attested. In the same vein, this use is not attested in Old Turkic languages (cf Tekin 1968, 1995; Geng and Wei 2010 among others), while DAT-LOC and ABL (ablative)-LOC are attested in Old Turkic languages such as in Orkhon Inscriptions (Tekin 1968: 130-133). Synchronically, this use of ACC-DAT is also absent in Mongolic and Turkic languages.<sup>17</sup> It is evident that this use in Bao'an and Tu is not inherited from these languages. This syncretic usage, then, seems odd.

It is important to verify the historical layers of the case system formation in this area. We know that Mongolic and Turkic languages have possessed a case marking system for a long time, while Sinitic languages did not have case marking (still unclear for Old Chinese). It is then an innovation in Sinitic languages, and the case marking formation is recent. It is difficult to say how recent, but documents and papers published in the 1960s reveal interesting clues. According to the *Gansu fangyan gaikuang* (Overview of Gansu dialects), published in 1960 by a group of researchers, this syncretic use only began to appear in one dialect out of 42, with a phonetic form [a]. The marker [a] marks either a direct object or an indirect object. These preverbal objects can be nouns or pronouns. Some other dialects (from two to five depending on test sentences) have also changed the word order from VO to OV, but without any marker (Xu 2021). According to the documents I can find, Todaeva (1957) is the first scholar who has noted this syncretic case, i.e. ACC-DAT. She did fieldwork with several Chinese scholars in 1955 and 1956 (see also the preface about the collected data by Chen 1986: 13). In the book by Chen (1986), based on their investigations since 1955, we can see that, in the Bao'an language, this syncretic use for first and second person pronouns is completely mature (cf. Table 2). Similarly, in the Tu language, as described by scholars, and mentioned in Table 2, the syncretic use of ACC-DAT is also well established. As has been said earlier, one single Chinese dialect in Gansu began to use case marker-like [a] in the 1960s and the 1980s; this usage is extended in Sinitic languages at the border regions between Gansu and Qinghai. This suggests that the syncretic use of ACC-DAT in Sinitic languages clearly developed later than in Bao'an and Tu. These two languages inherited the case system from Common Mongolian and then followed their own way in case marking. Apparently, the Sinitic languages spoken in the Gansu-Qinghai area have adopted a *Pattern replication* (term proposed by Matras and Sakel 2007) in the borrowing of case marking systems. As has been mentioned, [a] or [xa] has no connection with any non-Sinitic languages at the phonetic level. Apparently, a *Matter replication* (cf. the same authors) is not implied here. In other words, the syntactic frame came from non-Sinitic languages while the phonetic form has been taken from an existing particle often used

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<sup>16</sup> Popper (1964: 74), Grønbech, Kaare and John R. Krueger (1993: 16), and Sárközi (2004: 19) present DAT and LOC together.

<sup>17</sup> Tibetic languages also have syncretic cases such as ERG-INST (instrumental), since they belong to languages with ERG marking, which are not relevant in our discussion about ACC-DAT usage.

to mark topics in Sinitic languages (Xu, 2015a). The topic-marking use of [a/xa] can be still found in today's data.<sup>18</sup>

These replications (on matter as well on pattern) due to contact can be easily observed in this region. However, this does not imply that Sinitic languages have directly borrowed this syncretic pattern from Bao'an or Tu. In these two languages, this usage is limited to first and second person pronouns in singular form, whereas in the Sinitic languages spoken in this area the ACC-DAT case is applied to third person pronouns (singular and plural), as well to nouns. In other Mongolic languages such as Dongxiang and Eastern Yugur, this syncretic use of ACC-DAT is absent. This usage has also not been attested in Turkic languages such as Western Yugur and Salar.

The case marking of the Mongolic languages in this area is different from Khalkha and Chakhar Mongolic languages, which are considered to be "standard Mongolian" for Mongolia and Inner Mongolia. These two Mongolic varieties distinguish GEN from ACC and INST from COM, unlike the Mongolic languages in the Gansu-Qinghai area. Only the DAT-LOC is a syncretic case found in Khalkha and Chakhar. In this way, the case marking system in the Gansu-Qinghai area shows more simplification. The Bao'an and Tu languages seem to be more advanced in the simplification process about case marking in terms of creating a new syncretic use for first and second singular personal pronouns.

In Sinitic languages, the simplification of case marking is also attested, but for another reason. The Sinitic languages have borrowed in part the case marking system in terms of further shortening the list of cases. For example, the Sinitic languages continue to use the postposition *li* 'down,' seen by several scholars as LOC, and to employ structural particle *de* 'of,' considered by some researchers to be GEN. In reality, these grammatical words are not typical case markers, but rather case-like markers. They are grammatical words, just as in other Chinese dialects out of this area. The real cases in Sinitic languages of this region concern the ACC-DAT, ABL-COMP (comparative), and INST-COM (comitative). Except for ACC-DAT, the rest (ABL-COMP and INST-COM) constitutes matter replication in most Sinitic languages. Unlike other Sinitic languages, the case INST-COM *liangge* in Wutun presents a typical pattern replication. It has taken the syntactic frame from non-Sinitic languages and the phonetic form from Chinese (cf. examples by Li 1985, Janhunen et al. 2008 among others). These facts indicate that the Sinitic languages spoken in this linguistic area did not replicate the whole paradigm of case marking from source languages. They have copied the core case (here ACC) by pattern replication and some non-core cases either by matter replication or by exploiting existing grammatical words in Chinese.

Bao'an and Tu have simplified their case marking system, and Sinitic languages have done the same, but for *different motivations*. These languages, Sinitic as well non-Sinitic, have developed this syncretic case marking, i.e. ACC-DAT through two different processes. The Bao'an and Tu have this innovation due to internal mechanisms of their languages, while Sinitic languages have created this syncretic use due to long contact with the non-Sinitic languages in this area.

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<sup>18</sup> See an example in Wutun (Janhunen et al. 2008: 110). *Nia ni bai-qhi*. 2SG+TOP-2SG-NG-go. 'As to you, don't go there.' [nia] presents the coalescence of the second person pronoun [ni] with a topic marker [a/xa]. The syncretic case ACC-DAT came from TOP, and especially from TOP chains (Xu 2021).

### 3 The Widespread Use of DAT in Possessor Construction

The possessor construction attested in the Gansu-Qinghai area has the following word order: “Subject [+possessor DAT]+V [+to have].” This construction with DAT marking is largely attested in non-Sinitic, as well in Sinitic languages, in the Gansu-Qinghai area. In Sinitic languages, the syncretic case [a/xa] is used in this construction, except in Xining.

#### 3.1 Possessor Construction in Non-Sinitic Languages

Different situations are found in various non-Sinitic languages. In Middle Mongolian of the 13<sup>th</sup> century, the subject [+possessor] is marked by GEN case (Sárközi 2004: 25), and examples marked by LOC are found in Turkic language (cf. Maḥmūd Kāshgarī, 11<sup>th</sup> century).<sup>19</sup> The possessor construction can also be marked by GEN (in Eastern Yugur and Salar in Xinjiang), by LOC (in Western Yugur)<sup>20</sup>, by DAT/LOC (in Khalkha, Chakhar, Dongxiang, Bao’an, Tu, Eastern Yugur, and Tibetic languages), and by COM (in Khalkha and Chakhar). Let us begin by observing ancient languages.

(5) **Written Mongolian of the 13<sup>th</sup> century (Grønbech and Krueger 1993: 13)**

*Qayan-u*      *γurban köbegün*      *bülüge*  
king-GEN      three son      exist  
‘The king had three sons.’

(6) **Turkic of the 11<sup>th</sup> century (Maḥmūd al-Kāshgarī, translated by Dankoff and Kelly 1984: tome II, 224)**

*Sän-dä*      *yarmāq*      *bārmu*  
2SG-LOC      money      have-INTER  
‘Do you have money?’

In the above examples, GEN is used in Middle Mongolian while LOC is seen in Turkic languages of the 11<sup>th</sup> century. However, today’s Mongolian and Turkish mark the possessor construction by different case markings. The standard Mongolic languages (outside of the Gansu-Qinghai area) use both DAT and COM as case markers, whereas Turkish uses possessive (POSS) suffixation to express possession, as seen below:

(7) **Khalkha Mongolian (Tserenpil and Kullmann 2008: 192, 196)**

a. Надад нэг ах, нэг эгч байсан  
1SG-DAT one brother one sister have-PAST  
‘I had one brother and one sister.’

<sup>19</sup> Cf. his work translated and annotated by Dankoff and Kelly 1982.

<sup>20</sup> Western Yugur can also use DAT in possessor construction (see Zhong 2019: 194).

- b. Би нэг ах, нэг эгчтэй байсан  
1SG one brother one sister-COM have-PAST  
'I had one brother and one sister.'

(8) **Chakhar (provided by Saiyinjiya Caidengduerji)**

- a. *Nadad xoër ax baina*  
1SG-DAT two brother have-PRES  
'I have two brothers.'

- b. *Bi xoër axtai*  
1SG two brother-COM  
'I have two brothers.'

(9) **Turkish (Bozdémir 2016: 87)**

- Param var*  
money-1SG-POSS have  
'I have money.'

It is clear that Mongolic languages have changed the case marking strategy. Today Khalkha and Chakhar both use DAT and COM to express possession. In Dongxiang, Bao'an and Tu languages, as well as in Tibetic languages, possessor construction requires a DAT case to mark the subject-possessor. For more examples, please see vBrug mo vtsho (Zhoumaocao) (2003: 88, 221) for Amdo Tibetan, Zhaonasi (1981: 18) for Tu, and Buhe and Liu (1982: 72) for Bao'an. Here only two complementary examples will be given:

(10) **Dongxiang (Chuluu 1994: 8)**

- tšima-də tšiajə wai-n-u?*  
2SG-DAT/LOC tea have-PRES-INTER  
'Do you have tea?'

(11) **Tu in Huzhu (Georg 2003: 298)**

- gan-di taawun bulee yiina*  
3SG-DAT/LOC five child have  
'He has five children.'

In contemporary Mongolic languages, inside and outside of the Gansu-Qinghai area, DAT is frequently used case in possessor constructions. Remember that DAT and LOC cases are marked with the same form in these languages, however, this syncretic use applies in Bao'an and Tu to nouns and third person pronouns, but not to first and second singular personal pronouns. The Kangjia language, belonging to Mongolic languages, spoken at Jianzha county close to Xunhua in Qinghai, presents the same feature using DAT/LOC in expressing possessor construction:

(12) **Kangjia (Siqinchaoketu 1999: 129)**

*nanda*        *ʂu*     *i*  
1SG-DAT    book    have  
'I have a book.'

Now let us compare the Salar languages (Turkic languages) spoken in Xunhua (Qinghai) in the Gansu-Qinghai area, and in Yining district (Xinjiang) outside of this area. Salar in Xunhua takes DAT as a marker, while Salar in Xinjiang uses GEN in the possessor construction:

(13) **Salar in Xunhua (Lin 1985: 36)**

*maŋa*        *avo*    *igi*    *var*  
1SG-DAT    boy    two    have  
'I have two boys.'

(14) **Salar in Xinjiang (Xu and Wu 2005: 152)**

*anigi*        *yɬf*    *anasə*        *var*  
3SG-GEN    three    daughter    have  
'He has three daughters.'

The use of the DAT marker in the Salar language spoken in Xunhua may have been influenced by Tibetic languages (see Simon 2015), but linguistic data shows that Mongolic languages in the Gansu-Qinghai area may also have influenced Salar in Xunhua since all these Mongolic languages use DAT in the possessor construction. In other words, not only Tibetic languages, but also Mongolic languages in this area, have impacted the Salar language, since the latter is surrounded by these languages which have alternated their dominant language position for ages. Salar in Xinjiang may be influenced by the Uyghur language, a local dominant language, which marks the subject possessor by a GEN marker (cf. the example given by Zhao and Zhu 1985: 175). These facts show that the Salar languages that are geographically detached from Common Turkic languages are subject to change under pressure from neighboring languages, including Tibetic and Mongolic languages. One can remark that neither Salar in Xunhua, nor Salar in Xinjiang, have inherited the same case marker LOC from Turkic languages of the 11<sup>th</sup> century to mark possessors (cf. example 6).

What we find today definitely presents the results of intertwined influences between Tibetic, Mongolic, and Turkic languages in case marking. Table 3 summarizes the complex situation of case marking in possessor constructions. Middle Mongolian of the 13<sup>th</sup> century and Turkic languages of the 11<sup>th</sup> century reflect languages used in periods very close one to another, which are therefore comparable. Contemporary Mongolian, Turkish, Salar in Xinjiang, and Yugur languages are presented in Table 3 as comparison references.

		GEN	DAT	LOC	COM	POSS	Sources
Mongolic languages	Mid. Mong. 13th c.	+					Chen 1986, Janhunen 2003
	Khalkha		+		+		Tserenpil, Kullmann 2008
	Chakhar		+		+		Caidengduerji
	Dongxiang		+				Liu 1981
	Bao'an (Qinghai)		+				Chen 1986
	Bao'an (Gansu)		+				Chen 1986
	Tu (Minhe)		+				Slater 2003a
	Tu (Huzhu)		+				Georg 2003
	Eastern Yugur	+	+				Siqinchaoketu 2019
	Kangjia		+				Siqinchaoketu 1999
Tib	Amdo Tibetan		+				vBrug mo vtsho 2003
Turkic lang.	Turkic 11 <sup>th</sup> c.			+			Dankoff and Kelly 1982
	Modern Turkish					+	Bozdémir 2016
	Salar (Qinghai)		+				Lin Lianyun 1985
	Salar (Xinjiang)	+					Xu and Wu 2005
	Western Yugur		+	+			Zhong 2019

Table 3. Comparison of possessor constructions in non-Sinitic languages

In Table 3, Khalkha, Chakhar, and the two Yugur languages possess two case markings to express possessor construction, while other languages have one case, i.e. DAT, for the same construction. It is evident that the DAT case is the most favored marking in Mongolic and Tibetic languages, and that it constitutes one of the common syntactic features in the Gansu-Qinghai area. Due to long term contact, Sinitic languages began to borrow this construction into their languages, using the syncretic case [a/xa] to mark the possessor.

### 3.2 Possessor Constructions in Sinitic Languages

Sinitic languages do not need to mark subject-possessor, except for these languages spoken in the Gansu-Qinghai area. Undoubtedly, these Sinitic languages using DAT case have borrowed this syntactic meaning from neighboring languages in the Gansu-Qinghai zone. It is clear that these languages have calqued the whole possessor construction, instead of borrowing a case marker. This borrowing has taken time, and not all Sinitic languages in this region have adopted this marked construction. Let us observe some examples in which the DAT case is obligatory:

- (15) **Wutun (Janhunen et al. 2008: 63)**  
*aba-ha nek do yek-li*  
 father-DAT cattle many have-FP  
 ‘Father has many cattle.’

(16) **Tangwang (Xu and Ran 2019: 211)**

*nia*            *tei*            *kie*    *vava*    *a?*  
 2SG-DAT    how many    CL    child    INTER  
 ‘How many children do you have?’

It is difficult to date the integration of this marker into these languages, but publications on other languages in this zone reveal non-homogeneity of the adoption of this marking. This might be due to different informants and sites. For instance, in Xunhua and Linxia, scholars have noted different possessor constructions. More precisely, the DAT case marking is present or absent in their reports.

(17) **Xunhua (Ma 1985: 97)**

我            钱    没    有  
*ya*<sup>21</sup>            *qián*    *méi*    *yǒu*  
 1SG-DAT    money NEG    have  
 ‘I don’t have money.’

(18) **Xunhua (Dwyer 1995: 156)**

他们            □            只    一    个    丫头  
*tɕ<sup>h</sup>amẽ*            *dzã*            *dzɿ*    *zi*    *gr*    *jatɕ<sup>h</sup>eu*  
 3PL            merely<sup>22</sup>            just    one    CL    daughter  
 ‘They only have one daughter.’

In (17), Ma (1985) has already remarked that in possessor constructions in Xunhua, a DAT case was necessary, while in Dwyer (1995), this marker was not present, even though the data collected by the latter is from ten years after the data collected by the former. This fact shows that the DAT case marking is progressive and not homogenous among local speakers. A similar example is found in Linxia. Let us compare two examples published by two scholars:

(19) **Linxia (Hanjiaji; Rindzin, Wangmo 1991: 16)**

*ŋa*            *ji*    *pən*    *su*    *jəu*    *ŋi*  
 1SG-DAT    one    CL    book    have    FP  
 ‘I have a book.’

<sup>21</sup> The transcription [ya] in (19) came from Ma (1985: 97), who indicates that [ya] is a coalescence of the first person pronoun [yr] and the ACC/DAT marker [xa]. In her work, Dwyer (1995) transcribes the first person pronoun as [ŋə], although she sometimes also transcribes it as [ŋɔ].

<sup>22</sup> Dwyer glosses this adverb “Emphatic particle.” In Northwestern Sinitic languages, this word is 将 *jiāng*, meaning ‘just (recently)’.

(20) **Linxia (Linxia City; Lanzhou daxue 1996: 203)**

我<sup>23</sup> 再 钱 没 有。  
*ŋə zài qián méi yǒu*  
 1SG more money NEG have  
 ‘I have no money anymore.’

It is interesting to notice that these scholars clearly indicated the site of their investigation. In (19), where the DAT marker is noted, Hanjiaji (also named Linxia County) is indicated, whereas in (20), where the DAT is lacking, Linxia City is specified. Again, in one location, DAT is present, while in the other, it is absent. We should interpret these variations as non-homogeneity of informants regarding this construction but not as the non-existence of the phenomenon.

The situation in Xining, the capital of Qinghai Province, is different. The published documents tell us that, in Xining, this marked construction has not been accepted yet. Table 4 summarizes the situation in Sinitic languages in the Gansu-Qinghai area.

Languages	Linxia	Tangwang	Wutun	Xunhua	Xining	Gangou
DAT marking						
Subj DAT+V[have]	+	+	+	+	-	+

Table 4. Possessor constructions in today’s Sinitic languages

Outside of the frontier region between Gansu and Qinghai, the marking in possessor constructions has also been found. Zhou (2019) reveals that in the Zhoutun language spoken in a village situated in Guide, Qinghai, an identical syntactic usage marking possessor construction with DAT case has been attested:

(21) **Zhoutun (Zhou 2019: 495)**

扎西 哈 钱儿 有。  
*Zhāxī hā qián-er yǒu*  
 Zhaxi DAT money have  
 ‘Zhaxi has money.’

According to Zhe (2011), a local speaker, the population in Zhoutun might have migrated from Linxia in the 14<sup>th</sup> and 15<sup>th</sup> centuries, and their founders were Han people. This tendency shows that the extension of the marked possessor construction continues to progress among other Sinitic languages.

#### 4 Spread of Pattern Reduplication in Sinitic Languages

In the above sections, we have discussed two problems: the syncretic use of [a/xa] and the spread of DAT marking in possessor constructions in Sinitic languages. We have shown that these markings in Sinitic languages came from non-Sinitic languages via pattern reduplication. However,

<sup>23</sup> According to the authors of the *Linxia fangyan*, the 1SG nominative is [ŋə] in Linxia.

the question remains: what is (are) the path(s) of this spreading? I present here my tentative explanation, being aware of incomplete knowledge about languages spoken in this area at the present stage. Historical and anthropological studies provide linguists important indications about population groups in this zone, since languages are spread by people.

It is taken for granted that populations in our target zone have been formed and reformed during various periods, and mainly so after the 14<sup>th</sup> century (except Tibetans). The Dongxiang, Bao'an, and Salar forefather populations came from Central Asia (and some from Western Asia), and today they speak different languages. In their studies, Xu and Wen (2017: 60–61) indicate that the Dongxiang and Bao'an populations were formed due to “violent historical events,” while the Salar population formation presents a different scenario, since the migration from Central Asia to China was a choice made by Salar ancestral clans. Still, according to them, populations in Gansu and Qinghai show a very high divergence at the genetic level due to a long admixture of migrants with local people. Different tribes and clans have joined dominant groups at different periods. These historical and genetic factors have strongly impacted their languages, and, in consequence, the mentioned populations' languages have been newly formed, or even replaced, by other dominant languages.

The complex origins of the Gansu-Qinghai populations partially explain why borrowing models cannot be directly vertical or linear; horizontal spread is unavoidable because of ceaseless aggregations of other groups into one clan or tribe. A kind of intertwined borrowing model is called for. This means that the borrowing direction is not unidirectional, but instead bi-directional, and, more often, multi-directional. According to the *Linxia shizhi* [Annals of Linxia City] (1995: 780–781), most of the Han population came to Linxia City during the Ming (1368–1644) and Qing (1644–1911) dynasties. They were descendants of garrisons soldiers, wastelanders, merchants, artisans, and so on. The Linxia Hui Autonomous Prefecture, commonly called Hezhou, including Linxia City, Linxia County, and some nearby counties, constitutes an important region gathering Hui populations in Gansu.

According to Nietupski (2015: 139), the “Key Sufi groups represented at Labrang [located in Southern Gansu] were mostly from Hezhou/Linxia.” The demographics in 1985 reveal that, in Linxia City, the Han population reached 51, 5% while the non-Han populations made up 48, 48%. Among the non-Han people, Hui populations represented 94, 69%. According to the official statistics in 2020, the non-Han peoples make up 52.9% in Linxia City (given by the Linxia City brief info, on the web site of the prefectural government, accessed February 7<sup>th</sup>, 2021). Hui populations believing in Islam constitute a complex entity. Their ancestors came from Central Asia, but they continuously have been incorporated and extended by Han populations and other populations who were converts to Islam during different epochs.<sup>24</sup> It seems that the Islamic influence is less important in Qinghai than in Gansu, since Qinghai belongs to the Tibetosphere where the Geluk school of Tibetan Buddhism dominates. However, based on historical documents and his fieldwork, Chang (2015) reveals the actual situation of “Tibetan-speaking Muslim” people staying in the Kaligang area of Hualong Hui Autonomous County, Qinghai. This Muslim community, formed by Tibetan populations, has existed for “at least two centuries” (Chang 2015: 67). The same author reports that most imams he has interviewed came from Ikhuang (one of the Islam schools) Mosque in Linxia (p80). Thanks to this historical and anthropological research, we can imagine that there are strong influences of the Islamic religion in the Gansu-Qinghai area

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<sup>24</sup> Han people, converted to Islam, self-identify as Hui.

with Chinese-speaking Muslim people, Tibetan-speaking Muslim people, and so on. Even though the Tibetic languages and Buddhist religion exert more influence in Qinghai, the mentioned factors suggest that Islam has impacted Qinghai as well as Gansu. These cross-border Muslim communities speak different languages, often being bilinguals and even polyglots. They have formed a net-like connection lying across different sites in the Gansu-Qinghai area.

The Hui populations speaking different languages should have played a key role in spreading syntactic patterns from non-Sinitic languages in this area. In other words, Han populations do not necessarily learn different syntactic expressions directly from non-Sinitic languages. The Hui or Muslim populations speaking Chinese, Tibetan, Dongxiang, Bao'an, Tu, and Salar, may favor language contact, and especially an intertwined model of borrowing between these separate groups, that are officially identified by the Chinese government.

Let us consider Figure 1, which suggests two movements of language contacts. One comes from Amdo Tibetan and Mongolic languages, which have influenced, and still are influencing, Sinitic languages. Another movement finds its source from the Linxia zone including Linxia City, Linxia county (Hezheng county may be also included), which strongly impacts neighboring Sinitic languages. The arrows present non-Sinitic languages, while the waves indicate possible expansions from Linxia into other nearby regions.

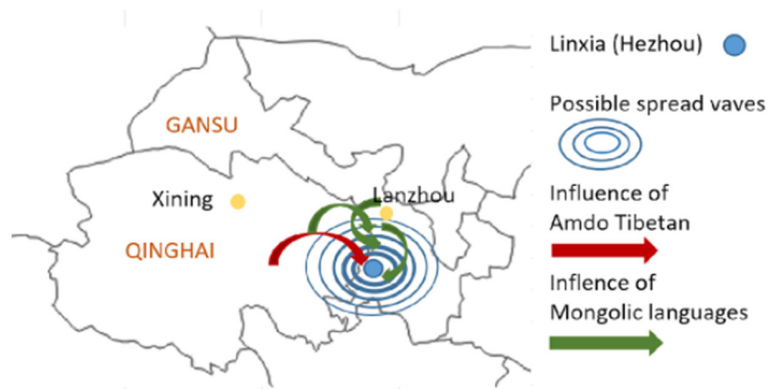


Figure 1. Possible scenario of pattern reduplication spreading from non-Sinitic into Sinitic languages

The schema is only illustrative (as has been mentioned, the adaptation of alien syntactic means has not been homogeneous; the waves must be irregular and the arrows much more numerous). Case marking might be introduced by non-Sinitic languages into Sinitic languages through pattern reduplication by Muslim populations speaking different languages; following this, it then began to be spread among Sinitic languages, but not in a synchronous manner. Linxia, an important trade and religious center, should be the spreading source since, geographically, it is located at the center of this area at Gansu and Qinghai borders. The borrowing path of the marked possessor construction in Sinitic languages should be similar.

What we can observe is that the DAT marking in possessor constructions is mainly attested in the frontier regions and counties but not in big (politically speaking) cities such as Xining (the capital of Qinghai) or Lanzhou (the capital of Gansu). Our hypothesis that Linxia should be considered as the spreading source of non-Sinitic syntactic marking could explain both why in Xining, DAT marking in possessor construction does not exist yet, and why the coalescence of

first and second pronouns, and the syncretic case ACC/DAT, does not happen (cf. Table 1 in Section 2) as in other locations. It is worth noting that Lanzhou (which is not a part of our target area) does not accept either case marking or the possessor construction calque. Languages in big cities should follow their own evolution patterns (Chambers and Trudgill 1980; Xu, 2015b). Published documents about the Xining language<sup>25</sup> show that the OV order is not necessarily the dominant order (Ren 2004; Wang 2012) and that Standard Mandarin still has an important position.

## 5 Preliminary Concluding Remarks

In the Gansu-Qinghai area, populations are often under pressures from several languages.<sup>26</sup> We have shown that the Linxia zone should be the center of language contacts since it has been, and remains, a hub witnessing interactions between populations speaking Sinitic and non-Sinitic languages. A possible scenario is that the Linxia region has linked these mentioned languages to each other, favoring the emergence of ACC-DAT usage and the extension of the marked possessor construction. Geographically, Linxia has Tibetic and Turkic languages in the West, and Mongolic languages (Dongxiang, Bao'an, and Tu) all around it. Linxia is then located in the center of this linguistic area. Muslim populations (Dongxiang, Bao'an, Salar, and several Tu, Tibetan and Chinese) have formed a spreading net in this region. An intertwined model of borrowing is evident: Sinitic and non-Sinitic languages have influenced each other in direct or indirect ways, just as Sinitic languages have influenced other Sinitic languages, and non-Sinitic languages have influenced other non-Sinitic languages. Evidently, the area-wide situation needs more investigation. The spread of syntactic devices from non-Sinitic languages into Sinitic languages is shown to be progressive, and consistently progressing.

### ABBREVIATIONS

ABL	ablative	IMP	imperative
ACC	accusative	INST	instrumental
CAUS	causative	INTER	interrogative
E	classifier	LOC	locative

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<sup>25</sup> One of the anonymous reviewer wonders which role the Hui community in the Xining City could play in this linguistic spreading. Two factors support the analysis that Linxia City may play a more significant role in language contact: the population density and the proportion of the Hui/Muslim peoples in these two cities.

1. The population density in Linxia City was 1,696 people/km<sup>2</sup> in 1985 (*Linxia shizhi* (Annals of Linxia City) 1995: 85) and 4,627 people/km<sup>2</sup> in 2020 (based on <http://www.linxia.gov.cn>, accessed February 7<sup>th</sup>, 2021) while the population density in Xining was about 311/km<sup>2</sup> in 2020 (based on <http://www.xining.gov.cn/zjxn/>, accessed February 7, 2021). These differences in the population densities of Linxia and Xining favor the hypothesis that Linxia City has more people contacts- and thus implications of more significant religious societies, commercial activities, social relationships, and denser travels- than Xining has. These elements help to stimulate exchanges between different communities at economic, social-political, and linguistic levels.

2. The Hui/Muslim peoples were 54% in Linxia City (Annals of Linxia City, 1985: 85) while the Hui/Muslim peoples were about 16% in Xining City in 2010 City (<https://zh.wikipedia.org/wiki/>, accessed February 8, 2021).

<sup>26</sup> Wutun has been influenced not only by Amdo Tibetan and Mandarin, but also by Mongolic languages.

COM	comitative	NEG	negative
E	comparative	PL	plural
DEM	demonstrative	PRF	perfect
DUR	durative	PRES	present
EVID	evidential	RES	resultative
FP	final particle	SG	singular
GEN	genitive	TOP	topic

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