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► **To cite this version:**

Mathieu Beaudouin. Tangut verb agreement: Optional or not?. *Linguistics of the Tibeto-Burman Area*, 2022, 45 (1), pp.93-109. 10.1075/ltba.21008.bea . hal-03893853

**HAL Id: hal-03893853**

**<https://hal.science/hal-03893853v1>**

Submitted on 11 Dec 2022

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# Tangut verb agreement: optional or not?

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The Tangut language is of particular importance to the field of Sino-Tibetan Studies, notably because of its morphological conservatism, which is unexpectedly correlated with a simplification of its syllable structure, a consequence of a process Miyake (2012) called “compression”. Such conservatism is evident in the syllable qualities reconstructed, which sometimes reflect proto-Tangut’s ancient derivational processes. Verbs also exhibit various flectional phenomena, mainly due to conversion of agreement rules and referential hierarchy rules (Silverstein 1976), in a manner reminiscent of the indexation system of languages of the rGyalrongic taxon within the Qiangic family. The present paper attempts to explain the absence of indexation in the Tangut verb, a key phenomenon in the history of verb agreement analysis. First, I recall the main rules of the Tangut verb’s agreement system, as shown by Kepping (1975) and Gong (2001). Second, cases of non-agreement are analyzed. Apart from the case of non-local contexts, we see that the absence of agreement occurs in non-finite forms resulting from a dependency pattern, such as clause chaining, topic/comment context, and semantically dependent modality.<sup>1</sup>

**Keywords :** Tangut, agreement, syntax, dependency, clause chaining, topic/comment, modality

## 1 Introduction

### 1.1 The rules of agreement

As known since Kepping (1975), the Tangut verb encodes a sizeable quantity of information at both sides of the root. Preverbs (traditionally called “prefixes”) to the left of the root provide knowledge regarding orientation and TAME.<sup>2</sup> To the right

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<sup>1</sup>The transcription used in the present paper is the reconstruction of Gong (2006), as given in Li (2008)’s Tangut-Chinese dictionary.

<sup>2</sup>The template follows an order shown by Jacques (2011) and includes ancient directional prefixes, interrogation prefixes, negation prefixes, modal prefixes, and monosyllabic incorporated nouns.

of the root, one notably finds suffixes carrying agreement with the arguments of the verb. These display forms responding to different types of indexation systems.

### 1.1.1 Intransitive verbs

With intransitive verbs, the scheme is quite simple: the verb, having just one unique argument (the subject), agrees with that unique argument. The suffix will be  $-ŋa^2$  𐰽 for the first person singular,  $-nja^2$  𐰾 for the second person singular, and  $-nji^2$  𐰿 for the plural of both the first and second person (examples 1a to 1c).<sup>3</sup>

- (1) a. 𐰽 𐰾 𐰿 𐰽 𐰾 𐰿  
*mjo<sup>2</sup> lwe<sup>2</sup>lwe<sup>2</sup> lja<sup>1</sup>-ŋa<sup>2</sup>*  
 1.HUM slowly come-1SG  
 ‘I will come slowly.’ (Leilin 07.21.A.5, cited in Shi et al. 1993: 302)
- b. 𐰽 𐰾 𐰿 𐰽 𐰾 𐰿  
*nji<sup>2</sup> dzjir<sup>1</sup>-ya<sup>2</sup> dja<sup>2</sup>-çji<sup>1</sup>-nja<sup>2</sup>*  
 2.HON fast-LOC IMP-go<sub>1</sub>-2SG  
 ‘Go quickly!’ (Leilin 07.21.A.5, cited in Shi et al. 1993: 302)
- c. 𐰽 𐰾 𐰿 𐰽 𐰾 𐰿 𐰽 𐰾 𐰿 𐰽 𐰾 𐰿  
*gji<sup>2</sup>mji<sup>2</sup> tej<sup>1</sup> pie<sup>1</sup>=jij<sup>1</sup> gji<sup>2</sup>lhji<sup>1</sup> ŋwu<sup>2</sup>-nji<sup>2</sup> jji<sup>2</sup>*  
 1PL Tai Bo=GEN descendants be-12PL QUOT  
 ‘They [used to] say: “We are the descendants of Tai Bo”.’ (Leilin 04.33.A.3, cited in Shi et al. 1993: 275)

The verb with a third-person subject is to be treated apart, as it never shows agreement, as seen in example (2). Finally, one must note that the occurrence of reported speech does not impede agreement, as shown by examples (1c) and (3).<sup>4</sup>

<sup>3</sup>Before Kepping’s seminal work, the main (and inexact) interpretation regarding two of these suffixes was that they were related to modality. Nevsky (1960, posth.: 146–147) saw in 𐰽  $-nji^2$  and 𐰾  $-nja^2$  suffixes indicating assertion, in the manner of Japanese べし *beshi*, 𐰽 *yo* or 𐰽 *ya*, an interpretation Nishida (1964–1966) accepted with some reservations. Sofronov (1968: 217–218) stayed inside this modal explanatory frame, and described suffixes encoding an “appellative mood” (“апеллятивное наклонение”). He also conjectured that the choice between 𐰽  $-nji^2$  and 𐰾  $-nja^2$  was related to a hierarchy between the speaker and the addressee. The first person suffix 𐰽  $-ŋa^2$  was not mentioned at all until Kepping, probably because of the graphic indifferenciation with the homograph pronoun 𐰽  $ŋa^2$ .

<sup>4</sup>The nature of reported speech in Tangut is probably semi-direct (Type II of reported speech in Aikhenvald 2007), or hybrid (Tournadre & Dorje 2003), like in Horpa languages (Jacques & Antonov 2014), even if I translate it as direct speech in my examples. In example (3), a more

- (2) 散 薇 蕪 穉 穉 豎 豎 散 薇 蕪 穉 穉 豎 豎

*sə<sup>1</sup> tɕiej<sup>2</sup> ko<sup>1</sup>=tɕhjaa<sup>1</sup> ·wji<sup>2</sup>-dzuu<sup>2</sup> sə<sup>1</sup> tɕiej<sup>2</sup> ko<sup>1</sup>=tɕhjaa<sup>1</sup>*  
 three time vehicle=SUPE PFV:OUT-sit three time vehicle=SUPE  
*nja<sup>1</sup>-lhji<sup>2</sup>*  
 PFV:DOWN-descend

‘He sat three times on the vehicle and three times got down from it.’ (12K, 132.21.02, cited in Solonin 1995: 39)

- (3) 穉 穉 穉 穉 穉 穉 穉 穉

*bji<sup>2</sup> da<sup>2</sup> dzjwu<sup>1</sup> dzjwi<sup>1</sup> ŋwu<sup>2</sup>-nja<sup>2</sup>·ji<sup>2</sup>*  
 servants say be.benevolent emperor COP-2SG QUOT

‘The servants said: “You are a benevolent emperor”.’ (Leilin 03.10B.1, cited in Shi et al. 1993: 259)

### 1.1.2 Transitive verbs

With transitive verbs, the pattern is far more complex. In local scenarios (between first and second person), agreement always occurs with the patient, and alignment is of an ergative-absolutive nature (穉 穉 *p<sup>h</sup>ji<sup>1</sup>-ŋa<sup>2</sup>* ‘You send me’, 穉 穉 *p<sup>h</sup>ji<sup>1</sup>-nja<sup>2</sup>* ‘I send you’). However, in mixed contexts (i.e., in the interaction between first/second and third person), the agreement occurs with the first or second person, no matter its syntactic role (i.e., agent or patient), the only difference being in the theme of the root: A (normal) for 3 > 1/2 configurations, B for 1/2 > 3 ones. In example (4) (mixed context, 2 > 3), the agreement is with the agent, conversely to example (5) (mixed context, 3 > 1), where the agreement is with the patient.

- (4) 穉 穉 穉 穉 穉 穉 穉 穉

*xwā<sup>1</sup> kow<sup>1</sup>·jir<sup>1</sup>da<sup>2</sup> dzji wji<sup>2</sup>·wa<sup>2</sup> ·wj<sup>2</sup>-nja<sup>2</sup>*  
 Xuan Gong ask perform skill INTRG can[B]-2SG

‘Xuan Gong asked: “What fine art are you good at?”’ (12K, 132.12.03, cited in Solonin 1995: 36)

- (5) 穉 穉 穉 穉 穉 穉 穉 穉

*ju<sup>2</sup> sjij<sup>2</sup> zji<sup>1</sup> tɕier<sup>1</sup> dzjwo<sup>2</sup>=dzji·wji<sup>1</sup> mja<sup>1</sup>-sja<sup>1</sup>-ŋa<sup>2</sup>*  
 often think left right people=ERG IRR-kill-1SG

correct (even if not grammatical) translation could possibly be ‘The servant said [to the emperor<sub>i</sub>] that you<sub>i</sub> are<sub>i</sub> a benevolent emperor’, and in example (1c) ‘They<sub>i</sub> used to say that we<sub>i</sub> are<sub>i</sub> the descendants of Tai Bo.’

A \ P	1SG	1PL	2SG	2PL	3
1SG			$\Sigma^1$ -nja <sup>2</sup> 𐰇	$\Sigma^1$ -nji <sup>2</sup> 𐰇	$\Sigma^2$ -ŋa <sup>2</sup> 𐰇
1PL					$\Sigma^1$ -nji <sup>2</sup> 𐰇
2SG					$\Sigma^2$ -nja <sup>2</sup> 𐰇
2PL	$\Sigma^1$ -ŋa <sup>2</sup> 𐰇	$\Sigma^1$ -nji <sup>2</sup> 𐰇			$\Sigma^1$ -nji <sup>2</sup> 𐰇
3			$\Sigma^1$ -nja <sup>2</sup> 𐰇	$\Sigma^1$ -nji <sup>2</sup> 𐰇	$\Sigma^1$

Figure 1: Paradigm of the Tangut verb (without the dual)

‘He was often thinking: “My assistants could kill me”.’ (Leilin 04.03A.4, cited in Shi et al. 1993: 267)

As can show this example given by Jacques (2014: 222), one should note that the reflexive 𐰇 *jij*<sup>1</sup>, which cause the emerging of Stem B, is considered in Tangut as a third-person object:

(6) 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇

*məð*<sup>1</sup>=*kha*<sup>1</sup> *jij*<sup>1</sup> *ljo*<sup>2</sup>-*nja*<sup>2</sup> *thjij*<sup>2</sup>*yiej*<sup>1</sup>  
fire=INTERE REFL throw[B]-2SG INTRG

‘Why throw yourself into the fire?’ (CXZ 14.1–2, Jacques 2007)

It is also to be noted, as already observed by Kepping (1985), that the possessor of a possessed argument often triggers agreement in the verb. In example (7), the verb agrees with the hand’s owner, i.e., the woman, and not the hand itself, as such a coreference would not cause agreement. The Tangut verb’s complete paradigm is summarized in figure 1 (mixed contexts where Stem B occurs are colored in orange).

(7) 𐰇 𐰇 𐰇 𐰇 𐰇 𐰇 [𐰇] 𐰇 𐰇 𐰇 𐰇 𐰇

*mjjj*<sup>1</sup> *njjj*<sup>2</sup>=*do*<sup>2</sup> *kji*<sup>1</sup>-*dju*<sup>1</sup> *dzjwi*<sup>2</sup>=*gu*<sup>2</sup> *dzjwo*<sup>2</sup> *gji*<sup>2</sup>  
woman king=TERM PFV:IN-tell hall=INE people one  
[ŋa<sup>2</sup>]=*jij*<sup>1</sup> *la*<sup>1</sup> *kji*<sup>1</sup>-*zow*<sup>2</sup>-*wji*<sup>1</sup>-*ŋa*<sup>2</sup>  
[1SG]=GEN hand PFV:IN-holding.LV:do[A]-1SG

‘The woman told the king: “There is someone among the persons in the hall who grabbed my hand.”’ (Leilin 07.22.A.3, cited in Shi et al. 1993: 302)

### 1.1.3 The dual suffixes

Tangut also has two suffixes indexing dual arguments: the first person 𐰇𐰏  $-kji^1$  (example 8a), and the second person 𐰇𐰏  $-tsji^1$  (example 8b). Nishida (2004) was the first to reveal the existence of the first person dual suffix and since then, Arakawa (2018) and Zhang (Ms) found new examples, together with occurrences of a second person suffix for the latter. Note that in the two examples given below, the coreference is enforced by pronouns. The place occupied by 𐰇𐰏  $-tsji^1$  in example (8b), between the stem and the inferential 𐰇𐰏  $sjj^2$ , is also entirely consistent with the Tangut template order, as shown in Jacques (2011). As the quantity of examples available for these two dual suffixes is still too scarce (a sufficient amount of contexts of direct speech with a dual argument should be constituted first), they are not included in the analysis for the moment.<sup>5</sup>

- (8) a. 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏  
 $gji^2bjj^2=jij^1 \quad jji^1da^2 \eta a^2 \quad sju^2 gja^1p^1jij^1=rji^2 \quad lji^1kji^1$   
 wife=ANTIERG ask 1SG Xu Junping=COMIT which.one  
 $sjwo^2-kji^1=lji^1 \quad jji^2$   
 be.beautiful-1DU=EXCLAM QUOT  
 ‘...he asked his wife: “Who from Xu Junping or me is more beautiful?”’ (12K, 132.51.06, cited in Solonin 1995: 45)
- b. 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏 𐰇𐰏  
 $nji^2-nji^2 \quad nej^2nej^2 \quad mjij^2-djii^1-tsji^1-sji^2$   
 2.HON-PL safely NEG.PFV-divide-2DU-IFR  
 ‘It seems you two safely did not divide.’ (Jinglü yixiang, Juan 15, cited in Zhang Ms)

## 1.2 Is agreement optional or mandatory?

The two examples given below can illustrate the question of whether or not agreement is optional or mandatory. As one can see, in (9a), all verb forms are indexed with a personal agreement suffix, whereas in (9b), none are marked.

<sup>5</sup>One can still note that these dual forms tend to argue in favor of the Tangut indexation system as a primary state, and not as a feature acquired through the grammaticalization of former pronouns. Indeed, these suffixes, conversely to other agreement particles, do not have pronominal counterparts (apart from a bisyllabic interrogative pronoun 𐰇𐰏 𐰇𐰏  $lji^1kji^1$  where the second part 𐰇𐰏  $kji^1$  can reasonably be assessed to be related to the first person dual; however in that case the pronoun itself could also be the result of a suffixation process).

Facing such diversity, the positions held by scholars have been subject to evolution. Awareness of Tangut verbal agreement is as stated above relatively recent, as the discovery of the phenomenon dates to [Kepping \(1975\)](#), and the explanation of stem alternation to [Gong \(2001\)](#). Since then, some scholars have expressed the view that agreement was optional ([Ahrens 1990](#), [LaPolla 1992b](#)<sup>6</sup>). [Jacques \(2016\)](#), on the other hand, has proposed that indexation should be seen as mandatory with transitive verbs, non-finite exceptions being found in “converbal chains”.

- (9) a. 橐 斡 斡 斡 斡 斡 斡 斡 斡 斡  
*nji<sup>2</sup> dzjir<sup>1</sup>-ya<sup>2</sup> dja<sup>2</sup>-ɕji<sup>1</sup>-nja<sup>2</sup> mjo<sup>2</sup> lwe<sup>2</sup>lwe<sup>2</sup> lja<sup>1</sup>-ŋa<sup>2</sup>*  
 2.HON fast-LOC IMP-go<sub>1</sub>-2SG 1.HUM slowly come-1SG  
 ‘Go quickly. Me, I’ll come slowly.’ (Leilin 07.21.A.5, cited in [Shi et al. 1993](#): 302)
- b. 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡 斡  
*ɕji<sup>1</sup> nji<sup>2</sup>=rjir<sup>2</sup> lhjij<sup>2</sup> dzjwi<sup>1</sup> sjij<sup>1</sup> nji<sup>2</sup>=jij<sup>1</sup>*  
 before 2.HON = COMIT country neighbour today 2.HON = GEN  
*bji<sup>2</sup> ·wji<sup>1</sup>∅ nji<sup>2</sup>=do<sup>2</sup> ·o<sup>2</sup> tjwij<sup>1</sup> khu<sup>1</sup>∅ nji<sup>2</sup> zjo<sup>2</sup>*  
 servant do[A]∅ 2.HON = LOC alcohol cup offer∅ 2.HON life  
*khji<sup>2</sup> tsə<sup>1</sup> lja<sup>1</sup>*  
 ten.thousand autumn come  
 ‘Yesterday I was a neighbor country to you, and today I am your servant. I raise my cup to you and wish you a ten thousand autumns life.’ (Leilin 05.17B.1, cited in [Shi et al. 1993](#): 279)

The view I support here is that agreement is primarily mandatory not only in transitive verbs, but also in intransitive ones, and that the verbal forms not following the pattern above are non-finite. The key proof here is that if the cases of non-agreement can be explained by the presence of invariant contexts which, typologically speaking, also often accompany non-finite forms, agreement should be seen as mandatory.

The primary material of the present analysis consists of two xylographs, the 斡 斡 *Djij<sup>1</sup> bo<sup>1</sup>* (‘Forest of Categories’, also known as 斡 斡 ‘Lèilin’, edition of [Shi et al. 1993](#)) and the 斡 斡 斡 *Ÿa<sup>2</sup> nji<sup>1</sup> lhjij* (‘Twelve Kingdoms’, edition of [Solonin 1995](#)). These two documents offer the advantage of being relatively close approximations of oral speech, with the style of the translation being quite distinct from the original Chinese text.

<sup>6</sup>This optionality was for LaPolla an argument to support his view of an ‘isolating’ proto-Sino-Tibetan, of view today not shared by a majority of scholars in the field of Sino-Tibetan historical linguistics.

## 2 Clues to the mandatoriness of agreement

In dependent clauses, the emergence of a non-finite form is something that can happen in a language as familiar as English, in a sentence like ‘Who is the boy *writing on the desk?*’. In the relative clause, the action nominal ‘writing’ is used in place of the structure with the relative pronoun ‘who’ in ‘Who is the boy who is writing on the desk?’.

In Tangut, a verb inside a syntactically dependent clause (as a relative clause or a completive clause) *displays* agreement. In example (10) which cites a story from the 左轉 *Zuǒ Zhuàn* (Lord Xuan, 15), the verb inside the head-internal relative clause 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 (between brackets) agrees with the second-person agent of the verb 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 ‘let marry’ (that person also being the addressee of the whole sentence). I explain the absence of agreement of the copula of the first foreground clause in section 3.

- (10) 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 [𐰽𐰺𐰍𐰏𐰤𐰆𐰏] { 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 } 𐰽𐰺𐰍𐰏𐰤𐰆𐰏  
 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 𐰽𐰺𐰍𐰏𐰤𐰆𐰏

*nar*<sup>2</sup>*dzjwo*<sup>2</sup> · *we*<sup>2</sup> *khjow*<sup>2</sup> = *jij*<sup>1</sup> *da*<sup>2</sup> · *ji*<sup>2</sup> *ŋa*<sup>2</sup> = [*tja*<sup>1</sup>] { *nji*<sup>2</sup> *la*<sup>2</sup> *mja*<sup>1</sup>  
 old.man Wei Ke=ANTIERG say 1SG=[TOP] { 2.HON aunt  
*jar*<sup>2</sup> *ɕji*<sup>2</sup> · *phjo*<sup>2</sup> · *nja*<sup>2</sup> } = *jij*<sup>1</sup> · *wja*<sup>1</sup> *ŋwu*<sup>2</sup> ∅ = *tɕhjwo*<sup>1</sup> [*ɕji*<sup>2</sup>  
 marry go<sub>2</sub>-CAUS[B]-2SG } = GEN father COP ∅ = because [grass  
*lhwa*<sup>0</sup> = *ŋwu*<sup>2</sup> *nji*<sup>2</sup> = *jij*<sup>1</sup> *lji*<sup>2</sup> *lji*<sup>1</sup> *ljij*<sup>2</sup> · *ŋa*<sup>2</sup>  
 tie]=INS 2.HON = ANTIERG favour give.back come[B]-1SG

‘The old man said to Wei Ke: “I am the father of your aunt,<sup>7</sup> the one you made wed once more; due to that reason I returned your favour to you by fastening the grass [under the feet of the enemy].’ (Leilin 07.18.A.3, cited in Shi et al. 1993: 301)<sup>8</sup>

Similarly, in the following sentence, perhaps written in semi-direct speech, the verb inside the completive 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 agrees with the semantic agent 𐰽𐰺𐰍𐰏𐰤𐰆𐰏. As one can see, the form used in the English translation is the infinitive, i.e., a non-finite form.

<sup>7</sup>I translate here the main meaning of 𐰽𐰺𐰍𐰏𐰤𐰆𐰏, ‘aunt’ in Tangut, although 姜 in Chinese shows that 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 refers here to a concubine of ego’s deceased father.

<sup>8</sup>I use the label “anti-ergative” (LaPolla 1992a) in place of “oblique” essentially because of the ability of the clitic 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 = *jij*<sup>1</sup> to mark the semantic object of a prototypic transitive verb, a distribution not incompatible with the canonical conception of oblique case (cf., differential object marking), but which adds complexity when the label “anti-ergative” confers 𐰽𐰺𐰍𐰏𐰤𐰆𐰏 *jij*<sup>1</sup> a label coherent both syntactically and semantically.



(11) 席 嚙 循 { 筵 蓂 蓂 蓂 } 玆 瓿

$njij^2 bji^2 = jij^1$       {  $lj\dot{i}^2 zjij^2 \cdot wja^2 - nji^2$  }  $j\dot{i}^2 - nja^2$   
king servant=ANTIERG { soil taxes remit-12PL } say-2SG

‘King, tell the servants { to remit the taxes }.’ (12K 132.46.06, left untranslated in [Solonin 1995](#))

These two examples cannot prove the mandatory nature of Tangut verbal agreement, but are still substantial clues. I am now going to analyze and categorize the cases where the Tangut verb does not agree with its argument(s).

### 3 Clause chaining dependency

The label “clause chaining” refers in the field of syntax analysis to the succession of foreground clauses, i.e., not subordinate to one another ([Dooley 2010](#)) inside the same sentence, with an operator dependency ([van Valin 2005](#)), typologically prenuclear in SOV languages (i.e., with a controlling position on the right). [Jacques \(2016\)](#) used the term “converbal chain” to depict that phenomenon; however, I prefer the label “clause chaining,” as converbs show a similar pattern, but not only—as I think to be the case in Tangut—limited to coordination, the defining parameter of converbal chains being the existence of a dedicated operator called the “converb” ([Haspelmath & König 1995](#)).

One could note that to validate the existence of clause chaining, the first thing to do is to prove coordination. [Haspelmath 2007](#) proposed a set of conditions we will use *vis-à-vis* example (12).

- no intercalation rule: no clause can be contained inside another;
- temporal iconicity rule: the linear order must be in accordance with the chronology of the facts;
- no cataphora rule: the first coordinate clause cannot contain a reference that appears only in the second clause;
- no focus rule: no coordinate can be focused;
- no extraction rule: it must be impossible to extract an interrogative from the second coordinate clause to put it in the first position.

As one can see in example (12) which translates a story from the *Book of the Later Han* (Volume 27), all the conditions listed ahead apply to the phenomenon:

first of all, all the clauses (separated by a coordinator in the translation) are independent and cannot be contained by any of the other clauses; then the temporal iconicity is respected between each clause (the first clause referring to the past cause of the presence of the messenger, the second to his present state, and the last to a desire necessarily concerning a possible future); then none of the arguments of the first clause can be regarded as a cataphora of an argument first appearing in the second clause; furthermore, the focus on one clause would be strange, as neither of the other clauses could follow such a focus; eventually, the response to the question ‘What are you holding?’ definitely cannot be ‘The situ sent me’.

- (12) 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒  
*ŋa*<sup>2</sup>=*tja*<sup>1</sup> *sə*<sup>1</sup>*thu*<sup>1</sup> *rjir*<sup>2</sup>-*phji*<sup>1</sup>∅ *njj*<sup>1</sup>*jwir*<sup>2</sup> *gj*<sup>2</sup> *zow*<sup>2</sup>∅ *xu*<sup>1</sup>*zj*<sup>1</sup>=*rjir*<sup>2</sup>  
 1SG=TOP situ PFV:DIR-send[A]∅ letter one hold∅ wife=COMIT  
*ber*<sup>1</sup> *kjej*<sup>2</sup>-*ŋa*<sup>2</sup>  
 see desire-1SG

‘The situ sent me, I’m holding a letter and I want to see my wife.’ (Leilin 08.11.A6, cited in Shi et al. 1993: 309)

Thus, we are facing coordination, in a pattern similar to many languages which mark the last verb of a chain of non-finite forms (as one of the uses of the ㄟ ‘te’ form in Japanese, or the “absolute” case seen in Indian languages). The originality of Tangut lies only in the fact that the operator dependency concerns *person*, the agreement phenomenon being at the same time able to define finiteness.

In example (13), in which the pattern is similar to example (10) in the last section (non-agreement in the first foreground clause), clause chaining explains once more the absence of indexation of 纒 *sjwi*<sup>1</sup>. The verbs included in the complete clause are to be seen as generic forms not related to the parameter of person, maybe nominalized by 報 *nji*<sup>2</sup>.

- (13) { 纒 纒 纒 纒 纒 [報] } 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒 纒  
 { *ɕjwi*<sup>1</sup> *dzaa*<sup>1</sup> *gji*<sup>2</sup>*bjij*<sup>2</sup> *mjj*<sup>1</sup> [*nji*<sup>2</sup>] } *mji*<sup>1</sup>-*sjwi*<sup>1</sup>∅ *lew*<sup>1</sup>  
 { age decrease wife NEG.COP etc. } NEG-preoccupy∅ only  
 [*ŋwər*<sup>1</sup>*khju*<sup>1</sup> *dzju*<sup>2</sup> *mjj*<sup>1</sup>]=*jij*<sup>1</sup> *sjwi*<sup>1</sup>-*ŋa*<sup>2</sup>  
 [world sovereign NEG.COP]=ANTIERG preoccupy-1SG

‘I don’t care about such things as getting old or not having a spouse; I just worry about the fact that there isn’t a sovereign in that world.’ (Leilin 08.12.B.7, cited in Shi et al. 1993: 309)

Eventually, if one recalls the Tangut verb’s usual agreement with a possessed argument (see example 7), clause chaining can shed new light on the semantic

coreferences we have to establish. In example (14), 斷 should agree with the second person, and absence of indexation should then be seen as a consequence of clause chaining, and not of the fact that the agent (the king) is a third person.

(14) 席戮悞 [讖] 肅齋斷絞戮彥 阨

*njij<sup>2</sup> kji<sup>1</sup> djij<sup>2</sup> [nja<sup>2</sup>]=:jij<sup>1</sup> ·o<sup>1</sup> ·wjar<sup>1</sup>∅ nji<sup>0</sup> dzji<sup>0</sup>=·wji<sup>1</sup>-nja<sup>2</sup>*  
king certainly [2SG]=GEN belly cut∅ pearl pulling=LV:do[A]-2SG

‘The king will no doubt cut your belly and pull the pearl out of it.’ (Leilin 04.02A.2, cited in Shi et al. 1993: 267)

## 4 Conditional dependency

The conjunction 彥 *tjij<sup>1</sup>* usually precedes a non-finite form. In a case such as in example (15), though, it is not easy to know for sure if it is a non-finite form coreferent with the agent, or if it is a generic form similar to that of the following verb 肅 *dzjwi<sup>2</sup>dzjij<sup>2</sup>* (a hypothesis I favor here). Nevertheless, there are other examples, as in (16), where the knowledge of the context allows the establishment of a coreference between the subject and the verb, and where the absence of an agreement therefore has to be explained.

(15) [彥] 慨彥肅戮悞 絳肅肅

*[tjij<sup>1</sup>] mji<sup>1</sup>-wji<sup>1</sup>∅ ku<sup>1</sup> kji<sup>1</sup> djij<sup>2</sup> kie<sup>1</sup>=bju<sup>1</sup> dzjwi<sup>2</sup> dzjij<sup>2</sup>*  
[if] NEG-do[A]∅ then necessarily rules=according.to judge

‘If it is not done, then it will be judged in accordance to the rules.’ (Leilin 07.03A.5, cited in Shi et al. 1993: 297)

(16) 彥 肅 彥 肅 戮 悞 肅 肅 [彥] 悞 ∅ 肅 戮 悞 席 絳 肅 戮 悞 [悞] 悞 ∅ 肅 戮 悞 悞 肅 肅 悞

*thjij<sup>1</sup> xiwəj<sup>1</sup>=do<sup>2</sup> dzjwo<sup>2</sup> zeew<sup>2</sup> bju<sup>2</sup> ɕji<sup>1</sup>-phji<sup>1</sup> [tjij<sup>1</sup>] lja<sup>1</sup>∅*  
Tian Heng=TERM person send announce go<sub>1</sub>-CAUS[A] [if] come∅  
*ku<sup>1</sup> kji<sup>1</sup> djij<sup>2</sup> njij<sup>2</sup>-tsəj<sup>1</sup> mjii<sup>1</sup> bjij<sup>2</sup>-phji<sup>1</sup>-nja<sup>2</sup> [mji<sup>1</sup>]-lja<sup>1</sup>∅ ku<sup>1</sup>*  
so necessarily king-DIM entitle-CAUS[A]-2SG [NEG]-come[B]∅ so  
*kji<sup>1</sup> djij<sup>2</sup> dzjwo<sup>2</sup> zeew<sup>2</sup> jijr<sup>2</sup>-phji<sup>1</sup>-nja<sup>2</sup>*  
necessarily person send execute-CAUS[A]-2SG

‘He sent someone at Tian Heng’s place and made him say: “If you come, I will make you prince, but if you don’t come I will certainly send someone to have you executed.”’ (Leilin 09.07.B.4, cited in Shi et al. 1993: 314)

There is usually no agreement after the conjunction 𪛑 *tji¹*, whose conditional structure can therefore be seen at the origin of a dependency which is itself at the origin of the absence of agreement. However, the indexation of the main clause’s verb is a prerequisite for such a form to occur. In example (17), the verb following the conjunction displays agreement, as the main clause’s verb does not allow for the establishment of a coreference with the addressee/agent of the verb 𪛑𪛑 *dʒjow¹ka²* ‘move away’.

(17) 𪛑𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑 𪛑

*tji¹ tsʰji¹ lʰji¹=rji² dʒjow¹ka²-nja² ku¹ sja² lji²-io¹ sjwo¹-tji²*  
 [if] Qi State=COMIT separate-2 then Xie land use-NMLZ  
*ljo² ·wji² ji²*  
 INTRG EXV.on QUOT

‘If you move away from Qi’s State, then what will be the use of Xie’s land?’ (12K, 132.33.04, cited in [Solonin 1995](#): 42)

## 5 Topic/comment dependency

As said above, indexation is probably primarily mandatory both in transitive and intransitive verbs. Table (1) illustrates this statement by listing all the forms of the copula *ɲwu²* in direct or semi-direct speech in the Leilin.

I already analyzed the last form listed in the table as a consequence of clause chaining. However, the agreement of the copula 𪛑 *ɲwu²* seems to behave according to parameters also related to the topic/comment (thematic/rhematic) structure of the clause. Example (18) is illustrative of what one can see as a topical dependency: in Table (1), each time the copula doesn’t agree with its subject, the subject is followed by the topical clitic 𪛑 = *tja¹*.

One can observe that a topic/comment structure can be coupled in two cases with clause chaining, as in example (19), where the last verb of the main clause should be understood as generic (‘it is not possible’). In that case, it is still difficult to determine which one of the two processes is responsible for the lack of agreement. However, the explanation of non-indexation as a consequence of the appearance of the topical 𪛑 remains consistent if we look at the other cases.

Form	Finiteness	Affixes	Context	Ref.
2SG	F	𪛗 <sup>2</sup> -nja <sup>2</sup>	main	03.10B.1
2SG	F	𪛗 <sup>2</sup> -nja <sup>2</sup>	main	03.10B.2
2SG	F	𪛗 <sup>2</sup> -nja <sup>2</sup>	main	03.10B.6
2SG	F	𪛗 <sup>2</sup> -nja <sup>2</sup>	completive	03.11A.2
1SG	NF	/	comment	03.23A.4
1SG	NF	/	comment	03.35B.7
1.PL	F	𪛗 <sup>2</sup> -nji <sup>2</sup>	main	04.33A.4
1SG	NF	/	comment	07.17.A.6
2SG	NF	/	interrog.	07.16.B.4
1SG	NF	/	comment / clause ch.	07.16.B.4
1.PL	F	𪛗 <sup>2</sup> -nji <sup>2</sup>	main	07.21.B.7
1.PL	NF	/	comment	07.22.A.1
1SG	F	𪛗 <sup>2</sup> -ŋa <sup>2</sup>	main (pron.)	08.11.A.7
1SG	F	𪛗 <sup>2</sup> -ŋa <sup>2</sup>	main (pron.)	08.13.B.4
1SG	NF	/	comment / clause ch.	07.18.A.3

Table 1: Agreement of 𪛗<sup>2</sup> ŋwu<sup>2</sup>- COP in the Leilin

(18) 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> [𪛗<sup>2</sup>] 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup>

*ljij<sup>1</sup> ·wjij<sup>2</sup>=jij<sup>1</sup> dja<sup>2</sup>·jir<sup>1</sup> ljij<sup>1</sup> ·wjij<sup>2</sup> da<sup>2</sup> ŋa<sup>2</sup>=[tja<sup>1</sup>] mja<sup>1</sup> be<sup>2</sup>*  
 Ling Zhe=ANTIERG PFV-ask Ling Zhe say 1SG=[TOP] former day  
*sow<sup>1</sup> sji<sup>1</sup>phu<sup>2</sup>=khju<sup>1</sup> dzjwiw<sup>2</sup> dzjwo<sup>2</sup> ŋwu<sup>2</sup>∅·ji<sup>2</sup>*  
 mulberry tree=SUBE starving person COP∅ QUOT

‘He asked Lingzhe; the latter answered: “I’m the starving man who was under the mulberry tree last time.”’ (Leilin 07.17.A.6, cited in Shi et al. 1993: 301)

(19) 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> [𪛗<sup>2</sup>] 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup> 𪛗<sup>2</sup>

*dzjwiw<sup>2</sup> dzjwo<sup>2</sup> da<sup>2</sup> ŋa<sup>2</sup>=[tja<sup>1</sup>] tshji<sup>1</sup> lhjj<sup>2</sup> dzjwo<sup>2</sup> ŋwu<sup>2</sup>∅ mə<sup>2</sup>*  
 starving person say 1SG=[TOP] Qi country person COP∅ clan.name  
*ljij<sup>1</sup> mjij<sup>2</sup>·wjij<sup>2</sup>·jwir<sup>2</sup> yiew<sup>1</sup> ɕji<sup>2</sup>∅ sɔ<sup>1</sup> kjiw<sup>1</sup>·we<sup>2</sup> sji<sup>1</sup> lhjwo<sup>1</sup>*  
 Ling, name Zhe, literature study go<sub>2</sub>∅ three year do today return  
*kiej<sup>2</sup>∅ dzji<sup>1</sup>dzjwij<sup>2</sup> dja<sup>2</sup>·sji<sup>1</sup>=bjju<sup>1</sup> mə<sup>2</sup> lhjj<sup>2</sup> X·wji<sup>1</sup>*  
 desire∅ food PFV-to.end = because origin country X.do[A]  
*tji<sup>1</sup>·njwi<sup>2</sup> (∅)*  
 PROHIB-can (∅)

‘The starving man said: “I am from Qi, my name is Ling Zhe; I went to study literature for three years. Today I want to come back home, but my provisions are empty. I can’t come closer to my hometown.”’ (Leilin 07.16.B.4, cited in [Shi et al. 1993](#): 301)

There are still two cases that do not display agreement when the topical clitic does not appear. I treat the case of the interrogative sentence (07.16.B.4) in the next section. Regarding the sentence 07.22.A.1 reproduced in example (20),<sup>9</sup> if we consider the possibility that the last phrase is really reported speech, I hypothesize that the non-finite copula is due to a dependency similar to that of the topic/comment structure, but at an extra-clausal level (or thetical, see [Kaltenböck et al. 2016](#)).

- (20) 儼嗷駉龔劓龔彥駸 𠄎𠄎 [𠄎𠄎嗷駸 𠄎𠄎] 𠄎  
*ɣwə<sup>1</sup> dzjwo<sup>2</sup> dɑ<sup>2</sup> mja<sup>1</sup> be<sup>2</sup> rjijr<sup>1</sup> kjw#r<sup>1</sup>=mjijr<sup>2</sup> ɣwu<sup>2</sup>-nɣi<sup>2</sup> jɣ<sup>2</sup> [tɕjiw<sup>1</sup>*  
 five person say other day horse steal=NMLZ COP-12PL QUOT Zhou  
*ɕjiɣ<sup>1</sup> dzjwo<sup>2</sup> ɣwu<sup>2</sup>∅ lɣ<sup>1</sup>] jɣ<sup>2</sup>*  
 dynasty person COP∅ ASSERT QUOT

First possible translation: ‘We are the five people who stole the horse last time; we are from Zhou!’ (Leilin 07.22.A.1)

Alternative translation: “‘We are the five people who stole the horse last time.’ They were from Zhou.’ (Leilin 07.22.A.1, cited in [Shi et al. 1993](#): 302)

This form of dependency of a verbal form on a preceding sentence exists, for example, in East Greenlandic Inuit, where it has been defined by [Tersis \(2010: 588\)](#) “as a form of situational dependency at the paragraph level.” I reproduce her example in (21); one can see that the attributive, ordinarily used as a noun-modifier third-person participial (e.g., *tikkak nii-tiq* ‘man eating’, lit. man eat-ATTRIB.SG) also occurs at a discursive level in a dependent clause. In Tangut, as for clause chaining, the dependency only concerns the parameter of person and could be linked to the context of enunciation (example 9b of the introduction).

- (21) *miqsiqtit tasiita-mut nuut-taq-pu-t tattani atiwaqpim-mi*  
 child.PL Tasiilaq-DIR move-HABITUAL-IND-3PL there school-LOC  
*nayuna-qaq-ti-tit.*  
 home-have-ATTRIB-3PL

<sup>9</sup>It would have been easier not to consider this example, as it does not enter in the topic/comment structure at a clausal level, and as [Shi et al. 1993](#) analyze the phrase 𠄎𠄎嗷駸 𠄎𠄎 *tɕjiw<sup>1</sup> ɕjiɣ<sup>1</sup> dzjwo<sup>2</sup> ɣwu<sup>2</sup>* as a narrative component. However, the verb 𠄎𠄎 *jɣ<sup>2</sup>* indicates reported speech quite consistently, while the assertive is often found in (semi)-direct-speech. I thus consider here the possibility of speech produced by the thieves themselves. More examples will be necessary to be completely sure of the exact meaning of this sentence.



(23) 𐞗𐞙𐞛𐞜𐞝𐞞𐞟𐞠𐞡

*nji*<sup>2</sup> ·*wa*<sup>2</sup>=*sju*<sup>2</sup> *dzjwo*<sup>2</sup> *ŋwu*<sup>2</sup>∅  
2.HON INTRG = sort people COP∅

‘What sort of person are you??’ (Leilin 07.16B.3, cited in [Shi et al. 1993](#): 301)

## 7 Conclusion

This overview of the limited contexts where agreement does not appear reveals the importance of dependency in our understanding of Tangut grammar. Indeed, dependency is the objective explicative tool that describes the computation of a coreference from the speaker’s subjective point of view. This coreference is anaphoric in the case of topic/comment (perhaps thetic) structures or modal statements as imperative or interrogation, and cataphoric in the case of clause chaining and conditional dependency. Apart from these situations, all the verbs used in direct speech are indexed, and agreement should then be seen as primarily mandatory, non-agreement being limited to the specific contexts listed in the present study.



## Abbreviations

1SG first person singular (pronoun & suffix)	INE inessive (‘in, within’)
1.HUM first person humilific pronoun	INS instrumental
2SG second person singular (pronoun & suffix)	INTERE intercessive (‘in, among, through’)
2.HON second person honorific pronoun	INTRG interrogative
1PL first person plural pronoun	IRR irrealis
12PL first and second person plural suffix	LOC locative
ANTIERG antiergative	LV light verb
CAUS causative	NEG negative prefix
COMIT comitative	NMLZ nominalizer
COMP comparative	OPT optative
COP copula	PFV perfective
NEG.COP negative copula	PFV:DOWN downwards perfective
DIM diminutive	PFV:IN centripetal perfective
PFV:DIR directional preverb	PFV:OUT centrifugal perfective
ERG ergative	PROHIB prohibitive
EXV.on existential verb (on a surface)	QUOT quotative verb
EXCLAM exclamative	REFL reflexive
IMP imperative	SUBE subessive (‘above’)
IMP:UP upwards imperative	SUPE superessive (‘on the surface of, when’)
GEN genitive	TERM terminative
	TOP topic

## Bibliography

- Ahrens, Kathleen. 1990. Re-examining the evidence for verbal agreement in Tangut. Paper presented at the 23rd International Conference on Sino-Tibetan Languages and Linguistics, University of Texas at Arlington, October 1990.
- Aikhenvald, Alexandra. 2007. Semi-direct speech: Manambu and beyond. *Language Sciences* 30(4). 383–422.
- Arakawa, Shintarō 荒川慎太郎. 2018. 西夏語の双数接尾辞について Seik-ago no sosu setsubishi ni tsuite [On the ‘dual’ suffix of Tangut]. In ユーラシア諸言語の多様性と動態—20号記念号—追悼庄垣内正弘先生 [Diversity and Dynamics of Eurasian Languages: The 20th Commemorative Volume Dedicated to Prof. Dr. Masahiro Shōgaito] Contribution to the studies of Eurasian languages series 20, 69–83. The Consortium for the Studies of Eurasian Languages.

- Beaudouin, Mathieu. accepted. Tangut and Horpa languages: some shared morphosyntactic features. *Language and Linguistics*.
- Dooley, Robert A. 2010. Exploring clause chaining. SIL Electronic Working Papers 2010–001. [https://www.sil.org/system/files/reapdata/13/04/21/130421360311569160306235201738876375986/silewp2010\\_001.pdf](https://www.sil.org/system/files/reapdata/13/04/21/130421360311569160306235201738876375986/silewp2010_001.pdf). Last checked: 10/02/2021.
- Gong, Hwang-cherng 龔煌城. 2001. 〈西夏語動詞的人稱呼應與音韻轉換〉 *Xixià yǔ dòngcí de réncēng hūyìng yǔ yīnyùn zhuǎnhuàn* [Rhyme alternation and personal agreement in the Tangut verb]. *Language and Linguistics* 2(1). 21–67.
- Gong, Hwang-cherng 龔煌城. 2006. 西夏語文研究論文集 *Xixià yǔwén lùn-wénjí* [Collected papers on the Tangut language]. Taipei: Institute of Ethnology of the Academia Sinica.
- Haspelmath, Martin. 2007. Coordination. In Timothy Shopen (ed.), *Language typology and syntactic description*, vol. II: Complex constructions, 1–51. Cambridge: Cambridge University Press.
- Haspelmath, Martin & Ekkehard König (eds.). 1995. *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms–adverbial participles, gerunds*. Berlin: Mouton de Gruyter.
- Honkasalo, Sami. 2019. *A grammar of Eastern Geshiza : A culturally anchored description*: University of Helsinki, Faculty of Arts dissertation.
- Jacques, Guillaume. 2007. *Textes tangoutes I. Nouveau recueil sur l’amour parental et la piété filiale*. München: Lincom Europa .
- Jacques, Guillaume. 2011. The structure of the Tangut verb. *Journal of Chinese Linguistics* 39(2). 419–441.
- Jacques, Guillaume. 2014. *Esquisse de phonologie et de morphologie historique du tangoute*. Leiden: Brill.
- Jacques, Guillaume. 2016. Tangut, Gyalrongic, Kiranti and the nature of person indexation in Sino-Tibetan/Trans-Himalayan. *Linguistics Vanguard* 2(1). 2015–0033.
- Jacques, Guillaume. 2017. L’impératif en tangoute. *Panchronica (Research Blog)* <https://panchr.hypotheses.org/2015>. Last checked: 10/02/2021.

- Jacques, Guillaume & Anton Antonov. 2014. Semi-direct speech in rGyalrongic languages: Rtau vs Japhug. Paper presented at the Symposium on the Syntax of the World's Languages VI, Pavia, September 2014.
- Kaltenböck, G., E. Keizer & A. Lohmann. 2016. Outside the clause: form and function of extra-clausal constituents *Studies in Language Companion Series*, 178. Amsterdam: John Benjamins.
- Kepping, Ksenija. 1975. Subject and object agreement in the Tangut verb. *Linguistics of the Tibeto-Burman Area* 2(2). 219–231.
- Kepping, Ksenija. 1985. Тангутский язык: Морфология [The Tangut Language: Morphology]. Moscow: Nauka.
- Lai, Yunfan. 2017. *Grammaire du khroskyabs de Wobzi*. Paris: Université Sorbonne Paris Cité dissertation.
- Lai, Yunfan, Jesse Gates, Xun Gong & Guillaume Jacques. 2020. Tangut as a West Gyalrongic language. *Folia Linguistica Historica* 41(1). 171–203.
- LaPolla, Randy. 1992a. 'Anti-ergative' marking in Tibeto-Burman. *Linguistics of the Tibeto-Burman Area* 15(1). 1–9.
- LaPolla, Randy. 1992b. On the dating and nature of verb agreement in Tibeto-Burman. *Bulletin of the School of Oriental and African Studies* 55(2). 298–315.
- Li, Fanwen 李範文. 2008. 夏漢字典 Xià Hàn zìdiǎn [A Tangut-Chinese Dictionary]. Beijing: Social Sciences Academic Press.
- Miyake, Marc. 2012. Complexity from compression: a sketch of pre-Tangut. In Irina Popova (ed.), Тангуты в Центральной Азии: сборник статей в честь 80-летия проф. Е.И.Кычанова [Tanguts in Central Asia: a collection of articles marking the 80th anniversary of Prof. E. I. Kuchanov], 244–261. Moscow: Oriental Literature.
- Nevsky, Nikolai Alexandrovich. 1960, posth. Тангутская филология [Tangut Philology], vol. 1. USSR Academy of Sciences.
- Nishida, Tatsuo 西田龍雄. 1964–1966. 西夏語の研究 — 西夏語の再構成と西夏文字の解読 Seikago no kenkyū - Seikago no saikōsei to seika moji no kaidoku [Tangut Studies - Decipherment of the Tangut Script and Reconstruction of the Tangut Language]. Tokyo: Zauhō Kankōkai [2 volumes].

- Nishida, Tatsuo 西田龍雄. 2004. 西夏語文法新探 Xīxià yǔ wénfǎ xīntàn. In Lin Ying chin 林英津 (ed.), 漢藏語研究—龔煌城先生七秩壽慶論文集 Hànzàngyǔ yánjiù – Gong Hwang-cherng xiānshēng qīzhì shòuqìng lùnwénjí [Sino-Tibetan Studies – collected paper for the anniversary of Prof. Gong Hwang-cherng], 353–381. Taipei: Institute of Linguistics of the Academia Sinica.
- Shi, Jinbo 史金波, Huang Zhenhua 黃振華 & Nie Hongyin 聶鴻音. 1993. 類林研究 Lèilín yánjiù [Study of Leilin]. Ningxia Renmin Press.
- Silverstein, Michael. 1976. Hierarchy of features and Ergativity. In Robert M.W. Dixon (ed.), Grammatical categories in Australian languages, 112–171. Canberra: Australian Institute of Aboriginal Studies.
- Sofronov, Michail V. 1968. Грамматика тангутского языка [Grammar of the Tangut language]. Moscow: Nauka.
- Solonin, Kirill. 1995. 嵛榑嶺 / Двенадцать царств [The Twelve Kingdoms]. Saint Petersburg: Petersburg Oriental Studies.
- Tersis, Nicole. 2010. Clause dependency relations in East Greenlandic Inuit. In Isabelle Bril (ed.), Clause linking and clause hierarchy, syntax and pragmatics. Studies in Language Companion Series 121, 581–601. Amsterdam: John Benjamins.
- Tournadre, Nicolas & Sangda Dorje. 2003. Manuel de tibétain standard. Paris: L’Asiathèque.
- van Valin, Robert D. 2005. Exploring the syntax-semantics interface. Cambridge: Cambridge University Press.
- Zhang, Yongfu 張永富. Ms. 西夏語第一、二人稱雙數後綴與人稱範疇再探討 Xīxià yǔ dì yī, dì èr rénchēng shuāngshù hòuzhuì yǔ rénchēng fānchóu zài tàn-tǎo [New inquiries on the first/second person dual suffixes and the agreement in Tangut].

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