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The history of the polyfunctional $\text{𑖃𑖄𑖅 } jij^1$ in Tangut

How did the accusative/genitive syncretism come about?

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This paper focuses on the history of a polyfunctional case marker $\text{𑖃𑖄𑖅 } jij^1$ in Tangut, an extinct Rgyalrongic language (Sino-Tibetan). This versatile case morpheme is a typological rarity of maximum syncretism among several abstract case functions, including differential object marking, the genitive, and the oblique (which overlaps with the dative). For one thing, accusatives originating from datives or spatial sources are rarely found with additional genitive functions; for another, reported instances of accusative/genitive syncretism seldom include other functions. The principal hypothesis of this paper is that the Tangut $\text{𑖃𑖄𑖅 } jij^1$ may be the result of multiple grammaticalization processes stemming from a proto-locative source. These processes can be subsumed under two pathways, one leading from an allative to an accusative, with an intermediate oblique stage, and the other from a locative to a genitive. Although both of these development pathways are frequently attested, the Tangut $\text{𑖃𑖄𑖅 } jij^1$ remains a typological rarity due to their superposition.

Keywords: case syncretism, differential object marking, locative, Tangut, Rgyalrongic languages

1. Introduction

This paper focuses on the diachronic development of the polyfunctional case marker $\text{𑖃𑖄𑖅}^{1139} jij^1$ in Tangut (Glottolog: tang1334, in Tangut $\text{𑖃𑖄𑖅 } mji^2 jwu^1$, in

Chinese 西夏语 *xīxià yǔ*), an extinct language with its own scripts, once spoken in the Tangut Empire (1038–1227) in present day northwestern China.¹

Though once classified into the Qiangic branch (Tibeto-Burman, Sino-Tibetan) (Wang 1933; Sun 1991; etc.), recent studies on Sino-Tibetan phylogeny and historical linguistics (Lai et al. 2020; Sagart et al. 2019) show that Tangut is a close relative of the modern Rgyalrongic languages, a group of unwritten Tibeto-Burman languages, spoken in southwestern China (Aba Tibetan and Qiang Autonomous Prefecture and Ganzi Tibetan Autonomous Prefecture, Sichuan Province cf. Figure 1). These languages are known for their complex phonology and rich polysynthetic morphology, which several authors consider to be conservative features (Jacques 2004; Hill 2019; Zhang et al. 2019; etc.). The subgrouping of the Rgyalrongic group is illustrated in Figure 2.

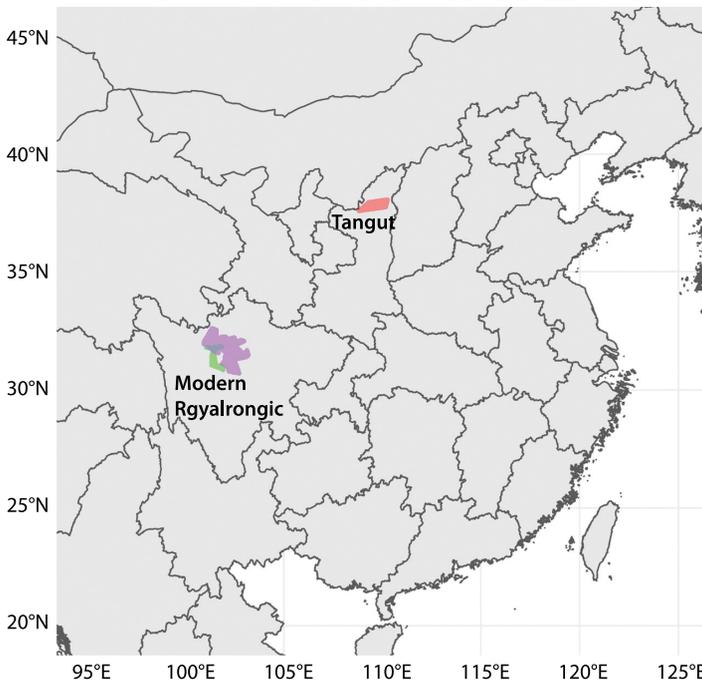


Figure 1. Geographic distribution of Tangut and modern Rgyalrongic languages

1. Since this paper has been written with typologists/diachronicists, Sino-Tibetanists, and Tangutologists in mind, Tangut characters are provided alongside their number as listed in the Tangut-Chinese Dictionary (Li 2008). Transcriptions follow the reconstruction of Gong (2003). However, knowledge on Tangut characters is not necessary for understanding the content of the paper. The present analysis is mainly based on two materials translated from Chinese texts, 籀核 (*Leilin*, ‘The Forest of Categories’, eds. Shi et al. 1993) and 新集西夏文辞源 (*Xinji Cixiao-zhuan*, ‘Newly Collected Biographies of Affection and Filial Piety’, ed. Jacques 2007).

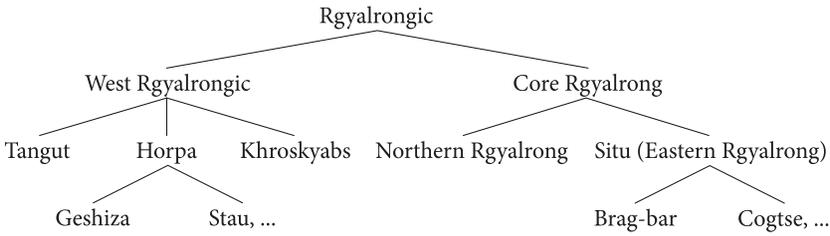


Figure 2. *Stammbaum* of Rgyalrongic languages (Sun 2000; Lai et al. 2020)

The most important functions of the postposition རྟོག་འཇོག་ include differential object marking (i.e. accusative), and the genitive. It reflects the Proto-Rgyalrongic yod postposition =*j(V), the functions of which vary across different sub-groups. No modern Rgyalrongic varieties exhibit the same accusative/genitive syncretism as the Tangut རྟོག་འཇོག་. Before discussing the source of རྟོག་འཇོག་ and the processes leading to its accusative/genitive syncretism, I will first briefly introduce the phenomenon of differential object marking and the sources of its markers.

1.1 Differential object marking

‘Differential object marking’ (henceforth DOM) refers to the non-uniform marking of objects within the same language, depending on their semantico-pragmatic properties (Aissen 2003; Bossong 1985; Dalrymple & Nikolaeva 2011; Næss 2004; etc.), as illustrated by the pair of examples from Hindi given in (1).

HINDI (INDO-EUROPEAN)

- (1) a. *Ilaa-ne ek bacee-ko ut^haayaa*
 Ila-ERG one child-ACC lift-PERF
 ‘Ila lifted a child.’
 b. *Ilaa-ne ek haar ut^haayaa*
 Ila-ERG one necklace.NOM lift-PERF
 ‘Ila lifted a necklace.’

(Mohanan 1994: 79)

DOM is often used as an umbrella term,² most frequently including systems exhibiting optional object marking, in which an object marker can optionally be present or absent without affecting its grammatical function, as is the case in Hindi, and those showing alternating marking, where two morphological case

2. Distinction is also made between differential case marking of object, which is dependent marking by morphological case or adpositions, and differential object indexation, occurring on the predicate (Iemmolo 2011; Witzlack-Makarevich & Seržant 2018). In the present paper, the term DOM is used only to designate case marking on dependent.

markers alternatively mark the object (for a detailed discussion on this issue see Chappell & Verstraete 2019).

Recurrent parameters of DOM involve animacy (humanness), definiteness, specificity, and information structure of the object (Aissen 2003; Dalrymple & Nikolaeva 2011; Sinnemäki 2014; etc.). In many languages DOM operates under a synergy of multiple parameters. In Hindi, accusative marking is related to animacy and definiteness, while animate and definite inanimate objects receive overt marking (Mohanani 1994: 84). In Dolakha Newar (Tibeto-Burman), DOM is co-regulated by the animacy and topicality of the object. Its distribution can be described by two probabilistic trends: (i) topic animate objects often receive case marking; (ii) inanimate objects can occasionally be case-marked if they refer to a salient entity (Genetti 1997, 2007, cited in Dalrymple & Nikolaeva 2011: 137–139).

1.2 Sources and grammaticalization of DOM markers

Bossong (1985, 1991) points to datives and other spatial related markers such as locatives, allatives as common sources for DOM markers, as found in Romance and Semitic languages. This observation is also relevant to the Tibeto-Burman languages in which ‘locative-allative-dative-accusative’ syncretism prevails (LaPolla 1992, 2004).

The spatial and dative sources of DOM markers seem to be further compatible with a widely attested grammaticalization chain which accounts for the evolution of the accusative, with the allative as a starting point, and the dative as an intermediate stage (Heine 2009: 467–468; Heine & Kuteva 2002: 38–39; Lehmann 2015: 119; among others), as illustrated in (2).

- (2) Common grammaticalization chain of case functions
allative > dative > accusative (O) (Heine 2009: 468)

1.3 Genitive syncretism

It is typologically rare for the dative/accusative morpheme to be isomorphic with the genitive. Yet in the Gunnän Gurage (Ethio-Semitic) languages, a highly poly-functional case marker *jä-* is used as the (optional) accusative, dative, and genitive (Meyer 2011: 1243), as shown by the examples from Ezha given in (3).

EZHA (ETHIO-SEMITIC)

- (3) a. *abza jä-miss-we k'ət't'ər-ə-n-im*
Abza ACC-man-DEF kill.PFV-3M.SG.SJ-M.SG.OJ-CM
'Abza killed the man'

- b. *abza jə-dəsta x^wett birr ab-ə-n-m*
 Abza DAT-Desta two Birr give.PFV-3M.SG.SJ-3M.SG.OJ-CM
 ‘Abza gave two Birr to Desta.’
- c. *jə-dəsta gred*
 GEN-Desta girl.PL
 ‘Desta’s daughters’ (Endalew 2017: 25, 27, 28)

In Tshangla (Bodish), the ending *-ga* falls into two functional domains, the locative-dative-(limited) accusative, and the genitive (Andvik 2010: 155–160). Both Gurage and Tshangla differ from languages like modern Mongolic (Janhunen 2003), in which the accusative/genitive morpheme does not involve other abstract case functions (Baerman’s 2009 Type 2, i.e. case syncretism of a core case and a non-core case).

The question of whether dative-accusative-genitive syncretism resulted from a single source or represents an accidental isomorphy remains controversial in both Gurage and Tshangla. For Gurage, Hetzron (1977: 54) assumed an accidental syncretism due to the phonetic fusion of two distinct case morphemes – **lä-* ‘to, for’ for the accusative/dative, and **zä-* ‘for’ for the genitive. However, later scholars (Endalew 2017; Meyer 2005) prefer a common source for all of these functions, though a clear grammaticalization pathway leading to this syncretism has yet to be proposed. Concerning Tshangla, Andvik (2010: 161; 2017: 425) expresses uncertainty about a single source on the basis of dialectal evidence suggesting a proto-locative form **-gu* probably distinct from the genitive **-ga*.

This paper focuses on the case of Tangut (Rgyalrongic), in which a polyfunctional case marker $\text{𐎎𐎎}^{1139} \text{ji}^1$ exhibits an accusative/genitive syncretism similar to that observed in Gurage and Tshangla. I will argue that such syncretism in Tangut has resulted from the multi-path grammaticalization of a single locative source. Tangut is also unique in that the accusative/genitive morpheme $\text{𐎎𐎎}^{1139} \text{ji}^1$ (i) exhibits functional overlap with the dative $\text{𐎎𐎎}^{5447} \text{do}^2$, and (ii) its locative source is obscure and can only be reconstructed through comparative data from modern Rgyalrongic languages. The aim of the paper is to illustrate that a typological rarity of extreme syncretism among abstract case functions can arise due to the superimposing of divergent grammaticalization pathways stemming from a spatial case, even if each individual pathway is typologically frequent.

The rest of the paper is organized as follows. In Section 2, I describe relevant morpho-syntactic features of Tangut. In Section 3, I analyze the clausal functions of the Tangut $\text{𐎎𐎎}^{1139} \text{ji}^1$, paying special attention to comparison with the dative $\text{𐎎𐎎}^{5447} \text{do}^2$. Section 4 provides comparative data from West Rgyalrongic and core Rgyalrong, laying a framework for Section 5, which attempts to explain accusative/genitive syncretism as resulting from multiple grammaticalizations of

the Proto-Rgyalrongic general locative $*=j(V)$. Section 6 offers concluding remarks.

2. Morpho-syntactic profile of Tangut

Tangut is a verb final language, exhibiting templatic verbal morphology. The verbal template of Tangut is much simpler than those of modern Rgyalrongic languages (Jacques 2011), and can be divided into three domains, as summarized in Table 1: (i) the verb stem (including noun-verb and verb-verb compounds), (ii) verbal prefixes, including directional prefixes, encoding TAM values as well as certain orientation meanings (cf. Arakawa 2012; Beaudouin Accepted), negation, and other modal prefixes, and (iii) argument indexation suffixes (cf. Jacques 2011; Kepping 1975).

2.1 Transitivity

Since transitivity is crucial to understanding the clausal functions of $\text{𐰃𐰚}^{1139}jij^i$, which will be discussed in this paper later on Section 3, this section briefly introduces transitivity in Tangut.

As in other Rgyalrongic languages, transitivity in Tangut can be determined through indexation patterns, with intransitive and transitive verbs in Tangut following different indexation patterns (Beaudouin 2022; Gong 2001; Jacques 2014: 216–224, etc.). Intransitive subjects (S) are pronominally represented by three suffixes: $\text{𐰃𐰚}^{2098}-\eta a^2$ 1SG, $\text{𐰃𐰚}^{4601}-nja^2$ 2SG, and $\text{𐰃𐰚}^{4884}-nji^2$ 1/2PL. The third person is unmarked.³

Transitive verbs have a maximum of two indexation slots, one for the subject (A) and one for the object (O). Alignment distinguishes three scenarios: (i) in a non-local scenario (3→3), the verb is always unmarked; (ii) in a local scenario (1→2, 2→1), the verb agrees with the patient; (iii) in a mixed domain (1/2→3, 3→1/2), the SAP argument is always pronominally represented on the verb, independent of its syntactic role. Table 2 illustrates the Tangut transitive paradigm with the causative auxiliary verb $\text{𐰃𐰚}^{0749}phji^i$ ‘to send, cause to do’.

A small number of transitive verbs have an additional stem [B] form, occurring in 1/2SG→3 forms (Gong 2001; Jacques 2009, 2014; Gong 2017). As shown in Table 2, the verb $\text{𐰃𐰚}^{0749}phji^i$ has a distinct stem [B] $\text{𐰃𐰚}^{4568}phjo^2$, showing vowel alternation with the basic stem [A]. Jacques (2009) hypothesizes that vowel alter-

3. Tangut also has an infrequent dual suffix $\text{𐰃𐰚}^{1326}-kji^i$ (Arakawa 2018).

nations in stem [B] originate from a third person patient suffix *-w (well attested in modern Situ, see Prins 2016: 390), which merged with the basic stem [A].

(4) Reconstructed stems of ‘to send, cause to do’

	Tangut	Pre-Tangut	(Jacques 2014: 84)
Stem [A]	𐄂𐄂 ⁰⁷⁴⁹	<i>phji</i> ¹	* <i>phja</i>
Stem [B]	𐄂𐄂 ⁴⁵⁶⁸	<i>phjo</i> ²	* <i>phja-w</i>

Table 1. Simplified verbal template of Tangut (based on Jacques 2011, 2014: 266)

Directional prefixes	Negation	Modal	Noun stem	Verb stem	Auxiliary	Person	TAME
DIR1: 𐄂 ⁵⁹⁸¹	𐄂 ¹⁹¹⁸	𐄂 ¹³⁷⁴				𐄂 ²⁰⁹⁸	𐄂 ³⁹¹⁶
PFV: <i>a-</i>	<i>mji</i> ¹ -	<i>tchji</i> ¹ -POT				- <i>ŋa</i> ² 1SG	- <i>Sji</i> ² IFR ...
𐄂 ¹⁴⁵²	𐄂 ⁵⁶⁴³	
	<i>nja</i> ¹	<i>mji</i> ¹					
DIR2:						
𐄂 ³⁹⁸⁹							
	<i>jij</i> ¹ -						
OPT: 𐄂 ³⁸⁴⁶							
	<i>nji</i> ² -						
... ..							

Table 2. Person indexation of 𐄂𐄂⁰⁷⁴⁹ *phji*¹ (stem [B] 𐄂𐄂⁴⁵⁶⁸ *phjo*²) ‘to send, cause to do’ (Gong 2017: 31)

	1SG	1PL	2SG	2PL	3
1SG			𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁶⁰¹	𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁸⁸⁴	𐄂𐄂 ⁴⁵⁶⁸ 𐄂 ²⁰⁹⁸
			<i>phji</i> ¹ - <i>nja</i> ²	<i>phji</i> ¹ - <i>nji</i> ²	<i>phjo</i> ² - <i>ŋa</i> ²
1PL					𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁸⁸⁴
					<i>phji</i> ¹ - <i>nji</i> ²
2SG	𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ²⁰⁹⁸	𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁸⁸⁴			𐄂𐄂 ⁴⁵⁶⁸ 𐄂 ⁴⁶⁰¹
	<i>phji</i> ¹ - <i>ŋa</i> ²	<i>phji</i> ¹ - <i>nji</i> ²			<i>phjo</i> ² - <i>nja</i> ²
2PL					𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁸⁸⁴
					<i>phji</i> ¹ - <i>nji</i> ²
3			𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁶⁰¹	𐄂𐄂 ⁰⁷⁴⁹ 𐄂 ⁴⁸⁸⁴	𐄂𐄂 ⁰⁷⁴⁹ <i>phji</i> ¹
			<i>phji</i> ¹ - <i>nja</i> ²	<i>phji</i> ¹ - <i>nji</i> ²	

Tangut also differs from modern Rgyalrongic languages in the emergence of non-finite forms in chained clauses (Jacques 2017; Beaudouin 2022). As in (5), verbal inflections are only present in the final clause, and are neutralized in the preceding clauses.

- (5) 𐞗𐞟⁵³⁰⁶ 𐞗𐞟⁵⁶⁰⁴ 𐞗𐞟⁵¹¹³ 𐞗𐞟³⁴¹⁹ 𐞗𐞟⁴⁰⁶³ 𐞗𐞟¹⁹⁷⁹ 𐞗𐞟³⁵⁰⁶ 𐞗𐞟⁰⁵¹⁰ 𐞗𐞟⁴⁴⁴⁷ 𐞗𐞟⁴³⁴² 𐞗𐞟²²²⁶
 [dzjwi¹=dzji.wji¹ bjuu¹-wier¹] [mjii¹ bjij¹] [ɲwər¹.dzow¹
 emperor=ERG to.respect-to.cherish rank to.raise empress
 dja² -we²]
 DIR1:PFV-to.become
 ‘...The Emperor respected and loved her, and elevated her rank, she became
 the empress.’ (Cixiaozhuan, Jacques 2007: 103)

The neutralization of verbal inflections leads to ambiguities in transitivity marking in Tangut texts. Where there is an absence of morphological evidence, transitivity can be indicated on the basis of syntactic criteria, such as ergative marking by 𐞗𐞟⁵⁶⁰⁴ 𐞗𐞟⁵¹¹³ dzji.wji¹,⁴ as in (5).

2.2 Status of 𐞗𐞟¹¹³⁹ jij¹ in Tangut case system

In contrast to its simplified verbal inflections, Tangut is rich in dependent case marking (cf. Table 3), which distinguishes itself from languages with their dominant head marking.

Table 3. Tangut case system (adapted from Beaudouin 2021)

Abstract cases	Spatial cases	Non-spatial cases
𐞗𐞟 ⁵⁶⁰⁴ 𐞗𐞟 ⁵¹¹³ dzji.wji ¹ Ergative	𐞗𐞟 ⁵⁴⁴⁷ do ² Allative	𐞗𐞟 ⁵⁸⁸⁰ ɲwu ² Instrumental
𐞗𐞟 ¹¹³⁹ jij ¹ Genitive	𐞗𐞟 ⁵⁸⁵⁶ ya ² Locative	𐞗𐞟 ⁴⁹⁵⁰ rjir ² Comitative
𐞗𐞟 ¹¹³⁹ jij ¹ Accusative, oblique	𐞗𐞟 ²⁹⁸³ u ² In-essive	𐞗𐞟 ⁰⁴³³ bju ¹ Instrumental
𐞗𐞟 ⁵⁴⁴⁷ do ² Dative	𐞗𐞟 ⁵⁹⁹³ kha ¹ Mid-essive	𐞗𐞟 ¹⁴⁷³ su ¹ Comparative
	𐞗𐞟 ⁰⁰⁸⁹ tchjaa ¹ Super-essive	
	𐞗𐞟 ⁵³⁹⁹ khju ¹ Sub-essive	
	𐞗𐞟 ¹¹³⁶ gu ² Med-essive	

The 𐞗𐞟¹¹³⁹ jij¹ is versatile and is available for two functional domains (Kepping 1985: 145–148; Kotaka 2000; etc.). First, it functions as a genitive marker, express-

4. The ergative 𐞗𐞟⁵⁶⁰⁴ 𐞗𐞟⁵¹¹³ dzji.wji¹ is optional after transitive subjects (Kepping 1985: 231), and its distribution still awaits further investigation. Nishida (1989 [2012]) analyzes 𐞗𐞟⁵⁶⁰⁴ 𐞗𐞟⁵¹¹³ as an ‘emphasizing’ agentive (強調主格), suggesting that its distribution could be related to semantico-pragmatic factors, as is widely observed in Tibeto-Burman (DeLancey 2011).

ing adnominal possession linking two noun phrases, or a noun phrase and a pronominal phrase (e.g. (6)).

- (6) Genitive 𐄂𐄂¹¹³⁹*jij'*
 𐄂𐄂¹³⁰⁶𐄂𐄂⁵⁴⁴² 𐄂𐄂¹¹³⁹ 𐄂𐄂²⁴⁵⁵
 [k¹jow¹.ɕiə¹]^{PR}=*jij'* [g¹ji²]^{PE}
 PN:Jiang.Shi=GEN wife
 'Jiang Shi's wife' (Cixiaozhuan, Jacques 2007: 11)

Second, it occurs following a wide range of clausal functions, which can be subsumed under two labels, the accusative, marking indexable objects, or the oblique, occurring after various non-indexable functions.⁵

In terms of clausal functions, the distribution of 𐄂𐄂¹¹³⁹*jij'* partially overlaps with that of the dative 𐄂𐄂⁵⁴⁴⁷*do'*, in particular after the R of ditransitive verbs.⁶ Beaudouin (2021) argues that the dative use of 𐄂𐄂⁵⁴⁴⁷*do'* developed from its allative source, i.e. marking the endpoint of a motion.⁷

The clausal functions of 𐄂𐄂¹¹³⁹*jij'* will be detailed in comparison with 𐄂𐄂⁵⁴⁴⁷*do'* in Section 3.

3. Clausal functions of 𐄂𐄂¹¹³⁹*jij'*

This section examines the clausal functions of the case morpheme 𐄂𐄂¹¹³⁹*jij'* across three syntactic constructions, (i) object (O) marking with monotransitive verbs

5. 𐄂𐄂¹¹³⁹*jij'* was previously described as an 'anti-ergative' marker (Jacques 2014, etc.), a term introduced in the field of Sino-Tibetan linguistics by LaPolla (1992, 2004) as a kind of semantico-pragmatically-based marking of grammatical relations, opposed to the ergative. This label is not used in this article, as one of the objectives of the paper is to specify the precise syntactic distribution of a particular case marker in order to trace its historical development. Given its flexible syntactic distribution, 𐄂𐄂¹¹³⁹*jij'* will be glossed here as GEN, ACC or OBL, according to the syntactic function it marks.

6. The understanding of ditransitive verbs here follows Malchukov et al. (2010: 1) and refers to verbs having three arguments, prototypically associated with the semantic roles of Agent (A), recipient (R), and Theme (T).

7. There is no consensus on the case morpheme 𐄂𐄂⁵⁴⁴⁷*do'*. Nishida (1989 [2012]: 479) and Arakawa (2010: 158) analyzed it as a pure locative case (場所格), expressing stative location as well as the endpoint of a motion. At the same time, they recognized 𐄂𐄂⁵⁸⁵⁶*ya'* as an accusative/dative (對格/與格) case, co-existing with its locative source. Such differences could be relevant to corpus types. In my own corpus, since 𐄂𐄂⁵⁴⁴⁷*do'* is attested with a dative use while 𐄂𐄂⁵⁸⁵⁶*ya'* does not have significant dative/accusative functions, I follow the analysis of Beaudouin (2021). Systematic analyses of these two case morphemes awaits future investigation.

(Section 3.1), (ii) recipient (R) marking with (non-derived) ditransitive verbs (Section 3.2), and (iii) non-subject argument marking in auxiliary causative constructions, involving argument promotion (Section 3.3).

3.1 Monotransitive verbs: Optional O marking

One of the most common uses of 𐵓𐵓¹¹³⁹*jij'* in Tangut is as a DOM marker. The presence or absence of 𐵓𐵓¹¹³⁹*jij'* does not affect object indexation, with the latter following syntactic rules.

Optional O marking with 𐵓𐵓¹¹³⁹*jij'* occurs on the basis of semantico-pragmatic properties of objects, and can thus be described as a prominence-based⁸ rule co-regulated by humanness, as noted in previous studies (Arakawa 2010: 161; Kotaka 2000: 79–80), definiteness, and the discourse topicality of the object.

Examples (7) and (8) illustrate the effect of definiteness on the distribution of 𐵓𐵓¹¹³⁹*jij'*. With the same monotransitive verb 𐵓𐵓⁴²²⁵*sja'* 'to kill', overt case marking is present for a definite human object in (7), but is absent for an indefinite human object in (8).

- (7) 𐵓¹⁴⁸⁴ 𐵓⁰²⁸⁹ 𐵓²⁵⁴¹ 𐵓⁵⁶⁰⁴ 𐵓⁵¹¹³ 𐵓¹²⁵⁹ 𐵓⁴⁰¹⁸ 𐵓¹¹³⁹ 𐵓⁴³⁴² 𐵓⁴²²⁵
 [kju¹.we² dzjwo²]^A=dzji.wji¹ [tɕiow¹.tɕhji²]^O=jij¹ dja²-sja¹
 Ju.city people=ERG PN:Zhuochi=ACC DIR1:PFV-to.kill
 莒城人殺卓齒。 (Shi et al., 1993: 79)
 'The people of Ju city killed Zhuochi.' (Leilin 04.08A.3)

- (8) 𐵓⁴⁸⁶¹ 𐵓⁵³⁰⁶ 𐵓³⁸⁹⁴ 𐵓⁰⁵¹⁰ 𐵓⁵⁵⁴⁹ 𐵓²²²¹ 𐵓¹⁴⁴⁹ 𐵓⁵⁶⁰⁴ 𐵓⁵¹¹³ 𐵓²⁴⁴⁰ 𐵓¹⁴²¹ 𐵓²⁵⁴¹
 𐵓⁰⁴⁴⁸ 𐵓⁴³⁴² 𐵓⁴²²⁵
 zjo² [dzjwi¹ nji¹ ŋwər¹.tɕhjiw² wəə¹.tɕhjwor²]^A=dzji.wji¹ nji² zji¹ [dzjwo²
 time emperor aunt royal.woman servant=ERG day time people
 gi²]^O dja²-sja¹
 one DIR1:PFV-to.kill
 時帝姑公主奴白日殺一人。 (Shi et al. 1993: 42)
 'At that time, the servant of the emperor's aunt killed a person in the daytime.'
 (Leilin 03.08A.2–3)

Human and definite objects are not marked if they do not have discourse prominence. In (9), the human and definite object *the Minister Pi* is unmarked. In this

8. The term 'prominence' in this paper is used in a similar way as in Aissen (2003) and de Swart (2007) and refers to features triggering DOM. The only difference is that here prominence also includes topicality in addition to humanness/animacy and definiteness/specificity.

instance, it is a non-topical object mentioned in an account as incidental information at the ending of a story.⁹

- (9) 𐰚⁴⁴⁵⁶ 𐰚³⁵⁰⁸ 𐰚²⁹²³ 𐰚⁵⁸¹⁵ 𐰚⁴²²⁵
 [tha².bji² phji¹]^O tsji¹ sja¹
 Minister Pi also kill
 又殺大臣𐰚 (Shi et al. 1993: 55)
 ‘(Finally, the King of Yue destroyed the country of Wu, exiled the King Fuchai of Wu) also killed the Minister Pi.’ (Leilin, 03.22A.1)

The prominence-based rule of Tangut optional O marking shows three probabilistic tendencies: (i) human/definite objects are most likely to take overt case marking; (ii) animate and definite objects are occasionally found bearing case marking; (iii) inanimate objects are not excluded from case marking (Arakawa 2010: 161) (e.g. (10)), but are the least frequently marked type.

- (10) 𐰚²¹⁰⁴ 𐰚²⁸⁵⁷ 𐰚¹¹³⁹ 𐰚³⁸³²
 [ɕji¹ ηo²]^O=jij¹ dji²
 Previous illness=ACC to.heal^[A]
 ‘Cure the previous illness (先の病治す)’ (心經03a-1-1, r Arakawa 2010: 161)

3.2 Ditransitive verbs: Alternating R marking

Typical ditransitive verbs in Tangut include ‘Give’- and ‘Say’-verbs, which are morphologically transitive, with two indexation slots for A and O. Most of them are morphologically indirective,¹⁰ with the T indexed on the verb as the object (T=O).¹¹ The R, though non-indexable, receives obligatory case marking with the dative 𐰚⁵⁴⁴⁷*do*² or the oblique 𐰚¹¹³⁹*jij*¹.

The distribution of 𐰚¹¹³⁹*jij*¹ and 𐰚⁵⁴⁴⁷*do*² in R marking tends to be complementary in Tangut. The postposition 𐰚¹¹³⁹*jij*¹ shows idiosyncratic distribution

9. Topicality can be measured by referential distance (Givón 1994: 10), as no antecedent is found in the three preceding sentences in the text. A corpus-based study measuring the referential distance and topical persistence of unmarked objects in Tangut is beyond the scope of this paper, but is an anticipated line of inquiry for future studies.

10. This paper follows Malchukov et al.’s (2010) distinction between secundativity and indirectivity. In Rgyalrongic languages, secundative and indirective verbs are distinguished through verbal morphology, see Table 5, and Lai (2017: 424–426; 2021) for a detailed discussion.

11. Due to the neutralization of verbal inflections in Tangut texts (cf. Section 2.1), morphological indirectivity is not always obvious.

with a few Give-verbs, such as 𪛗¹¹⁰⁵*khjow*¹ ([B] 𪛗⁵⁶⁴⁴*khjij*)¹² ‘to give, grant’ and 𪛗²⁰⁴⁷*mji*¹ ‘to grant’. The dative 𪛗⁵⁴⁴⁷*do*² is found with many other ‘Give’-verbs, among which are 𪛗²⁸¹⁵*khhu*¹ ‘to tribute, consecrate’, or 𪛗³¹⁷⁵*tji*¹ ‘to return’ (for a list of verbs selecting 𪛗⁵⁴⁴⁷*do*², see Beaudouin 2021).

However, there are verbs of which the R can be marker with either the oblique 𪛗¹¹³⁹*jij*¹ or the dative 𪛗⁵⁴⁴⁷*do*², as exemplified by the verb 𪛗⁵⁶¹²*tshij*¹ ([B] 𪛗³⁹⁷⁴*tshjii*²) ‘to say, speak’. In Example (11), the addressee (R), Chen Zheng, is marked with 𪛗⁵⁴⁴⁷*do*².

- (11) 3→3
 𪛗¹³¹⁹ 𪛗³⁸³⁰ 𪛗²⁰¹⁹ 𪛗¹⁷⁹⁶ 𪛗²⁹³⁷ 𪛗¹⁵³¹ 𪛗⁰⁷⁶⁴ 𪛗¹¹⁸³ 𪛗⁰²⁹⁸ 𪛗⁵⁰⁵⁵ 𪛗⁵⁴⁴⁷ 𪛗⁰⁷⁹⁵
 𪛗⁵⁶¹²
 [tshji¹ njij²]^A thja¹ [tshju¹ lhjij² gia¹ rjjir¹ da²]^T [tshjī¹.tɕjī¹]^R=do²
 Qi king DEM Chu country army horse affaire PN:Chen.Zheng=DAT
 rjir²-tshjii¹
 DIR1:PFV-to.say_[A]
 ‘The king of Qi spoke about the affair of the army of Chu to Chen Zheng.’
 (Twelve Kingdoms, Solonin 1995: 43, cited by Beaudouin 2021)

However, in (12), the addressee (R), your majesty, is marked by 𪛗¹¹³⁹*jij*¹. Note that morphological indirectivity is clearly indicated in (12): the verb occurs in its stem [B] form 𪛗³⁹⁷⁴*tshjii*² (< Pre-Tangut *tshjeej-w, Jacques 2014: 170–171), indicating that the theme, a counsel, is indexed as the direct object.

- (12) 1SG→3
 𪛗³⁵⁰⁸ 𪛗¹⁹⁰⁶ 𪛗³⁸³⁰ 𪛗⁴⁴⁵⁶ 𪛗¹¹³⁹ 𪛗³²⁴⁸ 𪛗⁰⁴⁴⁸ 𪛗³⁹⁷⁴ 𪛗²⁰⁹⁸
 [bjj²]^A nioow¹ [njij² tha²]^R=jij¹ [rjij² gjj²]^T tshjii²-ŋa²
 your.servant LNK king grand=OBL stratagem one to.say_[b]-1SG
 臣更與大王說一計。 (Shi et al. 1993: 61)
 ‘I’ll tell your majesty a counsel (to save yourself from Wu’s invasion).’
 (Leilin, 03.27B.6)

Note that in (12), the argument marked by 𪛗¹¹³⁹*jij*¹ is the addressee (R), as well as the beneficiary of the event. In the example above, extracted from the story of Goujian Miewu, King Goujian of Yue is faced with the threat of Wu’s invasion and asks his minister Fan Li for counsel. The addressee, the King Goujian, is also the one who would benefit from the speaker’s counsel. The alternating R marking in

12. Alternation between *khjow*¹ and *khjij*¹ is not due to the merger of the third person patient suffix *-w (Jacques 2014: 200–201).

(11) and (12) is a potential indicator of prototypical semantic values of 𐎎𐎎¹¹³⁹*jij*¹ and 𐎎𐎎⁵⁴⁴⁷*do*², a hypothesis which will be developed in Section 3.4.1.

3.3 Auxiliary causative

In Tangut, productive causativization is built with the auxiliary verb 𐎎𐎎⁰⁷⁴⁹*phji*¹ (Stem [B] 𐎎𐎎⁴⁵⁶⁸*phjo*², cf. Table 2), originally a motion verb meaning ‘to send’ (Arakawa 2019; Shi 2020: 290). The derived causative compound shows bipartite morphology, with the base verb and the causative auxiliary sharing TAM marking and argument indexation.

The case postposition 𐎎𐎎¹¹³⁹*jij*¹ is particularly frequent in Tangut auxiliary causatives. While previous studies (Arakawa 2019: 141–142; Kotaka 2000: 73; Shi 2020: 304) mention the optional presence of 𐎎𐎎¹¹³⁹*jij*¹ after the causee, case marking for non-subject arguments in causative compounds is more complicated. I distinguish three such situations below.

3.3.1 Optional causee marking with 𐎎𐎎¹¹³⁹*jij*¹

The syntax of causative compounds in Tangut distinguishes two situations according to the transitivity of the base verb.

Causative compounds derived from an intransitive base are bivalent, with the causer, the transitive subject (A), and the original S as the causee. In this case, the causee is also the syntactic object ([A_{causer}, O_{causee}]). Both the causer and causee can be indexed on the verb. The causee optionally receives overt case marking with 𐎎𐎎¹¹³⁹*jij*¹, in accordance with the same prominence-based rules observed for non-derived monotransitive verbs (cf. Section 3.1).

Example (13) shows a causative compound derived from the intransitive verb 𐎎𐎎¹³³⁶*lhq*² ‘be confused’. In addition being indexed (suffix 𐎎𐎎⁴⁶⁰¹-*nja*² marks the causer, and the stem [B] form of the causative auxiliary reflects the causee), the causee, common people is also case marked with 𐎎𐎎¹¹³⁹*jij*¹.

(13) 2SG→3

𐎎𐎎⁴⁰²⁸ 𐎎𐎎²⁶²⁰ 𐎎𐎎⁵⁶⁰⁴ 𐎎𐎎⁵⁶⁸⁸ 𐎎𐎎¹⁰⁷⁵ 𐎎𐎎²⁵¹³ 𐎎𐎎²⁵⁴¹ 𐎎𐎎¹¹³⁹ 𐎎𐎎¹³³⁶ 𐎎𐎎⁴⁵⁶⁸ 𐎎𐎎⁴⁶⁰¹

*nji*² *njwi*² *dzji wa*² *dzjo*² [*ju*² *dzjwo*²]^{CAUSEE=jij}¹

2SG skill what to.have_[B] common people=ACC

*lhq*²-*phjo*²-*nja*²

be.confused-CAUS_[B]-2SG

汝有何術，而誣惑常人？

(Shi et al. 1993: 115)

‘What technique do you have to cause confusion in common people?’

(Leilin, 05.21B.3–4)

With a transitive base, causativization derives a three-place predicate ($[A_{\text{causer}}, O_{\text{causee}}, \text{oblique}]$). It introduces a new agent as the causer (A_{causer}), and the original A becomes the causee (O_{causee}). Both the causer and the causee are indexable. The original O becomes an oblique of the derived causative compound, which is non-indexable. The phenomenon of optional causee marking is also observed with trivalent causative compounds. Example (14) has a trivalent causative compound $\text{覘}^{0046}\text{覘}^{0749}$ ‘to cause to see, to show’, based on the transitive verb $\text{覘}^{0046}\text{ljij}^2$ ‘to see’. The plural first person causee is pronominally represented on the verb by the plural suffix $-nji^2$, and is also case marked with $\text{𠄎}^{1139}\text{jjij}^1$.

- (14) 2→1PL
 $\text{𠄎}^{2098}\text{𠄎}^{0724}\text{𠄎}^{1139}\text{𠄎}^{1326}\text{覘}^{0046}\text{覘}^{0749}\text{覘}^{4884}$
 $[\eta a^2.nji^2]^{CAUSEE}=jjij^1\text{ kji}^1\text{-ljij}^2\text{-phji}^1\text{-nji}^2$
 1PL=ACC DIR1:IMP-to.see-CAUS_[A]-1PL
 ‘Show it to us.’ (Kepping 1985: 228, citing Nevskij 1960: 591)

3.3.2 Optional marking on the oblique argument with $\text{𠄎}^{1139}\text{jjij}^1$

The postposition $\text{𠄎}^{1139}\text{jjij}^1$ is not dedicated only to optional causee marking. Though infrequent, it is also possible for the oblique argument to be overtly marked with $\text{𠄎}^{1139}\text{jjij}^1$. As evidenced by (15), with the causative verb $\text{𠄎}^{5754}\text{-覘}^{0749}$ ‘to cause to catch’, case marking occurs after the oblique argument Shijing.

- (15) $\text{𠄎}^{2872}\text{𠄎}^{3379}\text{𠄎}^{5981}\text{𠄎}^{0945}\text{𠄎}^{2541}\text{𠄎}^{5871}\text{𠄎}^{5442}\text{𠄎}^{2219}\text{𠄎}^{1139}\text{𠄎}^{5754}\text{覘}^{0749}$
 $w\acute{e}^1.xew^1\ a\text{-tshja}^1\ dzjwo^2\ zeew^2\ \text{ci}\acute{a}^1.kjjij^1=jij^1\ lju^2\text{-phji}^1$
 PN:Wenhou DIR1:PFV-be.angry people to.send PN:Shijing=OBL to.catch-CAUS_[A]
 文侯怒, 使人捕師經。 (Shi et al., 1993: 39)
 ‘Wenhou became angry, and sent people to catch Shijing.’ (Leilin, 03.06A.5)

Although the presence of $\text{𠄎}^{1139}\text{jjij}^1$ can be explained by the discourse prominence of the argument Shijing as the protagonist of the story, we also notice that Shijing is the maleficiary,¹³ affected by the causative event.

13. One of the reviewers points out that Examples (15) and (17) do not have a maleficiary in a typical sense, but a highly ‘affected patient’. The suggestion is not adopted, since there is no clear morphological evidence indicating that the arguments marked by $\text{𠄎}^{1139}\text{jjij}^1$ in the two examples are objects. Moreover, the term ‘affectee’ is avoided in the paper, as it is reminiscent of the theory of affectedness in DOM (Næss 2004), which might be relevant to DOM in Tangut but is beyond the scope of the current paper. Terminological clarification is expected for future works, as the term ‘affectee’ is used as an umbrella term subsuming both beneficiary and maleficiary in Geshiza Horpa (Honkasalo 2019: 494–495).

3.3.3 Alternative causee marking with 𠵹⁵⁴⁴⁷*do*²

There are very few examples in my corpus in which the causee is marked by the postposition 𠵹⁵⁴⁴⁷*do*². One such example is given in (16).

- (16) 𠵹¹⁰³⁰ 𠵹²¹⁷⁷ 𠵹⁴⁶⁰⁹ 𠵹⁰⁷⁷⁵ 𠵹¹⁷³³ 𠵹⁵⁴⁴⁷ 𠵹²⁵⁹⁰ 𠵹²⁹³¹ 𠵹⁰⁷⁴⁹
tcjow¹.pə¹ cjuwā².giuu¹.tcj²=do² wji²-sej¹-phji¹
 PN:Zhang.ben PN:Chunyu.zhi=DAT DIR1:PFV-to.calculate-CAUS_[A]
 ‘(Zhang Ben’s mother was seriously ill) Zhang Ben sought divination from
 Chuyu Zhi.’¹⁴ (Leilin 06.14B.3–4)

The occurrence of 𠵹⁵⁴⁴⁷*do*² instead of 𠵹¹¹³⁹*jij*¹ after the causee in (16) could be motivated by semantic factors. In (16) Chunyu Zhi is not the argument affected by the causative event; it is the causer, Zhang Ben, asking after the fortune of his sick mother, who would benefit from the causative event.

3.4 Interim summary

3.4.1 Prototypical semantic values of 𠵹¹¹³⁹*jij*¹ and 𠵹⁵⁴⁴⁷*do*²

The functional overlap between 𠵹¹¹³⁹*jij*¹ and 𠵹⁵⁴⁴⁷*do*² in three-place predicates, including non-derived ditransitive verbs (Section 3.2) and causative constructions (Section 3.3) indicates potential semantic overlap in that they are goal-oriented. However, alternations after the R and the causee also suggest that they differ from each other semantically. The arguments marked by the yod postposition 𠵹¹¹³⁹*jij*¹ are also associated with the semantic role of a bene-/maleficiary, which is affected by the event denoted by the predicate. Therefore, I propose Figure 3 to illustrate the prototypical semantic values of 𠵹¹¹³⁹*jij*¹ and 𠵹⁵⁴⁴⁷*do*² in Tangut.

This hypothesis is tested in Example (17), which contains a verb-noun incorporated predicate 𠵹⁰⁰³¹-𠵹³¹⁹⁰*dzjwi¹-lhjwa¹* ‘to speak ill of’. The predicate involves two non-subject arguments: King Fuchai, the addressee, marked by the dative 𠵹⁵⁴⁴⁷*do*², and Wu Zixu, marked by 𠵹¹¹³⁹*jij*¹. Although the syntactic status of the argumet marked with 𠵹¹¹³⁹*jij*¹ is ambiguous and could be either an object or an oblique, it is clear that Wu Zixu is the maleficiary, affected by the action of Minister Pi’s slandering.

14. Shi et al. (1993:132) provided a nearly word-to-word translation, 張本就淳于智處卜, in which 𠵹⁵⁴⁴⁷*do*² is translated as 處 *chù* ‘place’, reminiscent of its original allative function. From the context we know that Zhang Ben seeks divination from someone skilled, Chuyu Zhi. The ambiguity here is in line with the functional continuum of 𠵹⁵⁴⁴⁷*do*² after an NP human, ranging from the endpoint of a motion to an abstract goal. For a detailed account of the grammaticalization of 𠵹⁵⁴⁴⁷*do*², see Beaudouin (2021).

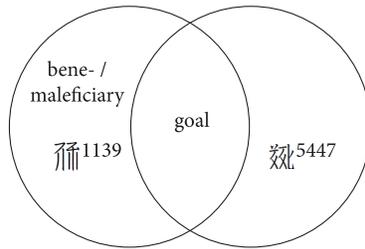


Figure 3. Prototypical semantic values of 𠵹¹¹³⁹ *jij*¹ and 𠵹⁵⁴⁴⁷ *do*²

- (17) 𠵹⁴⁴⁵⁶ 𠵹³⁵⁰⁸ 𠵹²⁹²³ 𠵹⁵⁹²⁵ 𠵹⁰⁵⁸⁶ 𠵹¹¹³⁹ 𠵹³¹¹⁸ 𠵹¹⁴⁰⁹ 𠵹⁵⁴⁴⁷ 𠵹¹³²⁶ 𠵹⁰⁰³¹ 𠵹³¹⁹⁰
 [tha².bji².phji¹] [tsa¹.sju²]=*jij*¹ [xu¹.tchiaj²]=*do*²

Minister.Pi PN:Wu.Zixu=ACC/OBL PN:Fuchai=DAT

*kji*¹-*dzjwi*¹-*lhjwa*¹

DIR1:PFV-to.slander-tongue

大臣 𠵹 𠵹 子 𠵹 於 夫 差。

(Shi et al., 1993: 55)

‘The Minister Pi slandered Wu Zixu to the King Fuchai.’

(Leilin, 03.21A.7–21B.1)

3.4.2 Syntactic distribution of 𠵹¹¹³⁹*jij*¹ and 𠵹⁵⁴⁴⁷*do*²

Table 4 summarizes the syntactic distribution¹⁵ of 𠵹¹¹³⁹*jij*¹ and 𠵹⁵⁴⁴⁷*do*² in marking clausal functions.

Table 4. Syntactic distribution of 𠵹¹¹³⁹ *jij*¹ and 𠵹⁵⁴⁴⁷ *do*²

	Object (indexable)			Non-indexable	
	Patient	Causee	Oblique (CAUS, etc.)	recipient; addressee	Goal of motion
𠵹 ¹¹³⁹ <i>jij</i> ¹	✓	✓	rare	✓	
𠵹 ⁵⁴⁴⁷ <i>do</i> ²		rare		✓	✓

15. Kepping (1985: 229–230) also mentioned the occurrence of 𠵹¹¹³⁹*jij*¹ after intransitive subjects. Due to a scarcity of examples, the phenomenon is still unclear and should await further studies. Optional intransitive subject marking also exists in other Tibeto-Burman languages. In Lhasa Tibetan, the dative can optionally occur after intransitive subjects, which could be related to both event semantics of controllability and information structure (Simon 2016: 340–341). On the other hand, the use of a subject marker for objects is also observed sporadically, for example in Burmese, for which Chappell & Verstraete (2019) suggest a possible reanalysis of a relevant morpheme as a general marker of information structure. In addition, I also found optional T(heme) marking with very few ditransitive verbs in my corpus. These may be described as examples of Kittila’s (2006) ‘extended differential object marking’. Both phenomena remain to be investigated with a larger corpus.

The most active range of $\text{𑄆𑄆}^{5447} \text{do}^2$ lies in the **non-indexable** interval. As Beaudouin (2021) remarks, within the source function of allative (i.e. goal of motion verbs), $\text{𑄆𑄆}^{5447} \text{do}^2$ already shows a preference to combine with human participants, which suggests a clear grammaticalization from allative to dative.

In contrast, $\text{𑄆𑄆}^{1139} \text{ji}^1$ shows a decreasing distribution from indexable to non-indexable functions. There is no internal evidence from Tangut suggesting a spatial related source for $\text{𑄆𑄆}^{1139} \text{ji}^1$, except for the fact that it is goal-oriented (cf. Figure 3). Furthermore, it is also difficult to suggest any directionality between the accusative and the genitive, although there are cases where $\text{𑄆𑄆}^{1139} \text{ji}^1$ exhibits a genitive/oblique ambiguity (see Section 4.1.2 for the same phenomenon in modern Rgyalrongic). In general, reanalysis of possessors as accusatives is typologically rare, and is considered counter-directional grammaticalization (Narrog 2014: 80).

The following sections examine comparative data from modern Rgyalrongic languages, in hopes of unveiling the origins of the postposition $\text{𑄆𑄆}^{1139} \text{ji}^1$ and explaining genitive/accusative syncretism.

4. Cross-Rgyalrongic comparison

The Tangut $\text{𑄆𑄆}^{1139} \text{ji}^1$ reflects the Proto-Rgyalrongic yod postposition $*=j(V)$ (Jacques 2014: 210). Reflexes of this postposition are still productive in modern West Rgyalrongic languages and Situ Rgyalrong (i.e. the eastern branch).¹⁶ However, the yod postpositions in these modern relatives of Tangut function very differently. In modern West Rgyalrongic languages, the yod postpositions show a genitive/oblique syncretism (Section 4.1), and those in Situ basically function as general locatives (Section 4.2).

Despite their functional differences, the productive uses of the yod postpositions in modern Rgyalrongic languages can offer clues to possible sources of the Tangut $\text{𑄆𑄆}^{1139} \text{ji}^1$ and the associated genitive/accusative syncretism discussed in Section 5.

4.1 Modern West Rgyalrongic: Genitive/oblique $=jV$

The yod postpositions in modern West Rgyalrongic languages present genitive/oblique syncretism. For the genitive function, $=jV$ serves to express adnominal

16. Japhug (Northern Rgyalrong) preserves traces of the yod locative. The word *qhuj* ‘tonight’ is potentially a fossilized locative form of the relator noun *u-qhu* ‘after’ (Jacques 2021: 330–331).

possession, as exemplified in (18). This clearly corresponds to the Tangut genitive $\text{𐰚𐰝}^{1139} \text{ji}'$ (e.g. Example 6).

WOBZI KHROSKYABS (WEST RGYALRONGIC)

- (18) genitive =*ji*
 $[t\text{ʂ}a\text{ɕ}i]^{PR}=\text{ji}$ $[p\text{ʔ}r]^{PE}$
 PN:Bkra.shis=GEN pen
 ‘Bkrashis’ pen’ (Lai 2017: 185)

The oblique function of the yod postposition should be understood with respect to verb classification in modern Rgyalrongic languages (cf. Table 5), which is strictly based on morphological transitivity (i.e. indexation patterns) and case frames. In general, three non-subject categories can be distinguished, (i) the accusative (i.e. the indexable O), (ii) the dative, which is in most cases non-indexable, but is indexable with secundative verbs, and (iii) the oblique, which is non-indexable.

In the non-indexable domain, we also notice competition between the dative and the oblique in marking extended arguments in two constructions: (i) extended intransitive verbs, and (ii) indirective verbs.

Table 5. Verb classification, indexation types and case frames in modern West Rgyalrongic languages (based on Lai 2017: 2021)*

Verb type	Indexation	Case frame	
Intransitive	V[S]	S=∅	E=∅
Semi-transitive		S=∅	E=DAT
Extended intransitive		S=∅	E=OBL
Transitive Indirect transitive	V[A,O]	A(=ERG)	O=∅
		A(=ERG)	O=DAT
		A(=ERG)	O=LOC:SURFACE (Khros)
Secundative	V[A,R=O]	A(=ERG)	T=∅
			R=DAT
Indirective	V[A,T=O]	A(=ERG)	T=∅
		A(=ERG)	T=∅
			R=OBL
Multitransitive	A(=ERG)	T=∅	R(E ₁)=OBL
			E ₂ =DAT

* E stands for the extended argument (cf. Dixon & Aikhenvald 2000).

4.1.1 Extended intransitive verbs

The dative that marks extended arguments shows idiosyncratic distribution, and is found with verbs such as ‘to help’ (*yâr* in Khroskyabs, *yor* in Geshiza), ‘to fear’ (*nscâr* in Khroskyabs, *stæær* in Geshiza) (Honkasalo 2019: 472; Lai 2017: 234–235).

The distribution of the oblique $=jV$ is rarely idiosyncratic, and is associated with a predictable semantic role of experiencer (Honkasalo 2019: 494). It is typically found with stative verbs, alternating between basic intransitive [$S=\emptyset$] and extended intransitive [$S=\emptyset$, $E=\text{OBL}$].¹⁷ This is exemplified by the modal verb *ró* ‘be necessary, should’ in Khroskyabs, which is intransitive and basically involves an impersonal subject, as in (19a). It can be ‘supplemented’ with an additional non-subject argument marked by the oblique $=ji$, expressing the meaning ‘to want, need; be necessary to’, as in (19b).

WOBZI KHROSKYABS (WEST RGYALRONGIC)

- (19) a. *ró* [$S=\emptyset$] ‘be necessary, should’
ægaε jdâ=yə ts^hâts^hâ rzâ ró
 LNK water=INS well to.wash₁ should
 ‘Then, one should wash them well with water. (Lit: washing them well with water is necessary)’ (Lai 2017: 586)
- b. *ró* [$S=\emptyset$, $E=\text{OBL}$] ‘want, be necessary to’
nû=ji t^hâε=jæ rə-ró
 2SG=OBL whatever=many NPST-be.necessary₁
 ‘You want too much (Lit: Too much things are necessary to you)’ (Lai 2017: 371)

4.1.2 Indirective verbs

The dative is the most important means for R marking. It occurs after the R of all secundative (e.g., ‘to feed’: Khroskyabs *bâ*, Geshiza *mə*) and most indirective (e.g., ‘to ask’: Geshiza *rjæ*, Khroskyabs *ryâ*) verbs in modern West Rgyalrongic languages. Only a small proportion of indirective verbs with their R marked by the oblique, are typically associated with the semantic role of a bene-/maleficiary (Honkasalo 2019: 494–496).

First, manipulation verbs (e.g. Khroskyabs *vâ* ‘to bring’, *t^hâ* ‘to take away (to)’; Geshiza *mbe* ‘to carry away’, *nzæ* ‘to bring’ are subsumed under a larger semantic class of orientable verbs, further details of which are discussed in Section 4.2) consist a particular subtype of indirective verbs in Rgyalrongic languages. They denote an induced motion, the R of which can be understood as an abstract goal intrinsically required by the verb’s semantics. As in (20), the oblique $=je$, merged with plural marker *ni*, serves to mark the R of the verb *nzæ* ‘to bring’.

17. Productive alternations between intransitive and extended intransitive could ultimately give rise to idiosyncrasies. The Geshiza verb *dzæn* ‘to miss (someone)’, requiring an experiencer marked by the oblique $=je$ (Honkasalo 2019: 468), could be lexicalized from the alternating structure [S , $E=\text{OBL}$] of a basic intransitive verb **dzæn* ‘to lack’ [S].

GESHIZA (WEST RGYALRONGIC)(20) *nzæ* ‘to bring’ [S=ERG, T, R=OBL]*gæ^ho* *ŋæ=ŋi* *vdzæ=wo* <*tiænxua*> *dæ-nzæ-s^{hi}*

evening 1=PL.OBL friend=ERG phone.call PFV-bring.3-IFR

‘In the evening, our friend called us.’ (Honkasalo 2019: 372)

Second, the oblique can occur with a group of monotransitive verbs which do not denote a motion event, and optionally ‘supplement’ a third argument acting as the bene-/maleficiary of the denoted action (Honkasalo 2019: 483). In (21), the yod postposition =*je* supplements a beneficiary, the Balang villagers, of the action denoted by the verb *v-q^{hl}ə* ‘to divide’.

GESHIZA (WEST RGYALRONGIC)(21) *v-q^{hl}ə* ‘to divide’ [S=ERG, T, R=OBL]*lmo wo æ-lə* *dæ-v-sæ* *zda*

3.ERG bear one-CLF.INDF.ABS PFV-INV-kill.PST.3 AUX.EXP.PERF

dæ-v-sæ *tɛ^ha=ræ* *næ-v-tæ=ræ* *bəra*

PFV-INV-kill.PST.3 when=LNK PFV.DIR-INV-bring.PST.3=LNK TOPN

stɛpa=je *dæ-v-q^{hl}ə-s^{hi}* *ŋuə*

villagers=OBL PFV-INV-divide.PST.3-NMLZ COP.3

‘He has killed a bear. When killing the bear he brought it down (to Balang),

and divided it for Balang villagers.’ (Honkasalo 2019: 495)

Some transitive verbs can be extended to become quadrivalent, associating with three non-subject arguments: a non-casemarked Theme, a Recipient marked with the oblique, and a Source argument marked with the dative (Lai 2017: 187; Honkasalo 2019: 485–486). In (22), with the manipulation verb (*rə*)-*véd* (Stem II *zám*) ‘to bring’ in Khroskyabs, the dative =*k^{he}* yields an ablative reading and marks the source of the transfer event. The ablative reading, which seems to be semantically contradictory with the dative one, originates from its original adessive function ‘near, at the place of...’ (Lai 2017: 187).

WOBZI KHROSKYABS (WEST RGYALRONGIC)(22) *zám* ‘to bring’*tʂaɛi=γə* *nû=ji* *kapə* *ŋâ=k^{he}* *k-u-zám*Bkra.shis=ERG 2SG=OBL/GEN book 1SG=ABL PST-INV-to.bring_{II}

‘Bkrashis brought you a book from me.’ (Lai 2017: 187)

Although in (22) the yod postposition =*ji* is ambiguous due to the contiguity of the R and the T and could be either an oblique (encoding the beneficiary) or a genitive (encoding the possessor), its goal-oriented property is obvious, and the inverse case alignment is ungrammatical.

4.2 Situ Rgyalrong: General locative =*j*

The yod postposition occurs in a non-syllabic form =*j* in most Situ dialects (Lin 1993: 325–330; Lin 2017: 63–64; Prins 2016: 259–260; Zhang 2020: 339–341; etc.). Like its syllabic cognates =*jV* in the West branch, it also operates at the phrasal level.¹⁸

As a general locative, =*j* in Situ has two identifiable interpretations: as a locative expressing stative location (e.g. (23a)) and as an allative indicating the end point of a motion (e.g. (23b)). The allative reading is triggered with orientable¹⁹ verbs, including (i) motion verbs such as ‘to go’ and ‘to come’, (ii) manipulation verbs denoting an induced motion, such as ‘to take’, and (iii) orienting verbs denoting a fictive motion. These verbs morpho-syntactically require a goal argument obligatorily marked with the locative.

BRAG-BAR SITU

(23) a. Locative: stative location

ŋə-wúj *kənâs tə* [*tə-ŋém=j*] *ŋês-ntɕ*
 1SG.POSS-grandson two DET POSS.INDF-house=LOC be₁-3DU
 ‘My two grandsons are at home.’

b. Allative: endpoint of a motion

[*a-tié=j*] *rv-bzê-n*
 PROX-UP=ALL IMP:UP-come₁-2SG
 ‘Come up.’

(Lit: come to the upper part)

Locative phrases in Situ often occur in one of the two syntactic positions: as an oblique argument (e.g. (23a); (23b)), or as an adjunct. Two locative phrases can occur successively, with an ‘outer’ locative adjunct providing background information and preceding an ‘inner’ locative, as in (24). Note that though not obligatory, the ‘outer’ locative is followed by the prominence marker *kə*, which developed from an ergative source (Prins 2016: 217–237; Zhang 2020: 25–26).

18. In some varieties, the yod postpositions develop new functions as clause subordinators. The Khroskyabs =*ji* has developed the function of a relativizer from a genitive (Lai: 2018). In Brag-bar (Situ), the locative =*j* can occur after nominalized adverbial clauses.

19. Orientable verbs in Rgyalrongic languages constitute a semantic class exhibiting distinct morphological behaviors. While most verbs have one or two directional prefixes which have lexicalized for the perfective and imperative as pure TAME markers, orientable verbs are free to select directional prefixes, encoding both spatial orientations and TAME values. See Zhang (2020: 369–399) for details on directional prefixes and orientability in Situ, and Jacques (2021: 621–681) for the Northern branch.

BRAG-BAR SITU

- (24) [xána comcó=j kə]^{OUTER}
 downstream.DIRECTION.DIST TOPN:Kyom.kyo=LOC PM
 [<nongchang>=j]^{INNER} na-təhê-n
 farm=ALL IMP:DOWN-to.GO_I-2SG
 '(You) go down to the farm at Kyom-kyo.'

The general locative =*j* in Situ has various non-spatial uses, all of which are related to the two syntactic positions of adjunct and oblique.

4.2.1 Delimitative adjuncts

The yod postposition =*j* in Situ can be used to encode sentence topics, roughly equivalent to English 'as for' topics. This function originates from the clause-external function of the locative =*j*, which is typically associated with the sentence initial position, as exemplified in (25).

BRAG-BAR SITU

- (25) rə-tərpîê=j rə-ptchár kənâs-ptchar=ksən cáw na-ŋôs.
 one-CLF:catty=LOC one-banknote two-banknote=like.this about 1PFV.PST-be_{II}
 'As for each catty (of Iris), it sells for about one or two yuan.'

4.2.2 Oblique

The oblique function of the Situ locative =*j* is similar yet not identical in terms of its distribution to the oblique =*j*V of modern West Rgyalrongic languages.

As shown in Table 6, the Situ locative =*j* is mainly found in constructions with (i) extended intransitive and (ii) indirective verbs. The locative and the dative also compete in the marking of extended arguments in these two constructions. However, the Situ dative *wo-phá=j* is only a semi-grammaticalized locative phrase, comprising (i) a possessive prefix, pronominally representing the possessor, (ii) a nominal base **pha* 'vicinity',²⁰ and (iii) the yod locative =*j*.²¹

4.2.2.1 Extended intransitive verbs

With extended intransitive verbs, the Situ =*j* functions in the same way as does the oblique =*j*V in modern West Rgyalrongic languages (Sections 4.1.1). The yod locative =*j* in Situ is also found with stative verbs, to which it optionally introduces an experience (e.g. *kə-râ* V[S=Ø] 'be necessary'; V[S=Ø, E=LOC] 'be necessary to').

20. Reconstruction of this root awaits further revision. Dative relator nouns within Situ show irregular correspondences, with an aspirated labial *ph-* in Brag-bar *wo-phá=j*, and a softened labial approximant *w-* in Cogtse *wə-wá=j* (Lin 2016: 20).

21. In Brag-bar the yod locative can be replaced or followed by the locative *tə* in Brag-bar (Zhang 2020: 345). In Cogtse it can be replaced by the sibilant locative =*s* (Lin 2016).

Table 6. Verb classification, case marking and indexation types in Brag-bar Situ

Verb type	Indexation	Argument structure		
Intransitive	V[S]	S= \emptyset		
Semi-transitive		S= \emptyset	E=LOC	
Extended intransitive		S= \emptyset	E=DAT	
		S= \emptyset	E= \emptyset	
Transitive	V[A,O]	A(=ERG)	O= \emptyset	
Secundative ditransitive	V[A,R=O]	A(=ERG)	T= \emptyset	R= \emptyset
Indirective ditransitive	V[A,T=O]	A(=ERG)	O= \emptyset	R=DAT
		A(=ERG)	T= \emptyset	R=LOC

4.2.2.2 Indirective verbs

A major distributional difference between the locative =*j* in Situ and the oblique =*jV* in modern West Rgyalrongic languages exists in ditransitive constructions. With indirective verbs, the Situ locative =*j* is reserved for manipulation verbs intrinsically involving a goal argument. The argument marked by =*j* can either be the concrete goal of motion, or the abstract goal of a bene-/maleficiary (typically a human participant). As exemplified by (26), =*j* marks the maleficiary of manipulation verb *ka-sə-bzê* ‘to induce (a disaster)’, derived from the cislocative verb *ka-bzê* ‘to come’ with the causative prefix *sə-*.

BRAG-BAR SITU

- (26) *wo-ŋkhú=j* *təjə=j* *máksən ma-kə-bdê* *no*
 3SG.POSS-after=LOC oneself=LOC like.that NEG-PTCP:S/A-be.good PL
ma-ka-nə-sə-bze *wo-rjô* *nə-ŋes.*
 NEG-INF-AUTOBEN-CAUS-COME 3SG.POSS-words SENS-be₁
 ‘(This story is about) not bringing bad things to oneself in the future.’

Unlike modern West Rgyalrongic languages (Section 4.1.2), the *yod* postposition in Situ is not available for non-orientable monotransitive verbs, such as ‘to buy’, or ‘to divide’, since they do not intrinsically involve a goal argument. For these verbs, bene-/maleficiary encoding relies on pronominal possessive prefixes. As in (27), the beneficiary of the action of buying is encoded by pronominal possessive prefixes, with *ŋə-* occurring on the theme, which is indexed on the verb as the syntactic O.

BRAG-BAR SITU

- (27) *ka-kî* ‘to buy’ (2SG→3)

ηά ηə-wô na-máŋam, ηə-smên rə re-kî-n
 1SG 1SG.POSS-head SENS-be.painful_I 1SG.POSS-medicine one IMP-to.buy_I-2SG
 ‘My head aches, buy me some medicine.’ (Lit: buy my medicine)

The restriction of locative encoding of bene-/maleficiary to orientable verbs in Situ reflects a very common extension of the allative; from a concrete goal to an abstract goal (cf. Heine 2009).

4.2.3 Locative =j and possession

In core Rgyalrong languages, possession is predominantly expressed through prefixing morphology. Most nouns are inalienably possessed, lexically taking an indefinite possessive prefix *tə-* or *ta-*. Definite possession is expressed by replacing the indefinite possessive with a set of pronominal possessive prefixes (cf. Jacques 2021: 108; Zhang 2020: 27; etc.). The possessive prefixes occur on the possessee NP, and agree with the person and number of the possessor, which can often be omitted, for instance:

BRAG-BAR SITU

(28) *tə-mí* → (ηά) ηə-mí
 POSS.INDF-daughter 1SG 1SG.POSS-daughter
 ‘daughter (default form)’ ‘my daughter’

In addition to the prevailing prefixing possessive, the locative =j in Situ can also serve to express possession in three constructions, as discussed below.

4.2.3.1 Locational possessive

One important function of the locative-existential clauses in Situ is to express the ‘locational possessive’ (cf. Stassen 2009: 49–50).²²

The locational possessive in Situ comprises three elements: (i) the existential predicative *ndó* ‘exist’, occurring in an invariant form; (ii) the possessor (PR), occurring as an oblique argument, marked by the locative =j; and (iii) the possessee (PE), which is the intransitive subject of the existential copula, as in (29). Note that the possessee NP does not agree with the possessor NP in this example, and occurs in its default form with the indefinite possessive prefix *tə-*.

BRAG-BAR SITU

(29) locational possessive

22. The phenomenon prevails in Tibeto-Burman languages, for further discussions see Stassen (2009: 316–321) and Chappell & Lü (2022).

PR-LOC PE EX
 𐏃𐏃=j tə-ʒém kəsəm ndó
 1SG=LOC POSS.INDF-house three EXIST₁,-FAC
 ‘I have three houses (Lit: to me, there are three houses)’ (Zhang 2020: 340)

The distribution of the locational possessive varies across Situ dialects. For instance, it is used for kinship relations in Cogtse Situ (Lin 1993: 49–50), but such uses are not attested in Brag-bar Situ.

4.2.3.2 *Locative pronouns*

In Situ, the locative =*j* can be directly attached to personal and interrogative pronouns, causing them to function like possessive pronouns (Nagano 2018: 165–166; Prins 2016: 121; etc.). Situ locative pronouns often occur in equative copula clauses, and serve to emphasize a possessive relationship (Lin 1993: 329).

For instance, in (30), the singular first person locative pronoun 𐏃𐏃=*j* appears with the equative copula 𐏃𐏃 ‘be’. The construction expresses a meaning similar to the dative possessive in French (*c’est à moi*).

BRAG-BAR SITU

(30) tá ta-rká tə 𐏃𐏃=j 𐏃𐏃
 DEM POSS.INDF-mule DET 1SG=LOC be₁,-FAC
 ‘The mule is mine.’

The possessive reading of locative pronouns could have originated from the structures where the figure is omitted, and the locative phrase has a contextual referential status, as in (31).

BRAG-BAR SITU

(31) 𐏃𐏃 𐏃𐏃-zgú=j zə nəʒə=j=ksən ndza~ndzâ ostó
 1SG 1SG.POSS-back=LOC also 2SG=LOC=like.that be.identical₁,RED really
 kə-dí ndó
 PTCP:S/A-be.heavy exist₁
 ‘That (burden) on my back is as heavy as (the one) on you.’ (Zhang 2020: 341)

4.2.3.3 ‘Double marking’

Situ also has a ‘double marking’ pattern, in which the possessor has an encliticized locative =*j*, and is indexed on the possessee NP with a possessive prefix. As in (32), the possessor NP, tə-rmî 𐏃𐏃 ‘people’, is both case marked by the yod locative =*j*, and pronominally represented on the possessee NP by the plural third person possessive prefix 𐏃𐏃-.

BRAG-BAR SITU

- (32) *mâ wo-ŋkhú tɛɛnə, tə-rmî ɲo=j*
 DEM.DIST 3SG.POSS-after LNK POSS.INDF-people PL=LOC
ɲi-ka-ndziê wo-spâ tə-rgék tə máksən tɛɛni
 POSS.3PL-PTCP:P-to.eat 3SG.POSS-material POSS.INDF-grains DET like.that LOC
nə-ká-va-u ɲés ka-tsâ nõ-ɲes.
 PFV-NMLZ-to.do_{II}-3SG be_I.FAC INF-to.say IFR-be_I
 ‘After that, he made human food like that.’

As Heine (1997: 148) remarks, the phenomenon of ‘double marking’ of a possessor could be related to a ‘Topic Schema’ (‘As for X), X’s Y’. As for Situ, the double encoding of possessors might have originated in constructions in which a possessor is also encoded as a sentence topic. In (33), the possessor NP marked by the locative occurs as the sentence topic. The possessive prefix *ɲi-* occurring on the possessee NP reflects the person and number of the topic possessor, and serves as morphological evidence that distinguishes the Topic possessive (33) from the Locational possessive (cf. Section 4.2.3.1).

BRAG-BAR SITU

- (33) *səmó=j tə ɲi-rjalpê tə nõ-ndo*
 TOPN:So.mang=LOC DET 3PL.POSS-king DET IFR-exist_I,
 ‘As for Somang (people), they had their (own) king.’

In (33), the sentence topic and the possessee NP are separated by the optional determiner *tə*, which is used as a contrastive marker. The absence of this element could easily lead to contiguity of topic possessor and possessee, resulting in the ‘double marking’ pattern.

5. Multi-directional development of the yod postposition

The unidirectionality hypothesis of grammaticalization predicts increasing grammaticalization from spatial concepts to more abstract case functions (Heine et al. 1991: 156). Among the three Rgyalrongic branches discussed in this paper, it is appropriate to postulate that the Situ locative represents one of the more archaic uses of the Proto-Rgyalrongic yod postposition. The yod postposition’s development towards genitive/oblique syncretism in modern West Rgyalrongic, and towards genitive/accusative syncretism in Tangut can be explained through two main grammaticalization pathways. They are summarized in (34).

- (34) a. From allative to accusative (Section 5.1)
 b. From locative to genitive (Section 5.2)

5.1 From allative to accusative

The promotion of the Proto-Rgyalrongic yod locative postposition to an accusative could have occurred in two steps. First, the allative was reanalyzed as an oblique case in Proto-West Rgyalrongic (Section 5.1.1), then the oblique was further promoted to an accusative in Tangut (Section 5.1.2).

5.1.1 From allative to oblique in West Rgyalrongic

One of the major functions of the oblique case =*jV* in modern West Rgyalrongic languages is to mark bene-/maleficiaries in indirective constructions (cf. Section 4.1.2). This function is also attested with the Situ locative =*j* as an extension of its allative function, albeit with a slightly different distribution (cf. Section 4.2.2.2). The transition from the Proto-Rgyalrongic allative function to the West Rgyalrongic oblique function (with bene-/maleficiary related meanings) may have involved: (i) the loss of the original spatial meaning, and (ii) reanalysis of the allative as a marker of bene-/maleficiaries.

This hypothesis finds support in the morpho-syntactic properties of motion verbs in West Rgyalrongic languages, which alternate between semitransitive, taking an unmarked goal argument ([S=∅, E=∅]), and extended intransitive, with a postpositional goal argument ([S=∅, E=POST]) (cf. Table 5). At the synchronic level, differential goal marking is regulated by semantico-pragmatic factors: default goals are unmarked (e.g. (35a)), and overt marking occurs when there is a need for topological specification (e.g. (35b), (35c)).

KHROSKYABS (WEST RGYALRONGIC)

(35) *rbjǎ* ‘to arrive’

- a. *âmo jâm rǎ-rbjǎ=mbǎ ɛǎ*
 mother house NPST-arrive_I=until LNK
 ‘Before mom arrives home...’ (Lai 2017: 237)
- b. *rdzǎngá zǎm=k^he læ-rbj-âŋ*
 TOPN:Rdzong,‘gag bridge=ADE PST-arrive_{II}-1SG
 ‘I arrived near the Rdzong,‘gag bridge’ (Lai 2017: 187)
- c. <*gǔn*> *vjú=la nǎ-rbjǎ k^hǎy ɛǎ*
 PN:Gun people=LOC:inside PST-arrive_{II} LNK LNK
 ‘Gun went into the crowd.’ (Lai 2017: 190)

Unmarked goals in West Rgyalrongic languages (e.g. (35a)) correspond to strict locative marking in Situ (Section 4.2), and can be considered to represent a gap left by the loss of the original allative (spatial) function of the yod postposi-

tion.²³ However, the yod postposition =jV did not completely disappear following the goal arguments of motion verbs in West Rgyalrongic languages. Rather, it is restricted to human goals. In (36), the yod postposition =ji occurs after a human goal, which can be understood as a metaphorical goal of the fictive motion denoted by the verb $v\hat{a}_a$ ‘to go’, which in this case can be translated to ‘to go well with, to fit’.

KHROSKYABS (WEST RGYALRONGIC)

- (36) $c\hat{s}$ $\chi tul\hat{u}$ =tə $\eta\hat{c}$ =ji $d\hat{a}v\hat{a}$ $n\hat{x}$ -_a=tə $r\hat{a}$ - $\eta\hat{c}$
 DEM hat=DEF 1SG=OBL exactly NPST-to.go₁=DEF NPST-be₁
 ‘This hat fits me very well (Lit: this hat goes well with me).’ (Lai 2017: 587)

This yod postposition’s semantic shift to goal [+human], as demonstrated in (36) also helps to explain its occurrence in ditransitive constructions with manipulation verbs (cf. Section 4.1.2). On the one hand, manipulation verbs are orientable and intrinsically include a goal argument; on the other hand, the R of a ditransitive construction is often a human participant. Under these circumstances, in extending to non-orientable verbs, such as ‘to buy’, it is likely that =jV develops into a genuine bene-/maleficiary marker.

- (37) Allative (orientable verbs)
 Goal > Human goal > Bene-/malefactive
 Oblique (orientable; non-orientable verbs)

Therefore data from modern West Rgyalrongic languages support an increasing grammaticalization from allative to oblique, with bene-/maleficiary related functions (as summarized in 37); a typologically frequent grammaticalization pathway (Heine et al. 1991: 151; Heine 2009; Narrog 2014; etc.).

5.1.2 Promotion of oblique to accusative in Tangut

Although it is widely accepted that the dative is a transit stage for the second grammaticalization of a spatial case to the accusative (cf. Section 1.2), the promotion of the Proto-West-Rgyalrongic oblique to the Tangut accusative seems to be an exception.

23. In Situ, topological specifications are realized by locative phrases based on spatial relator nouns such as wo - $li\acute{e}$ =j ‘in the middle of’. Despite the semantic discrepancy, in West Rgyalrongic languages, some spatial case postpositions with topological specification have transparent sources cognate with spatial relator nouns in Situ. For example, Khroskyabs = la ‘locative:inside’ is cognate with Brag-bar wo - $li\acute{e}$ ‘middle’, and = $g\hat{o}$ ‘locative:inside’ with Brag-bar wo - $\eta\hat{g}\hat{u}$ ‘inside’.

The yod postposition did not develop into a dative in any modern Rgyalrong languages; on the contrary we observe that datives developed independently in different branches: (i) Khroskyabs and most Horpa languages have velar datives (Honkasalo 2019; Gates 2021; Lai 2017; Sun & Tian 2013); (ii) the Horpa of Stodste and Rtsangkhog have a dental dative =*do* (Sun 2007; Lai 2021) cognate with the Tangut allative/dative $\bar{jij}^{5447}do^2$; (iii) Situ has less grammaticalized dative relator nouns (cf. Section 4.2.2). This formal diversity suggests that dative as a dedicated case category was formed very late in Rgyalrongic languages. In Tangut, it is unclear whether or not \bar{jij}^{1139} underwent a dative stage. Its limited occurrences after the R of non-derived ditransitive verbs still fall within the functional domain of the oblique.

An alternative hypothesis is that the Tangut accusative developed from oblique. This development is likely to have been realized via bridging syntactic constructions involving argument promotion, such as the auxiliary causative (cf. Section 3.3). For one thing, the causative auxiliary in Tangut \bar{jij}^{0749} (stem [B] \bar{jij}^{4568}) is originally an orientable verb which means ‘to send’ and syntactically involves a goal argument. Therefore, the optional causee marking with \bar{jij}^{1139} can be considered to have been initially driven by semantics properties, and in particular by humanness, as observed with =*jV* in modern West Rgyalrongic languages (e.g. Example 36). For another, since the auxiliary causative in Tangut is an argument promotion mechanism, it can promote the causee, which can be marked by the yod postposition, to a syntactically indexable O. In this case, \bar{jij}^{1139} , which was originally a marker for a human goal, would have been reanalyzed as an accusative marker.

Since an auxiliary causative based on a motion verb is Tangut innovation and is not found in any other Rgyalrongic languages, this also explains why the yod postposition did not develop an accusative in other West Rgyalrongic languages.

5.1.3 Information structure and accusative marking

Unlike the Romance languages, where DOM first emerges as a topic marking device (Iemmolo 2011), information structure is likely to have been a contributor in the grammaticalization of the yod postposition in Rgyalrongic languages.

The existing data only allow us to speculate that information structure may have promoted the spreading of DOM in Tangut. In modern West Rgyalrongic, the two semantic roles that are associated with the oblique =*jV*, the experiencer and the bene-/maleficiary, are typically human and definite. Although Tangut DOM shows a strong tendency to appear with human and definite objects, it is not limited to them. Tangut DOM can potentially be grouped into the Type 3 of Dalrymple & Nikolaeva’s (2011: 215) typology, wherein DOM first applies to topic

and non-topic arguments with the semantic features of human and definite, and then spreads to other topic-worthy arguments. Needless to say, the relationship between information structure and DOM in Tangut is worthy of further study.

5.2 From locative to genitive

Since the genitive function of the yod postposition is shared by all West Rgyalrongic languages, reanalysis from the locative as a genitive should predate the West-Rgyalrongic split.

Reanalysis of spatial and directional markers as genitives is a typologically frequent occurrence (Heine 1997:145; Stassen 2009:122). For the Rgyalrongic languages, the reanalysis of a locative as a genitive could be the result of multiple different pathways. Among the five source schemes that Heine (1997:144) postulates for the expression of attributive possession, at least two (*i*) the Location Schema (Y at X), and (*ii*) the Topical Schema (as for X, X's Y) that are relevant to the present discussion. Both schema involve the reanalysis of constituency (Stassen 2009:113–135): two noun phrases occurring in adjacency in an original predicative possessive construction are reanalyzed as a single noun phrase, with the preceding noun phrase becoming the adnominal modifier of the subsequent noun phrase.

5.2.1 Location schema

The locational possessive, as observed in Situ (cf. Section 4.2.3.1), is the bridging construction which has allowed the reanalysis of a locative possessor as a genitive in West Rgyalrongic.

As illustrated in (38), due to the contiguity, the locative possessor, originally an oblique argument, is reanalyzed as an adnominal modifier of the subsequent possessee, which is the original subject of the copula predicate.

- (38) Genitive possessive reanalyzed from locational possessive
- a. Locational possessive [PR=LOC] [PE] [COP.EX]
 - b. Adnominal possessive [PR=GEN PE] ([COP.EX])

A locational possessive with the yod postposition can be traced back to Proto-Rgyalrongic. Tangut has a dozen existential verbs (Ikeda 2012; Shi 2020:318–355), among which $\text{𑖇𑖆}^{0930}dju^1$, a common Rgyalrongic etymon (cognate with Khroskyabs *dá*, Situ *ndó*), demonstrates idiosyncratic combination with the yod

5.3 Beneficiary possessor

Heine (1997: 146) also suggests a Goal Schema, namely a unidirectional grammaticalization from markers of allative, dative, or benefactive to genitive. Yet in West Rgyalrongic languages, it is not clear whether the bene-/maleficiary meaning historically precedes the genitive meaning.

Bene-/maleficiary encoding for non-orientable verbs with the yod postposition may have been a simple analogy from orientable verbs, and a side effect of the increasing grammaticalization of the allative in West Rgyalrongic (Section 5.1.1). However, we cannot preclude an alternative hypothesis that the newly developed genitive =jV occurs in compensation for the loss of possessive prefixes in West Rgyalrongic. Note that Core Rgyalrong languages use the possessive prefixes to encode the bene-/maleficiary of non-orientable verbs (cf. Section 4.2.2.2, see also Jacques 2021: 112–113, 317 for Northern Rgyalrong languages). The ambiguity between the bene-/maleficiary and genitive always exists.

Figure 4 summarizes all the assumed historical developments of the yod postposition in Rgyalrongic languages presented in research to date.

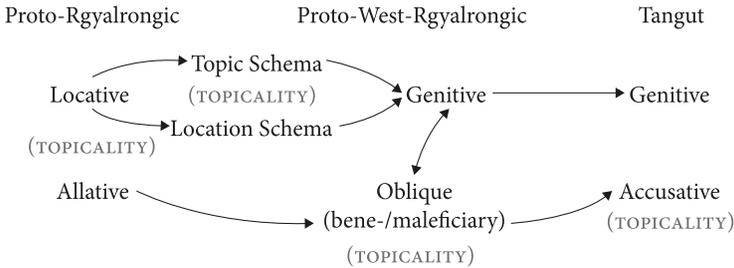


Figure 4. Diachronic development of the yod postposition in Rgyalrongic Languages

6. Conclusion

This paper explained the historical development of a polyfunctional case marker ji^{1139} in Tangut, and attributed its genitive/accusative syncretism to multiple grammaticalization from a proto general locative case. This syncretism appears confusing in Tangut owing to the complete loss of the original locative function, which can only be reconstructed through comparison with more conservative sister languages (Section 4).

The two main grammaticalization pathways assumed in this paper, from allative to accusative, and from locative to genitive with the help of constructional change (Section 5), confirm the hypothesis of unidirectional grammaticalization

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Abbreviations

1	first person	INDF	indefinite
2	second person	INF	infinitive
3	third person	INS	instrumental
I	Stem I	INV	inverse
II	Stem II	IPFV	imperfective
I'	Stem I'	LNK	linker
II'	Stem II'	LOC	locative
[A]	Stem A	M	masculine
[B]	Stem B	NEG	negative
A	transitive subject	NMLZ	nominalizer
ABL	ablative (before/above ABS)	NPST	non-past
ABS	absolutive	O(J)	object
ACC	accusative	OBL	oblique
ADE	adessive	OPT	optative
ALL	allative	PE	possessor
AUTOBEN	autobenefactive	PERF	perfect
AUX	auxiliary	PFV	perfective
CAUS	causative	PL	plural
CLF	classifier	PM	prominence marker
CM	clause marker	PN	person name
COP	copula	POT	potential
DAT	dative	POSS	possessive
DEF	definite	PR	possessor
DEM	demonstrative	PROX	proximate
DET	determiner	PREF	prefix
DIR	directional prefix	PRON	pronoun
DIS	distal	PST	past
DOM	differential object marking	PTCP	participle
DOWN	downward direction	R	recipient
DU	dual	RED	reduplication
E	extended argument	S	intransitive subject
ERG	ergative	SG	singular
EX	existential predicate	SENS	sensory
EXP	experiential	SJ	subject
FAC	factual	T	theme
GEN	genitive	TAME	tense-aspect-modality-evidentiality
IFR	inferential	TOPN	toponym
IMP	imperative	UP	upward direction

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