

“SPLIT INVERSION” IN NYAGRONG MINYAG AND ITS IMPLICATION FOR THE EVOLUTION OF THE RGYALRONGIC DIRECT/INVERSE SYSTEM

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The rGyalrongic languages of the Tibeto-Burman family employ what is conventionally called a direct/inverse system, a type of Person-sensitive transitive morphology conditioned by the relative ranking of the agent and the patient on the Person Hierarchy. Based on primary data, this paper investigates a unique type of transitive marking found in the Bomei dialect of Nyagrong Minyag, which, although unambiguously cognate with the inverse marker in closely related Horpa varieties, has nevertheless developed into an aberrant system that presents a split pattern between declaratives (“1 > the rest”) and *wh*-questions/imperatives (“1 > 2 > 3”). This study explores the development of this split system, and proposes a diachronic analysis of the evolution of the rGyalrongic direct/inverse pattern evidenced by two Nyagrong Minyag dialects Bomei and Manqing. Through careful examination of the Inverse and Person agreement systems in ten varieties from three rGyalrongic subgroups, this paper shows that the two constructions tend to evolve in parallel, decaying in a way that conforms with the hierarchical ranking proposed by the Person Hierarchy. Nyagrong Minyag appears to be an extreme case of such decay, in which first-person marking becomes the last asymmetry to be left on the Person Hierarchy.

**1. INTRODUCTION.** Direct/inverse marking is a distinctive typological trait of the rGyalrongic languages, a Tibeto-Burman subgroup consisting of languages spoken in Sichuan, China. Most rGyalrongic varieties employ a type of transitive morphology on the verb, whose presence is conditioned by the relative ranking between the agent and the patient on the Person Hierarchy (Silverstein 1976; DeLancy 1981; Ebert 1987):

1st person > 2nd person > 3rd human > 3rd (non-human) animate > 3rd inanimate

Two fundamental ideas are associated with the Person Hierarchy. First, a speech-act participant (SAP) always ranks higher than a non-SAP (third person). Second, SAP-internal ranking tends to be language-specific (Klaiman 1992; Thompson 1994). Examples (1a)–(1b) demonstrate the direct/inverse contrast in Caodeng rGyalrong, a variety of the Cidaba dialect of rGyalrong. In the *direct* example (1a), the first-person agent of the sentence ranks higher than the third-person patient on the Person Hierarchy (PH), and therefore no overt marking appears on the verb. In the *inverse* example (1b), on the other hand, the patient of the sentence ranks higher than the agent, triggering the inverse prefix *-o-* on the verb.

(1) Caodeng rGyalrong (Sun and Shi 2002:81-82)

- |  |  |
|--|--|
| a. <i>ɛfiʔ(-kə)</i> <i>dzomɐ</i> <i>ɐs-nɛmqɐ-aŋ.</i> | b. <i>dzomɐ</i> <i>ɛfiʔ</i> <i>thɐ-o-nɛmqɐ-aŋ.</i> |
| 1sg-erg    Droma    prog-blame-1sg                   | Droma    1sg    prog-inv-blame-1sg                 |
| ‘I am blaming Droma.’ [Direct]                       | ‘Droma is blaming me.’ [Inverse]                   |

Examples (2a)–(2b) show a direct/inverse contrast in Japhug rGyalrong, a different dialect of rGyalong. In (2a), the inverse marking is absent, since the [+human] agent ranks higher than the [-animate] patient. In (2b), the inanimate agent ranks lower than the third-person human patient on the PH, and, as expected, the inverse marking appears on the verb.

(2) Japhug rGyalrong (Jacques 2010:144)

- a. *gro u-ndzi tu-rdoḅ nu tṣ-teu nu ku ko-nṣtsu.*  
 pigeon 3SG.POSS-skin one-piece DET NEU-boy DET ERG EVD-hide  
 ‘The boy hid one of those pigeon skins.’ [Direct] (3rd human→3rd inanimate)
- b. *tu-ci nu ku taḅ-nṣ-taḅ taḅ-nṣ-taḅ zo tó-wṣ-tsum.*  
 NEU-water DEM ERG up-CONG-up up-CONG-up PART EVD:UP-INV-take  
 ‘The water drained him upwards.’ [Inverse] (3rd inanimate→3rd human)

Since this Person-sensitive type of transitive marking resembles that of the Algonquian direct/inverse system, DeLancy (1981) has applied the term “direct/inverse” to the rGyalrongic languages, a term which has been subsequently adopted elsewhere in literature (e.g., Sun and Shi 2002 for Caodeng rGyalrong; Jacques 2010 for Japhug rGyalrong; Jacques et al. 2013 for Khang.gsar Horpa; Sun and Tian 2013 for Gexi Horpa; Gong 2013 for Zbu rGyalrong, and Yin 2007 and Lai, to appear for several Lavrung varieties). Based on primary data, this paper analyzes a peculiar “inverse” system found in the Bomei dialect of Nyagrong Minyag, and compares it with the direct/inverse patterns in different rGyalrongic varieties and subgroups. The primary goal is to seek a proper analysis of the peculiar pattern in Bomei, with the concomitant goal of accounting for the synchronic variation in the inverse systems of different rGyalrongic varieties. The paper is organized as follows. Section 2 describes the Inverse and Person agreement systems of Nyagrong Minyag. Section 3 investigates the typology of Person agreement and Inverse patterns in ten representative rGyalrongic varieties. sections 4 and 5 propose a diachronic analysis of the evolution of the rGyalrongic direct/inverse system based on the observations in section 3. Section 6 concludes the paper with several typological implications.

**2. TWO PERSON-RELEVANT CONSTRUCTIONS IN NYAGRONG MINYAG.** Nyagrong (Xinlong) Minyag is an under-documented rGyalrongic language spoken in Xinlong County, Ganzi Province, Sichuan. The language is generally regarded as a variety of Horpa (also known as Daofu or Ergong) (Suzuki 2012; Sun and Tian 2013). Nyagrong Minyag consists of two dialects, which are barely mutually intelligible, Manqing (rGyarwagshis) and Bomei (Bangsmad). While the Manqing dialect has been researched to a certain degree (Suzuki 2010, 2012), Bomei remains virtually undescribed. This paper presents some initial findings on Bomei, focusing on the analysis of its Inverse and Person agreement patterns both of which are typologically unique among the rGyalrongic languages.<sup>1</sup>

Bomei has SOV as the unmarked word order, and accusative marking on the object (3). The accusative marker exhibits the same form *də-* as the perfective aspect marking. While the source of the

<sup>1</sup> Nyagrong Minyag (ISO 639-3) (新龍木雅) is often confused with Muya, also known as Manyak, Menya, Minyag, Minyak, Miyao, and Munya (康定木雅) (Qiangic, Tibeto-Burman) spoken in Kangding, Sichuan, China. The data presented in this paper were collected in 2013 with a native speaker of the Bomei variety. A preliminary version of this paper was presented at the 3rd Workshop on Sino-Tibetan Languages of Sichuan, September 4, 2013, Paris. I wish to thank Jackson Sun, Guillaume Jacques, John Van Way, William O’Grady, Robert Blust for helpful comments on this paper. I am grateful to Bkrashis Bzangpo, whose time and patience in sharing with me his language has made this paper possible, and John Van Way, who guided me into rGyalrongic languages.

perfective marker *də-* is uncertain, the accusative marker is clearly cognate with those used in other Horpa varieties such as Gexi (Sun and Tian 2013) and Khang.gsar (Jacques et al. 2013).<sup>2</sup>

(3) Accusative marking in Bomei

- |                            |                           |
|----------------------------|---------------------------|
| a. <i>ŋa əde-də də-li.</i> | b. <i>ŋa əde-də li.</i>   |
| 1SG 3SG-ACC PFV-release    | 1SG 3SG-ACC release       |
| ‘I released him/her.’      | ‘I will release him/her.’ |

**2.1 “INVERSE” SYSTEM IN BOMEI: THE DECLARATIVES.** Bomei presents a type of Person-sensitive transitive morphology on the verb, which is unambiguously cognate with the inverse marker in closely related Horpa varieties (cf. Jacques et al. 2013; Sun and Tian 2013). In a typical rGyalrongic direct/inverse system, a (morphologically) unmarked sentence indicates a *direct* scenario, whereas the presence of an overt marker in a transitive sentence indicates an *inverse* scenario. In Bomei, however, the prototypical direct/inverse system has evolved into an aberrant pattern, which, though still sensitive to Person, can no longer be characterized as a direct/inverse system.<sup>3</sup> For the sake of simplicity, we provisionally call this transitive marking in Bomei an *inverse* marker.

In Bomei, the “inverse” marker appears between the aspect marker and the verb stem as a bilabial fricative [ɸ]/[β], whose voicing agrees with the onset of the verb stem. A phonotactic constraint applied to word-initial position affects the presence of the inverse marking. An onset cluster will block the presence of the inverse prefix, as there is only one slot available at the pre-initial position in the language.<sup>4</sup>

To provide an accurate description of the pattern of this Person-sensitive transitive morphology, this paper follows Ebert’s (1987) classification of three discourse scenarios:<sup>5</sup>

(5) Three discourse scenarios (Ebert 1987)

- a. INNER SCENARIO (1→2; 2→1):  
A sentence in which both speech-act participants are core arguments.
- b. MIXED SCENARIO (1→3, 2→3; 3→1, 3→2):  
A sentence in which one SAP and one non-SAP are core arguments.
- c. OUTER SCENARIO (3→3):  
A sentence in which two non-SAPs are core arguments.

<sup>2</sup> In addition, while many rGyalrongic languages employ obligatory agent marking on transitive agents, only inanimate agents carry an overt marker in Bomei.

(4) Ergative marking *kʰɛ* in Bomei

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| a. <i>Lozom va-də ɸ-tə nəŋə.</i> | b. <i>rzwa-kʰɛ Lozom-də də-β-zɛ.</i> |
| Lozom pig-ACC INV-beat COP       | rock-ERG Lozom-ACC PFV-INV-push      |
| ‘Lozom is beating the pig.’      | ‘The rock pushed Lozom.’             |

<sup>3</sup> This unique transitive marker in Bomei is clearly cognate with the inverse marker in the other two Horpa-Shangzhai varieties. According to Sun and Tian (2013) and Jacques et al. (2013), the inverse prefix both in Gexi Horpa and in Khang.gsar Horpa has the form *f-/v-*, whose voicing agrees with the onset of the verb stem. An identical phonotactic constraint applied to the transitive marking of Bomei (see further in section 2.1) is also attested in the inverse marker in Khang.gsar Horpa (Rtau) (Jacques et al. 2013). Specific discussion on the diachronic evolution of this marker is presented in section 4.

<sup>4</sup> For instance, the “inverse” marker is not compatible with the following verb stems: *ntʂali* ‘to bite’, *ɛtʂatʂi* ‘to chase’, and *ntake* ‘to pinch’.

<sup>5</sup> Zúñiga (2006) provides a similar classification with different terminology. In his description, the inner scenario is called local and the outer scenario non-local. These terms have been adopted in some of the rGyalrongic literature as well.



third-person patient (10). “3→1” and “3→2” sentences, on the other hand, carry an inverse marker (also to be expected) (11)–(13). Passive sentences reflecting a “3→1” scenario also present inverse marking even if the agent is left unstated (11b).<sup>6</sup> These patterns all conform with the PH.

The “2→3” scenario, however, presents a highly atypical pattern. In all “2→3” declaratives found in our collected texts and elicitations, the inverse marking consistently appears on the verb (13)–(14). An “inverse” marking in “2→3” scenarios is apparently incompatible with the fundamental idea of the PH, not only because the inverse marker appears when the agent ranks higher than the patient, but also due to the crucial violation of the fundamental assumption of PH: SAPs are always ranked higher than non-SAPs (Klaiman 1992; Thompson 1994). Crucially, “2→3 inversion” is not attested in any other rGyalrongic varieties. The case of Bomei is therefore typologically intriguing.

- (10) *nalə*      *ŋa*      *Lozom-də*      *tɔ-u.*      (1→3)  
tomorrow 1SG Lozom-ACC beat<sub>1</sub>-1A  
‘Tomorrow I will beat Lozom.’ [Direct]
- (11) a. *ədə*      *ŋa-də*      *φ-tɔ*      *ŋə.*      (3→1)  
3SG 1SG-ACC INV-beat<sub>1</sub> COP.1  
‘He is beating me (now).’ [Inverse]
- b. *məgə*      *ŋa-də*      *də-β-zɔ-a.*      (3→1)  
yesterday 1SG-ACC PFV-INV-push-1O  
‘Yesterday I was pushed (by somebody).’ [Inverse]
- (12) *ədə*      *ni-də*      *φ-si*      *nəŋə.*      (3→2)  
3SG 2SG-ACC INV-kill COP  
‘He will kill you (someday in the future)’ [Inverse]
- (13) *ni*      *ədə-də*      *φ-si*      *nəŋə.*      (2→3)  
2SG 3SG-ACC INV-kill COP  
‘You will kill him (someday in the future)’ [Inverse]
- (14) *məgə*      *ni*      *Lozom-də*      *də-β-li.*      (2→3)  
yesterday 2SG Lozom-ACC PFV-INV-release  
‘You released Lozom yesterday. (You don’t remember.)’ [Inverse]

**2.1.3 OUTER SCENARIOS.** Outer-scenario sentences involve two non-SAP as core arguments, (i.e., “3→3”). As reflected in the PH, there is a widely attested cross-linguistic tendency in distinguishing third-person animacy: third-person humans rank higher than third-person non-human animates, which in turn rank higher than third-person inanimates. This elaborate hierarchy is indeed attested in some conservative rGyalrongic varieties. In Caodeng rGyalrong, for example, inverse marking occurs in “3→3” sentences in which the agent has less animacy than the patient, (i.e., “3rd animate→3rd human”, “3rd inanimate→3rd animate”, and “3rd inanimate→3rd human” scenarios), whereas their *direct* counterparts are morphologically unmarked (Sun and Shi 2002) (15a)–(15b). Unlike Caodeng, however, Bomei does not have inverse marking that is sensitive to third-person animacy. All outer-scenario sentences are thus equally marked as *inverse*, even when the agent is ranked higher in animacy than the patient (16).

<sup>6</sup> Note that in passive sentences with a first-person subject (or, thematically speaking, a first-person patient) such as (11b) ‘I was pushed (by someone)’, even if the agent is implicit the speakers still seem to treat the sentence as a transitive “3→1” event in which the third-person agent ranks lower than the first-person patient on the PH. Hence, the inverse marking still appears on the verb.

(15) Outer scenarios in Caodeng rGyalrong (Sun and Shi 2002:87–88)

- a. *seʔ p<sup>h</sup>argot-kə i<sup>h</sup>e-səldə/\*i<sup>h</sup>e-o-səldə.* (3rd animate→3rd inanimate)  
 white.birch wild.boar-ERG PFV:TR-knock.down.PST/\*PFV:TR-INV-knock.down.PST  
 ‘The wild boar knocked down a white birch.’ [Direct]
- b. *térəm-kə ɲe-cə tə-o-səsmət-cə.* (3rd inanimate→3rd animate)  
 falling.rock-ERG female.yellow.cow.ID PFV-INV-injure.PST-EVI  
 ‘The falling rock injured a female yellow cow.’ [Inverse]

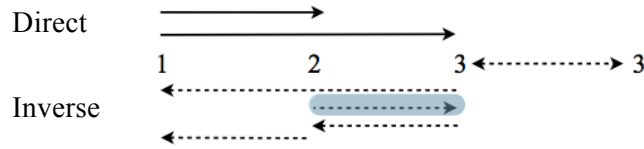
(16) Outer scenarios in Bomei

- a. *ədə khɔ-də β-zɛ nəŋə.* (3rd human→3rd animate)  
 3SG dog-ACC INV-push COP  
 ‘He is pushing the dog.’ [Inverse]
- b. *k<sup>h</sup>ɔ agə Lozom-də də-ϕ-si.* (3rd animate→3rd human)  
 dog ID Lozom-ACC PFV-INV-kill  
 ‘The dog killed Lozom.’ [Inverse]
- c. *Lozom vi ϕ-tɛ<sup>h</sup>ə nəŋə.* (3rd human→3rd inanimate)  
 Lozom butter INV-melt<sub>2</sub> COP  
 ‘Lozom is melting the butter.’ [Inverse]
- d. *rzwa gatchi -k<sup>h</sup>e Lozom-də də-β-zɛ.* (3rd inanimate→3rd human)  
 stone big-ERG Lozom-ACC PFV-INV-push  
 ‘Lozom was pushed by the big rock.’ [Inverse]
- e. *khɔ χtɛy-də də-ϕ-tsi (tsi).* (3rd animate→3rd inanimate)  
 dog rtsampa-ACC PFV-INV-eat already  
 ‘The dog ate the rtsampa secretly.’ [Inverse]
- f. *rzwa-k<sup>h</sup>e khɔ-də də-β-zɛ.* (3rd inanimate→3rd animate)  
 stone-ERG dog-ACC PFV-INV-push  
 ‘The big rock pushed the dog.’ [Inverse]

As can be seen in (16), the “inverse” marker consistently appears in all “3→3” sentences in Bomei. The absence in Bomei of the direct/inverse distinction that is characteristic of conservative varieties such as Caodeng implies the decay of the Inverse system. The presence of an “inverse” marker in “3→3” direct scenarios implies that the language has reinterpreted the originally direct/inverse contrast and developed a different Person-sensitive mechanism.

**2.1.4 SUMMARY: INVERSE MARKING IN BOMEI DECLARATIVES.** As shown in the preceding description, a Bomei declarative will be unmarked as *direct* only when the agent of the sentence is a *first-person* argument. In any other scenarios, an “inverse” marker ( $\phi/\beta$ ) always appears on the verb. The inverse pattern in Bomei declaratives can thus be described as “1 > 2 / 3”, or more simply “1 > the rest”, as illustrated in figure 1. The solid lines in the figure indicate direct scenarios (i.e., 1→2, 1→3), and dashed lines inverse scenarios (i.e., 3→3, 3→2, 3→1, 2→1, and 2→3). Significantly, the unexpected “2→3 inversion” pattern turns out to be a challenge to our current understanding of the PH. The lack of any distinction among levels of third-person animacy also deviates from the system of conservative rGyalrongic languages such as Caodeng, Japhug, or Zbu rGyalrong. Further discussion follows in 3.1.

FIGURE 1. INVESE PATTERN IN NYAGRONG MINYAG DECLARATIVES



**2.2 PERSON AGREEMENT IN BOMEI.** Person agreement is another feature distinctive of the rGyalrongic subgroup of Tibeto-Burman languages. The exact pattern of the agreement system, however, varies from one variety to another. While some employ overt Person-agreement markers for first, second, and third person, making an elaborate three-way number distinction, others lack a third-person or even a second-person agreement marker, had exhibit fewer number distinctions. The Person-agreement pattern in Bomei is among the simplest of all rGyalrongic varieties. Only first-person agreement is attested without any number distinction, as illustrated in table 1. In the table,  $\Sigma$  stands for the verb stem, and an affix attached after  $\Sigma$  indicates suffixation.

TABLE 1. PERSON AGREEMENT PARADIGM IN NYAGRONG MINYAG (BOMEI)

A \ P	1st	2nd	3rd
1st		$\Sigma(-u)$	$\Sigma(-u)$
2nd	$\Sigma-a$		$\Sigma$
3rd	$\Sigma-a$	$\Sigma$	$\Sigma$
INTR	$\Sigma-a$	$\Sigma$	$\Sigma$

As shown in table 1, Bomei employs only first-person agreement marking. Transitive sentences with a first-person patient (1O) (cf. Table 4) carry the same agreement marker *-a* as intransitive sentences with a first-person subject (1S) (cf. tables 1 and 2). Some verbs with high transitivity (e.g., ‘to beat’, ‘to pull’) additionally employ a specific stem alternation (*-u*) in transitive sentences that have a first-person agent (1A), as shown in the paradigm of the verb ‘to beat’ (table 5).<sup>7</sup>

In most cases, however, transitive sentences with a first-person agent (1A) are unmarked, as is shown in the verb paradigm for ‘to release’ (table 4).<sup>8</sup> Such an ergative-aligned agreement system is different from the prototypical rGyalrongic agreement mechanism, in that it is governed by syntax and not by discourse pragmatics (cf. Sun and Shi 2002).<sup>9</sup>

<sup>7</sup> Verbs employing the *-u* suffix in 1A constructions in Minyag are all verbs with high transitivity. For instance, *tɔ* ‘to beat’ (1O *twa*, 1A *tɯ*); *tʰətɔ* ‘to pull’ (1O *tʰətwa*, 1A *tʰətɯ*). Sun and Tian (2013) made a similar observation in Gexi Horpa, a rGyalrongic variety that belongs to the same subgroup with Nyagrong Minyag.

<sup>8</sup> In Nyagrong Minyag as well as other Horpa varieties, Person agreement suffixes often trigger vowel fusion in final position (cf. Sun and Tian 2013; Jacques et al. 2013). To keep the discussion to a minimum, the vowel fusion phenomenon (cf. Tables 2 and 3), which is not relevant to the analysis, will not be covered in this paper.

<sup>9</sup> Sun and Tian (2013) provide a specific discussion of the change in agreement strategy found among many Horpa varieties, in which the prototypical discourse-governed strategy has become syntactically conditioned instead.

TABLE 2. *ɤli*<sup>10</sup> ‘to fall’ (intr.)<sup>10</sup>

	1st	2nd	3rd
INTR	<i>ɤwa</i>	<i>ɤ</i>	<i>ɤ</i>

TABLE 3. *ɤ* ‘to go’ (intr.)

	1st	2nd	3rd
INTR	<i>ɤlwa</i> <sup>10</sup>	<i>ɤli</i> <sup>10</sup>	<i>ɤli</i> <sup>10</sup>

TABLE 4. *li* ‘to release’ (tr.)

	1st	2nd	3rd
1st		<i>li</i>	<i>li</i>
2nd	<i>β-lwa</i>		<i>β-li</i>
3rd	<i>β-lwa</i>	<i>β-li</i>	<i>β-li</i>

TABLE 5. *tɔ* ‘to beat’ (tr.)

	1st	2nd	3rd
1st		<i>tu</i>	<i>tu</i>
2nd	<i>φ-twa</i>		<i>φ-tɔ</i>
3rd	<i>φ-twa</i>	<i>φ-tɔ</i>	<i>φ-tɔ</i>

In brief, unlike conservative rGyalrongic varieties, which exhibit an elaborate agreement system, Bomei marks only first-person arguments on verbs. The marker follows an ergative-aligned distribution, whereby it appears in all intransitive sentences with a first-person subject and in all transitive sentences with a first-person patient. No second-person or third-person agreement is found in this variety.

**2.3 “FIRST-PERSON PROMINENCE” IN BOMEI.** A comparison of Inverse and Person agreement systems thus reveals Bomei’s strong preference for first-person marking. In both systems the first-person is treated differently from other persons. This special “first-person prominence” phenomenon stands in stark contrast to the morphosyntax of the more conservative rGyalrongic varieties. Table 6 illustrates the differences between the Inverse and Person agreement patterns in Zbu rGyalrong (Gong 2013) and Nyagrong Minyag (Bomei). The figure  $\Sigma$  stands for the verb stem. The “inverse” scenarios, i.e., those with an overt inverse marker presented, are marked in grey.

TABLE 6. INVERSE AND PERSON AGREEMENT PATTERNS IN ZBU RGYALRONG AND NYAGRONG MINYAG

P	Zbu rGyalrong										Nyagrong Minyag		
	1S	1D	1P	2S	2D	2P	3S	3D	3P	3'	1	2	3
A				<i>tɔ-Σ</i>	<i>tɔ-Σ-<sup>n</sup>dzə</i>	<i>tɔ-Σ-<sup>n</sup>ɲə</i>	$\Sigma$ - $\eta$	$\Sigma$ - $\eta$ - <sup>n</sup> <i>dzə</i>	$\Sigma$ - $\eta$ - <i>ɲə</i>			$\Sigma$ (-u)	$\Sigma$ (-u)
1S													
1D								$\Sigma$ - <i>tɛə</i>					
1P								$\Sigma$ - <i>jə</i>					
2S	<i>tə-wə-Σ-η</i>	<i>tə-wə-Σ-tɛə</i>	<i>tə-wə-Σ-jə</i>					<i>tə-Σ</i>			<i>β-Σ-a</i>		<i>β-Σ</i>
2D	<i>tə-wə-Σ-η-<sup>n</sup>dzə</i>							<i>tə-Σ-<sup>n</sup>dzə</i>					
2P	<i>tə-wə-Σ-η-ɲə</i>							<i>tə-Σ-ɲə</i>					
3S	<i>wə-Σ-η</i>	<i>wə-Σ-tɛə</i>	<i>wə-Σ-jə</i>	<i>tə-wə-Σ</i>	<i>tə-wə-Σ-<sup>n</sup>dzə</i>	<i>tə-wə-Σ-ɲə</i>				$\Sigma$	<i>β-Σ-a</i>	<i>β-Σ</i>	<i>β-Σ</i>
3D	<i>wə-Σ-η-<sup>n</sup>dzə</i>									$\Sigma$ - <sup>n</sup> <i>dzə</i>			
3P	<i>wə-Σ-η-ɲə</i>									$\Sigma$ - <i>ɲə</i>			
3'							<i>wə-Σ</i>	<i>wə-Σ-<sup>n</sup>dzə</i>	<i>wə-Σ-ɲə</i>				
INTR	$\Sigma$ - $\eta$	$\Sigma$ - <i>tɛə</i>	$\Sigma$ - <i>jə</i>	<i>tə-Σ</i>	<i>tə-Σ-<sup>n</sup>dzə</i>	<i>tə-Σ-ɲə</i>	$\Sigma$	$\Sigma$ - <sup>n</sup> <i>dzə</i>	$\Sigma$ - <i>ɲə</i>		$\Sigma$ - <i>a</i>	$\Sigma$	$\Sigma$

<sup>10</sup> See the following sentences illustrated in the paradigm:

- a. *ni/əde/Lozom də-ɤli*<sup>10</sup>.                      b. *ɲə də-ɤli*<sup>10</sup>-*a*(<sup>10</sup>).  
 2SG/3SG/Lozom PFV-fall                      1SG PFV-fall-1  
 ‘You/he/she/Lozom fell.’                      ‘I fell.’



As shown in the table 6, Zbu employs all first-, second-, and third-person agreement markers, each exhibiting a three-way number distinction (singular/dual/plural), while Bomei exhibits only first-person agreement without number distinctions.<sup>11</sup> To mark inverse patterns, Zbu employs specific portmanteau affixes for inner scenarios (*tɐ-* for “1→2”; *tə-* for “2→1”) and exhibits an animacy distinction in the third person, whereas Bomei lacks both distinctions. Unlike those in Bomei, the “2→3” scenarios in Zbu are unmarked (direct). The inverse system of Zbu thus presents an elaborate “1 > 2 > 3 human / 3rd animate > 3rd inanimate” distinction.<sup>12</sup>

Bomei, however, functions dramatically differently. In a prototypical direct/inverse system, only the lower-left half of the semantic map (cf. table 6) should be marked inverse. Zbu conforms to this pattern. The inverse pattern in Bomei declaratives, however, appears additionally in the “2→3” scenario (located outside the lower-left half of the map). In accordance with Bomei’s preference for first-person permanence, the distinction in marking in the semantic map is thus “horizontal,” as opposed to “diagonal.”

**2.4 INVERSE PATTERN IN BOMEI IMPERATIVES AND *WH*-QUESTIONS.** Bomei’s aberrant “inverse” pattern is associated with other phenomena in addition to the unexpected marking in “2→3” declaratives. Namely, in both *wh*-questions and imperative constructions, Bomei exhibits a distinctive “1 > 2 > 3” inverse pattern. This type of split pattern is not attested in any other rGyalrongic variety.

**2.4.1 “2→3” SCENARIO REFLECTED IN BOMEI IMPERATIVES.** In contrast to Bomei declaratives, imperative constructions do not employ inverse marking in “2→3” scenarios (17)–(19). Since imperatives, however, do exhibit inverse marking in “2→1” scenarios (20)–(21), the inverse pattern in imperative constructions is therefore different from that of declarative constructions. This suggests an intriguing “split inversion” pattern between different sentence types within a single language.

- |      |   |                   |
|------|---|-------------------|
| (17) | <i>ni</i> <i>Lozom-də</i> <i>gə</i> <i>tə!</i><br>2SG Lozom-ACC IMP beat <sub>1</sub><br>‘Beat Lozom!’ [Direct] | (Imperative: 2→3) |
| (18) | <i>ni</i> <i>kʰɔ-də</i> <i>gə</i> <i>li!</i><br>2SG dog-ACC IMP release<br>‘Release the dog!’ [Direct]          | (Imperative: 2→3) |
| (19) | <i>ni</i> <i>rzwa-də</i> <i>gə</i> <i>zɛ!</i><br>2SG stone-ACC IMP push<br>‘Push the stone!’ [Direct]           | (Imperative: 2→3) |
| (20) | <i>ni</i> <i>ŋa-də</i> <i>gə</i> <i>φ-tə!</i><br>2SG 1SG-ACC IMP INV-beat <sub>1</sub><br>‘Beat me!’ [Inverse]  | (Imperative: 2→1) |
| (21) | <i>ni</i> <i>ŋa-də</i> <i>gə</i> <i>β-li!</i><br>2SG 1SG-ACC IMP INV-release<br>‘Release me!’ [Inverse]         | (Imperative: 2→1) |

<sup>11</sup> The agreement and inverse markers in Zbu are listed as follows: 1Sg. -ŋ, 1Du. -təə, 1Pl. -jə, 2Sg. tə-, 2du tə-∑-ndzə, 2Pl. tə-∑-jə, 3Sg. (zero), 3Du. -ndzə, 3Pl. -jə; 1>2 tɐ-, 2>1 tə; inverse marker wə-.

<sup>12</sup> According to Gong 2013, the hierarchy between 3rd human and 3rd animate in Zbu is less strict than that between 3rd human and 3rd inanimate. Some “3rd animate→3rd human” sentences are unmarked (direct). The PHin Zbu is thus presented as “1 > 2 > 3 human / 3rd animate > 3rd inanimate.”

**2.4.2 MIXED-SCENARIO PATTERN REFLECTED IN BOMEI WH-QUESTIONS.** In terms of inverse marking, *wh*-questions in Bomei resemble imperatives: while “3→2” scenarios with lower-ranked agents are marked as inverse (as in declaratives), “2→3” scenarios (in addition to “1→3”) are unmarked (*direct*) (22) (as in imperatives). Bomei’s inverse pattern in “2→3” scenarios thus presents a contrast between declaratives (inverse) and imperative/*wh*-questions (unmarked).

- (22) *ŋa shə-də də-tʰɔ ŋə ?* (*wh*-question: 1→3)  
 1SG who-ACC PFV-beat<sub>2</sub> INT  
 ‘Whom did I beat? (I don’t remember)? [Direct]
- (23) *na shə-də də-tʰɔ ŋə ?* (*wh*-question: 2→3)  
 2sg who-ACC PFV-beat<sub>2</sub> INT  
 ‘Whom did you beat?’ [Direct]
- (24) *ŋa-də shə də-φ-tʰɔ ŋə ?* (*wh*-question: 3→1)  
 1SG-ACC who PFV-INV-beat<sub>2</sub> INT  
 ‘Who beat me?’ [Inverse]
- (25) *ni-də shə də-φ-tʰɔ ŋə ?* (*wh*-question: 3→2)  
 2SG-ACC who PFV-INV-beat<sub>2</sub> INT  
 ‘Who beat you?’ [Inverse]

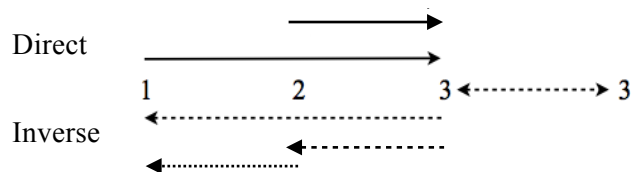
**2.4.3 OUTER-SCENARIO PATTERN REFLECTED IN BOMEI WH-QUESTIONS.** Outer-scenario *wh*-questions in Bomei employ the same inverse pattern with outer-scenario declaratives. All outer-scenario *wh*-questions are marked as *inverse* (26)–(28), indicating that animacy distinction is absent in third person. Such a pattern agrees with that in declaratives (cf. section 2.1.3).

- (26) *Lozom shə-də də-φ-tʰɔ ŋə ?* (*wh*-question: 3rd human→3rd human)  
 Lozom who-ACC PFV-INV-beat<sub>2</sub> INT  
 ‘Whom did Lozom beat?’ [Inverse]
- (27) *kʰɔ shə-də də-φ-si ŋə ?* (*wh*-question: 3rd animate→3rd human)  
 dog who-ACC PFV-INV-beat<sub>2</sub> INT  
 ‘Whom did the dog kill?’ [Inverse]
- (28) *rzwa-kʰɛ shə-də də-β-zɛ ŋə ?* (*wh*-question: 3rd inanimate→3rd human)  
 stone-ERG who-ACC PFV-INV-push INT  
 ‘Who was pushed by the stone?’ [Inverse]

**2.4.4 INVERSE PATTERN IN BOMEI IMPERATIVES/WH-QUESTIONS: A SUMMARY.**

As shown in the preceding discussion, the inverse pattern in Bomei imperatives and *wh*-questions presents a “1 > 2 > 3” inverse hierarchy, as illustrated in figure 2. The solid lines in the figure indicate direct scenarios (i.e., 1→3, 2→3), and dashed lines inverse scenarios (i.e., 3→3, 3→2, 3→1, 2→1). Such a distinctive “1 > 2 > 3” pattern is different from the “1 > the rest” alignment observed in declaratives.

FIGURE 2. INVERSE PATTERN IN NYAGRONG MINYAG (BOMEI) WH-QUESTIONS AND IMPERATIVES



The divergence in inverse pattern between declaratives (figure 1) and imperatives/wh-questions (figure 2) lies in the marking difference in “2→3” scenarios. While imperatives and wh-questions present a unmarked pattern in “2→3” scenarios, which conforms with the PH, the declaratives employ inverse marker in the same scenario, triggering an unexpected conflict with the PH.

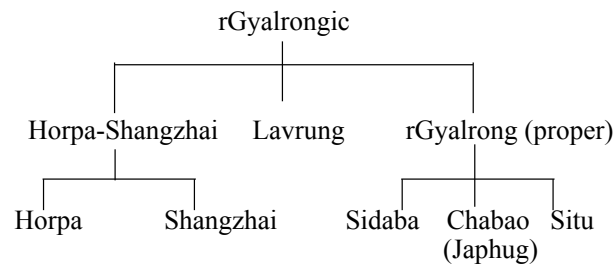
### 3. INVERSE AND PERSON AGREEMENT TYPOLOGY IN RGYALRONGIC LANGUAGES.

Bomei’s typologically unique “split inverse” system brings up several questions for the diachronic analysis of the rGyalrongic direct/inverse system. First, which pattern should be analyzed as the default one (i.e., retention)? Second, what is the potential factor of such a split system? We argue that the tentative solution lies in the typology of Inverse across rGyalrongic languages.

Before entering into the discussion of inverse typology, the internal classification of the rGyalrongic is briefly introduced. In an older model proposed in the early 1990s (Qu 1990; Lin 1993), rGyalrongic is divided into three primary branches: Western, Northern, and Eastern. The Western group comprises Horpa, Shangzhai, Zhongzhai, and Lavrung; the Northern group comprises Sidaba and Chabao (Japhug); while the Eastern group refers to the Situ variety.

A more recent proposal is raised in Sun 2000a, b, which defends a three-branch subgrouping consisting of rGyalrong Proper (RG), Lavrung, and Horpa-Shangzhai (cf. figure 3). The “rGyalrong Proper” (RP) subgroup further consists of three dialects: Sidaba, Chabao (Japhug), and Situ. This three-branch subgrouping has been accepted by most scholars, and is supported by Huang’s (2001) study on Lavrung, which suggests that Lavrung be separated from Horpa and rGyalrong Proper based on lexical and morphosyntactic evidence.

FIGURE 3. RGYALRONGIC SUBGROUPING (SUN 2000A, B)



This paper adopts Sun’s subgrouping and assumes a ternary-branch classification of rGyalraongic. The following sections examine the Inverse and Person agreement systems of ten varieties that belong to different rGyalrongic subgroups. They are Situ rGyalrong, Caodeng rGyalrong, Japhug rGyalrong, Zbu rGyalrong, Wobzi Lavrung, Njorogs Lavrung, ‘Brongrdzong Lavrung, Gexi Horpa, Khang.gsar Horpa, and Nyagrong Minyag (Bomei). Their position under Sun’s subgrouping are presented in the following section (cf. table 7).

#### 3.1 SPLIT-INVERSION IN NYAGRONG MINYAG: A DIACHRONIC ACCOUNT.

Table 7 presents the inverse patterns of the ten varieties mentioned above. It can be seen that the inverse patterns vary among different varieties. The three rGyalrong Proper varieties (Situ, Caodeng, and Japhug) all adopt a highly elaborate pattern, whereas Lavrung and Horpa-Shangzhai (HS) varieties adopt a more reduced system. Among the ten cases, Bomei exhibits the most reduced inverse pattern, i.e., the “1 > the rest” hierarchy in declaratives. The pattern reflected in its *wh*-questions and imperatives, on the other hand, is identical with other extra-RP varieties.

TABLE 7. TYPES OF INVERSE PATTERNS IN TEN RGYALRONGIC VARIETIES

LANGUAGE	CLASSIFICATION	INVERSE PATTERN
Situ rGyalrong	RGYALRONG	1 > 2 > 3rd human > 3rd animate > 3rd inanimate
Caodeng rGyalrong	RGYALRONG	1 > 2 > 3rd human > 3rd animate > 3rd inanimate
Japhug rGyalrong	RGYALRONG	SAP > non-SAP (3rd human) / 3rd animate > 3rd inanimate
Zbu rGyalrong	RGYALRONG	1 > 2 > 3rd human / 3rd animate > 3rd inanimate
Wobzi Lavrung	LAVRUNG	1 > 2 > 3 (3→3 inverse)
Njorogs Lavrung	LAVRUNG	1 >? 2 > 3 (3→3 inverse)
‘Brongrdzong Lavrung	LAVRUNG	1 > 2 > 3 (3→3 inverse)
Khang.gsar Horpa	HORPA-SHANGZHAI	1 > 2 > 3 (3→3 inverse)
Gexi Horpa	HORPA-SHANGZHAI	1 > 2 > 3 (3→3 inverse)
Nyagrong Minyag (Bomei)	HORPA-SHANGZHAI	1 > 2 > 3 in <i>wh</i> -imperatives (3→3 inverse); 1 > 2 / 3 in declaratives (2→3 inverse; 3→3inverse)

Several important observations can be made from table 7.<sup>13</sup> First, while all three rGyalrong Proper varieties present Person-sensitive ranking in third-person animacy, extra-RP varieties lack such a distinction. Crucially, where the distinction is eliminated, a unitary alternative “3→3 inversion” strategy arises. A generalization of this phenomenon is that when a certain distinction on the Person Hierarchy is lost, extra-RP languages tend to generalize it as inverse (marked). This hypothesis is further supported by the case of Minyag declaratives—the “1 > the rest” hierarchy suggests no distinction between second and third person, which is reflected as “2→3 inverse.”

Synchronically, this “1 > the rest” alignment could be described as a “marked agency” system—in which all the sentences without a first-person agent are treated as marked (i.e., inverse). Some more inferences can be further generated from a diachronic perspective. In particular, if the absence of animacy distinction in third person in Lavrung and Horpa-Shangzhai is a signal of pattern reduction, could the “split-inversion” system inside Bomei be analyzed as a further reduction between second and third person on the PH?

This proposal is built on three empirical observations. First, a “split-inversion” pattern is not attested in closely related varieties or other inverse languages that have no genetic relationship with the rGyalrongic. This refutes the proposal that “split inversion” is a shared feature of the rGyalrongic, or a language-universal. Second, the “2→3 inverse” pattern in Bomei declarative follows the same strategy as the “3→3 inverse” in extra-RP languages, due to a similar manner of reduction. Third, the Person agreement system in Bomei shows a similar type of decay, namely, the loss of the distinction in non-first-person marking. More emphasis will be placed on the second point in the present discussion.

The proposal that “split-inversion” is essentially the result of pattern reduction in Bomei declaratives as a further erosion of the “1 > 2 > 3” pattern (as reflected in imperatives/*wh*-questions) succeeds in providing a proper account for Bomei’s “2→3 inverse” violation of the PH—in which a presumably unmarked (direct) event (SAP→non-SAP) is interpreted as marked (inverse) after the loss of distinction between second and third person.

<sup>13</sup> A question mark is put in “1 > 2” pattern in Njorogs Lavrung, because data are lacking for this scenario in Yin 2007. This paper follows Lai (to appear) and suggests it to be “1 > 2 > 3”. On the other hand, note that Japhug has a special “SAP > non-SAP/ 3rd animate > 3rd inanimate” hierarchy. Since Japhug employs specific portmanteau affixes for inner scenarios and inverse marking does not occur in “2→1” inner-scenario sentences (cf. section 2.1.1), its hierarchy is presented as SAP > non-SAP. This is distinct from any other rGyalrongic varieties shown in table 7.

From a typological perspective, split-type evolution within a single language system is not unusual. Declarative constructions, as the most frequently adopted sentence type in daily use, have a universal tendency to be the pioneering construction in structural change. Wh-questions, on the other hand, tend cross-linguistically to be more conservative than declaratives with respect to changes. Regarding the evolution of word order in Germanic languages, English is a prominent example of shifting from V2 to SVO, while wh-constructions in modern English still retain the conservative (V2) word order. We argue that the “split-inversion” pattern in Bomei is another case of structural change in which declarative constructions change faster than other clause types. This triggers the much reduced “1 > the rest” hierarchy in the former and a more conservative “1 > 2 > 3” hierarchy in the latter. This proposal is additionally supported by the “1 > 2 > 3” pattern of Bomei imperatives/wh-questions staying in the same developmental stage with that of other Horpa-Shangzhai languages (cf. table 7).

**3.2 A TYPOLOGY OF PERSON AGREEMENT SYSTEM ACROSS RGYALRONGIC LANGUAGES.** As mentioned in section 3.1, more supporting evidence for the “pattern reduction” analysis of Bomei’s split-inversion pattern comes from the Person agreement typology across rGyalrongic languages (cf. table 8).<sup>14</sup>

TABLE 8. PERSON AGREEMENT SYSTEMS IN TEN RGYALRONGIC VARIETIES

	RGYALRONG PROPER				LAVRUNG			HORPA-SHANGZHAI		
	Situ	Caoden	Japhug	Zbu	‘Brongrdzong	Njorog	Wobzi	Gexi	Khang.gsar	N.Minrag
1S	$\Sigma$ - $\eta$	$\Sigma$ - $a\eta$	$\Sigma$ - $a$	$\Sigma$ - $a\eta$	$\Sigma$ - $\eta$	$\Sigma$ - $\eta$	$\Sigma$ - $\eta$	$\Sigma$ - $u$ (in 1S.A)	$\Sigma$ - $w$ (in 1A)	$\Sigma$ - $u$ (in some 1A)
1D	$\Sigma$ - $tj^h$	$\Sigma$ - $tsə$	$\Sigma$ - $tei$	$\Sigma$ - $teə$	$\Sigma$ - $ite$	$\Sigma$ - $y$	$\Sigma$ - $j$	$\Sigma$ - $\eta$	$\Sigma$ - $\tilde{a}$ (in IO/INTR.)	$\Sigma$ - $a$ (in IO/INTR.)
1P	$\Sigma$ - $j$	$\Sigma$ - $jə$	$\Sigma$ - $ji$	$\Sigma$ - $jə$	$\Sigma$ - $i$	$\Sigma$ - $j$				
2S	$tə$ - $\Sigma$ - $n$	$tə$ - $\Sigma$	$tu$ - $\Sigma$	$tə$ - $\Sigma$	$\Sigma$ - $n$	$\Sigma$ - $n$	$\Sigma$ - $n$	$\Sigma$ - $i$ (in 2S.A)	$\Sigma$ - $j$ (in 2A)	$\Sigma$
2D	$tə$ - $\Sigma$ - $ntj^h$	$tə$ - $\Sigma$ - $dzə$	$tu$ - $\Sigma$ - $ndzi$	$tə$ - $\Sigma$ - $dzə$	$\Sigma$ - $nte$	$\Sigma$ - $s$				
2P	$tə$ - $\Sigma$ - $j$	$tə$ - $\Sigma$ - $nə$	$tu$ - $\Sigma$ - $nu$	$tə$ - $\Sigma$ - $jə$	$\Sigma$ - $\tilde{i}$	$\Sigma$ - $j$				
3S	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$	$\Sigma$
3D	$\Sigma$ - $ntj^h$	$\Sigma$ - $dzə$	$\Sigma$ - $ndzi$	$\Sigma$ - $dzə$	$\Sigma$ - $\tilde{ite}$					
3P	$\Sigma$ - $j$	$\Sigma$ - $nə$	$\Sigma$ - $nu$	$\Sigma$ - $jə$	$\Sigma$ - $\tilde{i}$					

As shown in table 8, all rGyalrong-*Proper* varieties present an elaborate nine-form agreement system (including zero as the third-person singular form) with three-way number distinction in each person. Lavrung and Horpa-Shangzhai varieties, on the other hand, adopt a more reduced pattern. Crucially, although the degree of reduction varies from one variety to another, the decay follows a unitary direction. Among the Lavrung varieties, ‘Brongrdzong is apparently the most conservative regarding the agreement pattern, while Njorogs and Wobzi have undergone the movement toward simplicity. The reduction took place in the third person, eliminating the three-way number distinction, as reflected in Njorogs. Wobzi further drops the number distinction in second person as well as the dual/plural distinction in first person, resulting in a much simpler agreement pattern. A similar phenomenon is also attested in Horpa-Shangzhai (HS) varieties. As shown in table 8, all three HS

<sup>14</sup> The agreement systems listed in the table come from the following sources: Situ rGyalrong (Gong 2013), Zbu rGyalrong (Gong 2013), Caodeng rGyalrong (Sun and Shi 2002), Japhug rGyalrong (Jacques 2010), Lavrung varieties (Lai to appear; Yin 2007), Gexi Horpa (Sun and Tian 2013), Kang.gsar Horpa (Rtau) (Jacques et al. 2013). For the sake of consistency, this paper adopts the name “Khang.gsar Horpa” to replace Khang.gsar Rtau used in Jacques et al. 2013.

varieties have lost number distinction in the third person. Nyagrang Minyag (Bomei), as a maximally reduced case, further eliminates the marking in the second person, presenting only a contrast between first-person (with overt marker *-u/-a*) and non-first person (unmarked).

Moreover, the elimination of the number distinction in extra-RP varieties is observed to follow two unitary rules. First, the dual tends to be lost before the loss of plural/singular contrast, as shown in Wobzi Lavrung and Gexi Horpa.<sup>15</sup> Second, when the number distinction is lost, the markers for singular forms are always generalized into the common form. In the Lavrung subgroup, the third-person singular form (zero) is generalized into the third-person common form in Njorogs and Wobzi; the second-person singular form (*-n*, as attested in both 'Brongrdzong and Njorogs) is also generalized into the second-person common form in Wobzi. The same reduction strategy also applies to HS varieties, in which the first-person singular form (*-ŋ/-ã/-a*, as different reflexes of 1Sg. *\*-aŋ*) is generalized into the first-person common form.<sup>16</sup> The direction of decay in these ten varieties thus presents a neat demonstration of the following two implicational hierarchies (Siewierska 2004:149; Corbett 2000:38):

(29) The Person hierarchy: 1st > 2nd > 3rd

(30) The Number hierarchy: singular > plural > dual > trial

As claimed by Siewierska (2004) and Corbett (2000:65), the distribution of number within person paradigms is seen to conform to the PH being most common with the first person and least common with the third. The reduction of the rGyalrongic Person agreement patterns can be accounted for with reference to the same hierarchy. Namely, the least prominent pattern on the PH tends to be the first distinction to be lost.

Last, a crucial observation from table 8 is that Nyagrang Minyag turns out to be the only rGyalrongic variety that has entirely lost the marking for both second person and third person. Also, no number distinction remains in the first person. From a typological perspective, verbal agreement restricted to first-person is very rare, while the employment of both first and second person markers is much more common (Siewierska 2004:149–50). This cross-linguistic observation supports the “loss hypothesis” proposed in this paper in terms of the development of the simple agreement system in Minyag. Within the rGyalrongic subgroup, Nyagrang Minyag turns out to be an extreme case of pattern reduction.

#### 4. INVERSE AND AGREEMENT PATTERN REDUCTION IN RGYALRONGIC

**4.1 THE DIRECTION OF EROSION IN RGYALRONGIC INVERSE AND AGREEMENT SYSTEMS.** The typology of the Inverse and Person agreement systems discussed in section 3 reveals a similarity in pattern reduction among extra-RP languages. Bomei therefore represents a maximally reduced case, in terms of both Inverse and Person agreement patterns.

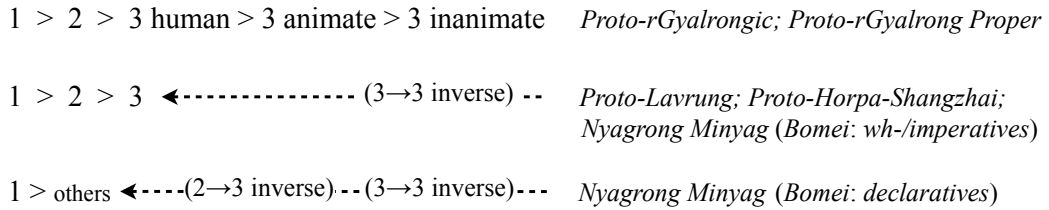
In comparing Inverse typology (table 7) with Person agreement typology (table 8), two important questions arise. First, what is the directionality of the common reduction attested in both constructions? Second, is there a potential correlation between the pattern reduction of the two constructions? This paper argues that the pattern reduction observed in both can be characterized as a leftward-moving marking decay on the PH, manifest in many rGyalrongic varieties.

The development of rGyalrongic direct/inverse systems is illustrated in figure 4 (cf. table 7 above).

<sup>15</sup> In addition, note that the second-person singular marker *-i* in Gexi Horpa and the common form *-j* for second-person in Khang.gsar Horpa appear to be another case of such a generalization.

<sup>16</sup> The claim that HS varieties have generalized the first-person singular form to the first-person common form is based on the assumption that a first-person singular marker *\*-aŋ* is reconstructable to Proto-rGyalrongic level. Such reconstruction is based on the first-person singular forms from the ten varieties (cf. table 8).

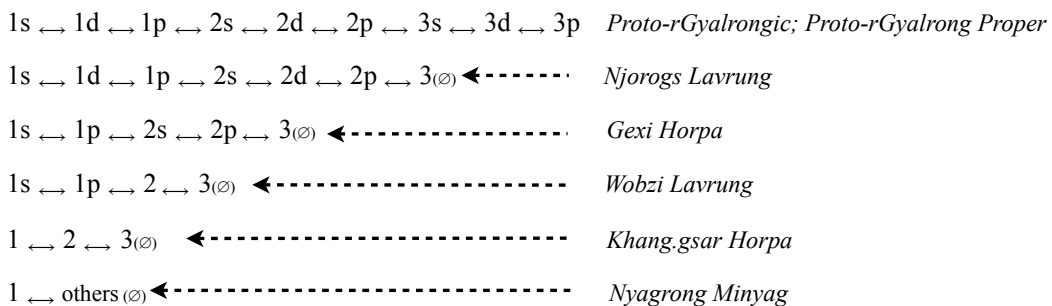
FIGURE 4. THE DECREASE OF RGYALRONGIC DIRECT/INVERSE SYSTEM



In the preceding discussion, we have argued that the Bomei’s “1 > 2 / 3” inverse pattern is best analyzed as a result of a two-step reduction. Under the assumption that the RP varieties are the most conservative and reflect the most elaborate Person-marking system, the third-person animacy distinction could be reconstructed to the Proto-rGyalrongic level. Proto-Lavrung and Proto-Horpa-Shangzhai appear to have lost such a distinction, and have undergone the “3→3 inverse” generalization, as none of the varieties under these two subgroups has been reported to employ a third-person animacy distinction in the inverse pattern. Based on the evidence from the “3→3 inverse” generalization, we analyze the inverse pattern in Bomei declaratives as further eliminating the distinction between second person and third person, resulting in the “1 > the rest” hierarchy. Synchronically, such a pattern is no longer appropriate to be defined as an inverse system, although it is clearly derived from a direct/inverse system.

The proposed developmental direction of the rGyalrongic Person agreement pattern is illustrated in figure 5. Under the assumption that the rGyalrong-*Proper* varieties are conservative, a nine-form agreement system can be reconstructed to both the Proto-RP and the Proto-rGyalrongic levels. As shown in figure 5, the agreement patterns in these ten varieties suggest that *dual forms tend to be the first number-related contrast to be lost, while third-person marking tends to be the first person-related contrast to be lost*. Nyagrong Minyag (Bomei), again, appears to be the extreme case of such a decay, in which the loss of a second-person marker eliminates the distinction between second and third person. Parallel to the case of Inverse, this results in the maximally reduced “1 > the rest” hierarchy, and triggers the “first-person marking prominence” phenomenon on the surface.

FIGURE 5. THE DECREASE OF RGYALRONGIC PERSON AGREEMENT SYSTEM



Crucially, it can be seen in figures 4 and 5 that when person-related constructions began to reduce in extra-RP languages, the direction of the decay always moved in accordance with the ranking proposed by the PH. The loss in distinctions would have always begun at the right margin of the PH, with subsequent losses occurring in order moving leftward. Since first person occupies the most prominent position on the PH, it would be the last asymmetry to be lost. This is exactly what is reflected in Bomei.

The most intriguing consequence of this diachronic process is that Minyag (Bomei)’s “1 > the rest” alignment on the PH is represented both by its inverse pattern and by its agreement pattern. This

suggests not only the language’s move towards simplicity, but also a balanced evolutionary pace between its two Person-marking patterns. That Bomei has lost not only its 2/3 person inverse distinction but also its second-person agreement marker implies a language-internal consistency on the PH.

**4.2 THE INVERSE PATTERN REDUCTION AND ITS IMPLICATIONS FOR RGYALRONGIC SUBGROUPING.** Given extra-RP varieties’ Inverse and agreement pattern reduction, an important question arises as to whether such a reduction is a shared innovation by Lavrung and Horpa-Shangzhai. Specifically, as “3→3 inversion” is attested in both Lavrung and HS, its status as a shared innovation or independent developments (i.e., drift) needs to be clarified. If the former inference is adopted, Lavrung and Horpa-Shangzhai could form a single branch, and also challenge Sun’s ternary model (Jacques et al. 2013; Lai, to appear). On the other hand, if it is concluded that the changes were independent, the subgrouping will remain the same.

In terms of uniqueness, “3→3 inversion” is apparently a less common innovation, as it involves both the properties of “pattern reduction” and “pattern generalization,” and such uniqueness lowers the possibility of “3→3 inversion” being a chance convergence. In terms of the amount of the shared innovation that can be used to identify a subgroup, however, “3→3 inversion” appears to be the only evidence for the putative Lavrung-HS subgroup. Another possible clue for “Lavrung-HS” lies in the potential shared phonological innovation in the form of the inverse marker—if the reconstructed inverse markers for Proto-Lavrung and Proto-HS shared certain phonological innovations and such innovations are not shown in the inverse form for Proto-RP, they can be used as a solid evidence for a “Lavrung-HS” subgroup.

However, there is little evidence suggesting that the inverse marking in Proto-Lavrung and Proto-HS share certain phonological innovations. As shown in table 9, inverse marking appears to be reconstructable to Proto-rGyalrong Proper (RP) and Proto-Horpa-Shangzhai (HS) levels. Gong (2013)’s description of Zbu rGyalrong additionally provides a potential account for the phonological connection between the vowel-like inverse markers in RP varieties and the fricative inverse markers in HS varieties: “(in Zbu), the form of the (inverse) prefix *wə-* varies with context: *f-/v-* when it is phonotactically possible to be part of the next syllable, and *wə-* when impossible” (Gong 2013:47).<sup>17</sup> However, the reconstruction of Proto-Lavrung inverse marking is challenging without a detailed word-list of each variety. Crucially, there appears to be little evidence suggesting that the inverse proto-form of Proto-HS and Proto-Lavrung share certain phonological innovations.

TABLE 9. INVERSE MARKERS IN TEN RGYALRONGIC VARIETIES

	RGYALRONG PROPER				LAVRUNG			HORPA-SHANGZHAI		
	Situ	Caodeng	Japhug	Zbu	‘Brongrdzong	Njorogs	Wobzi	Gexi	Khang.gsar	N.MinYang
INV	<i>wə-</i>	<i>o-</i>	<i>wy-</i>	<i>wə-</i>	<i>u-</i>	<i>i-</i>	<i>ə-</i>	<i>f-/v-</i>	<i>f-/v-</i>	<i>φ-/β-</i>
	distinction in 3rd-person animacy				“3→3” inversion			“3→3” inversion		

From a “pattern reduction” point of view, this paper holds a conservative attitude toward proposing a Lavrung-HS subgroup solely based on the “3→3 inversion” innovation. As reported by Sun (2000a, b) and Huang (2001), Lavrung and Horpa-Shangzhai are lexically and morphosyntactically distinct

<sup>17</sup> See the following examples: *ətə-v-nəfsjan* ‘Do you know me?’, *nətə-f-sáqho* ‘He cured you’ v.s. *tətə-wə-xsâη* (\**f-xsâη*) ‘You hit me’ (Gong 2013:47).



from each other.<sup>18</sup> Especially since “3→3 inversion” appears to be the only evidence for “Lavrung-HS,” the possibility of it being a result of drift is difficult to exclude. As can be seen in table 8, apart from the most conservative ‘Brongrdzong Lavrung, independent drifts have taken place in the Person agreement systems of Lavrung and Horpa-Shangzhai varieties.<sup>19</sup> Especially because independent agreement reductions are commonly observed in extra-RP languages, “3→3 inversion” may not be treated as strong evidence for subgrouping, and the possibility of “3→3 inversion” being another case of drift should be carefully considered.

**4.3 THE ORIGIN OF RGYALRONGIC INVERSE MARKING.** Related to the issue of subgrouping, the source and origin of rGyalrongic inverse marking are also important questions to explore. As already reported in DeLancy 1981 and recently in Jacques et al. 2013, the rGyalrong-*Proper* varieties Situ, Caodeng, and Zbu employ the same form for inverse marking and third-person possessive marker, as shown in table 10 (Jacques et al. 2013). This intriguing phenomenon implies that a proto-form X had already borne both functions at the Proto-rGyalrong-*Proper* stage, and further evolved into different reflexes in modern RP varieties.

TABLE 10. A COMPARISON BETWEEN INVERSE AND 3RD-PERSON POSSESSIVE IN THREE RP VARIETIES

LANGUAGE	CLASSIFICATION	INVERSE MARKER	3rd-PERSON POSSESSIVE
Caodeng rGyalrong	RGYALRONG PROPER	<i>o-</i>	<i>o-</i>
Situ rGyalrong	RGYALRONG PROPER	<i>wə-</i>	<i>wə-</i>
Zbu rGyalrong	RGYALRONG PROPER	<i>wə-</i>	<i>wə-</i>

An intuitive hypothesis from table 10 is that inverse marking arises diachronically from a third-person possessive marker employed only in mix and outer scenarios that involve a third-person agent, possibly used as a marker indicating marked agency. Cross-linguistically, the strategy of expressing agency via possessive/genitive marking is not unusual (Allen 1964:340; Blake 2001:149–51).<sup>20</sup> The validity of this analysis, however, is associated with the distribution of the inverse marking in the three types of discourse scenarios.

TABLE 11. INNER-SCENARIO SYSTEMS IN FOUR RP VARIETIES (GONG 2013)

LANGUAGE	INNER SCENARIOS (2→1)	MIX/OUTER SCENARIOS (3→1, 3→2, 3→3)
Caodeng rGyalrong	<i>portmanteau affix &amp; inverse marking</i>	<i>inverse marking</i>
Japhug rGyalrong	<i>portmanteau affix only</i>	<i>inverse marking</i>
Situ rGyalrong	<i>portmanteau affix &amp; inverse marking</i>	<i>inverse marking</i>
Zbu rGyalrong	<i>portmanteau affix &amp; inverse marking</i>	<i>inverse marking</i>

<sup>18</sup> Huang (2001) provides specific discussions on the morphosyntax idiosyncrasies of rGyalrong *Proper* (Zhokeji and Caodeng), Lavrung, and Horpa (Gexi and Khang.gsar) languages. It is concluded that (i) Lavrung varieties exhibit internal consensus on morphology, (ii) there is no evidence suggesting that Lavrung is closer to either Horpa-Shangzhai or to rGyalrong *Proper*, and (iii) based on shared cognacy, the degree of lexical diversity between Lavrung and HS and that between Lavrung and RP is similar, suggesting that Lavrung should be treated as an independent branch.

<sup>19</sup> Note that the conservative pattern in ‘Brongrdzong Lavrung implies independent agreement reductions in other Lavrung varieties after the split of Proto-Lavrung.

<sup>20</sup> According to Allen (1964:340) and Blake (2001:149–51), a Case common to transitive agent and possessor is attested in a quite a few languages (e.g., Zoque (Mexican), Caucasian, and Eskimo languages). Proto-rGyalrongic is tentatively another case of agent/possessor homophony, which expresses 3rd-person agency (i.e., inverse) via 3rd-person possessive marking.

As mentioned in section 2.1.1, two types of inner-scenario systems are observed in rGyalrong Proper varieties, as shown in table 11. Given the two types of distributions of the portmanteau affix and inverse marking among RP varieties, the important question lies in whether the Japhug-type system is conservative or innovative. Considering the formal similarity between inverse and third-person possessive in the three RP languages, we argue that the Japhug-type system may be the best candidate for reconstructing the structure of Proto-rGyalrongic—a proposed system in which the third-person possessive marker indicates the marked agency of the third-person agent in mix and outer scenarios (i.e., 3→1, 3→2, 3→3).

From a typological perspective, this solution has two advantages. First, cross-linguistic observations with respect to the PH (Klaiman 1992; Thompson 1994) suggest that “SAPs are always higher than third-person, while SAP-internal ranking varies from language from language.” SAP-internal scenarios, due to their discourse prominence, may be morphosyntactically distinct from the rest. The employment of specific portmanteau affixes for inner scenarios demonstrates such a distinction. Thompson’s (1994) typological observation further supports this analysis: “the basic system is that the inverse is used if the object is a speech-act participant and the subject third person.” Second, in the sense of economy the Japhug-type structure is also favored, as it avoids redundancy in inner-scenario morphology. Under this hypothesis, the inverse marking is inferred to have generalized into the inner scenario (“2→1”) independently in Caodeng, Situ, and Zbu, unless a different RP subgrouping is proposed. As the evidence for the present subgrouping is solid (Sun 2000a, b), independent generalization is very likely to be the case.

If this analysis is on the right track, a slight modification will be made to figure 4 by proposing a revised inverse hierarchy for Proto-rGyalrongic and Proto-rGyalrong Proper, which goes as “SAP > non SAP (3rd human) > 3rd animate > 3rd inanimate.”

**5. FINAL REMARKS: A GLANCE AT THE MANQING DIALECT.** The present proposal of analyzing Bomei’s “first-person marking prominence” as the result of massive pattern reduction is further supported by the case observed in the related dialect Manqing, which could be said to represent a final stage in this process of decay, namely, the total collapse of the “inverse” system.

According to Suzuki (2012:46), Manqing has no obligatory inverse marking: “a prefix *f-/v-* will be added if a third-person patient is implied, but does not necessarily appear in the sentence. This cross-reference on the person is not obligatory, and the lack of the person marking is also acceptable.” Indeed there is no inverse marking to be found among any of Suzuki’s inverse-scenario sentences (cf. (31a) and (32a)). Whereas Bomei (as well as Gexi Horpa) requires overt markers in inverse scenarios involving the verb ‘to give’, no such marker occurs in Manqing. Inverse marking in Manqing has thus apparently decayed even more so than in Bomei.<sup>21</sup>

(31) a. Nyagrong Minyag (Manqing) (Suzuki 2012:42)

*te<sup>-h</sup>ce    ηa<sup>-b</sup>je    s<sup>h</sup>ə<sup>h</sup>qe-t<sup>h</sup>sə.*  
3-ERG    1-DAT    look(R)-PFV  
‘He looked at me.’ [Direct]

b. Nyagrong Minyag (Bomei)

*ədə    ηa-də    də-ϕ-səqa.*  
3SG    1SG-ACC    PFV-INV-look  
‘He looked at me.’ [Inverse]

<sup>21</sup> A “1> the rest” hierarchy is highly unbalanced, since marked scenarios outnumber unmarked scenarios. The collapse of the system is hence not unexpected. On the other hand, Manqing exhibits a Person agreement pattern similar to that of Bomei, in which first-person marking is the only agreement left on the PH (cf. Suzuki 2012).

(32) a. Nyagrong Minyag (Manqing) (Suzuki 2012:42)

*te<sup>-h</sup>ce*    *ŋa<sup>-b</sup>je*    *ʰgo* *ʰge-Ø*    *k<sup>h</sup>u-rə*.  
 3-ERG    1-DAT    money-ABS    give-(R)-SFP  
 ‘He gave me money.’ [Direct]

b. Nyagrong Minyag (Bomei)

*ədə*    *ŋa-də*    *k<sup>h</sup>ɔ-gə*    *də-ϕ-k<sup>h</sup>ɔ-a*.  
 3SG    1SG-ACC    dog-ID    PFV-INV-give<sub>2</sub>-1O  
 ‘He gave me a dog.’ [Inverse]

c. Gexi Horpa (Sun and Tian 2013:17)<sup>22</sup>

*ni*    *ŋa-gə*    *dʒədə-gə*    *də-v-k<sup>h</sup>o-ŋ*.  
 2SG    1SG-DAT    book-ID    PFV-INV-give-1  
 ‘You gave me a book.’ [Inverse]

As shown in (31)–(32), Manqing turns out to be reaching the last step of the reduction, as the obligatory Person distinction on the PH has been lost. The evolution of the rGyalrongic direct/inverse system thus could be characterized as a four-step process of structural loss, as demonstrated in the inverse patterns in RP varieties, the Horpa varieties (loss of 3rd-person animacy distinction), Bomei declaratives (loss of distinction between second person and third person), and Manqing (the loss of the entire pattern).

Other than the aberrant “inverse” pattern, the prototypical rGyalrongic directional prefixes (*tə-* ‘neutral’, *rə-* ‘upward’, and *nə-* ‘downward’) have also been reported to have undergone a unique functional reanalysis in Manqing, in which the directional affixes have experienced a unique functional reanalysis into the expression of attitude for the statements of the speaker (Suzuki 2010). Such an innovation is also attested in Bomei, while has not been reported in any other Horpa varieties. This additionally suggests that Nyagrong Minyag has undergone atypical innovations in different morphosyntactic aspects.

As discussed in Sun and Tian (2013), in Horpa varieties the prototypical rGyalrongic-type discourse-governed agreement strategy has been gradually replaced by the syntactically controlled subject agreement strategy, and results in the ergative-aligned Person agreement patterns during the transition between the two types. Bomei is a typical example of this type of strategy shift which, as suggested by Sun and Tian, is due to the long-term influence from the dominant Tibetan. Considering all the evidence presented in this paper, contact-induced change may be a final and unitary answer to the structural shifts that have taken place in Nyagrong Minyag. The patterns reflected in Bomei and Manqing may be a microcosm of the future development of other rGyalrongic varieties.

**6. CONCLUSION.** This paper has analyzed a unique “split inversion” system found in the Bomei dialect of Nyagrong Minyag, a rGyalrongic variety spoken in Sichuan, China. We have shown how the prototypical rGyalrongic direct/inverse system has evolved into an aberrant pattern in Bomei, which can no longer be described as an inverse system. We have argued that Bomei’s “first-person marking prominence” is best analyzed as the product of a massive reduction in the language’s Inverse and Person agreement systems, which in turn triggered a leftward-moving marking decay on the PH. Through careful examination of the Inverse and Person agreement systems in ten rGyalrongic varieties, we have further shown that the two constructions parallel each other in terms of direction of reduction. Crucially, the direction of decay conforms to the hierarchical ranking proposed by the PH. Bomei is an

<sup>22</sup> In Bomei, the recipient in double-object constructions is obligatorily marked as dative (*gə-*). *Gə-*marked arguments can trigger Person agreement and is syntactically a core argument. A similar observation is also found in Gexi Horpa (30c) (Sun and Tian 2013). Although the 1st-person argument in (30c) is marked as dative, inverse marking still appears on the verb, indicating “2→1” scenario.

extreme case of such decay, in that first-person marking is the only asymmetry left remaining on the PH.

## ABBREVIATIONS

1	first person	NMLZ	nominalization
2	second person	NPST	non-past
3	third person	O	object of transitive
A	agent, subject of transitive	OBL	oblique
ABS	absolute	P	patient
ACC	accusative	PASS	passive
COP	copula	PFV	perfective
DAT	dative	PL/P	plural
DU/D	dual	PN	proper name
ERG	ergative	POSS	possessor
EVI	evidential	PST	past
ID	indefinite	R	realis
IMP	imperative	S	subject of intransitive
INT	interrogative	SFP	sentence-final particle
INTR	intransitive	SG/S	singular
INV	inverse	STAT	stative
IPFV	imperfective aspect	TR	transitive

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