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“You and me against the world”: Direct-inverse morphology in Rma (Qiang)

Nathaniel A. Sims¹ 
CNRS INALCO-CRLAO
nathaniel.sims@inalco.fr

Abstract

The aim of this short paper is to examine the morphological categories of direction and direct-inverse marking in Northwestern Rma/Qiang (< Trans-Himalayan/Sino-Tibetan). Based on evidence from published sources (LaPolla and Huang 2003; H. Sūn 1981; Liú 1998, 1999; Sun and Evans 2013), it is argued that the verbal systems of some northern varieties are more characteristic of hierarchical alignment than previously recognized.

Keywords: Morphology, Direct-inverse, Hierarchical systems, Sino-Tibetan, Trans-Himalayan, Tibeto-Burman, Rma/Qiang

1. Introduction

Direct-inverse systems are a typologically rare kind of morphological marking primarily found in polysynthetic languages.² While direct-inverse systems have long been recognized in some Trans-Himalayan languages (DeLancey 2017),³ such as Rgyalrong (DeLancey 1981; Jacques 2017), the category of direction has been somewhat overlooked in other languages of the family, such as Rma.⁴ The aim of this paper is to examine prior analyses of the verbal morphology of two north-western varieties of Rma: Rónghóng and Mávō. The present analysis finds that these two varieties exhibit characteristics typical of direct-inverse systems. This paper is organized as follows: section 2 introduces direct-inverse systems with an emphasis on Rgyalrongic languages; sections 3 and 4 analyse the category of direction in the Rónghóng and Mávō varieties respectively; and section 5 offers some concluding remarks and implications of the findings of this study.

- 1 I wish to thank Carol Genetti, Marianne Mithun, Eric W. Campbell, Randy LaPolla, Nathan W. Hill, Guillaume Jacques, Scott DeLancey, as well as two anonymous reviewers for their comments on earlier drafts of this paper. All mistakes are my own.
- 2 See Jacques and Antonov (2014) for an overview of direct-inverse systems. For a functional account of direct-inverse systems, see Givón (1994).
- 3 The name of the family is a point of contention. As arguments surrounding nomenclature are not relevant here, I use the term “Trans-Himalayan” simply because it is neutral with respect to ethnonyms, unlike alternatives such as Tibeto-Burman or Sino-Tibetan.
- 4 This language complex is also called *Qiāng* 羌. See Wáng (1998) and Wén (2014) for a history of the terminology.

2. Direction marking in Northeastern Trans-Himalayan languages

The category of “direction” refers here to a distinction between two oppositional grammatical voices: direct and inverse. These two voices mark the flow of action as either in accordance with expectation, and therefore “direct”, or counter to expectations and therefore “inverse”. DeLancey (1981) proposes describing direct-inverse systems in relation to the *Empathy Hierarchy* presented in (1). The “greater than” symbol means “outranks”. SAP refers to *speech-act-participant*, a category which encompasses both first and second person and excludes third person.

- (1) SAP > third person pronoun > human > animate > natural forces > inanimate

Givón (1994: 9) defines direct as a transitive voice in which “the agent is more topical than the patient, but the patient still retains considerable topicality”, and the inverse as a de-transitive voice in which “the patient is more topical than the agent, but the agent still retains considerable topicality”.

In analysing direct-inverse systems, it is useful to differentiate speech-act-participants (SAP) which include the speaker and the addressee, from non-SAP (Silverstein 1976). Zúñiga (2006: 47–52) further distinguishes between three different *domains* for various scenarios with different combinations of SAP and non-SAP: local (SAP-only), mixed (both SAP and non-SAP), and non-local (non-SAP) scenarios.

It is customary to represent direct-inverse systems in tables like that shown in Figure 1. In these tables, rows represent agents while columns represent patients. Intransitive forms are given in the right-hand column for comparison. Rightwards arrows indicate “acts on” whereas the “greater than” symbol is used to mark outranking. Reflexive scenarios are marked in grey. The forms for intransitives are given for comparison. The system displayed in Figure 1 is an idealized minimal system that does not make number distinctions. More complex paradigms will be discussed below.

Jacques and Antonov (2014), following the tradition of canonical typology (Corbett 2007), define a canonical direct-inverse system as having a

A/P	1	2	3	3'	INTR
1		1→2	1→3		1
2	2→1		2→3		2
3	3→1	3→2		3→3'	3
3'			3'→3		

Figure 1. An example of a simple direct-inverse system (adapted from Jacques and Antonov 2014)

A\P	1	2	3	3'	INTR
1		1→2	1→3		1
2	2→1		2→3		2
3	3→1	3→2		3→3'	3
3'			3'→3		

Figure 2. An idealized canonical direct-inverse system

hierarchy of $1 > 2 > 3 > 3'$. Figure 2 illustrates this hierarchy. Light grey cells indicate direct scenarios whereas dark grey cells represent inverse scenarios.

The ranking of SAP > non-SAP is well supported across direct-inverse systems (Jacques and Antonov 2014). However, the ranking of 1 relative to 2 shows more variability.

Jacques and Antonov (2014) propose that while no language exactly exemplifies this type, Rgyalrongic languages come closest. To give an example of a hierarchical system of a Rgyalrongic language, consider the Khroskyabs paradigm, shown in Figure 3. The upper case sigma here represents a verb stem. See Lai (2020) for a full account of Khroskyabs direct-inverse marking in diachronic perspective.

In intransitive forms, SAP arguments are marked whereas non-SAP arguments are unmarked. For transitive forms, the system conforms neatly to that of an idealized direct-inverse system. First, there is an asymmetry such that direct scenarios are unmarked whereas only inverse scenarios are marked. Second, there is no evidence for $3 > 3'$, as the inverse prefix ə- occurs in all $3 \rightarrow 3$ scenarios. With respect to Zúñiga’s (2006: 47–52) domains, the system aligns closely with that predicted by three different domains. However, there is one significant difference. In Khroskyabs, the hierarchy is $2 > 1$ for local

A\P	1SG	1PL	2SG	2PL	3	INTR
1SG			Σ-n	Σ-N	Σ-aη	Σ-aη
1PL					Σ-j	Σ-j
2SG	ə-Σ-η	ə-Σ-j			Σ-n	Σ-n
2PL					Σ-N	Σ-N
3			ə-Σ-n	ə-Σ-N	ə-Σ	Σ

Figure 3. The Khroskyabs system (from Jacques and Antonov 2014)

A/P	1	2	3	INTR
1S		Σ	Σ -w	Σ -ã
1P			Σ -ã	
2	v- Σ -ã		Σ -j	Σ
3		v- Σ		

Figure 4. The Stau person-marking system (from Jacques et al. 2014)

scenarios when the 2 is the P, but $1 > 2, 3$ when the 1 is the P. That is, there is no difference between local and mixed scenarios when the 1 is the P.

The Stau language provides another example of a hierarchical system within the Rgyalrongic branch. The Stau paradigm (from Jacques et al. 2014) is given in Figure 4.

In Stau, apart from $1 > 3$, direct scenarios are unmarked. The inverse is marked with the v- prefix. There is no difference between local and mixed scenarios when the 1 is the P. The hierarchy is $2 > 1$ when 2 is the P. In Stau, the $1 > 2, 3$ hierarchy extends beyond scenarios where 1 is the P, and can also be seen in the intransitive forms for the verbs.

Lastly, we will examine a simplified version of the Zbu Rgyalrong paradigm from Jacques and Antonov (2014: 6). Figure 5 gives the simplified Zbu paradigm. See Gong (2014) for a full account of the Zbu paradigm.

Again, we see that direct scenarios are unmarked, whereas inverse scenarios are marked. Jacques and Antonov (2014) note that the system is not perfectly symmetrical, since if it were $1 \rightarrow 2$, forms such as * $t\text{-}\Sigma$ - η would be expected. Jacques and Antonov posit the following hierarchy in order to account for the Zbu system: $1 > 2 > 3$ animate proximate > 3 animate obviative > 3 inanimate. Note, however, that the hierarchy within the category of SAP depends on whether the role is agent or patient. When 1 is P, the hierarchy is $1 > 2, 3$. When 2 is P, the hierarchy is $2 > 1 > 3$. Having examined some more well-understood Rgyalrongic direct-inverse systems, we can now turn to the systems found in the Rma varieties.

3. Direct-inverse marking in Rónghóng Rma

Rma (Qiāng) varieties, spoken in the mountainous region along the upper 民江 Mín River in north-western 四川 Sichuan, China, exhibit complex and diverse verbal morphology (LaPolla and Huang 2003; Evans 2004). While not all varieties have direct-inverse systems, the two north-western varieties discussed here do. Rma varieties are verb-final with both head and dependent marking. The verb is largely agglutinative with some fusion and little suppletion. Stems inflect for spatial orientation, aspect, mood, person, valency (including direction), and evidentiality. See Evans (2004) for a discussion of the verb-complex from a cross-dialectal perspective.

A\P	1	2	3	3'	INTR
1		tə-Σ	Σ-ŋ		Σ-ŋ
2	tə-wə-Σ-ŋ		tə-Σ		tə-Σ
3	wə-Σ-ŋ	tə-wə-Σ		Σ	Σ
3'			wə-Σ		

Figure 5. The Zbu paradigm (simplified to remove dual and plural persons)

The empirical materials for the present study are somewhat limited. While there are many instances of the direct suffix in Rónghóng texts (LaPolla and Huang 2003: 249–325), the inverse suffix does not occur at all. For Mávō, there are no recourses outside of the materials in H. Sun 1981; Liú 1998, 1999; and Sun and Evans 2013. Unfortunately, van Driem’s (1993: 305) observation that “a morphemic analysis of the Mávō verb based on a complete set of transitive and intransitive paradigms remains a *desideratum*” is still the case almost three decades later. Given the paucity of relevant data, the analysis here should be taken as provisional.

3.1. 荣红 Rónghóng verb morphology

Rónghóng is spoken by the ethnic Qiāng 羌 in Rónghóng village in the 赤布苏 Chíbùsū district of north-western 茂县 Mào County. Data from the Rónghóng variety come from LaPolla and Huang (2003), who present the Rónghóng variety as making a distinction between actor person marking and non-actor person marking. They present this distinction as representing an intransitive and a transitive paradigm respectively.

3.1.1. Prior analysis

In their chapter on Rónghóng verbal morphology, LaPolla and Huang (2003) split the discussion of person marking into two parts and present the intransitive and transitive paradigms separately. The intransitive paradigm is given in Table 1.

For transitive verbs, LaPolla and Huang (2003: 143) recognize a “set of suffixes which can be used to mark the undergoer of a transitive verb, the goal/recipient of a ditransitive verb (the undergoer of a ditransitive verb is not

Table 1. Person marking suffixes (from LaPolla and Huang 2003: 141)

Gloss	Form
1S	Σ-ɑ
1PL	Σ-ɿ
2S	Σ-n
2S	Σ-i
3S	Σ-∅
3PL	Σ-tɕi

Table 2. The non-actor agreement suffixes (from LaPolla and Huang 2003: 143)

Gloss	Form
1S:non-actor	Σ -ʂa
1PL:non-actor	Σ -ʂaɿ
2S:non-actor	Σ -san
2S:non-actor	Σ -sai
3S:non-actor	Σ -wə ~ u
3PL:non-actor	Σ -wə ~ u

1S			Σ -a	Σ -a	Σ -wa	Σ -wa
1P			Σ -ɿ	Σ -ɿ	Σ -wəɿ	Σ -wəɿ
2S	Σ -n	Σ -n			Σ -wən	Σ -wən
2P	Σ -i	Σ -i			Σ -wəi	Σ -wəi
3S	Σ -ʂa	Σ -ʂaɿ	Σ -san	Σ -sai	Σ -wə	Σ -wə-tʂi
3PL	Σ -tʂi-ʂa	Σ -tʂi-ʂaɿ ⁵	Σ -tʂi-san	Σ -tʂi-sai	Σ -wə-tʂi	Σ -wə-tʂi

Figure 6. The full transitive paradigm for Rónghóng (adapted from LaPolla and Huang 2003: 144)

reflected in the person marking), or even a genitive or benefactive argument”. The paradigm for the *non-actor agreement suffixes* is given in Table 2.

In their analysis of the person-marking suffixes, LaPolla and Huang (2003: 143) mention that: “The first and second person forms clearly incorporate the first and second person actor forms /-a/, /-ɿ/ and /-n/, /-i/ respectively, but the origins of the initial of the first person forms and /sa/ of the second person forms are unclear”.

Evans (2004) proposed an explanation for the different initials of the first person non-actor forms (alveolar and retroflex) by pointing out that the retroflexion in the first person singular and first person plural non-actor forms comes from contamination from the first person plural marking suffix [ɿ]. This would be an example of small-scale paradigm levelling. Later in the chapter, LaPolla and Huang (2003: 144) give the full transitive paradigm. The full paradigm is reproduced in Figure 6.

One issue with this analysis is that it treats [wə] as a separate morpheme from the other suffixes in the non-local scenarios, but as a fused morpheme in the mixed (1, 2 → 3) scenarios. Evans (2004) was the first to point out that it is not necessary to posit distinct actor and non-actor agreement morphemes, and that the Rónghóng actor/non-actor system appears to have a two-degree number

5 This form is not included in LaPolla and Huang 2003, but is from Evans (2004), who cites personal communication with native speaker Huáng Chénglóng and gives examples to show that this is indeed part of the Ronghong paradigm.

A/P	1S	1PL	2S	2PL	3(PL)	INTR
1S			Σ-a		Σ-w-a	Σ-a
1PL			Σ-i		Σ-wə-i	Σ-i
2S	Σ-n				Σ-wə-n	Σ-n
2PL	Σ-i				Σ-wə-i	Σ-i
3(PL)	Σ-(tci)-sa	Σ-(tci)-sa-i	Σ-(tci)-sa-n	Σ-(tci)-sa-j	Σ-wə-(tci)	Σ-(tci)

Figure 7. A re-analysis of the Rónghóng system

hierarchy: 1, 2 > 3. In this hierarchy, verbs are marked specially for 3 → 1, 2 as opposed to any person → 3. Evans (2004) posits a TRANS (transitivity) morpheme with three allomorphs: sa, sa, and wə. Thus, Evans (2004) glosses the Rónghóng examples as follows.⁶

- (2) the: qa-wu ləyz e-pen de-l-wa. (< -wə + -a)
 3sg 1sg-AGT book one-CL DIR-give-TRANS:1sg
 “Him I gave a book to.” (LaPolla and Huang 2003: 144)
- (3) themle qa xe-tci-sa. (< -sa + -a)
 3pl 1sg scold-3pl-TRANS:1sg
 “They are scolding me.” (LaPolla and Huang 2003:144)

Evans’ insight into the hierarchical nature of the system is important. However, the present analysis differs in that it treats the morphemes /-sa ~ sa/ and /-wə/ neither as part of the person system nor as allomorphs of a single TRANS morpheme, but instead as a pair of morphemes within a direct-inverse system. The present analysis is given in the next section.

3.1.2. The present analysis

This section presents a revised analysis of the Rónghóng system. Figure 7 removes some of the redundancies of the presentation in Figure 6. Analysed in this way, it is essentially a hierarchical system with a 1, 2 > 3 hierarchy. In this case, /-sa/ is the inverse marker and /-wə/ is the direct marker.

Local scenarios take only person marking, mixed scenarios take person marking and direction marking (direct or inverse) in addition to the plural marking for the agent. Non-local scenarios take only the direct directional marking along with plural marking of the patient.

Figure 7 shows that in Rónghóng, the hierarchy of 1, 2 > 3 is fundamental. That is, there is no evidence for a hierarchy within the category of SAP. In local scenarios, only the agent is marked. This is unlike some Rgyalrongic languages, which have hierarchy within local scenarios. In Rgyalrongic, the

6 See Evans (2004) for a description of the semantic features of the non-actor suffixes. Note that LaPolla (2017: 787, n. 5) does not change the analysis of the suffixes and maintains that the language is not hierarchical.

hierarchy is $1 > 2$ when 1 is the P, but $2 > 1$ when 2 is the P. Thus, unlike Rgyalrongic, it is not accurate to say that the Rónghóng $1 \rightarrow 2$ forms are direct, or that the $2 \rightarrow 1$ forms are inverse. The Rónghóng system is also different from the systems observed in Rgyalrongic in that the direct scenarios are formally marked. In Rgyalrongic, $1 \rightarrow 3$ and $2 \rightarrow 3$ are not formally marked. Because the Rónghóng paradigm treats 1 and 2 equally and treats $3 \rightarrow 1, 2$ as inverse but $1, 2 \rightarrow 3$ as direct, it would be more succinct to characterize the Rónghóng system as SAP > non-SAP or “you and me against the world”.

The following section will examine the literature on the Mávō variety and shows that the category of direction has also been under-analysed.

3.2. 麻窩 Mávō verb morphology

The Mávō 麻窩 variety is spoken by people belonging to the Tibetan ethnicity in 黑水县 Hēishuǐ County, 麻窩乡 Mávō Township.⁷ It is a relatively conservative variety with respect to phonology as well as morphosyntax (cf. LaPolla and Huang 2003). The Mávō data are from Sūn (1981) and Liú (1998; 1999). While these publications describe person and number in Mávō, they do not mention the category of direction. Jackson T.S. Sun and Jonathan Evans have published work which reconsiders some aspects of the morphophonology of the Mávō variety (cf. J. Sun 2003, Sun and Evans 2013).

3.2.1. Person indexation

Mávō first person singular is marked with a vowel which has sometimes become wholly or partially fused with the verb. First person plural is marked with [ɿ]. Second person is marked with an alveolar nasal suffix /nə/.⁸ Third person is unmarked.⁹ Sun and Evans note that “The Qiang verb generally indexes the S/A human subject of the sentence (person-number marking is obligatory for human arguments, optional for non-human mammals and birds, and disallowed for low-order animals and inanimate objects)”.

Apart from the retroflex first-person plural suffix, Mávō also marks plurality using a plural-marking suffix /-ki/, phonetically [tɕi]. A summary of person and number marking morphemes in Mávō is given in Table 3.

3.2.3. Direction marking

Sūn (1981: 189–92) presents transitive verbal paradigms for verbs in the Mávō variety of Rma. There is no mention of direct-inverse marking, though the inverse marker does occur in the paradigm for /zita/ “to strike” (H. Sūn 1981: 189–92).¹⁰

7 Not every village in Mávō township speaks the Mávō variety. See Sun and Evans (2013) for the specific locales where Mávō is spoken.

8 Sūn (1981: 189) includes [ni] as an allomorph of the second person marker.

9 Although it has been suggested that Mávō has a third person marker -j (Liú 1998: 153–63), Sun and Evans (2013), conclude that this suffix is better analysed as part of the evidential marking system. Sun and Evans (2013) refer to this as a *mediative* marking suffix (*sensu* Lazard 2001).

10 van Driem (1993: 305) mistakes the inverse marking suffix [-sa] in Sun 1981 as part of the stem of the verb “to strike”. Thus, he concludes that the form for the stem of the verb

Table 3. Person and number marking in Mávō Rma

	Singular	Plural
1	-a	-jə
2	-nə	-ki-n
3	-∅	-ki

Sun and Evans (2016) do not recognize hierarchical alignment in the Mávō verbal system. Instead they state that: “Hierarchical agreement, found in certain Qiangic languages, is not observed. However, the verb may agree with an SAP possessor rather than a non-SAP subject when a speech-act participant is either beneficially or adversely affected by the action of the verb”. Here, the verb carries an inverse suffix /-sa/. They note that “the verb may agree with an SAP possessor rather than a non-SAP subject when a speech act participant is either beneficially or adversely affected by the action of the verb”, and give the following example with the inverse suffix:

- (4) tʂafī njat qa^ɣ-k bu: dzə-sa-a
 PN often 1SG-GEN sweets eat-INV-1SG
 “Bkrashis often eats my candy (against my will).” (Sun and Evans 2013)

Consider example (5) from Liú (1999: 32), which illustrates a transitive verb in a non-local scenario.

- (5) zita-tʃə-ji.
 hit-??-MED
 “Elder brother hits his younger brother.”

The second morpheme is unglossed in the source, but it occurs in opposition to the inverse marker /-sa/ and this is consistent with an analysis as a direct marker. Sun and Evans also recount that the suffix [tʃə] is used for statements about something possessed by a non-SAP. Sun and Evans (2016) give the following examples of a horse seller’s comments on a horse before (6a) and after (6b) the horse is sold.¹¹

- (6a) ju^ɣ tsa: gən na^ɣ nŋwə^ɣ. pu-a:-n-a:
 horse this very be.good be buy-FUT-2-Q
 “This horse is very good. Will you buy it?”

“to strike” is /zitas/. This is incorrect, as the Mávō stem for “to strike” is /zita/ (Sun 1981: 189–92).

11 Evans and Sun represent Mávō segments in a manner more phonologically abstract than Sun (1981) or Liú (1998). For example, they recognize a phonological opposition for Mávō vowels which has been described as plain vs. pharyngealized (Evans 2006a; 2006b), plain vs. velarized (Sun and Evans 2013), and plain vs. uvularized (Evans et al. 2016). Sonographic evidence supports the account invoking uvularization, though I have left the data from Sun and Evans 2013 as it originally occurred in print.

Table 4. The person and direction marking morphemes of Rónghóng and Mávō Rma

	<i>Rónghóng</i>	<i>Mávō</i>
1	Σ-a ~ a	Σ-a
1PL	Σ-ɪ	Σ-ɪə
2	Σ-n	Σ-nə
2PL ¹²	Σ-i	Σ-ki-n
3	Σ-∅	Σ-∅
3PL	Σ-tçi	Σ-ki
DIR (1,2 > 3)	Σ-wə	Σ-tfə
INV (3 > 1,2)	Σ-sa ~ ʃa	Σ-sa

- (6b) qa^ʏ putsa^ʏ-ni ɹu^ʏ a^ʏ-dzɪ^ʏ da^ʏ-χwa^ʏ-a-ti gən na^ʏ
 1SG just.now-ADV horse one-CL PFV-sell-1SG-SEQ, very be.good
 nwə-tfə-ba:
 be-NONSAP.POSS-DM
 ‘‘I sold a horse just now; it is very good.’’

I argue that analysing the suffixes in Mávō as direct and inverse captures the similarity and opposition of these forms pointed out by Sun and Evans 2016. Table 4 gives a comparison of the Rónghóng and Mávō systems.

These systems are overall similar but have points of difference in both the person marking and the direction marking. One difference in the person marking is the marking of 2PL. Second person plural is marked with a unique morpheme in Rónghóng but marked with a composite form in Mávō. The most obvious difference in direction marking between the two varieties are the direct markers, which are not cognate. Note that the person marking in Mávō is less entangled with the direct-inverse marking, whereas these categories have become more fused in Rónghóng. That is, in Mávō, there are no person-specific allomorphs of the inverse suffix due to fusion or contamination as there are in Rónghóng (see above).

4. Conclusions

While the category of direction remains an understudied aspect of Rma verbal morphology, a preliminary re-analysis of the verbal morphology of north-western Rma reveals many similarities and areas of overlap with direct-inverse systems that have been overlooked or misrepresented in the literature before. It is hoped that a more thorough survey of the category of direction in Rma, based on naturalistic data from different varieties, will lend insights into the diachronic developments of these systems.

12 The Rónghóng 2PL marker [i] is probably older. The composite form in Mávō is probably a later development.

Abbreviations

1	First person
2	Second person
3	Third person
3'	Obviative 3; sometimes called “4 th person”
PL	Plural
INV	Inverse
DIR	Direct
S, SG	Singular
SAP	Speech act participant
PN	Personal name
FUT	Future tense
Q	Question
GEN	Genitive
PFV	Perfective
ADV	Adverbial
CL	Classifier
SEQ	Sequential marker
DM	Discourse marker
POSS	Possessed
NUM	Number

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