

The decay of direct-inverse systems

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- ▶ In Algonquian, direct-inverse is reconstructible to proto-Algonquian, but comparison with Wiyot and Yurok is inconclusive.
- ▶ Sino-Tibetan languages offer a tremendous diversity in their hierarchical systems, and allow us to gain important insights from a typological point of view on the origin and evolution of these systems.

What is a direct-inverse system?

Table : Idealized proto-typical inverse

	1	2	3	3'
1		$1 > 2$	$1 > 3$	
2	$2 > 1$		$2 > 3$	
3	$3 > 1$	$3 > 2$		$3 > 3'$
3'			$3' > 3$	
INTR	1	2	3	

Example of a quasi-prototypical system: Zbu Rgyalrong

Table : Zbu Rgyalrong transitive and intransitive paradigms (adapted from ?)

	1SG	1DU	1PL	2SG	2DU	2PL	3SG	3DU	3PL	3'	
1SG				tə- Σ_1	tə- Σ_1 -ndzə	tə- Σ_1 -nə	Σ_3 -ŋ	Σ_3 -ŋ-ndzə	Σ_3 -ŋ-nə		
1DU							Σ_1 -təə				
1PL							Σ_1 -jə				
2SG	tə-wə- Σ_1 -ŋ	tə-wə- Σ_1 -təə	tə-wə- Σ_1 -jə				Σ_3				
2DU	tə-wə- Σ_1 -ŋ-ndzə						tə- Σ_1 -ndzə				
2PL	tə-wə- Σ_1 -ŋ-nə						tə- Σ_1 -nə				
3SG	wə- Σ_1 -ŋ	wə- Σ_1 -təə	wə- Σ_1 -jə	tə-wə- Σ_1	tə-wə- Σ_1 -ndzə	tə-wə- Σ_1 -nə				Σ_3	
3DU	wə- Σ_1 -ŋ-ndzə									Σ_1 -ndzə	
3PL	wə- Σ_1 -ŋ-nə									Σ_1 -nə	
3'							wə- Σ_1	wə- Σ_1 -ndzə	wə- Σ_1 -nə		
INTR	Σ_1 -ŋ	Σ_1 -təə	Σ_1 -jə	tə- Σ_1	tə- Σ_1 -ndzə	tə- Σ_1 -nə	Σ_1	Σ_1 -ndzə	Σ_1 -nə		

Example of an opaque hierarchical system: Bantawa (? , 145-8)

	1SG	1DI	1DE	1PI	1PE	2SG	2DU	2PL	3SG	3DU	3PL
1SG						Σ-na	Σ-naci	Σ-nanin	Σ-uŋ	Σ-uŋciŋ	
1DI									Σ-cu	Σ-cuci	
1DE						Σ-ni			Σ-cuʔa	Σ-cuciʔa	
1PI									Σ-um	Σ-umcim	
1PE						Σ-ni			Σ-umka	Σ-umcimka	
2SG	ti-Σ-ŋa								ti-Σ-u	ti-Σ-uci	
2DU	ti-Σ-ŋaŋciŋ		ti-Σ-ni(n)		ti-Σ-ni(n)				ti-Σ-cu	ti-Σ-cuci	
2PL	ti-Σ-ŋaŋniŋ								ti-Σ-um	ti-Σ-umcum	
3SG	i-Σ-ŋa	ni-Σ-ci	(n)i-Σ-aciʔa	mi-Σ	(n)i-Σ-inka	ni-Σ	ni-Σ-ci	ni-Σ-in	Σ-u	Σ-uci	
3DU	i-Σ-ŋaŋciŋ		ni-Σ-aciʔa		ni-Σ-inka				i-Σ-cu	i-Σ-cuci	
3PL	ni-Σ-ŋa								i-Σ	mi-Σ-uci	
INTR	Σ-ŋa	Σ-ci	Σ-ca	Σ-in	Σ-inka	ti-Σ	ti-Σ-ci	ti-Σ-in	Σ	Σ-ci	mi-Σ

- ▶ i- prefix (corresponds to the Zbu wə- prefix, inverse-like but restricted to 3SG,DU→1SG and 3DU→3, 3PL→3SG; absence of proximate/obviative contrast)

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1DI										Σ-cu	Σ-cuci	
1DE									Σ-ni	Σ-cuʔa	Σ-cuciʔa	
1PI										Σ-um	Σ-umcim	
1PE									Σ-ni	Σ-umka	Σ-umcimka	
2SG	ti-Σ-ŋa		ti-Σ-ni(n)		ti-Σ-ni(n)				ti-Σ-u	ti-Σ-uci		
2DU	ti-Σ-ŋaŋciŋ								ti-Σ-cu	ti-Σ-cuci		
2PL	ti-Σ-ŋaŋniŋ								ti-Σ-um	ti-Σ-umcum		
3SG	i-Σ-ŋa	ni-Σ-ci	(n)i-Σ-aciʔa	mi-Σ	(n)i-Σ-inka	ni-Σ	ni-Σ-ci	ni-Σ-in	Σ-u	Σ-uci		
3DU	i-Σ-ŋaŋciŋ		ni-Σ-aciʔa		ni-Σ-inka				i-Σ-cu	i-Σ-cuci		
3PL	ni-Σ-ŋa								i-Σ	mi-Σ-uci		
INTR	Σ-ŋa	Σ-ci	Σ-ca	Σ-in	Σ-inka	ti-Σ	ti-Σ-ci	ti-Σ-in	Σ	Σ-ci	mi-Σ	

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- ▶ ni- prefix (3PL→1SG, 3→1DU,1PE,2; plural marker spread to the 3SG? Should it be analyzed as ni + i?)

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- ▶ ni- prefix (3PL→1SG, 3→1DU,1PE,2; plural marker spread to the 3SG? Should it be analyzed as ni + i?)
- ▶ mi- prefix (3PL.INTR, 3PL→3NS, 3→1PI; plural marker used as a generic?)

Table : Bantawa non-local scenarios

	3SG	3DU 3PL
3SG	$\Sigma\text{-u}$	$\Sigma\text{-uci}$
3DU	i- $\Sigma\text{-cu}$	i- $\Sigma\text{-cuci}$
3PL	i- Σ	mi- $\Sigma\text{-uci}$

Table : Zbu non-local scenarios

	3SG	3DU	3PL	3'
3SG				Σ_3
3DU				$\Sigma_1\text{-nd}\text{z}\text{ə}$
3PL				$\Sigma_1\text{-}\text{ŋ}\text{ə}$
3'	wə- Σ_1	wə- $\Sigma_1\text{-nd}\text{z}\text{ə}$	wə- $\Sigma_1\text{-}\text{ŋ}\text{ə}$	

One step further

?

Table : Rtau transitive and intransitive paradigms

AP	1	2	3
1s		Σ	Σ -w
1p			Σ -ã
2	v- Σ -ã		Σ -j
3		v- Σ	
INTR	Σ -ã	Σ	

- The v- prefix corresponds to the Zbu inverse wə-.

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- ▶ In non-local scenarios, as in Bantawa, there is no contrast between proximate 3 > 3' vs obviative 3' > 3 agent.

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- ▶ In non-local scenarios, as in Bantawa, there is no contrast between proximate 3 > 3' vs obviative 3' > 3 agent.
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- ▶ In non-local scenarios, as in Bantawa, there is no contrast between proximate 3 > 3' vs obviative 3' > 3 agent.
- ▶ The inverse form has been generalized to all non-local scenarios.
- ▶ Nevertheless it cannot be analyzed as an third person agent marker since it occurs in 2 > 1 scenarios.

Conclusion

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- ▶ When the proximative-obviative contrast in non-local scenarios is lost, we observe either generalization of $3' \rightarrow 3$ (Rtau, Lavrung), of $3 \rightarrow 3'$ (Khaling, Limbu) or a mixture thereof (Bantawa, Puma).

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- ▶ When the proximative-obviative contrast in non-local scenarios is lost, we observe either generalization of $3' \rightarrow 3$ (Rtau, Lavrung), of $3 \rightarrow 3'$ (Khaling, Limbu) or a mixture thereof (Bantawa, Puma).
- ▶ The animacy/saliency hierarchy governing the proximate/obviative contrast can be reanalyzed as a number hierarchy ($SG > DU/PL$)

References