

Tone in Kunming Chinese Reduplication: Against Input-Reduplicant Correspondence

Input-Reduplicant (IR) faithfulness has been widely debated, with many rejecting it on theoretical and empirical grounds. This paper reanalyzes apparent evidence for IR-faith in Kunming Chinese and shows that it can be eliminated.

Tone in Kunming Chinese reduplication has been argued to support the need for an input-reduplicant faithfulness constraint. In the analysis put forward by Lin (2019), there are cases in which the reduplicant is more faithful to the underlying form than the base. I show that treating the “sandhi” tones as underlying resolves this issue without disrupting other tonal patterns, both within reduplication and beyond.

Kunming Chinese has four contrastive tones—11, 31, 44(35), and 53(55). The two high register tones undergo tone sandhi alternations. Under the traditional analysis, /44/ surfaces as [44] before /44/ or utterance finally and surfaces as [35] before any other tone. /53/ surfaces as [53] utterance finally and surfaces as [55] before any tone.

When nouns and verbs reduplicate, high register tones copy while low register tones become 44(35). As seen in (1d) 53 undergoes typical tone sandhi, becoming 55 when not utterance final.

(1) Kunming Chinese (Lin, 2019)

	Isolation	Reduplication	Example	Gloss
a.	11	11-44	toŋ-toŋ	‘cave’
b.	31	31-44	lǎ-lǎ	‘basket’
c.	44	44-44	ku-ku	‘hoop’
d.	53	55-53	ku-ku	‘estimate’

The second copy is taken to be the reduplicant as it is where the prespecified high register tone appears when the base is low register. This creates a problem for analyses that reject IR-faithfulness.

Using Ident-BR, Ident-IO, and the sandhi-triggering constraint *53-T, the incorrect candidate is selected. If the reduplicant lacks access to the input, Ident-BR predicts that it should undergo sandhi along with the base. Because the reduplicant fails to do so, Lin concludes that it must be protected by IR-faithfulness.

(2)

	/53-RED/	*53-T	Ident-BR	Ident-IO
a.	53-53	*		
b. ●	55-55			*
c. ☹	55-53		*	*
d.	53-55	*	*	

Lin considered treating the sandhi tones as underlying but rejected this because it creates inconsistency in the headedness of tonal alternations.

(3) Sandhi tone as underlying—a&b from Lin (2019), c omitted in source

- a. /55-55/ → [55-53] utterance-finally Right-tone alternation
- b. /35-44/ → [44-44] before 44 Left-tone alternation
- c. /11-35/ → [11-44] utterance-finally Right-tone alternation

(4) Isolation tone as underlying (Lin, 2019)

- a. /53-53/ → [55] before another tone Left-tone alternation
- b. /44-44/ → [35] before non-44 tone Left-tone alternation

However, there are several downsides to treating /53/ and /44/ as the URs in addition to requiring IR-Faith. First, the environment for [55] is much more varied than the environment for [53]. Second, this frames the generalization in terms of a negative; /44/ changes to [35] if it is NOT before 44. Finally, one of the sandhi environments is left out of Lin’s table, added as (3c). /35/ would also become [44] utterance finally. This is important because it clearly shows that two of the environments are the same when the “sandhi” tones are underlying. This suggests word-final and pre-44 sandhi are distinct processes with different heads. Previous work has shown that languages can show inconsistency in sandhi headedness (Ying, 2025).

Switching the UR to the sandhi tone removes the need for IR-faith. Using a simplified OT analysis similar to Lin (2019), *53-T is replaced by *55# and Ident-IO is ranked above Ident-BR. The previously winning candidate is now ruled out by the sandhi-triggering constraint, and overapplication is blocked by Ident-IO.

	/55-RED/	*55#	Ident-IO	Ident-BR
(5) a.	53-53		*	
b.	55-55	*		
☞ c.	55-53			*
d.	53-55	*	*	*

This reanalysis preserves the empirical coverage of reduplication patterns in Kunming Chinese and can extend to the broader tonal system (as will be discussed in the presentation). Treating sandhi tones as underlying therefore eliminates the motivation for Ident-IR while improving the overall analysis.

[prose = 499 words]

References

- Lin, H.-s. (2019, February). Tonal (non-)transfer in Kunming Reduplication. *Journal of East Asian Linguistics*, 28(1), 55–105. doi: 10.1007/s10831-019-09190-8
- Ying, Y. (2025, May). Complex tone sandhi types in the Sinitic Wu dialect of Huangyan. *Proceedings of the Linguistic Society of America*, 10(1), 5935. doi: 10.3765/plsa.v10i1.5935