

1. Reduplicant Shape

- In partial reduplication, there is variation in reduplicant shape, both within languages and across languages.
- Question:** Is this variation arbitrary, or are there systematic restrictions / correlations between reduplicant shape and other independent properties?
- Observation:** In at least a subset of languages, independently motivated aspects of the *stress pattern* restrict this variability in principled ways.
 - Languages with the properties in (1) systematically lack monosyllabic / monomoraic partial reduplication in certain positions:

(1) Stress properties in restrictive languages

- Prohibition on stress clash (*CLASH)
 - Cyclic stress (Base-Derivative stress faithfulness)
 - A fixed stress relative to an edge
- E.g., Diyari (Austin, 1981) has cyclic L→R alternating stress and a prefixal **disyllabic** reduplication pattern.
 - A survey revealed 10 other Australian languages with this stress pattern *and* prefixal partial reduplication.
 - All of those patterns are disyllabic, *none* are monosyllabic.

- In other words, there are many languages like Diyari, but none like *Diyari'*, *Diyari''*, or *Diyari'''*:

(2) Attested & unattested patterns in restrictive languages

Base	✓ Diyari reduplication	* <i>Diyari'</i> reduplication	* <i>Diyari''</i> reduplication	* <i>Diyari'''</i> reduplication
σσ	σσ-σσ	σ-σσ	σ-σσ	σ-σσ
wilha	wilha-wilha	wi-wilha	wi-wilha	wi-wilha
kánku	kánku-kánku	ká-kánku	ka-kánku	ká-kanku
yátha	yátha-yátha	yá-yátha	ya-yátha	yá-yatha
σσσ	σσ-σσσ	σ-σσσ	σ-σσσ	σ-σσσ
kánhni	kánhi-kánhni	ká-kánhni	ka-kánhni	ká-kanhni
ngápiri	ngápi-ngápiri	ngá-ngápiri	nga-ngápiri	ngá-ngapiri
tyilparku	tyilpa-tyilparku	tyi-tyilparku	tyi-tyilparku	tyi-tyilparku
σσσσ	σσ-σσσσ	σ-σσσσ	σ-σσσσ	σ-σσσσ
wilhapina	wilha-wilhapina	wi-wilhapina	wi-wilhapina	wi-wilhapina

(3) Rankings for stress and reduplication

✓ Diyari	STRESSL, *CLASH, BD-IDENT(stress) » RED = σ
* <i>Diyari'</i>	RED = σ, STRESSL, BD-IDENT(stress) » *CLASH
* <i>Diyari''</i>	RED = σ, *CLASH, BD-IDENT(stress) » STRESSL
* <i>Diyari'''</i>	RED = σ, STRESSL, *CLASH » BD-IDENT(stress)

- The unattested systems all have RED = σ dominating one of the stress constraints, whereas the attested system does not.
 - If such a ranking is prohibited, only the attested Diyari-like ranking is permitted
- Equivalent gaps hold across a number of parameters:
 - Unit of metrical computation: syllable vs. mora
 - Orientation of fixed stress: left vs. right
 - Position of fixed stress relative to edge: edgemoat or interior
 - Permission of lapses: yes vs. no
- Hawaiian and Ponapean will demonstrate how similar principles generate similar results across these parameters.

2. S » R Meta-Ranking

- The unattested systems can be ruled out if we impose a meta-ranking on two kinds of constraints:
 - Constraint Types**
 - STRESS REQUIREMENTS (S): *unviolated stress constraints*
 - REDUPLICANT SIZE (R): *constraints enacting size preferences for the reduplicant*
 - Stress-Reduplication meta-ranking:**
STRESSREQ » REDSIZE (S » R)
- S » R predicts that a language will only have reduplication patterns that conform to their stress pattern.
- This meta-ranking generates the Diyari pattern, as well as the distribution of reduplicant shapes in Hawaiian & Ponapean.

3. Hawaiian Reduplication

- Hawaiian (as described by Alderete & MacMillan [A&M], 2014) has the following stress properties:
 - Fixed primary stress on the penultimate mora
 - No mora clashes
 - Base-Derivative stress faithfulness
 - Variable secondary stress

- Hawaiian has partial reduplication, which can appear initially, medially, and finally.
 - The distribution of shapes is *restricted* in final position:

(6) Reduplication patterns in Hawaiian (A&M:1)

	whole	prefix	infix	suffix
Foot _{uu}	516	188	9	515
σ _u	0	246	69	4
σ _u σ _{uu}	60	11	0	0

- The STRESSREQS conspire to make 1μ reduplication at the *right-edge* impossible, just like 1σ in Diyari at the *left-edge*.

(7) Hawaiian suffixal reduplication is bimoraic

/ poolunu, RED / BASE: [pōolunu] (2010)		*LAPSER _μ	NON FIN _μ	*CLASH _μ	BD-IDENT (stress)	RED = μ	RED = 2μ
a. pōolunu-nu	2010-0	*!				✓	*
b. pōolunu-nu	2001-0				*!	✓	*
c. pōolunu-nu	2021-0			*!		✓	*
d. pōolunu-nū	2020-1		*!			✓	*
e. pōolunu-lūnu	2020-10					*	✓

- RED = μ must be dominated by all of the STRESSREQS, as demanded by S » R.
 - S » R predicts that this is the only possible pattern for a language with this stress system.
 - This remains to be empirically verified.
- S » R does not limit the relationship between REDSIZE constraints and *violated* stress constraints, so it allows the variability seen in non-final position in Hawaiian.

4. Ponapean Reduplication

- Ponapean (McCarthy & Prince, 1986; Kennedy, 2002) has prosodically-variable, yet *predictable*, prefixal reduplication.
 - After accounting for significant phonotactic interference, the distribution can be explained by the stress pattern.
- Ponapean has *strictly alternating* moraic R→L stress (i.e. unviolated *LAPSEμ and *CLASHμ).
 - Odd parity words stress the initial, even parity words do not.
- Its reduplicant must bear a stress.

(8) Reduplicant distribution in Ponapean (Kennedy, 2002)

	1 mora stem	2 mora stem	3 mora stem	4 mora stem
2-mora prefix	pàa.pá tèpi.tép dòn.dód	duN.du.né diN.di.líp sipi-siped	dùu.dùu.pék mèc.mèc.lél lii.li.aán	rii.ri.aa.lá
1-mora prefix		dù.duúp		tò.toò.roór sò.sòu.pi.sék

- Reduplicants prefer to be monomoraic.
 - This is displayed in even-parity stems (w/o initial light syllables).

/ RED, du _u u _u p /		STRESS-RED	*CLASH _μ	*LAPSE _μ	RED = μ
a. du _u -du _u u _u p	0-01	*!		*	
b. d _u -du _u u _u p	2-01				
c. du _u u _u -du _u u _u p	02-01				*!
d. d _u u _u -du _u u _u p	20-01			*!	*

- In odd-parity stems, the reduplicant extends to two moras to avoid *CLASHμ violations.

/ RED, li _u a _u a _u n /		STRESS-RED	*CLASH _μ	*LAPSE _μ	RED = μ
a. li _u -li _u a _u a _u n	0-201	*!			
b. li _u -li _u a _u a _u n	2-201		*!		
c. li _u li _u -li _u a _u a _u n	20-201				*
d. li _u -li _u a _u a _u n	2-001			*!	*

- The requirement for *rhythmic stress*, rather than *fixed stress*, overrides reduplicant size preferences.

5. Conclusion

- S » R helps explain typological gaps in reduplication pattern observed in various sorts of alternating stress systems.
 - It restricts reduplicant size at the location of a fixed stress, but permits variation / preference to surface elsewhere:

	Left-edge	Right-edge
S » R effects: → 2 unit	Diyari, et al. Ponapean, <i>odd parity</i>	Hawaiian, <i>suffixal</i>
No S » R effects: → variable / preferential	Hawaiian, <i>prefixal</i> Ponapean, <i>even parity</i>	---

- Further questions:
 - Does this relationship hold for more varied types of systems?
 - What is the nature of “REDSIZE” constraints? Can we eliminate them / reduce them to independently necessary considerations?