# Syntactic Constraints on the Morphophonology of Reduplication



### 1. Main Points

- I examine reduplication patterns in isiZulu (Cook 2018) and Kerewe (Odden 1996).
- In certain environments, mismatches arise between the reduplicant and its base. I argue that, for this data:
  - 1. The reduplicant copies material that it c-commands.
  - 2. General phonological processes apply after morphemes are assigned phonological content.
  - 3. Merge may be triggered by phonological material.

### 2. Background

#### Zulu Phonology

1. Reduplication involves copying a bisyllabic foot, to mean 'do a bad job of..."

u-sébenz-a → u-sébe-sébenz-a 'you work'

- 2. /ae/ sequences are typically resolved by deleting the first vowel
- 3. Palatalization processes suggest that root-initial segment resist modification sumayela → iya-şunelel-w-a

'preach!' → 'it is being preached'

But:

 $bala \rightarrow iya-bal-w-a$ 

## 'writel' → 'it is being written' Kerewe Phonology

- 1. Reduplication can be full or partial, to mean "doing X here and there"
- 2. Perfective suffix triggers spirantization

*ku-ful-a* inf-clean-fv

*a-fuz-ílé* 3sg-clean-perf

3. /l/ assimilates to /d/, following /n/

ku-lol-a inf-see-fv

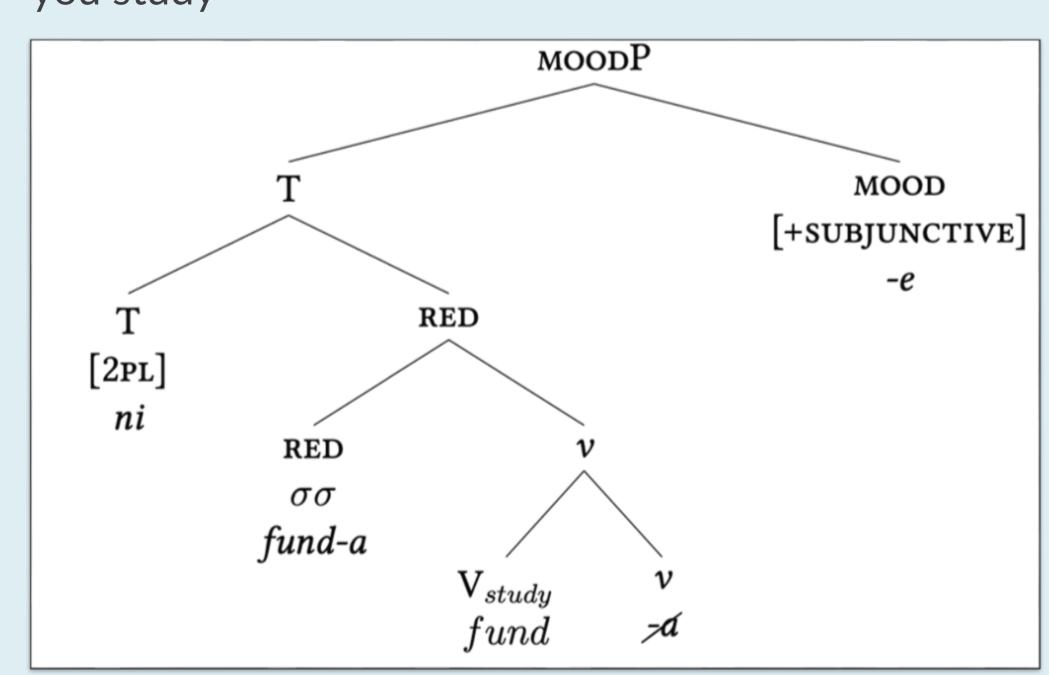
n-doz-ílé 1sg-see-perf

### 3. Zulu Analysis

### Monosyllabic CVC Root

→ Reduplicant copies the final vowel associated with V, later deleted after copying has applied

u-fúnd-e 2sg-study-sbj 'you study' u-fúnda-fund-e 2sg-**RED**-study-sbj



#### Monosyllabic VC Root

- → Copying VC stem results in a VV sequence that cannot be resolved by general phonological processes
- → "Atypical" reduplication processes must apply

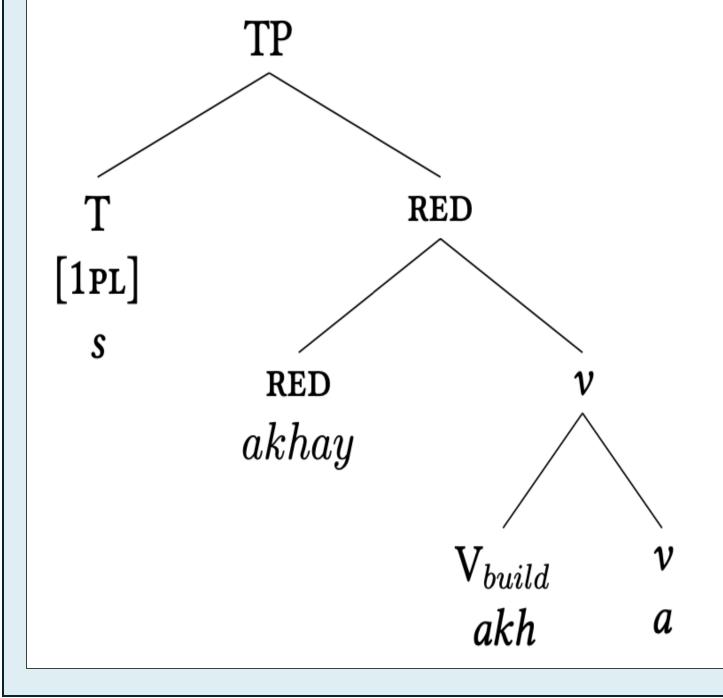
s-akh-a 1pl-build-fv

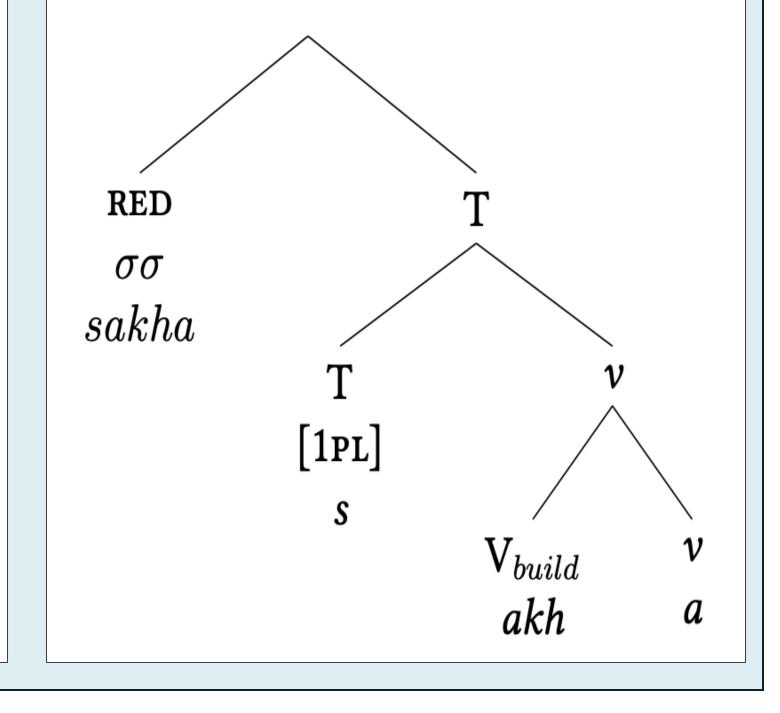
→ \*s-<u>akha</u>-akha

s-<u>akha-y</u>+akh-a 1pl-**RED**-build-fv 'we build'

sakha+s-akh-a

RED-1pl-build-fv





### 4. Kerewe Analysis

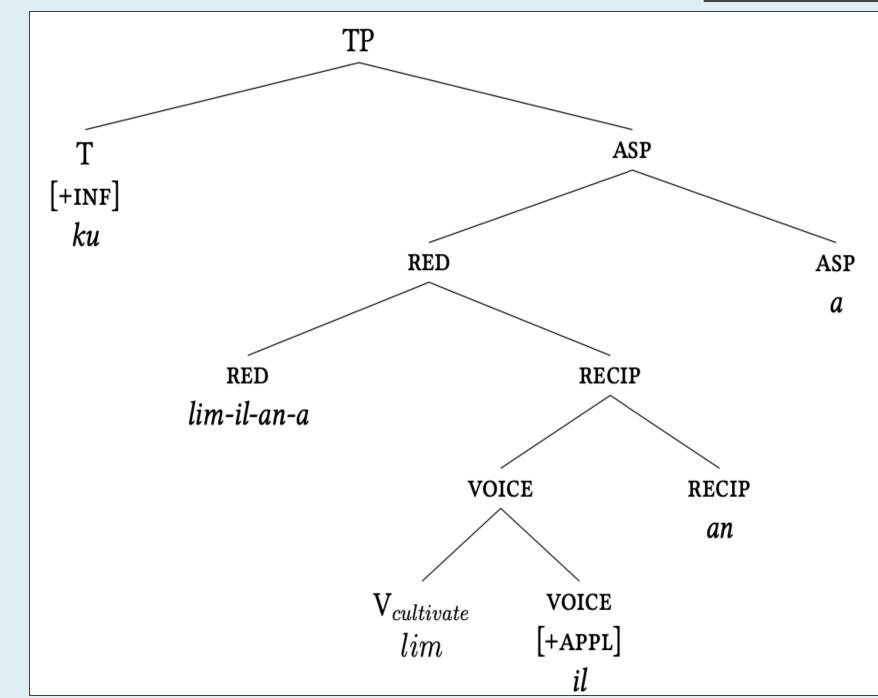
#### Partial Reduplication

- → Partial reduplication shows that reduplicant copies morphemes that it c-commands
- → Predicts ungrammatical forms

ku-lim-il-an-a
inf-cultivate-appl-Recip-fv
"to cultivate for each other"

ku-<u>lim-il-an-a</u>-lim-il-an-a ku-<u>lim-il-<del>an</del>-a</u>-lim-il-an-a ku-lim-<del>il-an</del>-a-lim-il-an-a

\*ku-<u>lim-<del>il</del>-an-a</u>-lim-il-an-a

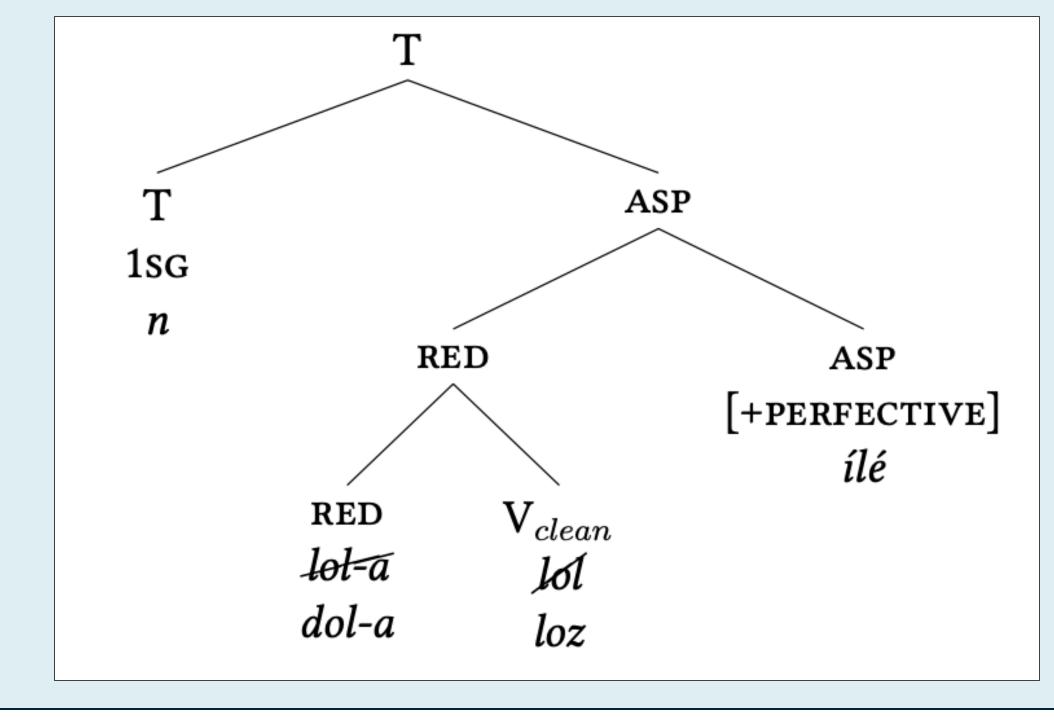


### Perfective and & Spirantization of lol "to see"

→ Phonological processes triggered by perfective suffix apply after copying

n-doz-ílé 1sg-see-perf "I saw"

n-<u>dol-a</u>-loz-ílé 1sg-<u>**RED**</u>-see-perf "I saw here and there



### 5. Discussion

#### Syntactic Positioning Without Readjustment

- Phonological information may influence structural placement during word formation.
- It avoids post-syntactic operations such as Local Dislocation and Readjustment Rules, which have been criticized as overgenerating (Haugen & Siddiqi 2016).
- This account emphasizes clear division of labor between the syntactic and phonological components.

#### Ordering of Operations

- Prosodic morphology applies cyclically after each instance of Vocabulary Insertion
- This finding is consistent with previous work on infixation and suppletive allomorphy (Kalin, 2022).

#### Point of Comparison: Xhosa

- Preliminary data suggest that Xhosa reduplication copies material after phonological processes have applied.
- This indicates that the ordering of operations may vary cross-linguistically and be a point of micro-variation.

boph-a tie-FV -'to tie'

→ bosh-w-a 'tie-pass-fv' ku-<u>boshwa</u>-bosh-w-a 15-**RED**-tie-pass-fv 'it is tied here and there'

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