# A recipe for readjustment - the view from Telugu

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#### 1. Introduction

- Nominative vs. oblique stems for nouns: a common areal feature in South Asia
- The nominative stem appears in subject position, and the oblique in all other cases/with postpositions (i.e., case markers and postpositions trigger the oblique)
- Examples: Tamil maram 'tree.Nom' vs. maratt- 'tree.obl'; Hindi kamra 'room.Nom' vs. kamre- 'room.obl'
- $\bullet\,$  Telugu has two types strongly suppletive nouns ( house below) and weakly suppletive nouns ( ocean below)
- (1) Strongly Suppletive: illu 'house'

(2) Weakly Suppletive: samudram 'ocean'

Case	Form
NOM	illu-ø
ACC	inți-ni
GEN	inți-ø
DAT	inți-ki
LOC	inți-lō

Case	Form
NOM	samudram-ø
ACC	samudrāni-ni
GEN	samudram-ø
DAT	samudrāni-ki
LOC	samudram-lō

- · Many nouns in Telugu are invariant
- Other case markers/postpositions in the language (e.g. paina 'above', gurinci 'on the topic of', etc.)
   behave the same way as the locative -l\(\bar{o}\) in both paradigms.

# Claims & Contributions

- I argue that the oblique alternation in **strongly suppletive nouns involves two separate Vocabulary Items** for the two stem alternants (*i.e.*, true suppletion), while the alternation in **weakly suppletive nouns is phonological readjustment**, with a single VI for the stem
- Previous argumentation in favor of readjustment rules (Harley & Tubino Blanco 2013, ao) has
  focused on phonological naturalness I instead argue for a suppletion/readjustment split based
  on case containment, linear adjacency, and morphosyntactic conditioning.
- The Telugu pattern is an important case study for questions about the constraints on readjustment and suppletion what is the general form of a readjustment rule?

# – Roadmap –

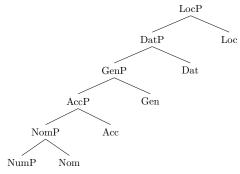
- Part 1: Arguments for a suppletion/readjustment split in Telugu obliques
- Part 2: Building the readjustment analysis

#### 2. There are two types of oblique in Telugu

# 2.1 Argument 1: Case Containment & \*ABA

- Case containment hypothesis (Caha 2009, others): More 'complex' cases/postpositions include 'simpler' cases/postpositions.
- Let's assume the following hierarchy from Caha (2009):

## (3) Simplified version of Case Containment Hierarchy (Caha 2009):



- Allomorphy triggered by a certain case must also be triggered by all higher cases this predicts ABB
  patterns and crucially never ABA patterns.
- A paradigm that shows an ABA pattern must be phonological.

#### 2.1.1 Applying the Diagnostic

- Strongly suppletive obliques are triggered by morphosyntactic case features
- Let's take another look at the *house* paradigm:

## (4) Paradigm for Telugu illu 'house'

Case	Form
NOM	illu-ø
ACC	inți-ni
GEN	inți-ø
DAT	inți-ki
LOC	inți-lō

(5) Nominative VI  $[./HOUSE] \rightarrow illu$ 

(6) **Oblique VI**  $[\ _{\kappa}ACC] \rightarrow inti / [\ _{\kappa}ACC]$ 

 Any version of case containment which assumes nominative to be the simplest case predicts the pattern of strongly suppletive nouns.

#### Weakly suppletive obliques are not triggered by case features -

- On the other hand, the the ocean paradigm is not nearly as well-behaved:
  - (7) Paradigm for Telugu samudram 'ocean'

	Case	Form
ſ	NOM	samudram-ø
	ACC	<b>samudrāni</b> -ni
	GEN	samudram-ø
	DAT	samudrāni-ki
	LOC	samudram-lō

- We see an ABABA pattern, doubly violating the predictions of the containment hypothesis
- Unless we throw out containment entirely, we are forced to think of this as a phonological alternation, and not structurally-governed allomorphy

#### 2.1.2 Could some other version of case containment work?

- What if the weakly suppletive paradigm isn't phonological, but in fact the Cahaian hierarchy isn't correct for Telugu?
- Let's assume that the representation of a given case does not vary across nouns, and that all cases and
  postpositions are on a single hierarchy
- The only possible hierarchy which could explain both paradigms at once would be one in which ACC and DAT are higher than LOC

# (8) **Hypothetical Hierarchy I** [[[[NOM]GEN]LOC]ACC]DAT]

- Recall that LOC is a placeholder for a whole class of postpositions
- Such a hierarchy is implausible and has not been posited in previous work (Hardarson 2016, Starke 2017, Middleton 2021, Radkevich 2010, ao)
- Another option: a split hierarchy?
- Let's say accusative and dative were in a different hierarchy from genitive and locative/postpositions

#### (9) Hypothetical Hierarchies II

[[[NOM]ACC]DAT] [[[NOM]GEN]LOC]

• This explains weakly suppletive nouns but makes the strongly suppletive pattern look coincidental

# 2.2 Argument 2: Adjacency

- Bobaljik (2012) posits that differences in locality restrictions could be used to diagnose between suppletion and readjustment
- A reasonable assumption: suppletion can be triggered non-adjacently, readjustment cannot be.

#### Strongly suppletive obliques can be non-adjacent from their trigger

- Quantifiers can occur after the nouns they modify:
- (10) కుక్కలన్ని పడుకున్నాయి kukka-l-anni paḍu-k-unn-ā-yi dog-PL-all.NOM fall-REFL-to.be-NONFUT-3PL.NH 'All the dogs are sleeping'
- When post-nominal, quantifiers intervene between noun and case:
- (11) నేమ కుక్కలన్నిటిని చూసాను nēnu kukka-l-anniṭi-ni cūs-ā-nu 1SG.NOM dog-PL-all.CT.OBL-ACC see-PST-1SG 'I saw all the dogs.'
  - We can use this construction to test our hypothesis about adjacency
  - When illu 'house' is used in this construction, it can (optionally) be in the oblique:
- (12) నేమ ఇంటంతటిని కొన్నాను nēnu inṭ-antaṭi-ni konn-ā-nu 1SG.NOM house.OBL-all.MS.OBL-ACC buy-PST-1SG 'I bought the whole house.'
- If this alternation were purely phonological, this is unexpected

## Weakly suppletive obliques must be adjacent to their trigger

- When a quantifier intervenes between it and the accusative, the noun *samudram* 'ocean' cannot be oblique:
  - (13) నేమ సముద్రమంతటిని చూసాను nēnu samudram-antaṭi-ni cūs-ā-nu 1SG.NOM ocean-all.MS.OBL-ACC see-PST-1SG 'I saw the whole ocean.'
  - (14) \*నేమ సముద్రానంతటిని చూసాను \*nēnu samudrān-antaṭi-ni cūs-ā-nu 1SG.NOM ocean.OBL-all.MS.OBL-ACC see-PST-1SG Intended: 'I saw the whole ocean.'
- Since linear adjacency between the trigger and the noun stem is required for this type of oblique, it must be a phonological effect.

# 2.3 Argument 3: What exactly is triggering the allomorphy?

- In outward-looking contextual allomorphy, allomorph choice can only be sensitive to the abstract
  morphosyntactic representation of the triggering morpheme, not its actual surface form (Bobaljik
  2000)
- This predicts that a different, non-case suffix appearing after the noun stem should not trigger a different choice of allomorph

## - Strongly suppletive obliques are not triggered by nominal agreement -

- Telugu features nominal agreement morphemes (Aitha 2018) which occur in, among other contexts, nominals like We students.
- When such a nominal is in subject position, it is in the nominative, so we expect the stem noun to be in its nominative form, regardless of whether a nominal agreement morpheme occurs after it or not
  - (15) నేమ ఇల్లని పడ్డాను. nīvu illu-vi padḍ-ā-vu 2SG.NOM house-2SG fall-PST-2SG 'You, a house, fell.'
- For weakly suppletive obliques, we predict that the presence of phonological material after the stem can affect its form, even given the same abstract case syntax.

#### Weakly suppletive obliques are triggered by nominal agreement

- This is exactly what we see nominal agreement triggers the oblique stem of *ocean*, even though the noun is still in the nominative:
  - (16) నేమ సముద్రాన్ని పడుకున్నాను nīvu samudrāni-vi paḍu-k-unn-ā-vu 2sg.nom ocean-2sg fall-refl-be-pst-2sg 'You, an ocean, are asleep.'
- Given that both stem alternants can occur in the nominative, it is difficult to maintain the hypothesis that weakly suppletive obliques are actually sensitive to case at all

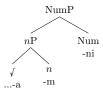
#### (17) Summary of arguments:

	Strongly supp. nouns	weakly supp. nouns
Does it violate *ABA?	*	✓
Is it constrained by adjacency?	*	✓
Is it only about case?	✓	*

#### 3. The Anatomy of a Readjustment

- The alternation in the paradigm for ocean (and so for all weakly suppletive nouns) is phonological
- Given this, the underlying form for the -am and  $-\bar{a}ni$  stems should be the same
- -a-m-ni, where -m is a n head, and -ni is a SG head.

#### (18) Posited UR for weakly suppletive nouns



## 3.1 -m is the realization of a n head

- All weakly suppletive nouns end with -m
- samudram 'ocean' is in a very large class of Sanskrit borrowings:
  - (19) Sanskrit borrowings in Telugu

Sanskrit	Telugu	Translation
samudra	samudra-m	ocean
āścarya	āścarya-m	surprise
ișța	iṣṭa-m	wish, desire
ānanda	ānanda-m	happiness

- The root samudra- can also appear bare form or with a different suffix
  - (20) సముద్ర మట్టం samudra maṭṭam ocean level 'sea level'
  - (21) సముదద్రపు దొంగ samudra-pu donga ocean-ADJ thief 'pirate'
- The n head realized as -m is selected by a set of lexical roots ( $\sqrt{\text{OCEAN}}$ ,  $\sqrt{\text{SURPRISE}}$ ,...).

### 3.2 Oblique -ni is the realization of singular number

- The sequence -ni in weakly suppletive obliques is in complementary distribution with and shows up in the same position as the plural suffix -lu:
  - (22) Singular: samudram 'ocean'

Case	Form
NOM	samudra-m-ø
ACC	samudrā- <b>ni</b> -ni
GEN	samudra-m-ø
DAT	samudrā- <b>ni</b> -ki
LOC	samudra-m-lō

Case	Form
NOM	samudrā-lu-ø
ACC	samudrā-la-ni
GEN	samudrā-la-ø
DAT	samudrā- <b>la</b> -ki
LOC	samudrā-la-lō

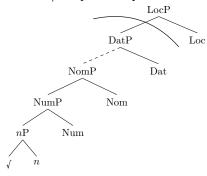
(23) Plural: samudrālu 'oceans':

• The sg head realized as -ni selects for nPs headed by -m

## 3.3 Case vs. Postpositions - a prosodic split

- Generalization I: The nominalizing suffix -m is deleted before singular -ni and plural -lu
- Generalization II: The SG suffix -ni is deleted unless it is followed by accusative -ni or dative -ki
- We can make sense of this if we posit the following prosodic boundary:

### (24) The Case/Postposition Split:



- This split is familiar many languages differentiate between core cases and adpositions
- Suffixes inside the boundary are all monomoraic, while those outside are largely multimoraic

#### (25) Inside vs Outside Suffixes

Inside	Outside	
[SG]: -ni	[LOC]: $-l\bar{o}$	
[PL]: -lu	[COM]: $-t\bar{o}$	
[ACC]: -ni	[BEN]: $-k\bar{o}sam$	
[DAT]: -ki	'from': -nunci	
[1sg]: -ni	'about': -gurinci	
[2sg]: -vi	'in front of': -mundu	
[1PL]: -mu	'behind': -venaka	

## Readjustment Rules

- -ni-deletion: If the singular suffix -ni is final in the prosodic domain, delete the final syllable in the domain.
- -m-deletion: If the nominalizer -m is not final in the prosodic domain, delete it and compensatorily lengthen the preceding vowel.
- These rules are ordered -ni-deletion bleeds -m-deletion

#### 3.4 Could it be about word length?

 In Yidip, disyllabic and trisyllabic noun stems have different ergative, ablative and genitive case markers (Dixon 1977)

#### (26) Yidin case paradigms

Case	'kangaroo sp.'	'initiated man'
ERG	mabi:- <b>ŋ</b>	mulari- <b>ŋgu</b>
ABL	mabi- $\mathbf{m}$	mulari- <b>mu</b>
GEN	mabi:- <b>n</b>	mulari- <b>ni</b>

- This is argued to be due to constraints on metrical foot structure (Embick 2010)
- In Telugu, there is no such alternation based on word length:

#### (27) Telugu case paradigms

Case	'ocean'	'desire'
ACC	samudrā-ni-ni	iṣṭā-ni-ni
DAT	samudrā-ni-ki	iṣṭā-ni-ki

# 3.5 What can a readjustment rule look like?

(28) English:

$$[_V \text{TELL}] \to \text{tel}$$
  
 $[_V \text{TELL}] \to \text{toul} \ / \ \_ \ [_T \text{PST}]$ 

(29) Hiaki (Harley & Tubino Blanco 2013):

$$\begin{array}{l} [_{V}\mathrm{PON}] \rightarrow \mathit{pon} \\ [_{V}\mathrm{PON}] \rightarrow \mathit{poona} \ / \ \_ \ \mathit{Asp} \end{array}$$

(30) Telugu:

$$\begin{array}{l} [_{Num} {\rm NI}] \rightarrow ni \\ [_{Num} {\rm NI}] \rightarrow \varnothing / \ \_+ \end{array}$$

• The structural condition in Telugu is phonological, not structural

#### 4. Conclusion

- Telugu weakly suppletive oblique alternation is readjustment
- A new approach to demonstrating the suppletion/readjustment split
- Prosodic split between case/postpositions generalizable?

#### 5. References

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