# TAMIL PRONOMINAL ALLOMORPHY IS NEITHER ALLOMORPHY NOR PROBLEMATIC

## A MORPHOPHONOLOGICAL SOLUTION TO A MORPHOSYNTACTIC PROBLEM

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# TAKE HOME MESSAGE

- What has been proposed to be allomorphy in the Tamil pronominal system is not allomorphy at all, it is just regular phonology. (and some extra morphology)
  - Tamil does not motivate altering theories of allomorphy to allow for non-local conditioning. If the (few) other problematic paradigms for locality and allomorphy also submit to alternative analyses, we do not need to complicate our syntax/ Vocabulary Insertion.
  - The line between phonology and morphology is sometimes hard to see.
  - I don't yet have a fully fleshed-out analysis of the phonology, but the alternative account proposed here allows us to have a conversation about whether the morphosyntactic or phonological analysis is preferable.

# OUTLINE OF THE TALK

1. The Tamil data, and why it is interesting.
2. Background:
    1. Expansion of morphosyntactic domains
    2. Other phenomena that have walked the line between allomorphy and phonology
3. An extra morpheme in certain Tamil pronouns.
4. A preliminary phonological analysis of the Tamil data.
5. Implications of the analysis for the morphosyntax.
6. Conclusions and General Implications.

# 1. THE TAMIL DATA, AND WHY IT IS INTERESTING.

# A PREVIEW OF THE DATA/THE PROBLEM

(1) a. Nominative: (i) 1sg. [nã:n̶-Ø] (ii) 1pl. [na:ŋ-ka[-Ø]

b. Accusative: (i) 1sg. [en:-ai] (ii) 1pl. [eŋ-ka[-ai] (and other Cases)

(2) a. Nominative: (i) 2sg. [ni:-Ø] (ii) 2pl. [ni:-ŋka[-Ø]

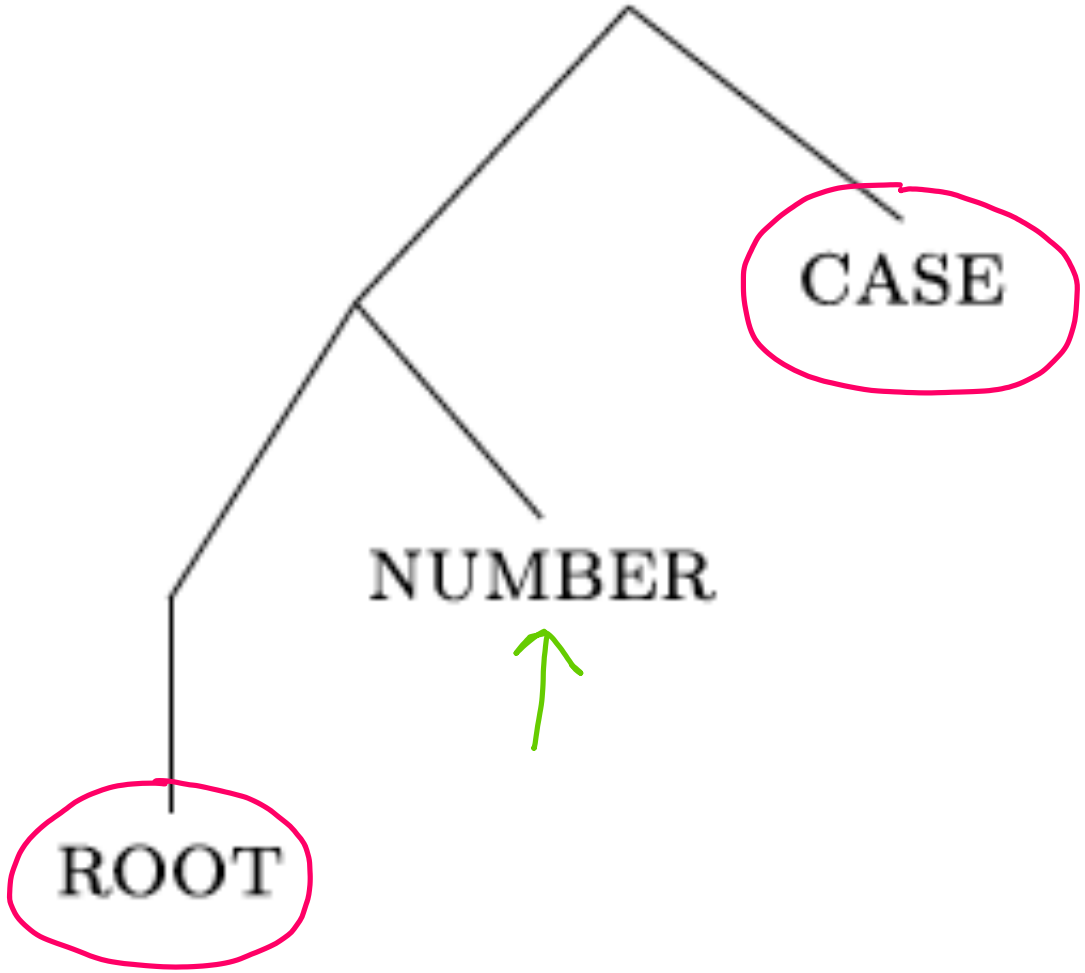
b. Accusative: (i) 2sg. [un:-ai] (ii) 2pl. [uŋ-ka[-ai] (and other Cases)

It appears that pronominal root allomorphy is conditioned across an overt plural morpheme.
BASE-PL-K(ase)

"Tamil shows a suppletion pattern that cannot be handled in any reasonable way under the adjacency hypothesis, whether phrased in terms of linear or structural relations." (Moskal 2015:91)
See also Moskal & Smith (2016), Smith et al. (2019).

# ALLOMORPHY

- Allomorphy :  distinct realizations (vocabulary items) of a single morphosyntactic feature bundle. Suppletion. (ex. Paster 2014)
- Phonologically-derived alternations are *phonology. Ex peti[t] garçon vs petit animal.*
- Readjustment rules are not possible grammatical objects.
- When I use 'morphophonological' I mean involving both morphology and phonology, but not at once. I am a strict modularist. This is the most restrictive default option for theory building.




# A PROBLEMATIC INTERVENER

**Table 30** Suppletion in Rutul wh-words (Erschler 2017)

| 'what' | SG | PL |
|---|---|---|
| NOM | šiv | šiv-dəb-ər |
| ERG | hid-iræ | šiv-dəbiš-æ |
| GEN | hid-id | šiv-dəbiš-də |

| 'who' | SG | PL |
|---|---|---|
| NOM | vuš | vuš-er |
| ERG | hal-a | hal-dəbiš-æ |
| GEN | hal-də | hal-dəbiš-də |

Smith et al (2019:1055)

# BLOCKING BY NUMBER~NON-BLOCKING BY NUMBER

N.B. the 'who' pattern is problematic in the same way as the Tamil problem, but I have nothing to say about it ...yet.

**Table 27** Suppletion across a number head in Tamil (Asher 1982:118)

| 1PERS | SG | PL |
|---|---|---|
| NOM | naan | naan-ga(ḷ) |
| GEN/OBL | en | en-ga(ḷ) |
| DAT | en-akku | en-gaḷ-ukku |

| 2PERS | SG | PL |
|---|---|---|
| NOM | nii | niin-ga(ḷ) |
| GEN/OBL | on | on-ga(ḷ) |
| DAT | on-akku | on-gaḷ-ukku |

Smith et al (2019:1054)

# ANOTHER CASE OF NON-BLOCKING BY NUMBER

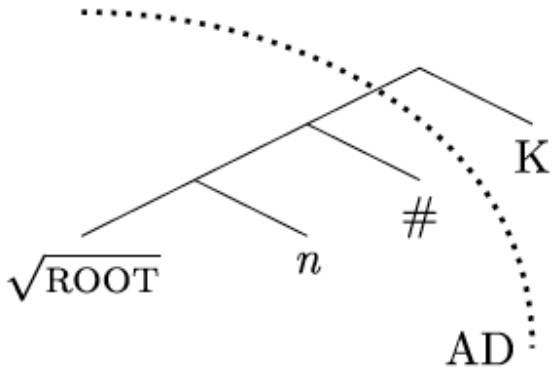
# 2A. BACKGROUND: EXPANSION OF MORPHOSYNTACTIC DOMAINS

# ALLOMORPHY AND ADJACENCY

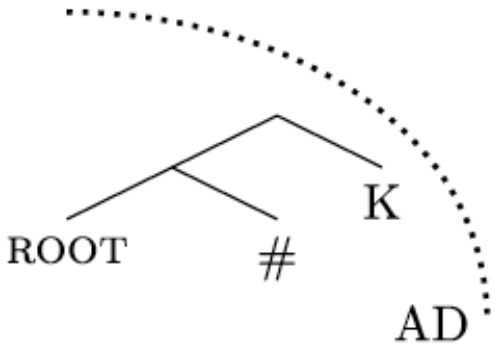
- Embick (2010) : Morphemes must be structurally and linearly adjacent to trigger allomorphy.
- Merchant (2015) : Morphemes must be part of a structural chain to trigger allomorphy.
- Haugen & Siddiqi (2016) : Morphemes must be linearly adjacent to trigger allomorphy.
- ...

# MOSKAL (2015)'S ACCESSIBILITY DOMAINS

## Lexical nouns




## Pronouns




Pronouns show allomorphy for K (case), but lexical nouns do not. (almost never)

# THE SOLUTION

- Modify locality restrictions to account for the data.

# 2B. BACKGROUND: OTHER PHENOMENA THAT HAVE WALKED THE LINE BETWEEN ALLOMORPHY AND PHONOLOGY

# ITALIAN ARTICLES

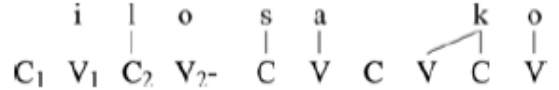
- Faust, Lampitelli, & Ulfsbjorninn (2018) offer a phonological analysis to a problem that has been analyzed as allomorphy (involving two underlying vocabulary items) in the literature (see refs, in Faust et al.)

- Here I give their analysis of the singular masculine variants only.

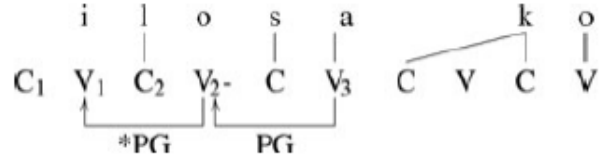
| | | |
|---|---|---|
| il | sakko | 'the bag' |
| lo | ska:fo | 'the hull' |

(13) Realization of [il]:

a. UR of [il sakko] 'the bag'

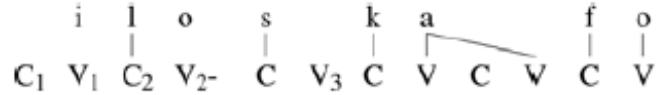



b. $V_2$ being governed, /o/ floats and /i/ must associate

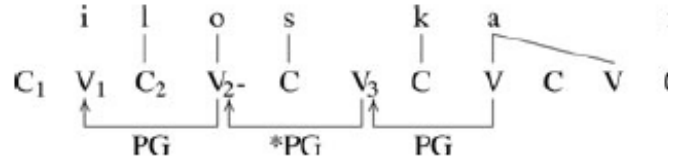



(14) Realization of [lo]

a. UR of [lo ska:fo] 'the hull'




b. $V_2$ being ungoverned, /o/ associates with it



# THE SOLUTION

- Modify underlying representations to account for the data.

# 3. AN EXTRA MORPHEME IN CERTAIN TAMIL PRONOUNS.

# TAMIL PRONOUNS, AND PRONOUNS IN GENERAL

| First Person forms, | | | |
|---|---|---|---|
| | Singular | Exclusive Plural | Inclusive Plural |
| **Nominative** | naan-Ø | naaŋ-ka[-Ø | naam-Ø |
| **Accusative** | enn-ai | eŋ-ka[-ai | namm-ai |
| **Dative** | en-akku | eŋ- ka[-ukku | nam-akku |
| **Sociative** | enn-oo[u | eŋ- ka[-oo[u | namm-oo[u |
| **Genitive** | enn-u[aiya | eŋ- ka[-u[aiya | namm-u[aiya |
| **Instrumental** | enn-aal | eŋ- ka[-aal | namm-aal |
| **Locative** | enn-i[am | eŋ- ka[-i[am | namm-i[am |
| **Ablative** | enn-i[am-iruntu | eŋ- ka[-i[am-iruntu | namm-i[am-iruntu |

| Second Person forms | | |
|---|---|---|
| | Singular | Plural |
| **Nominative** | nii-Ø | nii-ŋka[-Ø |
| **Accusative** | unn-ai | uŋ-ka[-ai |
| **Dative** | un-akku | uŋ- ka[-ukku |
| **Sociative** | unn-oo[u | uŋ-ka[-oo[u |
| **Genitive** | unn-u[aiya | uŋ- ka[-u[aiya |
| **Instrumental** | unn-aal | uŋ- ka[-aal |
| **Locative** | unn-i[am | uŋ- ka[-i[am |
| **Ablative** | unn-i[am-iruntu | uŋ- ka[-i[am-iruntu |

Data from Annamalai & Steever 1998:110)

# TAMIL PRONOUNS, AND PRONOUNS IN GENERAL

- A lot of work has been done on the cross-linguistic morphosyntactic distinctions between 3rd person and 1st/2nd person pronouns and that Tamil patterns with the long list of languages in Harley & Ritter (2002) in which 3rd person pronouns have demonstrative bases/origins.

**Third Person forms (deictic)**

| | Masc. Singular | Fem. Singular | Human Plural |
|---|---|---|---|
| **Nominative** | avan | ava⌊ | avar |
| **Accusative** | avan-ai | ava⌊-ai | avar-ai |
| **Dative** | avan-ukku | ava⌊-ukku | avar-ukku |
| **Sociative** | avan-oo⌊u | ava⌊-oo⌊u | avar-oo⌊u |
| **Genitive** | avan-u⌊aiya | ava⌊-u⌊aiya | avar-u⌊aiya |
| **Instrumental** | avan-aal | ava⌊-aal | avar-aal |
| **Locative** | avan-i⌊am | ava⌊-i⌊am | avar-i⌊am |
| **Ablative** | avan-i⌊am-iruntu | ava⌊-i⌊am-iruntu | avar-i⌊am-iruntu |

# ZEROING IN ON THE 1ST AND 2ND EXCLUSIVE

- Undisputed morphemes:
  - Number : (n)ka⌊ ‘plural’
  - Case : ai/ukku(akku)/ooʈu/uʈaiya/aɭ/iʈam/(i)runtu ‘acc/dat/soc/gen/instr/loc/abl’
- The pronominal bases according to Moskal (2015) and Moskal & Smith (2016):
  - naan/en ‘1st person (nominative)/1st person (elsewhere)’
  - nii/un ‘2nd person(nominative)/2nd person (elsewhere)’

# TAMIL AGREEMENT

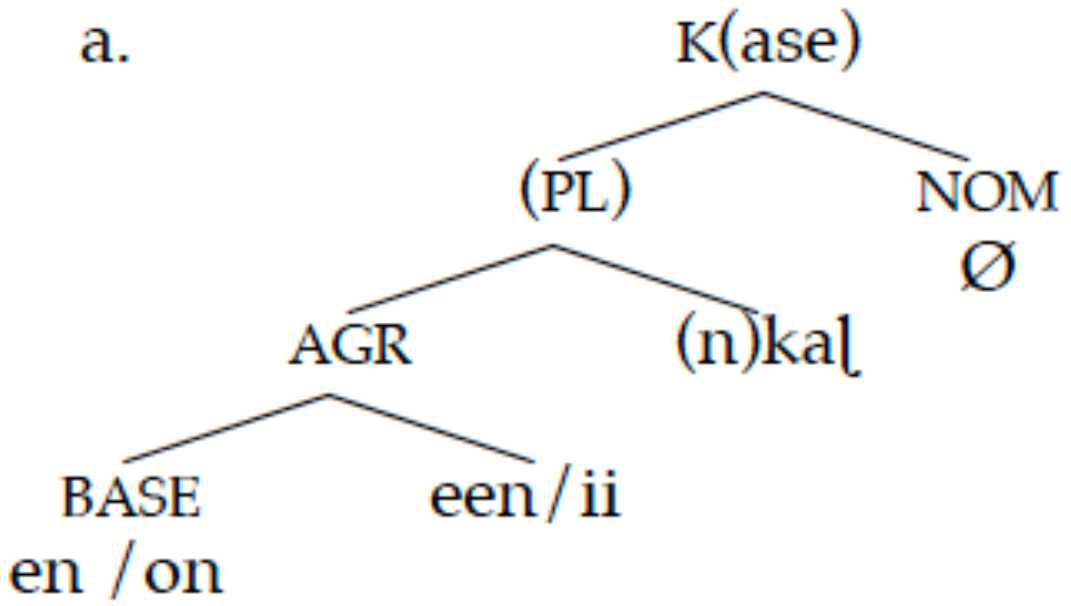
- Regular 1SG and 2nd person agreement morphemes in the verbal system of Tamil.

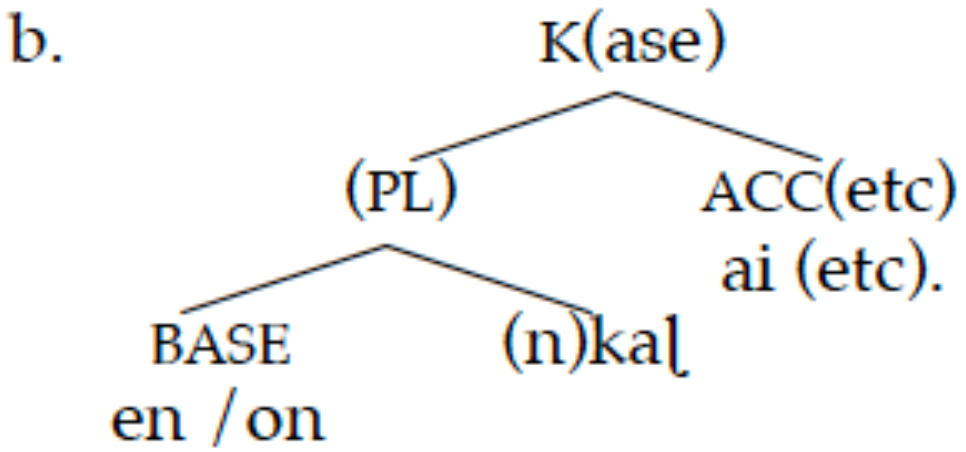
  - 1st person: iru-kur-een [irukkreen]
    be located-PRES-1SG
  - 2nd person: poo-ʋ-ii-ngaɭ [pooʋiinga]
    go-FUTURE-2SG-PLURAL

1st nominative: naan

2nd nominative: nii

- Note that 1PL agreement is -oom, clearly related to the inclusive plural marker, but appears to surface in all cases. The 2nd person marker varies in the literature but is coherently a long vowel. In the plural it is transparently followed by the same plural marker seen in the pronominal paradigms. There is more going on here. Remember that this discussion is preliminary.




# AN EXTENDED ANALYSIS OF THE MORPHOSYNTAX OF TAMIL 1ST AND 2ND PERSON PRONOUNS

First Person forms

| | Singular | Exclusive Plural | Inclusive Plural |
|---|---|---|---|
| Nominative | n-aan-Ø | n-aaŋ-*kaḷ*-Ø | n-aam-Ø |
| Accusative | enn-ai | eŋ- *kaḷ*-ai | n-amm-ai |
| Dative | en-akku | eŋ- *kaḷ*-ukku | n-am-akku |
| Sociative | en-ooṭu | eŋ- *kaḷ*-ooṭu | n-amm-ooṭu |
| Genitive | en-uṭaiya | eŋ- *kaḷ*-uṭaiya | n-amm-uṭaiya |
| Instrumental | enn-aal | eŋ- *kaḷ*-aal | n-amm-aal |
| Locative | enn-iṭam | eŋ- *kaḷ*-iṭam | n-amm-iṭam |
| Ablative | enn-iṭam-iruntu | eŋ- *kaḷ*-iṭam-iruntu | n-amm-iṭam-iruntu |

# THE INCLUSIVE IS DIFFERENT, BUT LET'S LOOK AT IT FOR A SECOND.

# THE INCLUSIVE IS DIFFERENT, BUT LET'S LOOK AT IT FOR A SECOND.

[1] ⇔ en / _ ] K ]
[2] ⇔ on / _ ] K ]
[1] ⇔ naan
[2] ⇔ nii

- The statement of allomorphy for Tamil pronominal bases in Moskal & Smith (2016)
- The 1st inclusive appears to contain the same base as the 1st exclusive (modulo the n/m final C), but its base is invariant.
- If this is allomorphy, the extra agreement head in the exclusive does not block it. It is therefore surprising that the agreement morpheme in the inclusive would block it.
- Allomorphy predicts **en-amm-ai* in the Accusative Inclusive Plural rather than the attested *n-amm-ai*.

# THE SOLUTION

- Tamil pronominal variation is phonological not morphological.

# 4. A PRELIMINARY PHONOLOGICAL ANALYSIS OF THE TAMIL DATA.

# FLOATING PHONOLOGICAL STRUCTURE

| | | |
|---|---|---|
| petit garçon | [pətigaʁsɔ̃] | 'little boy' |
| petit ami | [pətitami] | 'little friend/boyfriend' |
| | [pəti] | 'little' |

```
C  V  C  V
|  |  |  |
p  ə  t  i  t
```

(Encrevé 1983)

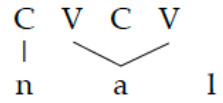
| | | |
|---|---|---|
| kiʔvi - [+nas] | [kĩʔvĩ] | 'you will be drunk' |
| kaʔta - [+nas] | [kaʔtã] | 'you will sing' |

(Piggott 1992:68)
Mixtec

- As discussed above, phonological analyses within autosegmental frameworks like CVCV (Lowenstamm 1996; Scheer 2004, 2009) offer an account of phonologically-triggered variation in output forms without appealing to allomorphy.
- Note that functional elements are more likely to contain floating structure/variation, but that this variation is not exclusive to functional items.
- Note also that the lexical/floating structure account avoids the modularity problem inherent to other accounts of functional/lexical variation, where phonology references notions like functional and lexical (ex. Selkirk 1996) and offers a unified analysis of this kind of variation.

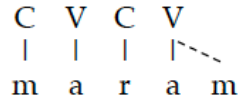
# DOES TAMIL PHONOLOGY GIVE EVIDENCE FOR FLOATING SEGMENTS?

naal [naalɯ] or [naa] (in some dialects) 'day'




(Schiffman 1999:6)

maram [marõ] 'tree'




(Schiffman 1999:4)

- Tamil phonology contains alternations that parallel the floating accounts we have seen.
  - Sonorants are not pronounced finally but are pronounced before a following vowel.
  - Final unpronounced nasals link to/nasalize a preceding vowel.

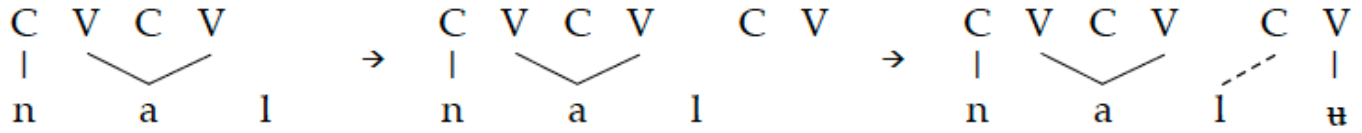
# TAMIL PRONOUNS

| | | | |
|---|---|---|---|
| en-Ø | 'D.1SG-OBLIQUE' | [ʸẽ] | 'my' |
| on-Ø | 'D.2SG-OBLIQUE' | [ʷõ] | 'your' |
| en-een | 'D.1SG-AGR' | [nãã] | 'I' |
| on-ii | 'D.2SG-AGR' | [nii] | 'you' |

- Also show evidence of floating nasal consonants.
  - Initial onglides are regular phonology.
- Note that there is variation in vowel quality in the agreement affixes that I do not yet have an account for (e.g. *en-een* → *nãã*), but this may be linked to the place features of the nasal.

# WORD MINIMALITY

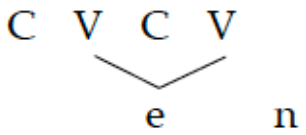
- Another piece of the phonological puzzle that we will need is augmentation of sub-minimal domains.
  - Consider the pronunciations of *naa* and *naal~~u~~* of /naal/ 'day'.
  - Some languages add syllable space to monomoraic bases, some to monosyllabic bases.
  - Short words in Tamil are more likely to epenthesize a V, longer words are more likely to drop the final C



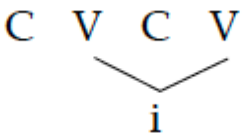
# UNDERLYING REPRESENTATIONS OF THE PRONOMINAL MORPHEMES

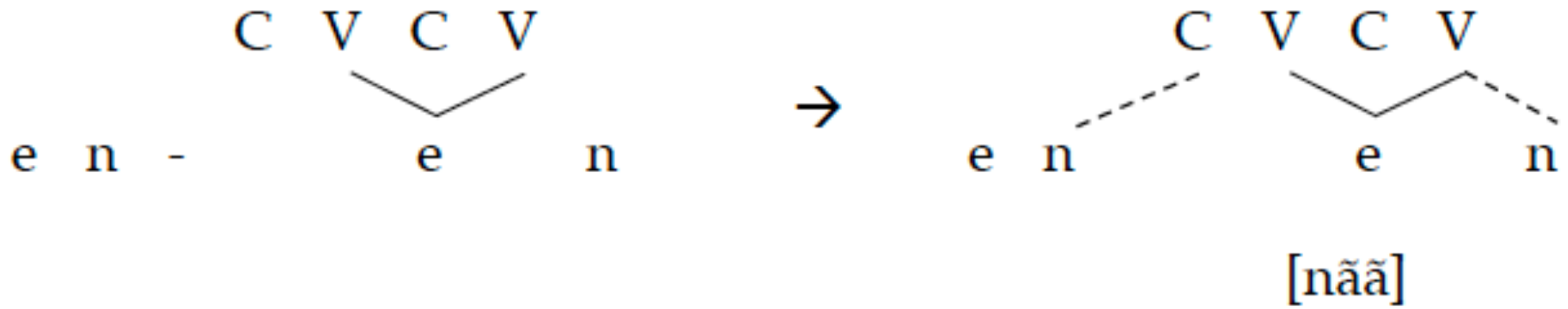
- 1st person base: en
- 2nd person base: on
- Note that, like the Mixtec 2nd person morpheme, some morphemes lexicalize no syllable structure.

- 1st person AGR




- 2nd person AGR

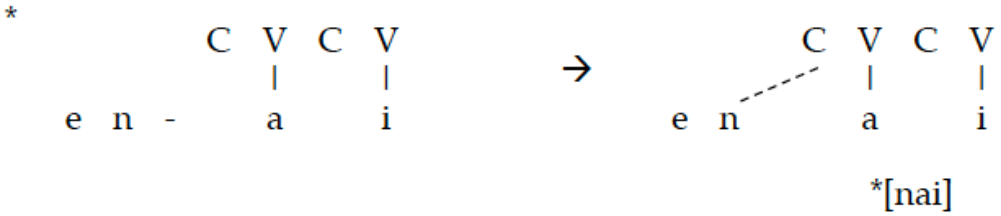




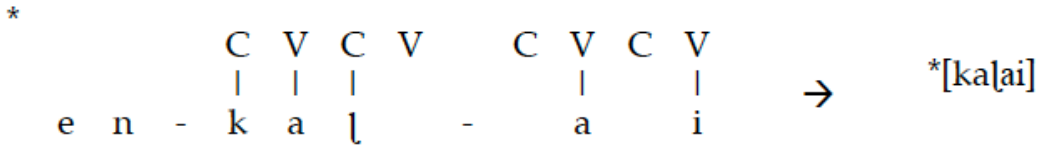

# A SIMPLE DERIVATION OF 'I' : BASE-1ST PERSON

# BUT IT'S NOT ALWAYS THAT SIMPLE

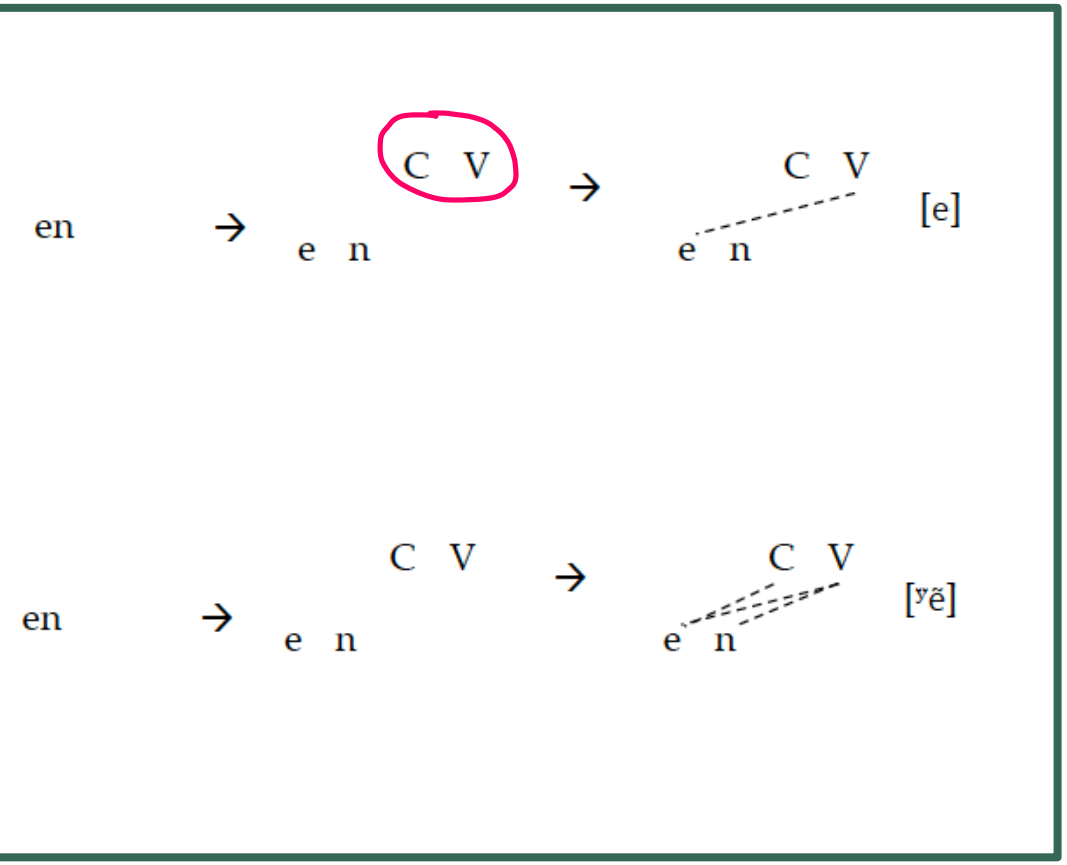
- Vowel-initial suffixes do not always bleed the pronunciation of the initial vowel of the base : 1st sg ACC : [ennai]




- Consonant-initial suffixes don't bleed the pronunciation of the base: 1st excl. pl. ACC: [eŋka[ai]

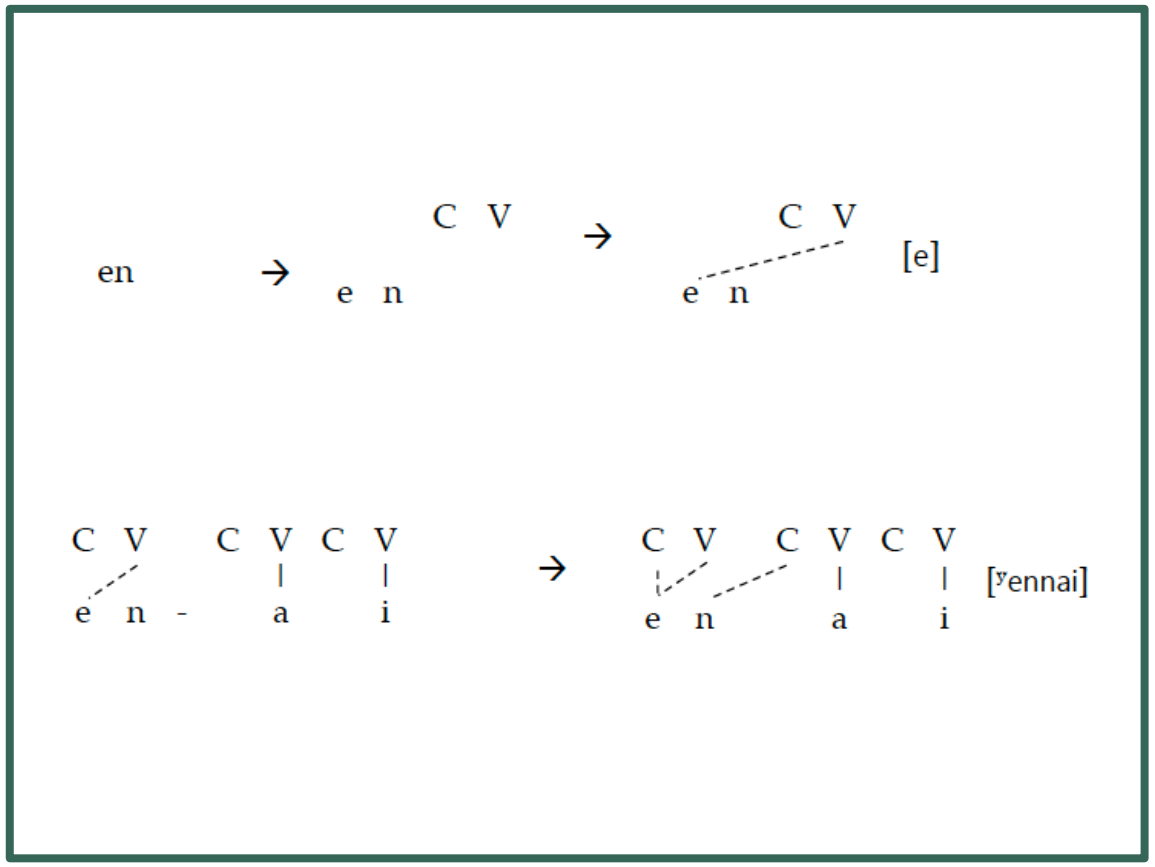


# A MULTI-CYCLIC SOLUTION : 1SG OBLIQUE 'MY'




- In all cases but the NOM, we must assume that the base undergoes spell-out alone.
  - Word-minimality will trigger the epenthesis of syllabic space
  - Note that the Inclusive paradigm does not fit this pattern and therefor needs further investigation.
  - This derivation is realized in 2 steps. The reason for this will be come apparent.

# A MULTI-CYCLIC SOLUTION : 1ST EXCL. PL.ACC



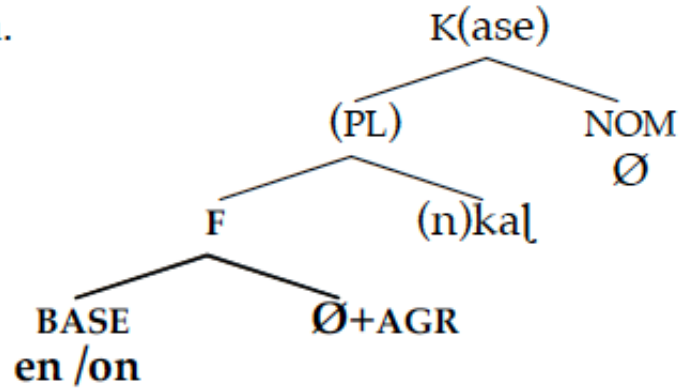

- The first cycle of this derivation is over the root, as on the previous slide.
- The second cycle is over the entire construction.
  - This bleeds the post-cyclic vowel nasalization, as the nasal is linked to an onset position.
  - Note that gemination is also left 'to be accounted for' here.

# THE IMPLICATION

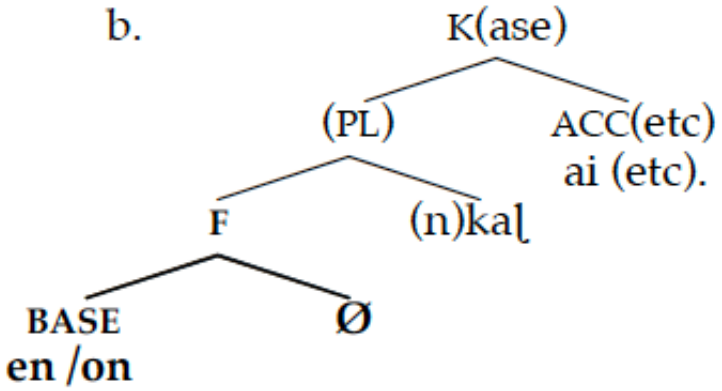
- There are multiple spell-out domains in the derivation of non-Nominative Exclusive Tamil pronouns.

# 5. IMPLICATIONS OF THE ANALYSIS FOR THE MORPHOSYNTAX

a.




b.




c. Spell-Out of F in (24a) → (i) VI of BASE : /en/~/on/
(ii) VI of dissociated AGR :/aan/
(iii) Phonological derivation : slide 32

Spell-Out of K in (24a) → (i) VI of K and PL : /(n)kaɭ/
(ii) Linearization of BASE+ PL
(iii) Phonological derivation of [naaŋkaɭ]

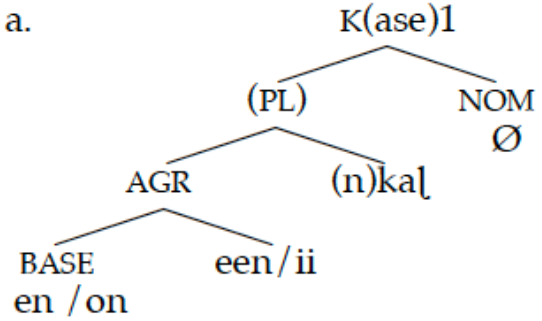
d. Spell-Out of F in (24b) → (i) VI of BASE —> /en/~/on/
(ii) Phonological derivation : slide 34

Spell-Out of K in (24b) → (i) VI of K and PL : /(n)kaɭ/ + /ai/
(ii) Linearization of BASE+ PL+K
(iii) Phonological derivation of [eŋkaɭai]

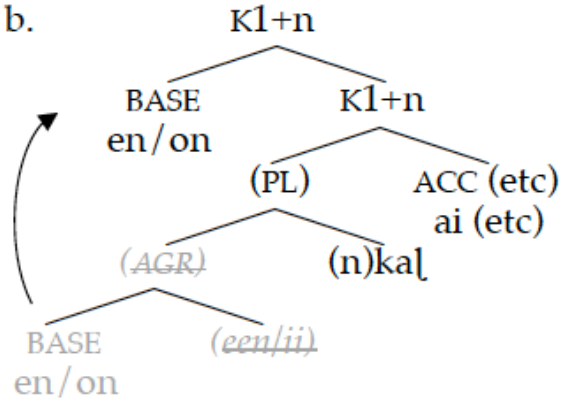
# POSSIBLE MORPHOSYNTAX #1

# POSSIBLE MORPHOSYNTAX #2

a.




b.




c. Spell-Out of a. → (i) VI, linearization of BASE, K and PL
(ii) Phonological derivation of ex. [naaŋkaɭ] in a single cycle.

d. Spell-Out of BASE in b. → (i) Spell-Out of moved BASE
Derivation is identical to Spell-Out of F : slide 38

Spell-Out of K1+n in b. → Derivation is identical to Spell-Out of K : slide 38

Note : McFadden (2018) proposes that there is no nominative case head in the syntax, a possible explanation for why the BASE is attracted to the specifier only in derivations where there is a K(ase) projection.

# CONCLUSIONS AND GENERAL IMPLICATIONS

- The variation in Tamil pronominal pronunciation is due to phonology and not allomorphy.
  - To be accounted for: vowel quality alternations, gemination.
- The phonological derivation implies, contra Moskal (2015), multiple cycles in the derivation of the pronouns in question.
  - To be accounted for: the Inclusive, what the actual cause of the cycles is.
- If other instances of non-local allomorphy across an overt morpheme are amenable to alternative accounts then we may be able to simplify the morphosyntactic analysis : but see Moskal (2015) and Moskal & Smith (2016), among others, for patterns that are (not) clearly (not) phonological.
- Whether we posit suppletive forms or articulated phonological representations, the speaker must lexcialize something special about a particular vocabulary item. Whether we propose (seemingly small) complications to our phonological or to our morphosyntactic derivations leads to different predictions for the role of lexicalization and its effects on the linguistic system globally.

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