# Floating-μ and Defective-• Affixation in Anywa

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# Samek-Lodovicis Insight (Samek-Lodovici 1992)

Length-Changing Morphology on Vs and Cs

may both derive from μ-affixation

# Emphatic Adjectives in Shizuoka Japanese (Davis & Ueda 2002)

| | Adjective | Emphatic Form | |
|---|---|---|---|
| a. | hade | ha**n**de | 'showy' |
| | ozoi | o**n**zoi | 'terrible' |
| | nagai | na**ŋ**gai | 'long' |
| b. | katai | ka**tt**ai | 'har' |
| | osoi | o**ss**oi | 'slow' |
| | takai | ta**kk**ai | 'high' |
| c. | zonzai | z**o:**nzai | 'impolite' |
| | suppai | s**u:**ppai | 'sour' |
| | okkanai | **o:**kanai | 'scary' |

# Davis & Ueda's Problem (Davis & Ueda 2002)

What if in language L:

**Morphology$_1$** triggers length change of **C**s

but

**Morphology$_2$** triggers length change of **V**s

?

# Length-Changing Morphology in Anywa (Reh 1993)

| | **Short Root V** | **Long Root V** |
|---|---|---|
| a. **V-Shortening (Antipassive)** | ŋa̱r → ŋa̱r-o, 'growl at sth.' | pu:r → pur-o, 'cultivate,hoe sth.' |
| b. **C-Gemination (Plural)** | gwɛk → gwɛk:-i, 'kudu' | aga:r → aga:r:-ɪ, 'hunting spear' |
| c. **C-Gemination + V-Shortening (Inchoative)** | mar → ma̱r:-o, 'be green,young' | dɪ:ɲ → dɪɲ:-ɔ, 'be narrow' |
| d. **C-Gemination + V-Polarity (Frequentative)** | ban → ba:n:-ɔ, 'fold up' | ca:n → can:-ɔ, 'tell' |

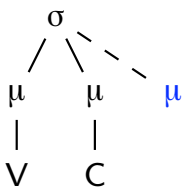
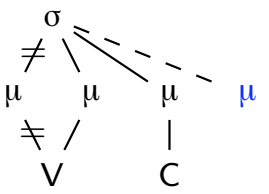
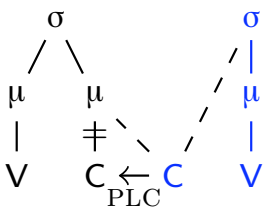
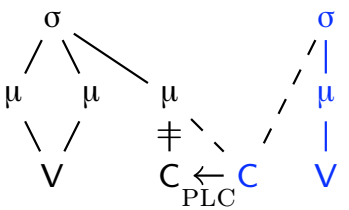
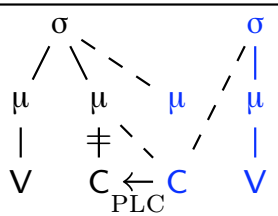
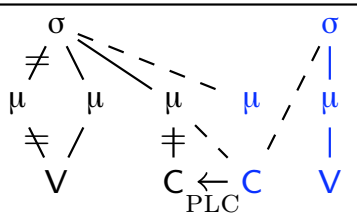
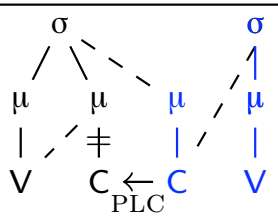
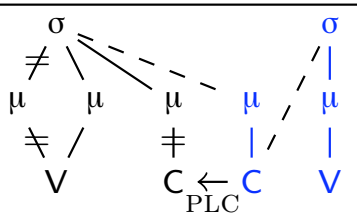
(p. 225, 223, 105, 244, 245, 247, 248)

# Claims of this Talk (for Anywa)

- Length change for Vs (shortening) derives from $\mu$-affixation
- Length change for Cs (gemination) derives from $\bullet$-affixation
- More complex patterns (gemination + V-length polarity) derive from simultaneous affixation of both

($\bullet \approx$ a bare segmental root node)

# Analysis in a Nutshell

| | **Short Root V** | **Long Root V** |
|---|---|---|
| a. **V-Shortening** |  |  |
| b. **C-Gemination** |  |  |
| c. **C-Gemination + V-Shortening** |  |  |
| d. **C-Gemination + V-Polarity** |  |  |

# Roadmap for the Talk

1. Background
   - Anywa
   - Theoretical Assumptions
2. Length-Changing Morphology in Anywa
   - V-Shortening
   - Gemination
   - Gemination + V-Shortening
   - Gemination + V-Length Polarity
3. Compensatory (Non-)Lengthening

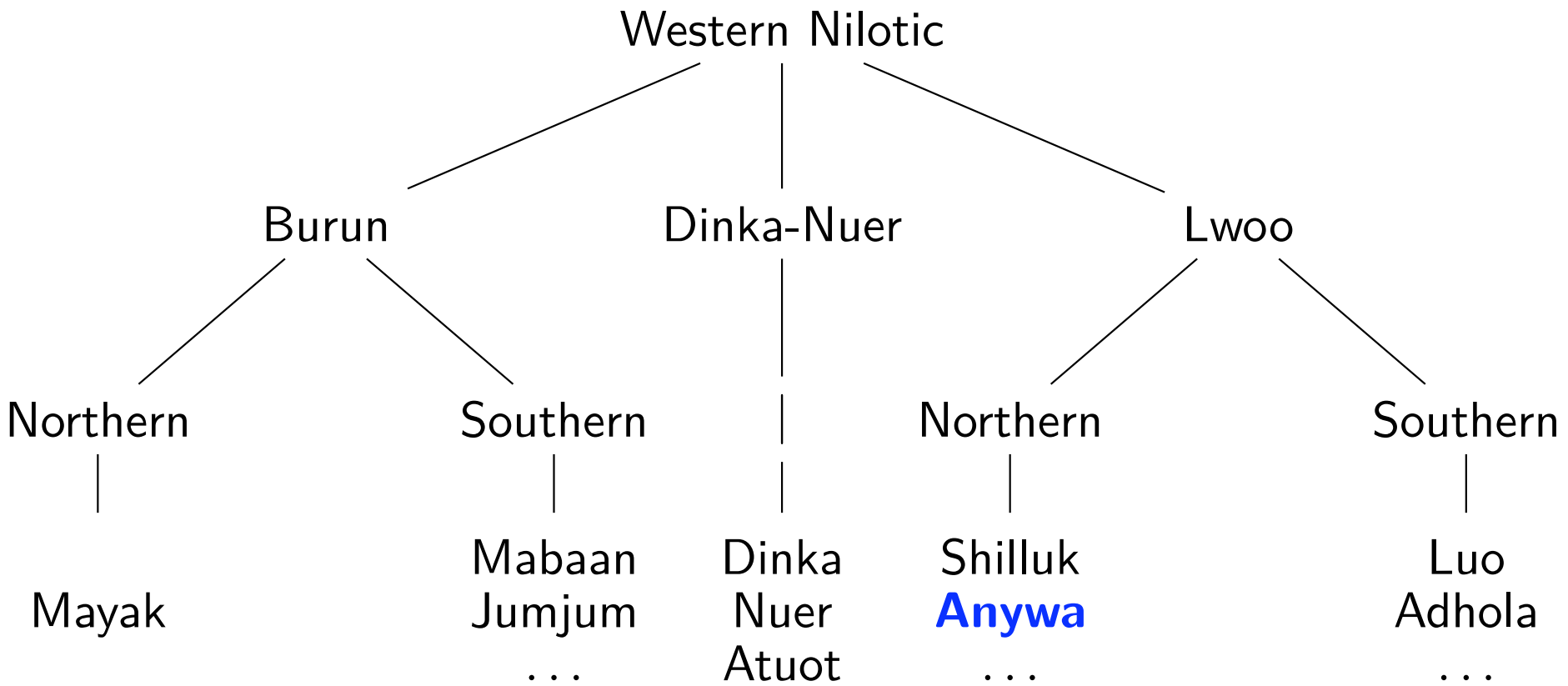
# Background

# Anywa

# Anywa

- Western Nilotic language of the Northern Lwoo sub-branch
- spoken by roughly 100.000 speakers in Sudan and Ethiopia
- Rich non-concatenative morphology crowded on monosyllabic stems (tone, vowel quality, segmental features of Cs, length)
- All data in this talk from the detailed grammar of Reh (1993)

# Western Nilotic Languages



# Anywa


Mediterranean Sea
Tunisia
Syria
Iraq
Morocco
Algeria
Libya
مصر
Egypt
Saudi Arabia
Mali
Niger
Chad
Sudan
Burkina Faso
Guinea
Ghana
Nigeria
Ethiopia
Gulf of Guinea
Somalia

# Anywa Phonology

- Complex two-tone system (systematically neglected here)
- Root-dominant [ATR]-harmony and [anterior] harmony for coronals
- Canonical shape of lexical roots: (C)VC
  Canonical shape of suffixes: -(C)V or subsegmental

# Theoretical Assumptions

# Theoretical Assumptions

- **Colored Containment:** (van Oostendorp 2006)
  Underlying material (i.e. nodes and association lines)
  is never literally deleted, but retained in the output,
  and marked as phonetically invisible.
- **Visibility of Epenthesis:** (Zimmermann & Trommer 2011)
  Epenthetic (colorless) material is phonetically visible.
- **Phonetic Connectedness:** (≈ Stray Erasure, Itô 1986)
  Only the phonology which is dominated by a designated root node
  through an uninterrupted path of phonetically visible association lines
  is phonetically pronounced.
- **Doubling:** (cf. Doubling in Correspondence Theory, McCarthy & Prince 1995)
  All markedness constraints are assumed to exist in two versions,
  one referring only to phonetically visible material,
  and one to all material in a given structure.

# Representation of Association (Zimmermann & Trommer 2011)

| Morphological association relations | | Epenthetic association relations |
|---|---|---|
| phonetically visible: | phonetically invisible: | phonetically visible: |
| X<br>\|<br>Y | X<br>≒<br>Y | X<br>⋮<br>Y |

# Axiom of Phonetic Visibility (Zimmermann & Trommer 2011)

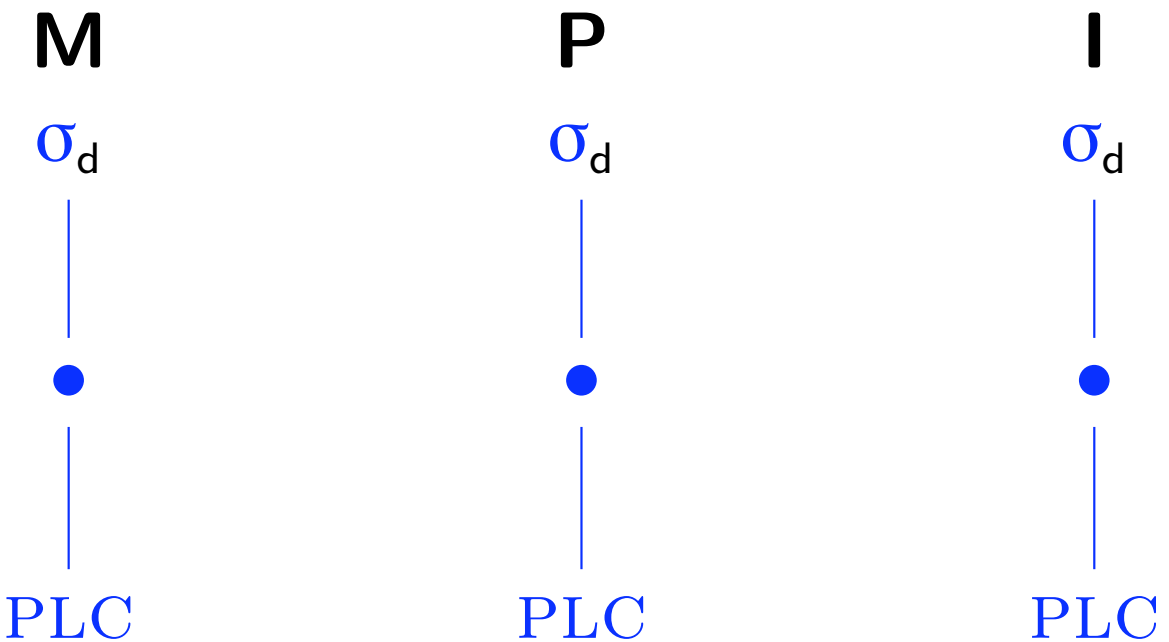
A phonological node is visible to phonetics (is in P)

if and only if

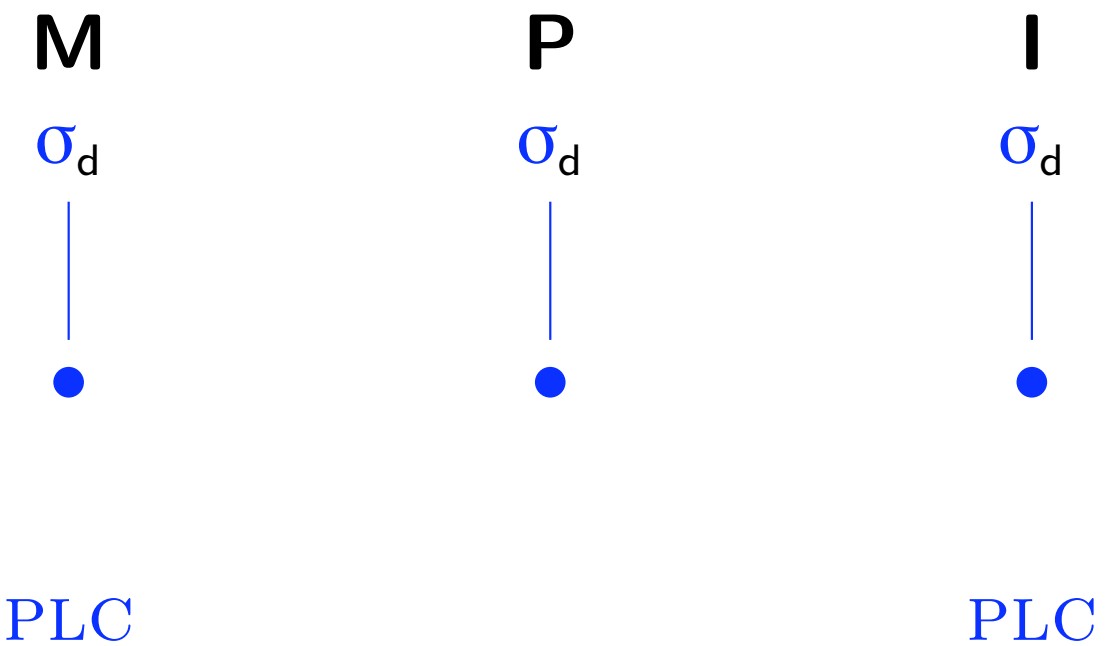
it is dominated by the designated ancestor node of the structure

through an uninterrupted path of phonetic association lines

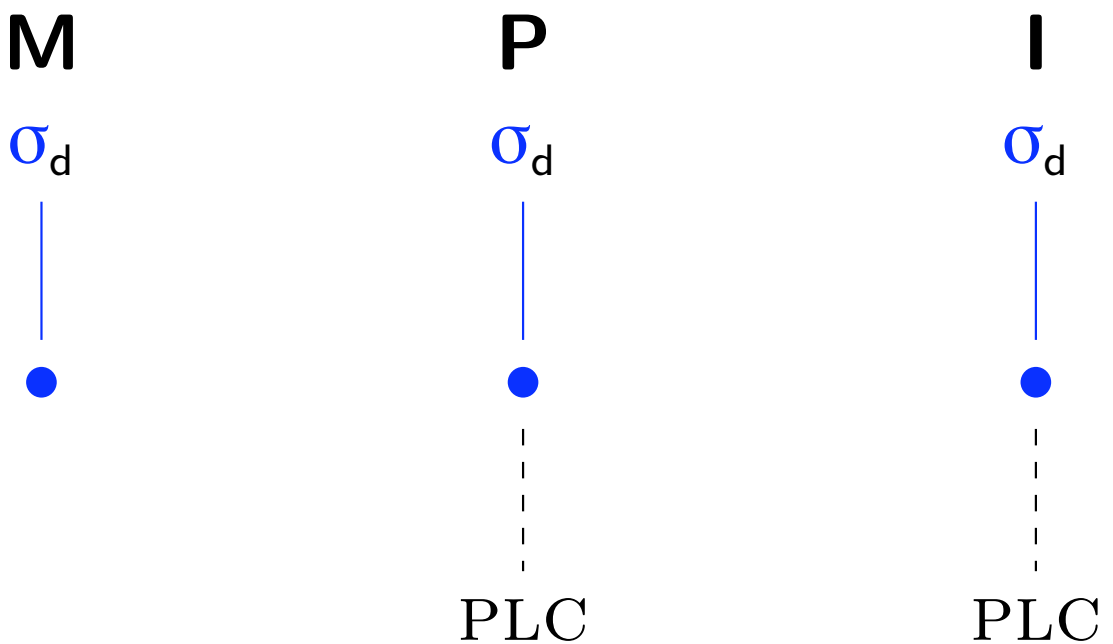
# Straight Realization of Morphological Material



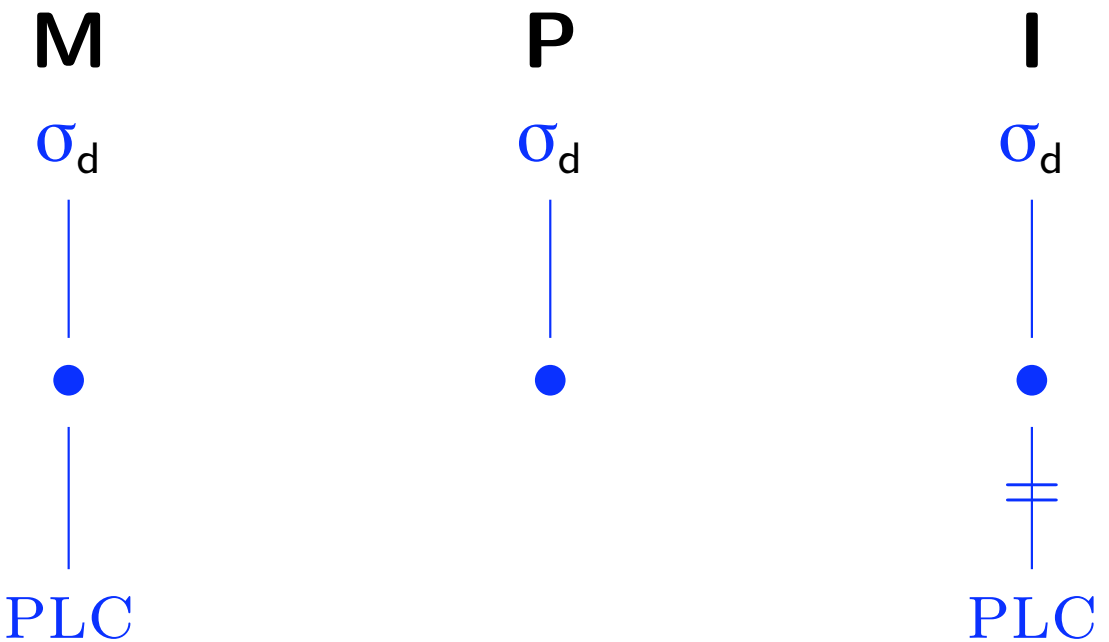
# Straight Non-Realization of Morphological Material



# Epenthesis



# Deletion



# The Cloning Hypothesis

Every markedness constraint exists in 2 incarnations:

The **general clone** refers to all structure in I

The **phonetic clone** refers only to structure in P

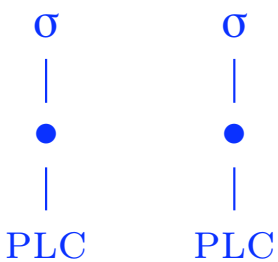
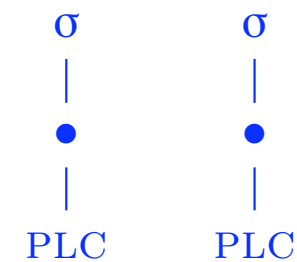
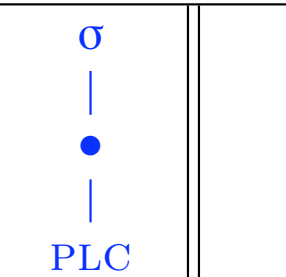
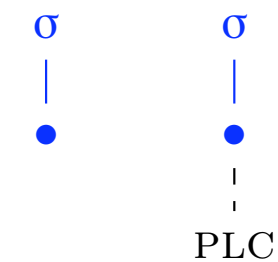
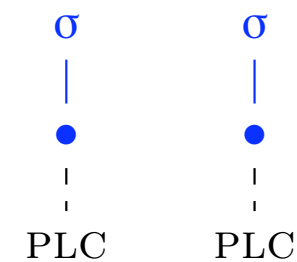
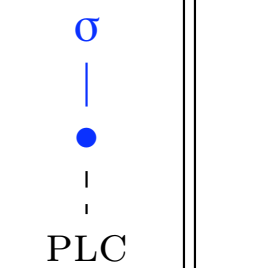
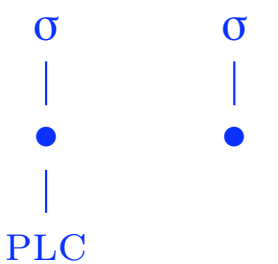
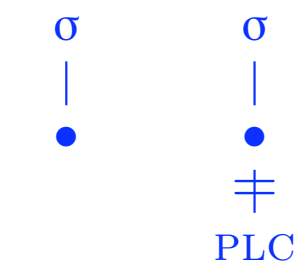
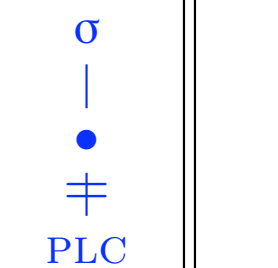
(cf. Doubling in Correspondence Theory, McCarthy & Prince 1995)

# The Cloning Hypothesis: An Example

| | | |
|---|---|---|
| $\textsc{Spec}(\bullet,\textsc{plc})$ | $\bullet \downarrow \textsc{plc}$ | Assign $*$ to every $\bullet$ which does not dominate a $\textsc{plc}$ **in I** |
| $\textsc{Spec}_{\textsc{P}}(\bullet,\textsc{plc})$ | $\bullet \Downarrow \textsc{plc}$ | Assign $*$ to every $\bullet$ which does not dominate a $\textsc{plc}$ **in P** |

($\approx$ HavePlace of McCarthy 2008)

# The Cloning Hypothesis: An Example

| M | P | I | $\textsc{Spec}_{\textsc{P}}(\bullet,\textsc{plc})$ | $\textsc{Spec}_{\textsc{P}}(\bullet,\textsc{plc})$ |
|---|---|---|---|---|
|  |  |  | ✓ | ✓ |
|  |  |  | ✓ | ✓ |
|  |  |  | * | ✓ |

# More Constraints on Faith and Association (I)

| | | |
|---|---|---|
| $\textsc{Ass}(\textsc{pl},\bullet)$ | $\overset{\bullet}{\uparrow}\ \textsc{pl}$ | Assign $*$ to every $\textsc{plc}$ which is not dominated by a $\bullet$ **in I** |
| $\textsc{Ass}_{\textsc{p}}(\textsc{pl},\bullet)$ | $\overset{\bullet}{\Uparrow}\ \textsc{pl}$ | Assign $*$ to every $\textsc{plc}$ which is not dominated by a $\bullet$ **in P** |

# More Constraints on Faith and Association (II)

| | |
|---|---|
| MAX PL | Assign $*$ to every morphological PLC which is dominated by some higher node in M but not dominated by any higher node in P |
| DEP PL | Assign $*$ to every non-morphological PLC |

| | |
|---|---|
| $\text{MAX}^{\bullet}_{\text{PL}}$ | Assign $*$ to every ordered pair (PLC,$\bullet$) in P which is associated in M, but not in P |
| $\text{DEP}^{\bullet}_{\text{PL}}$ | Assign $*$ to every ordered pair (PLC,$\bullet$) in P which is associated in P, but not in M |

# More Constraints on Faith and Association (III)

| | |
|---|---|
| $_{\text{PLC}}{}^{*}\text{C}_{\text{PLC}}$ | Assign $*$ to every C which is associated to more than one PLC |
| $^{*}_{\bullet}\text{PLC}_{\bullet}$ | Assign $*$ to every PLC which is associated to more than one $\bullet$ |

(C $=_{\text{abbr}}$ a [+cons] $\bullet$)

# Length-Changing Morphology in Anywa

# Key Ideas of the Analysis

- **Maraudage:**
  Floating material supersedes underlyingly associated material to satisfy general ASSOCIATE constraints

- **Derived-Environment Effects:**
  Affix material can only be associated to tautomorphemic material if it is also associated to heteromorphemic material

# Length-Changing Morphology in Anywa

| | **V Shortening** | **V-Length Polarity** | – |
|---|---|---|---|
| **C-Gemination** | Inchoative | Frequentative | Plural -Cɪ |
| – | Antipassive | – | |

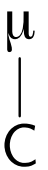
# Length-Changing Morphology in Anywa: Representations

a. C

b. μ

c.



d.


# Length-Changing Morphology in Anywa

(1)

| | **V Shortening** | **V-Length Polarity** | – |
|---|---|---|---|
| **C-Gemination** | μ<br>C | μ<br>\|<br>C | C |
| – | μ | – | |

# V-Shortening

# Antipassive: Vowel Shortening without Gemination

a. **V:** ⇒ **V**

| | | | |
|---|---|---|---|
| ri:w | ⇒ | riw | 'to lay sth. crosswise' |
| ma:t̚ | ⇒ | mat̚ | 'drink sth.' |

b. **V** ⇒ **V**

| | | | |
|---|---|---|---|
| cam | ⇒ | cam | 'eat sth.' |
| ŋɔl | ⇒ | ŋol | 'cut sth. off' |

(In addition, in antipassives, base Vs get [+ATR])

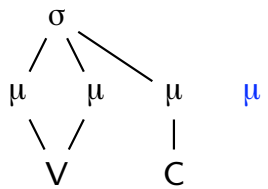
# Antipassive V-Shortening: Constraints

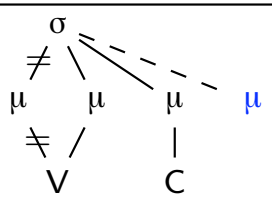
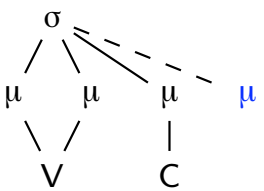
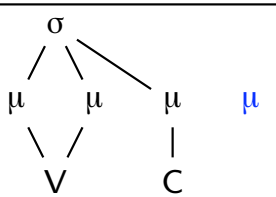
$\begin{matrix}\sigma \\ \uparrow \\ \mu\end{matrix}$ Assign $*$ to every $\mu$ which is not dominated by a $\sigma$ in I

$*\underline{\sigma}_{4\mu}$ Assign $*$ to every $\sigma$ which dominates more than 3 $\mu$s in P

# Antipassive: Shortening of Long Vs

**Input:**




| | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\sigma_{\leq 4\mu}$ | $*_{\mu}C_{\mu}$ | $*\bullet\odot$ | $\text{MAX}_{\mu_C}$ | $\mu_C \Downarrow \bullet$ | $\mu \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|
| ☞ a.  | | | | | | | * |
| e.  | | *! | | | | | * |
| f.  | *! | | | | | | * |

# Antipassive V-Shortening: Constraints

$\overset{*}{\mu}C\mu$ Assign $*$ to every C which dominates more than 1 $\mu$ in I

$\overset{*}{\odot}\bullet\odot$ Assign $*$ to every $\bullet$ which is dominated by more than 1 $\odot$ in I

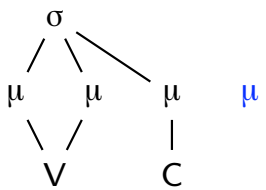
($\odot =_{abbr}$ ancestor node $=_{abbr}$ node which is not dominated by any other node)

# Antipassive V-Shortening: Constraints

| | |
|---|---|
| $\textsc{Max}$ $\mu_c$ | Assign $*$ to every $\mu_c$ in I which is not in P |
| $\mu_c$ $\Downarrow$ $\bullet$ | Assign $*$ to every $\mu_c$ in I which does not dominate a $\bullet$ in P |

($\mu_c$ $=_{\text{abbr}}$ a $\mu$ which dominates a C)

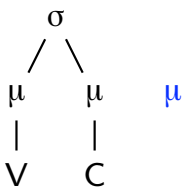
# Antipassive: Shortening of Long Vs



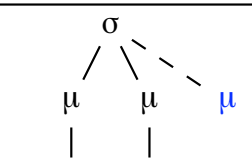
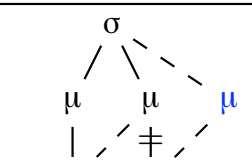
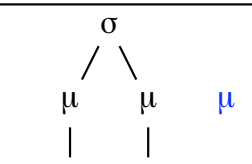

**Input:**

| | $\overset{\sigma}{\uparrow}\mu$ | $*\underline{\sigma}_{4\mu}$ | $*_{\mu}C_{\mu}$ | $*\odot\bullet\odot$ | $\textsc{Max}\ \mu_c$ | $\mu_c \Downarrow \bullet$ | $\mu \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|
| ☞ a. | | | | | | | * |
| b. | | | | | *! | * | |
| c. | | | | *! | | | |
| d. | | | *! | | | | |

# No Phonetic Changes with Short Vs




**Input:** V C

| | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\sigma_{\underline{\ }4\mu}$ | $*_{\mu}C_{\mu}$ | $*_{\odot}\bullet\odot$ | $\text{MAX}_{\mu_c}$ | $\mu_c \Downarrow \bullet$ | $\mu \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|
| ☞ a.  | | | | | | | * |
| b.  | | | *! | | | | |
| c.  | *! | | | | | | * |

# Underlying Logic

**Maraudage:**

A morphologically associated node *N* is deassociated

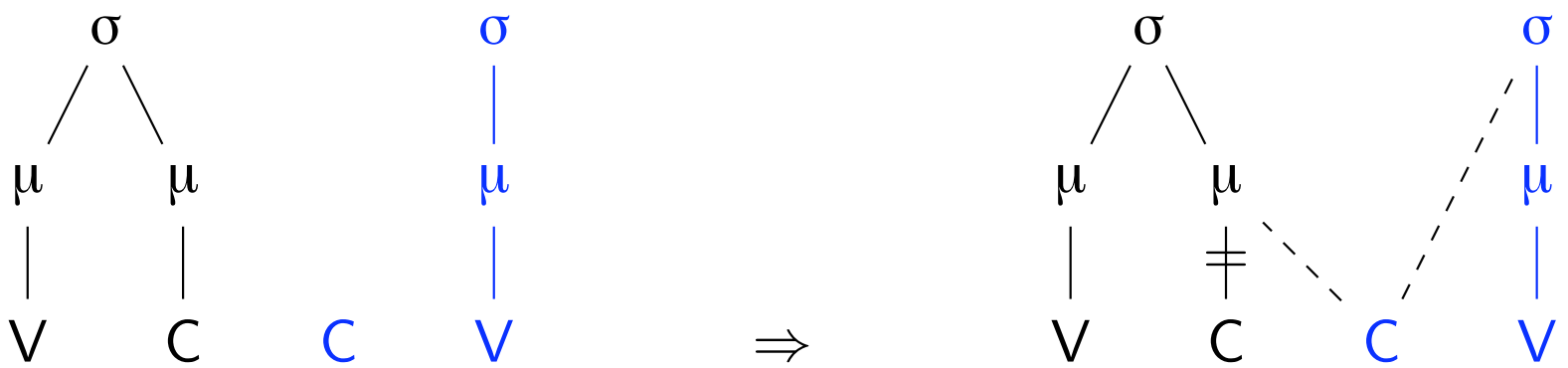
to enable association of a concurring floating node

# Gemination

# Gemination without Change of Vowel Length (Plural -Cɪ)

| **Singular** | **Plural** | |
|---|---|---|
| ruo**t̪** | ruo**t̪**ːi | ‘king(s)’ |
| **t̪im** | **t̪im**ːi | ‘jungle(s)’ |
| gwɛ**k** | gwɛ**k**ːɪ | ‘kudu(s)’ |
| agaː**r** | agaː**r**ːi | ‘hunting spears(s)’ |

# Gemination by • -Affixation



# Main Ingredients of the Analysis

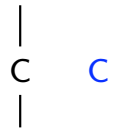
- PLC **Maraudage:**
  The floating C steals the PLC node of the base-final C
  ⇒ Deletion of stem-final C

- **Derived-Environment Gemination:**
  The floating C must associate to the C-mora of the base to serve as an onset of the following V
  ⇒ Gemination of affix-initial C

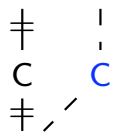
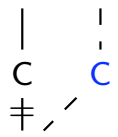
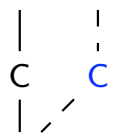
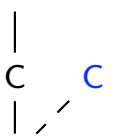
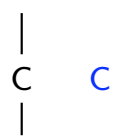
# PLC Maraudage: Constraints

| | |
|---|---|
| CodaCondition | Assign $*$ to every consonantal PLC which is dominated by a C in non-prominent position (a word-internal coda) in I |
| $\overset{*}{\odot}\text{PLC}_{\odot}$ | Assign $*$ to every PLC which is dominated by more than one $\odot$ in I |
| $\bullet \downarrow \text{PLC}$ | Assign $*$ to every $\bullet$ which does not dominate a PLC in I |
| $\bullet \Downarrow \text{PLC}$ | Assign $*$ to every $\bullet$ which does not dominate a PLC in P |

# PLC Maraudage: Evaluation




**Input:** PLC

| | ↓PLC | *⊙PLC⊙ | COD CON | ⇓PLC | MAX$^{\pi}_{\bullet}$ |
|---|---|---|---|---|---|
| ☞ b.  | | | | | * |
| d.  | | | | *! | |
| e.  | | | *! | | |
| f.  | | *! | | | |
| g.  | *! | | | | |

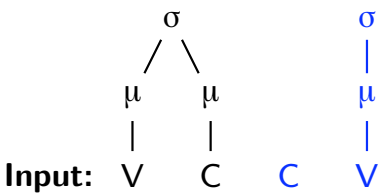
# Derived-Environment Gemination: Constraints

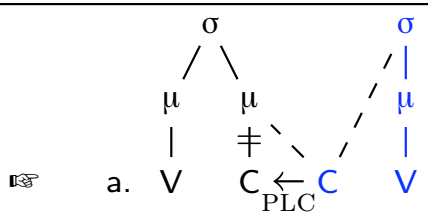
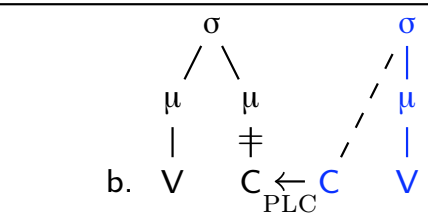
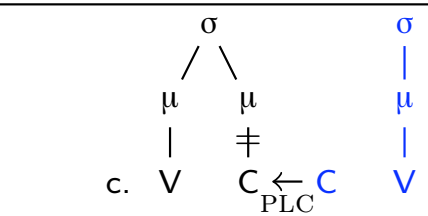
$\mathrm{DE}^{\sigma}_{C}$ Assign $*$ to every morphological consonant which is linked epenthetically to a $\sigma$ of the same color and is not linked phonetically to a $\sigma$ of a different color

$\mathrm{DE}^{c}_{\mu}$ Assign $*$ to every morphological $\mu$ which is linked epenthetically to a C $\bullet$ of the same color and is not linked phonetically to a C $\bullet$ of a different color

(cf. Alternation in van Oostendorp 2007)

# Derived-Environment Gemination: Evaluation




| | Ons | $DE^{\sigma}_{C}$ | $DE^{C}_{\mu}$ | *C: | $\mu_C \Downarrow \bullet$ | Max C |
|---|---|---|---|---|---|---|
| ☞ a.  | | | | * | | * |
| b.  | | *! | | | * | * |
| c.  | *! | | | | * | * |

# Gemination + V-Shortening

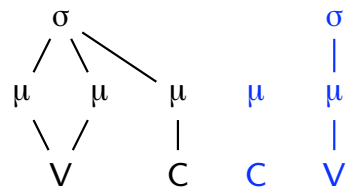
# Inchoative: Gemination + V-Shortening

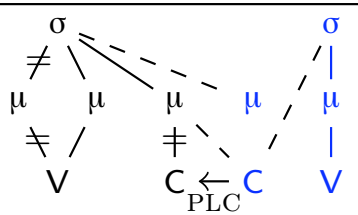
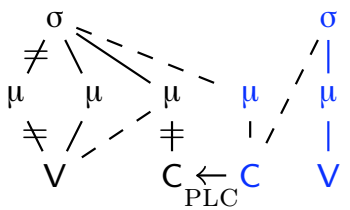
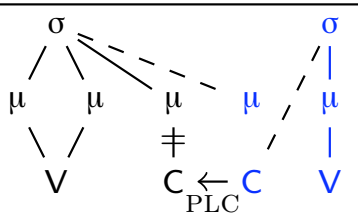
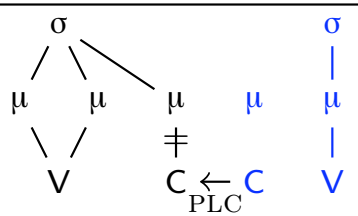
| **Basic Verb** | | **Inchoative** | |
|---|---|---|---|
| diːɲ | 'be narrow' | diɲːo | 'become narrow' |
| baːr | 'be long,tall' | baɲːo | 'become long,tall' |
| kwaːr | 'be red' | kwaɲːo | 'become red' |

(Additionally, In inchoatives, Vs of base roots get [+ATR] and final Cs nasal)

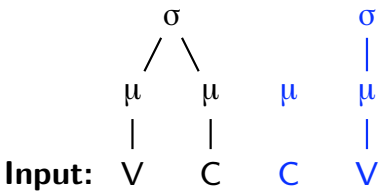
# Inchoative with Long Root Vs: Gemination + Shortening

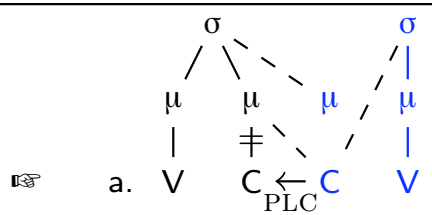
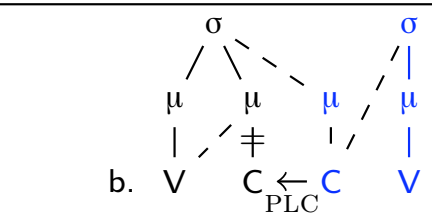
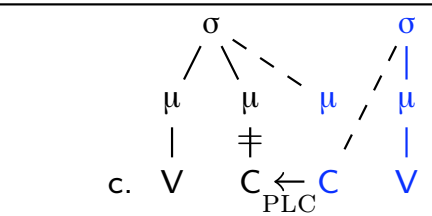
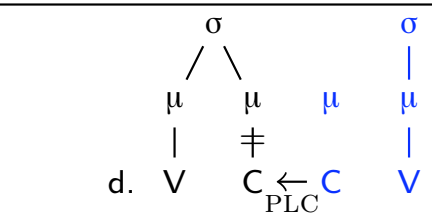
**Input:**




| | | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\sigma_{\underline{\ }4\mu}$ | $*_{\mu}C_{\mu}$ | Ons | $DE^{\sigma}_{C}$ | $DE^{C}_{\mu}$ | *C: | Max $\mu_c$ | $\mu_c \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|---|---|---|
| ☞ | a.  | | | | | | | | | * |
| | b.  | | | | | | *! | | | |
| | c.  | | *! | | | | | | | * |
| | d.  | *! | | | *! | | | | | * |

# Inchoative with Short Root Vs: Gemination Only




| | $\overset{\sigma}{\uparrow}\mu$ | $*\sigma_{\not\subseteq 4\mu}$ | $*\overset{*}{\mu}C\mu$ | Ons | $DE^{\sigma}_{C}$ | $DE^{C}_{\mu}$ | *C: | Max $\mu_C$ | $\mu_C \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|---|---|
| ☞ a.  | | | | | | | * | | * |
| b.  | | | | | | *! | * | | |
| c.  | | | | | *! | | | | * |
| d.  | *! | | | *! | | | | | * |

# Gemination + V-Length Polarity

# Frequentative: Gemination + V-Length Polarity

a. **V:C ⇒ VC:**

| | | | |
|---|---|---|---|
| ca:n | ⇒ | can:ɔ | ‘tell’ |
| ka:t | ⇒ | kat:ɔ | ‘weave basket’ |

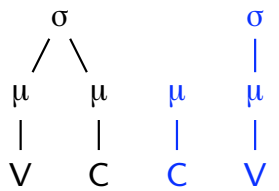
b. **VC ⇒ V:C:**

| | | | |
|---|---|---|---|
| ŋɔl | ⇒ | ŋɔ:l:ɔ | ‘cut’ |
| buŋ | ⇒ | bu:ŋ:o | ‘cover tightly’ |

(In addition, in frequentatives, base Cs get partially nasal)

# Gemination + V-Polarity: Basic Analysis

- Affix C and μ are morphologically associated:



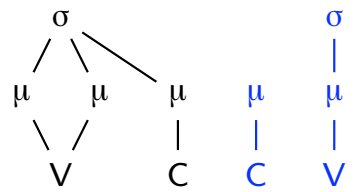

- The affix-μ associates to the base-σ
  leading again to shortening of long base vowels

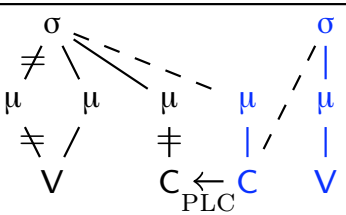
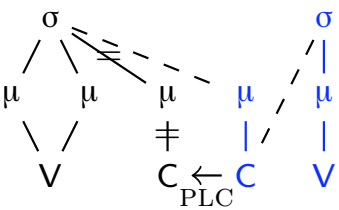
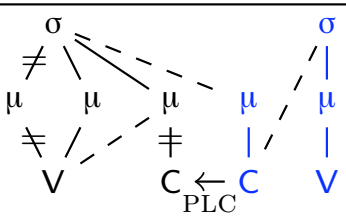
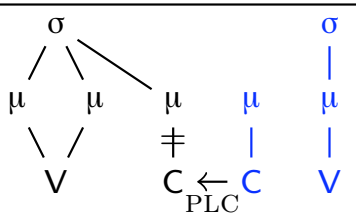
- Due to $\overset{*}{\mu}C_{\mu}$ and association to the homomorphemic μ
  affix C cannot associate to the coda-μ of the base

- This leaves the coda-μ of the base free to associate to the base V

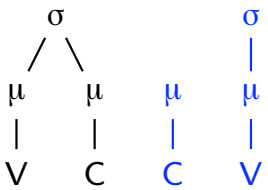
# Frequentative: Gemination + Shortening of Long Vs

**Input:**

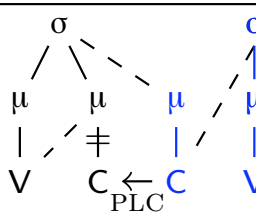
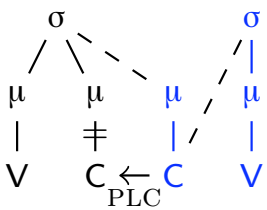
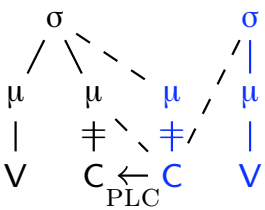
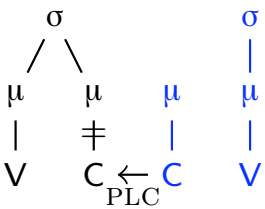



| | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\sigma_{\underline{\quad}4\mu}$ | $*V_{3\mu}$ | $*C_{\mu}$ | Ons | $DE^{\sigma}_{C}$ | $DE^{C}_{\mu}$ | *C: | Max $\mu_C$ | $\mu_C \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|---|---|---|
| ☞ a.  | | | | | | | | * | | * |
| b.  | | | | | | | | * | *! | * |
| d.  | | | *! | | | | | * | | |
| f.  | *! | | | | *! | | | | * | |

# Frequentative: Gemination + Lengthening of Short Vs




**Input:** V C C V

| | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\sigma_{\geq 4\mu}$ | $*V_{3\mu}$ | $*_{\mu}C_{\mu}$ | Ons | $DE^{\sigma}_{C}$ | $DE^{C}_{\mu}$ | *C: | Max $\mu_C$ | $\mu_C \Downarrow \bullet$ |
|---|---|---|---|---|---|---|---|---|---|---|
| ☞ a.  | | | | | | | | * | | |
| b.  | | | | | | | | * | | *! |
| c.  | | | | *! | | | | * | | * |
| e.  | *! | | | | *! | | | | * | * |

# Compensatory (Non-)Lengthening

# Compensatory (Non-)Lengthening: Basic Observations

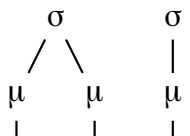
In Anywa:

- Only μs which are morphologically associated to a • associate phonetically to a (possibly different) •
- A μ which is morphologically associated to • X can only associate to • Y if X is deleted

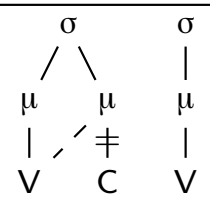
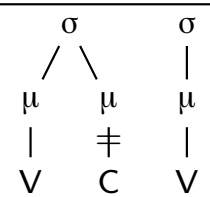
# Compens. Lengthening with Intervocalic Dorsal Deletion

| **Singular** | **Plural** | |
|---|---|---|
| kac | kaː-ɛ | ‘harvest(s)’ |
| d̻ak | d̻aː-e | ‘pot(s)’ |

# Compensatory Lengthening under Coda-C Deletion

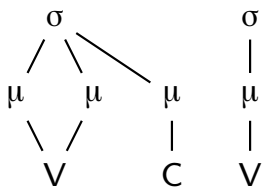


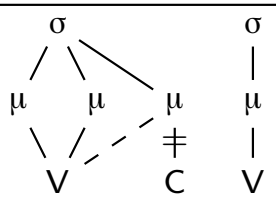
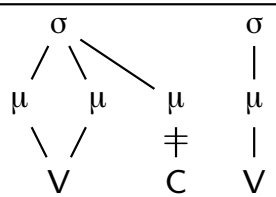

**Input:** V C V

| | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\sigma_{\overline{4\mu}}$ | $*V_{3\mu}$ | $*_{\mu}C_{\mu}$ | $*\bullet\odot$ | $\text{MAX}_{\mu_c}$ | $\overset{\mu_c}{\Downarrow}_{\bullet}$ | $\text{DEP}^{\mu}_{\bullet}$ |
|---|---|---|---|---|---|---|---|---|
| ☞ a.  | | | | | | | | * |
| b.  | | | | | | | *! | |

# No Compensatory Lengthening for Long Root Vs

**Input:**




| | $\overset{\sigma}{\uparrow}_{\mu}$ | $*\underline{\sigma}_{4\mu}$ | $*V_{3\mu}$ | $*\overset{*}{\mu}C_{\mu}$ | $\overset{*}{\odot}\bullet\odot$ | $\textsc{Max}_{\mu_C}$ | $\mu_C \Downarrow \bullet$ | $\textsc{Dep}^{\mu}_{\bullet}$ |
|---|---|---|---|---|---|---|---|---|
| a.  | | | *! | | | | | * |
| ☞ b.  | | | | | | | * | |

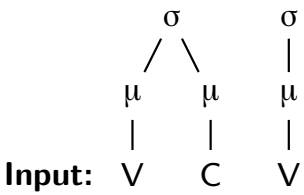
# No Compensatory Lengthening under Resyllabification

| **Singular** | **Plural** | |
|---|---|---|
| gwaŋ | gwaŋ-ɛ | ‘wildcat(s)’ |
| kɔp | kɔp-ɛ | ‘sheath(es)’ |
| atut | atut-e | ‘neighbor(s)’ |

# Crucial Constraint

$*_{n}\mu_{o}$ Assign $*$ to every $\mu$ which is associated to a nucleus V and an onset C in I

# No Compensatory Lengthening with Resyllabification




**Input:** V C V

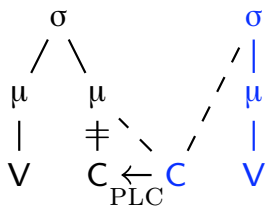
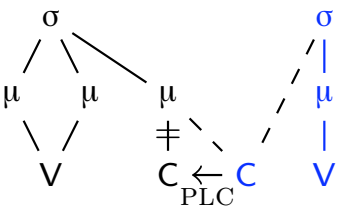
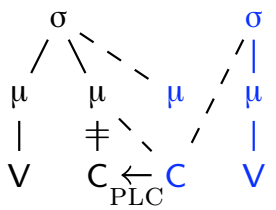
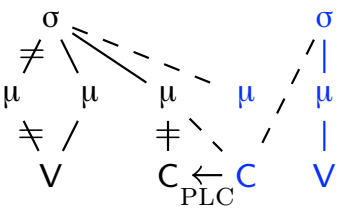
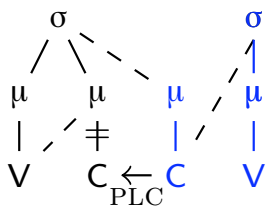
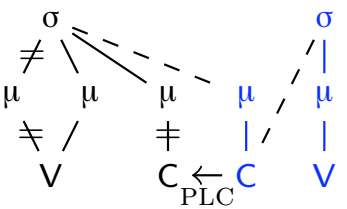
| | σ ↑ μ | *σ–4μ | Ons | *ɲμo | *C: | Max μc | μc ⇓ ● | μ ⇓ ● |
|---|---|---|---|---|---|---|---|---|
| ☞ a. V C V | | | | | | | * | |
| b. V C V | | | | *! | | | | |
| c. V C V | | | | | *! | | | |
| d. V C V | | | *! | | | | | |

# Compens. Lengthening in Morphological Gemination

Compensatory Lengthening is blocked if the coda-$\mu$ of the base reassociates to the (onset C) of the affix

Otherwise Compensatory Lengthening takes place

# Compens. Lengthening in Morphological Gemination

| | **Short Root V** | **Long Root V** |
|---|---|---|
| a. **C-Gemination** |  |  |
| b. **C-Gemination + V-Shortening** |  |  |
| c. **C-Gemination + V-Polarity** |  |  |

Coda μ --→ Onset C

No Compens. Length.

Compens. Length.

# Summary

- Vowel length alternations in Anywa are triggered directly by μ-affixation
- Consonant length alternations are triggered indirectly by • -affixation
- Partial interaction of both processes via μs and Compensatory Lengthening

# Consequences

- Predictions of the Constraint Ranking:
  - Anywa cannot have morphological V-lengthening
  - Anywa cannot have V-length polarity without gemination

- μs are always involved in length-changing morphology, but are not always its underlying triggers

- Compensatory lengthening is triggered by the requirement to reassociate *previously* associated μs, not to associate *any* μ

# References


- Itô, Junko (1986) Syllable theory in prosodic phonology. PhD thesis, UMass.
- McCarthy, John (2008) The gradual path to cluster simplification. Phonology 25, 271-319.
- McCarthy, John & Alan Prince (1995), Faithfulness and Reduplicative Identity, University of Massachusetts Occasional Papers in Linguistics, 249-384.
- Samek-Lodovici, Vieri (1992) A Unified analysis of crosslinguistic morphological gemination. Proceedings of CONSOLE 1.
- van Oostendorp, Marc (2006) A Theory of Morphosyntactic Colours. Ms., Meertens Institute, Amsterdam.
- van Oostendorp, Marc (2007) Derived environment effects and consistency of exponence. In: Blaho, S., Bye, P., Krämer, M. (eds.), Freedom of Analysis? Mouton de Gruyter Berlin/New York, 123–148.
- Reh, Mechthild (1993), Anywa Language, Köln: Rüdiger Köppe Verlag.
- Trommer, Jochen & Eva Zimmermann (2011) Generalized Mora Affixation. Ms., University of Leipzig.

# Overview