

HO 14# final remarks on Prosodic morphology and root and pattern morphology ch#8 (Katamba)

Lexical morphology is all about prefixation and suffixation.

For infixation we need to make use of prosodic morphology which majorly relies upon the theoretical assumptions made in the generative model known as auto segmental phonology.

Auto segmental phonology

Originally goldsmith 1990

Phonological representations consist of several independent layers of representation or tiers.

It provides a formal mean to represent these autonomous tiers

In morphology multi layered representation has been articulated in LM ‘democrat ~ demo’cratic

Mapping principles

AP was initially started with the representation of tones

Stress is independent of vowels and consonants, in tonal languages tone is an independent prosody

Tone is represented on the tonal tier and vowels and consonants are represented on the segmental tier. Process alteration in one tier may not affect the other tier.

Luganda when two vowels are adjacent the first one gets deleted if it is high.

kusa ‘to grind’ kuse:ebyo ‘to grind those’

Segmental tier kusa ebyo → kuse:byo



Tonal tier L H L H L H L H

If tone is inherent to vowels then the tone should have demised but that’s not the case.

Phonological representations consist of segments like stress, tone like supra segmental features and vowels and consonants like segments but on separate tiers. Representations are at different tiers but tiers are not isolable.

The hierarchy is thus

Tonal tier H L

Skeletal tier V V

Segmental tier a i

Notations

An unbroken is prelinking

A broken association is linking

A crossed through is delinking

[Bracket indicates boundaries]

There is no need of one to one correspond between the tiers

Elements at one tier may be associated with many elements at a different tier. eg. Contour tones

Are there constraints?

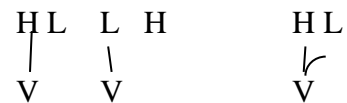
Yes AP has given mapping principles and are said to be a part of UG Mapping principles are given in the form Universal linking convention by pulleyblank 1986 and Well formedness condition WFC by Goldsmith

The WFC for tone has been given as follows

1. all vowels are associated with at least one tone
2. All tones are associated with at least one vowel
3. Association line do not cross

WFC safeguards phonotactic constraints, it ensures restriction on the combination of phonological elements are not violated

Universal linking condition



For Pulleyblank this association is non automatic. There are language specific constraints whether an unassociated tone spreads over an adjacent vowel or not.

Morphology also requires these non automatic constraints

Universal Linking condition

1. Link a sequence of auto segments e.g. tones with a series of elements on the skeletal tier that are capable of bearing them, link with vowels
2. Perform the linking going from the beginning to the end of the word, Unless specific instructions are given in the grammar of the language to do otherwise, link auto segments i.e tones with those autosegments vowels in an one to one fashion
3. Association lines do not cross in the linking process.



The skeletal tier

Why do we need this? not only tones are spread over but the segments can also occupy more than one slot. Thus in luganda germination arises



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Root and Pattern Morphology

In terms of morphological typology we have discussed four principle methods
 1) Affixation 2) compounding 3) conversion 4) Polysynthesis however these are not exhausted.

There are processes such as infixation and reduplication which are prevalent morphological processes.

Traditional morphological theories don't offer a satisfactory method for explaining these. Prosodic morphology accounts for these.

Arabic Binyanim

In Semitic languages, Words are formed by modifying the root itself internally and simply not by concatenation.

Root internal word formation system

Infixation of the root

Kataba 'he wrote'

Modification of the root

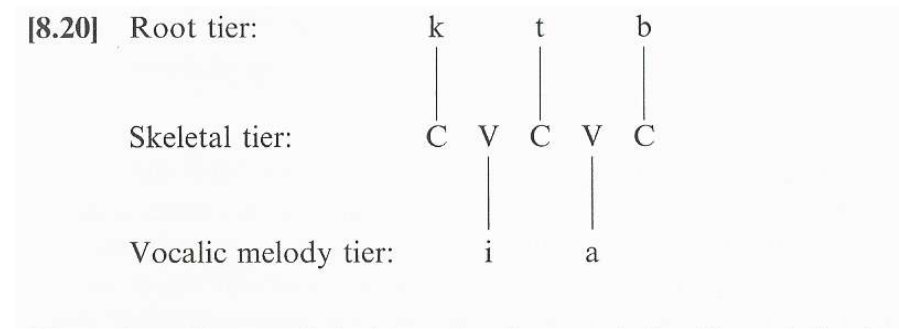
Kattaba 'he caused to write'

Maktabun 'office'

In Arabic verb forms are assigned to one of the fifteen derivational classes or binyanim singular binyan each binyan brings its own vocalism i.e. vowels further consonants.

Prosodic and non-concatenative morphology (initiated by McCarthy 1979, 81)

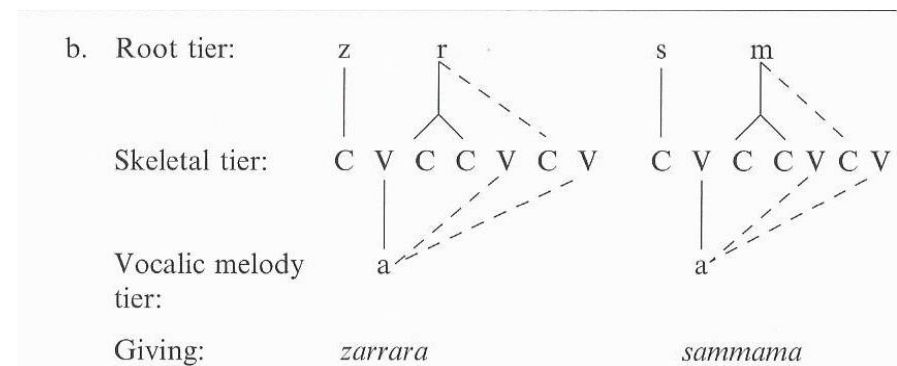
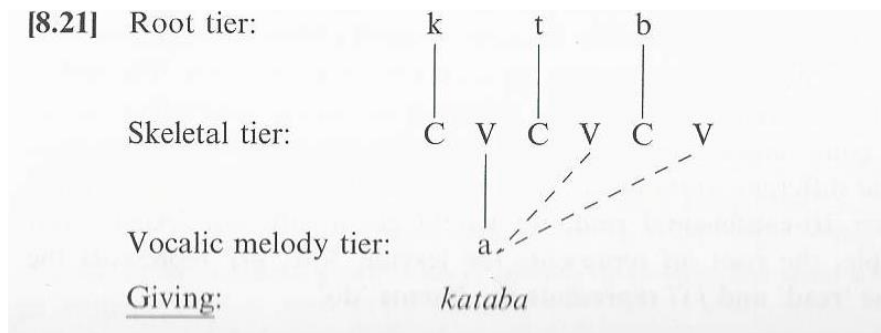
Semitic morphology requires three independent layers for analysis. Root tier (consonantal tier), the skeletal tier and vocalic melody tier.



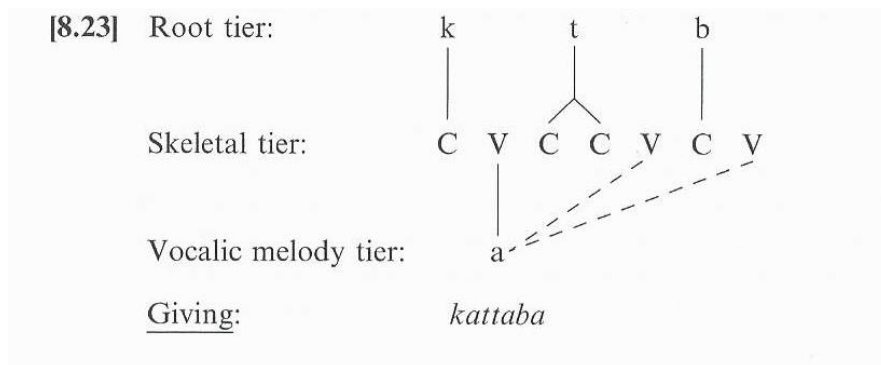
The skeletal tier is also referred to as prosodic template tier. It plays a crucial role in the sense to extract from each derivational and inflectional class of words.

The vocalic melody tier provides information analogous to that carried in English by affixes such as tense, voice or aspect.

Derivation of past tense with/a/

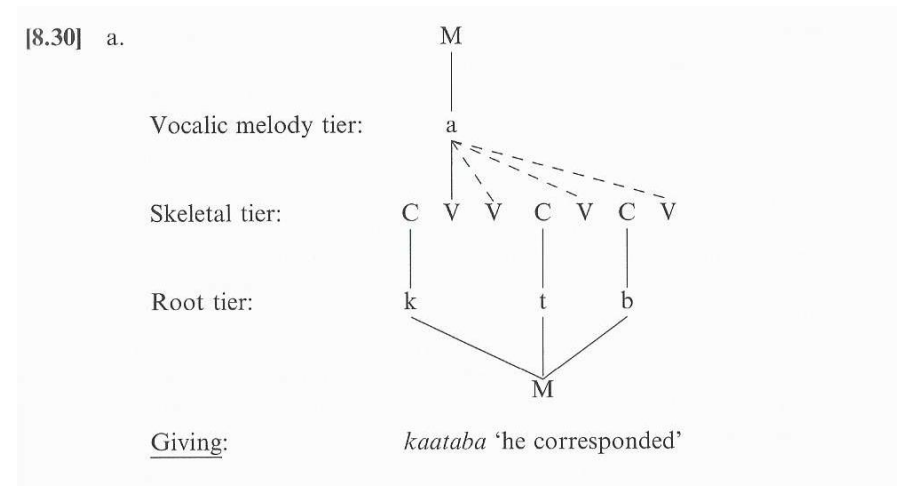


For kattaba (he corresponded)



The morpheme tier hypothesis

In the lexicon, the representation of each morpheme in a word occupies a separate tier so they contain another tier called the morpheme tier.



OCP

McCarthy argues that verb roots like zr 'pull' and sm 'poison' contain just two consonants underlyingly since *zrr and *smm sequence are disallowed by the obligatory contour principle which states that 'at the melodic level, adjacent identical elements are prohibited.

Derivation

Prosodic morphology provides a framework for Semitic word formations.

The patterns of infixing in Arabic binyanim are treated as association between morphological cv templates on the skeletal tier with segments and vocal melodic tier on the other.