Tonological processes and autosegmental representation in Àhàn

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Abstract
Out of the constituents of the Akokoid cluster of the Defoid group of languages (Bendor-Samuel, K. Williams 1989: 261), Àhàn language, spoken by people around Èkìtì/Kogi States boundaries of Nigeria is one of those yet to be comprehensively phonologically tonologically researched. Infact it is an endangered language. This paper examines empirically the tonological processes in Àhàn. The theoretical framework used is Goldsmith's autosegmental theory (Goldsmith, 1976). The tonological processes of tonal elision, contour formation, tone polarization, tonal contraction and floating tones were examined and established for the Àhàn tonology.

Conventions

C – Consonant; V - Vowel; T - Tone; ´ - High tone; ` - Low tone; - Mid tone; / / - Phonemic Representation; [ ] - Phonetic Representation; ~ -Nasal/Nasal Bed; → - to be realized as; I - Association line; H - High tone; M - Mid tone; L - Low tone; Seg. tier - Segmental tier; Tonal seg. - Tonal segmentalization.

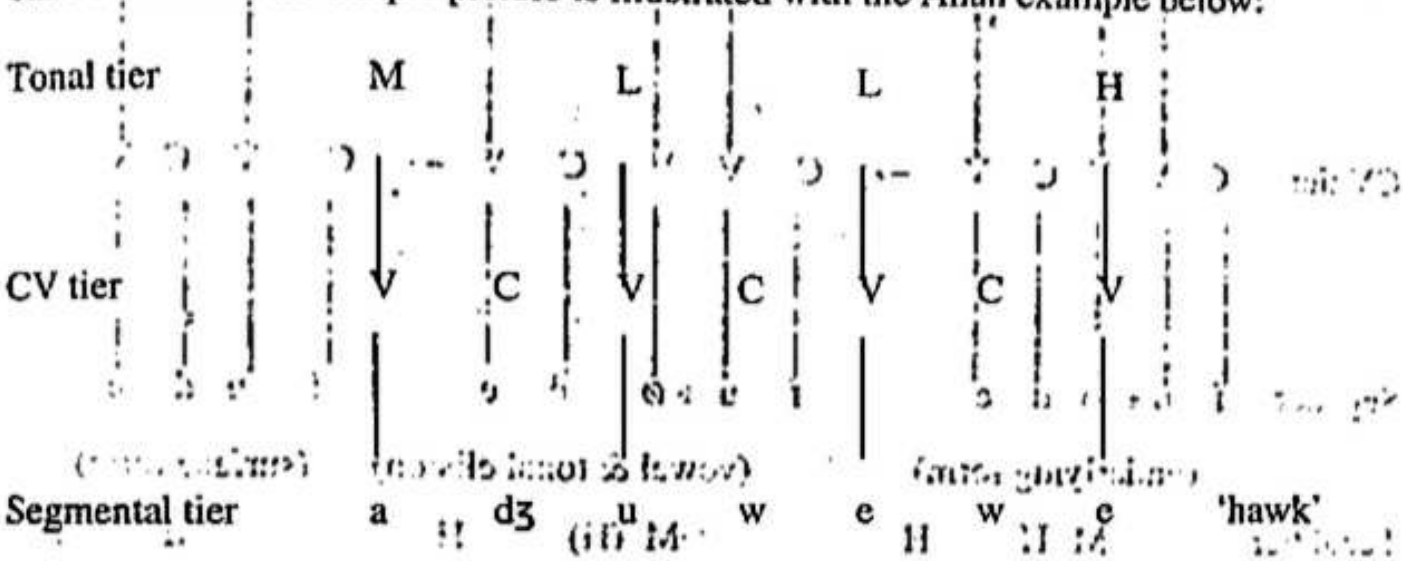
Introduction

Though Àhàn people do not share mutual intelligibility with Èkìtì people of Nigeria, they are indigenes of Èkìtì State (precisely Òmùò-Èkìtì, Èkìtì East Local Government Area of Nigeria, West Africa) and they speak Yorùbá fluently. Tone is an important suprasegmental element in African languages (Àhàn inclusive). Pike (1948) refers to tone as a lexically significant pitch in an utterance. In other words, it is used to make lexical and grammatical distinctions. Similarly, pitch variations are natural elements in languages, but if the variations are not contrastive, then, such languages are not considered tonal languages. For instance, English Language, though having pitch distinctions is not considered a tone language simply because, in the overwhelming majority of phrases, pitch does not change meaning of words.

Tone plays both lexical and grammatical functions in most African languages. Tone also marks possessives, interrogatives and even negation. Autosegemental representation differs from familiar generative and traditional phonemic representation in that it consists of two or more tiers of segments. In the picture given

to us by classical generative phonology and phonological representation, they consist of string of segments. In autosegmental representation, however, we posit two or more parallel tiers of phonological segments.

In the case of tone languages, for example, Àhàn, tones are represented on a separate tier – the tonal tier – and on this tonal tier each segment is specified for tone and for nothing else. The segments on the other non-tonal tier are specified for all other features. This simple picture is illustrated with the Àhàn example below:



Tonological processes in Àhàn

Tonological processes are changes that come about when tones interact in speech. The processes could be assimilatory or non-assimilatory. However, a number of tonologial processes that Àhàn exhibits are explained and represented below:

Tonal elision

This occurs when two words are juxtaposed across morpheme boundary and the initial vowel of the second word gests elided. When a floating tone is not joined to the next vowel, it is deleted. It can therefore be said that often times vowel elision causes tonal elision in Àhàn.

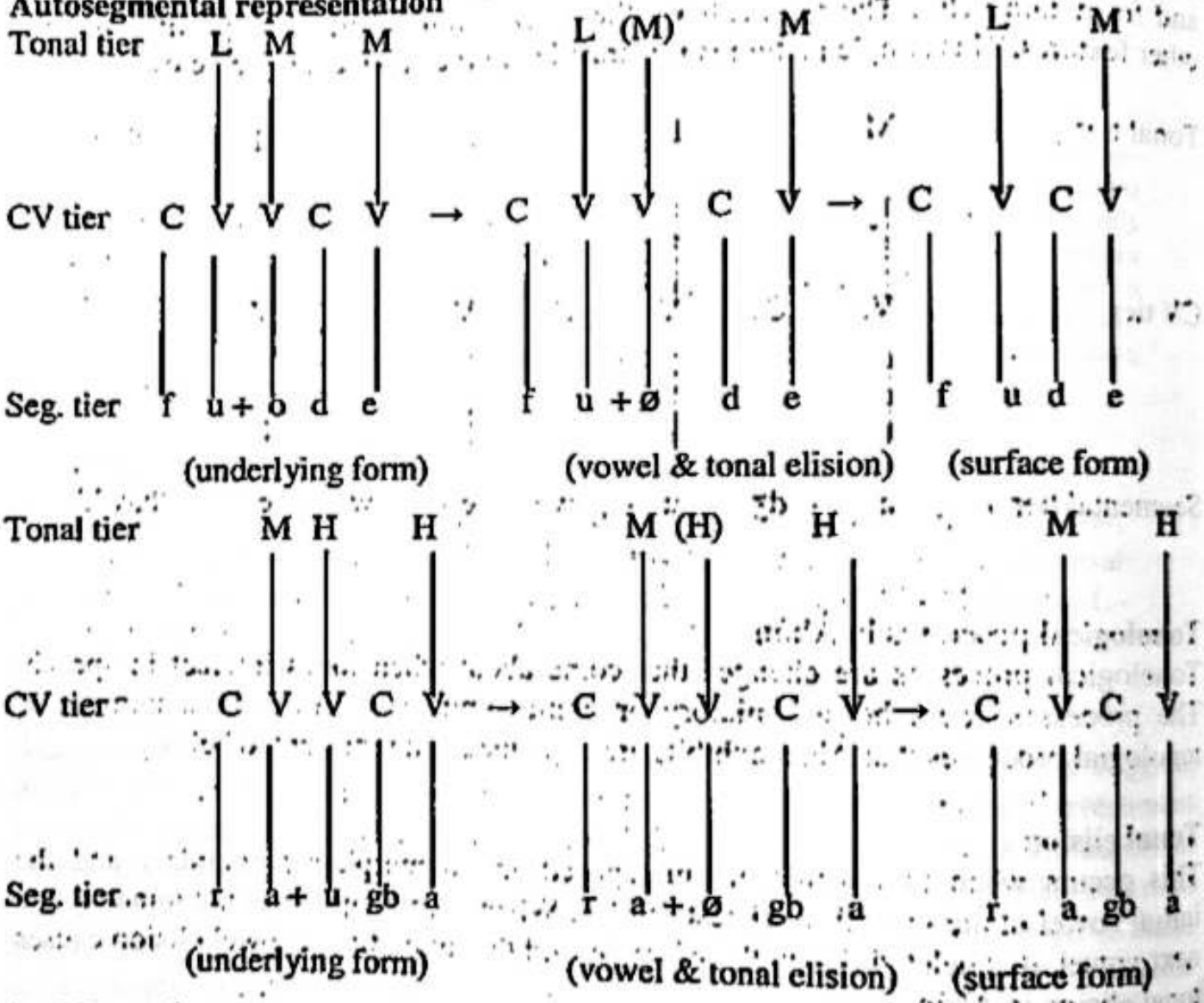
Examples:

a. fù + ode → fùde
'jump' 'house' 'to jump a house'

b. ra + úgbá → ragbá
'buy' 'plate' 'to buy a plate'

c. lọ + ujù → lọjù [lɔdʒù]
'go' 'farm' 'to go to farm'

Autosegmental representation



Looking at the autosegmental representation shown above, the first stage shows the underlying structure of the juxtaposed words. Subsequently, a tone bearing segment gets deleted leaving the tone floating. In the surface form, the floating tone disappears giving us the derived word (fùde) and (ragbà) respectively.

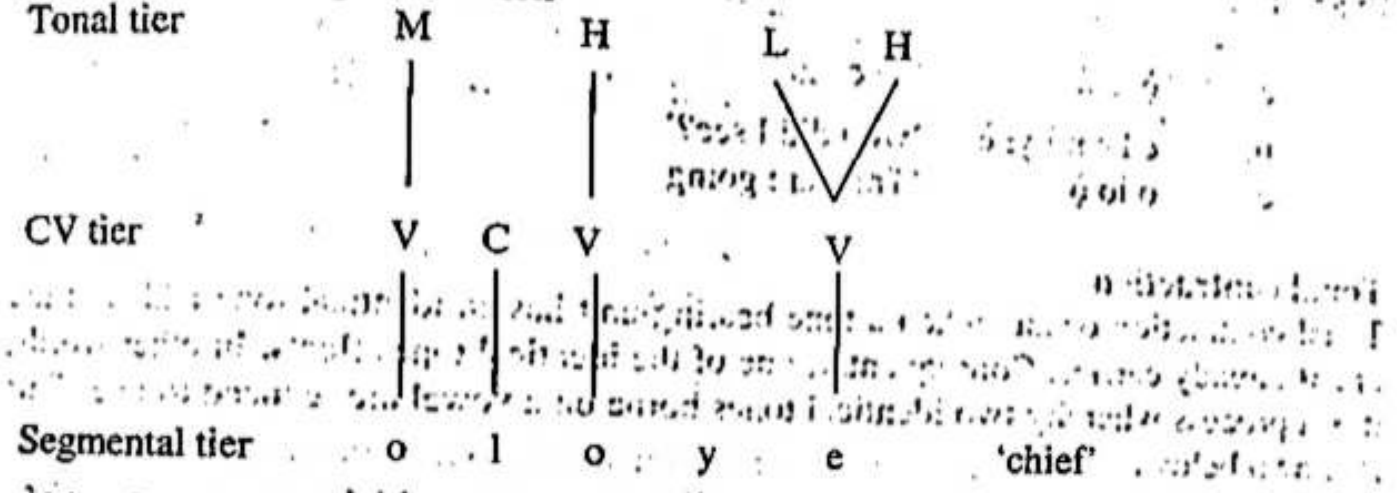
Contour formation

Contour tones (also known as tone spreading) are formed in Àhàn by vowel lengthening. They are also formed when the tone of a deleted segment or that of a

glide delinked and relinked with the nearest segment which already bears an unidentical tone. Cases of contour formation by vowel lengthening in Àhàn include the following:

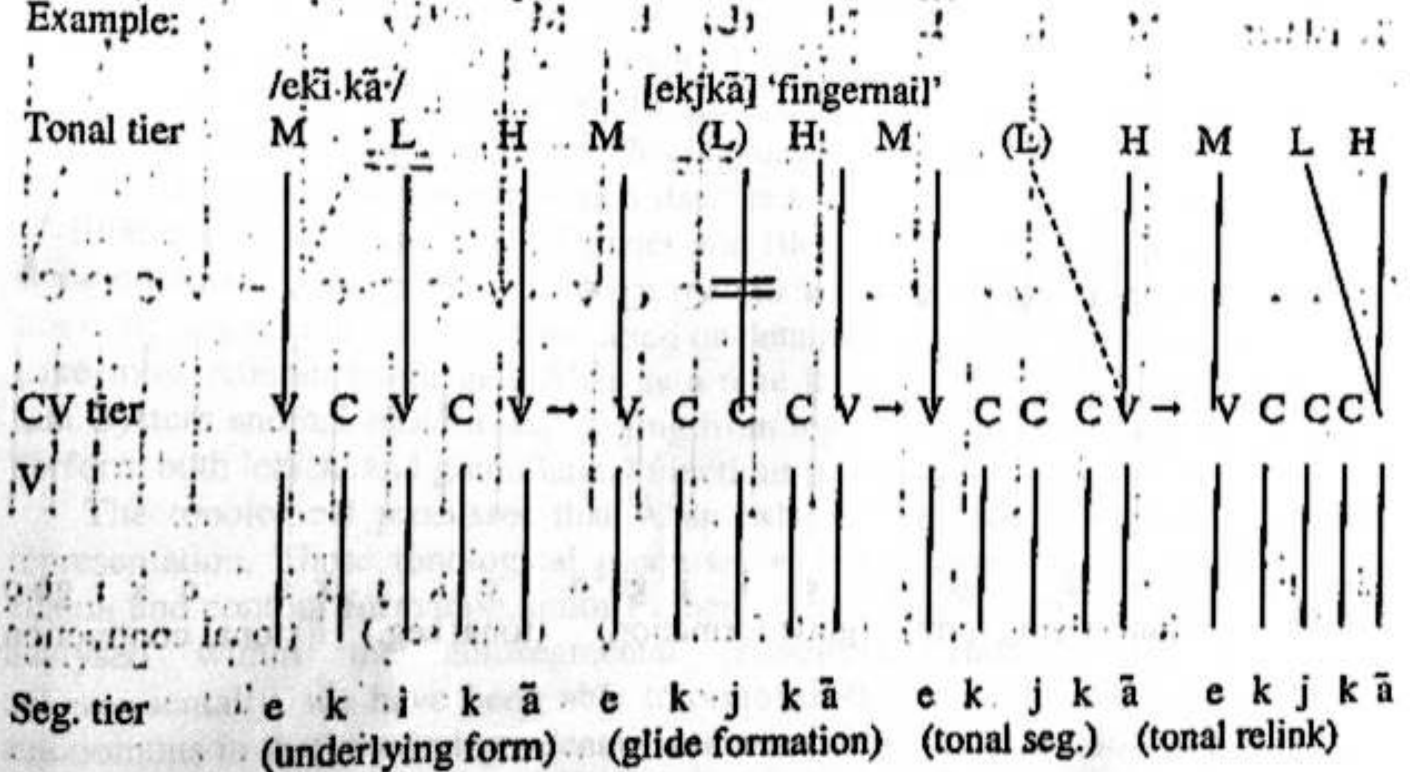
a. /olóyèé/ [oloye˥] 'chief'
b. /taa/ [ta˥] 'sell'

Autosegmental representation



Àhàn also showcases contour formation when a glide delinked and relinked with the nearest segment which already bears an unidentical tone.

Example:



Tone polarization

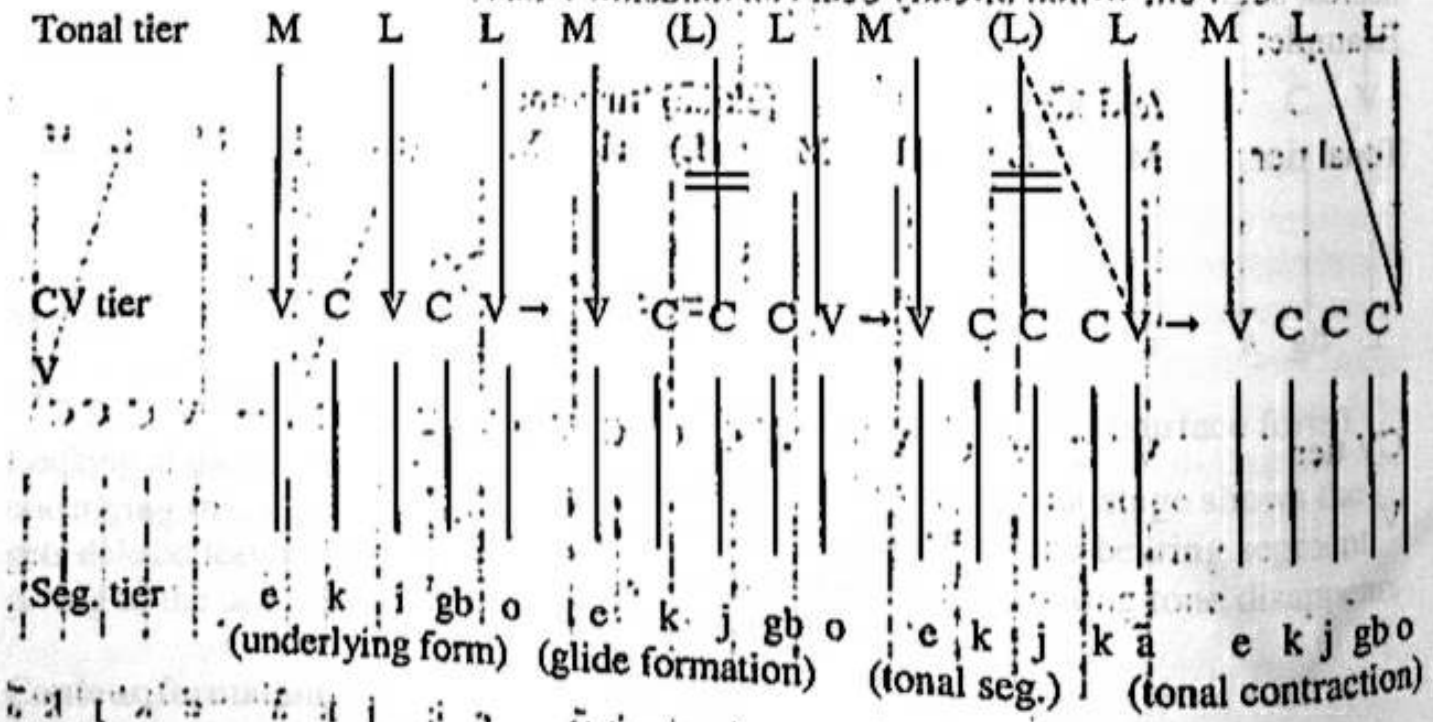
This is a process where a syllable that has no underlying tone is assigned a tone that is opposite to that of a neighbouring syllable. That is, if the neighbouring syllable has a low tone, then the toneless syllable picks on a high tone. However, if the neighbouring syllable has a high tone on it, the toneless syllable picks on a low tone. Examples:

a.	ọ à á	'he came'
b.	è kɛ mî yi è	'who did I see?'
c.	ọ́ lọ́ ọ	'They are going'

Tonal contraction

Tonal contraction occurs when a tone bearing unit has an identical tone added to the one it already carries. Consequently, one of the identical tones floats. In other words, it is a process whereby two identical tones borne on a vowel are reduced to one. This is shown below:

ekìgbò → èkjgbò → ekjgbò



Note: Tonal Segmentation is a tonal term used to say a floating tone becomes realized on a segment. The representation above shows the process of tonal contraction. When a tone bearing unit becomes a glide, the tone floats and re-segmentalizes on the adjacent vowel. Consequently, the tone on the adjacent vowel floats permanently.

Floating tones

Floating tones are underlying tones without underlying segments but with grammatical functions (Hyman 1975). A floating tone shifts or moves to an adjacent vowel segment. The movement could be forward or backward depending on where the next vowel is. However, a floating tone will not move across one vowel to another undistributedly.

Examples:

a.	èyì (´) yọ	→	èyí yọ	'it rained'
b.	èyè (´) á	→	èyé á	'mother came'
c.	eripu (`) Olu	→	eripù Olu	'Olu's wife'

Each of the tones in bracket is an inherent underlying tone without a segment. It surfaces to get realized on a segment when two words are juxtaposed.

Summary and conclusion

Àhàn language is spoken in a town called Òmùò-Èkìtì which is located in the eastern part of the present Èkìtì state of Nigeria. Àhàn is one of the minor languages in Nigeria that are today endangered. This language is grouped under Akokoid branch of Defoid language family group which itself is a branch of new Benue-Congo phylum (Williamson 1989, Capo 1989, Crozier and Blench 1992). Not much work has been done on Àhàn. Though scholalrs have mentioned the language in passing, they have not done any serious work that bordered on detailed analysis of the language. Like most African languages, Àhàn is a tone language. It operates a discrete level tone system and has basic tones ranging from high, mid and low respectively. Tones perform both lexical and grammatical functions in Àhàn.

The tonological processes that Àhàn exhibits are defined with autosegmental representation. These tonological processes which include tonal contraction, tonal elision and contour formation, among others, are explained with data from Àhàn and analysed within the autosegmental framework. Having represented tone autosegmentally, we have been able to establish that tonal and segmental tiers are autonomous in that, the independent autonomous tiers contain sequences of segments that specified certain subsets of phonological features. Also, segments on one tier are

linked to segments on the other tier by association lines. Furthermore, though Àhàn speakers speak and understand Yorùbá, Àhàn language is not mutually intelligible with Standard Yorùbá despite the fact that they share some word inventories.

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