

A New Allophonic Alternation in Lingala

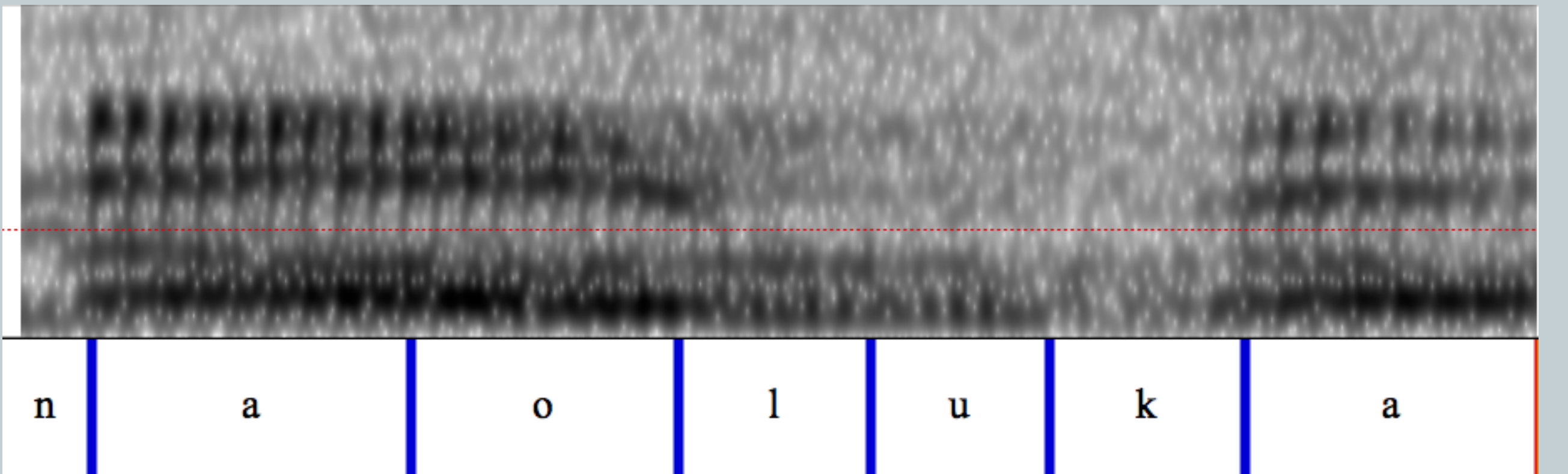
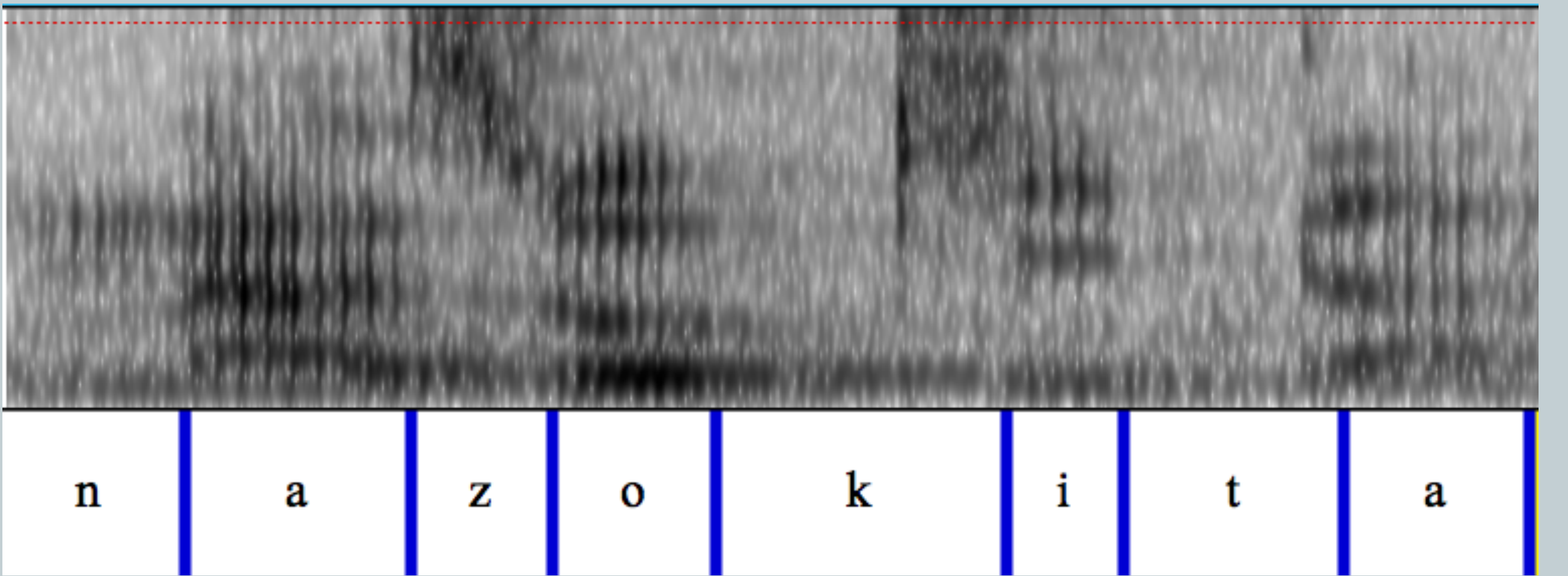
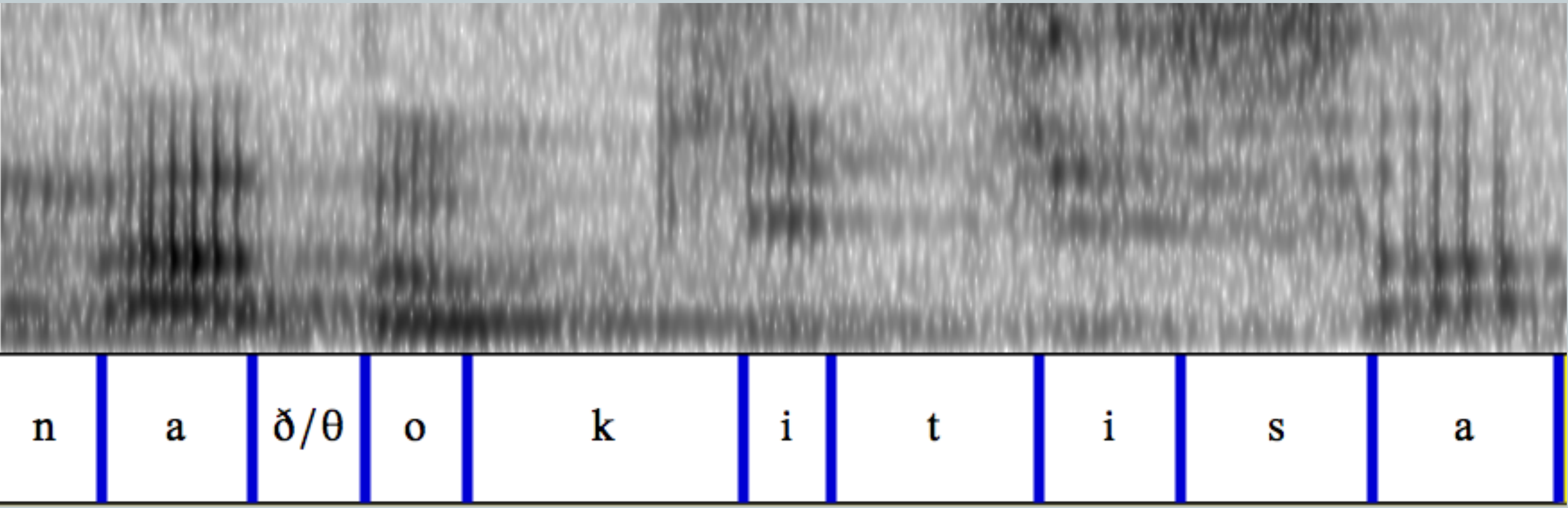
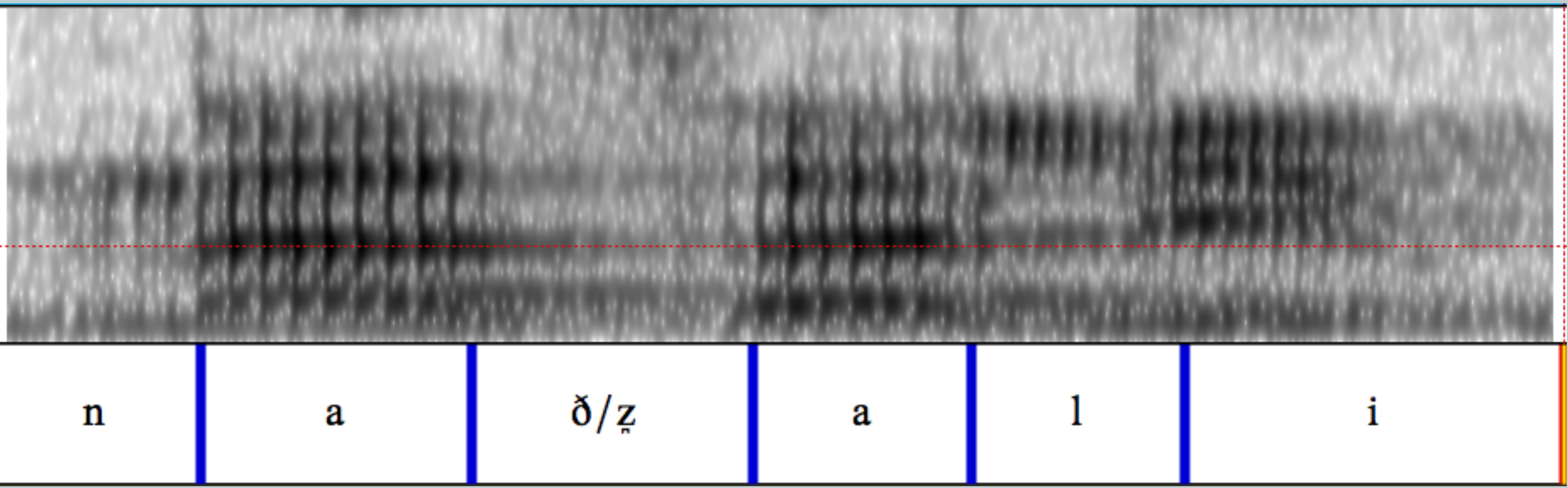
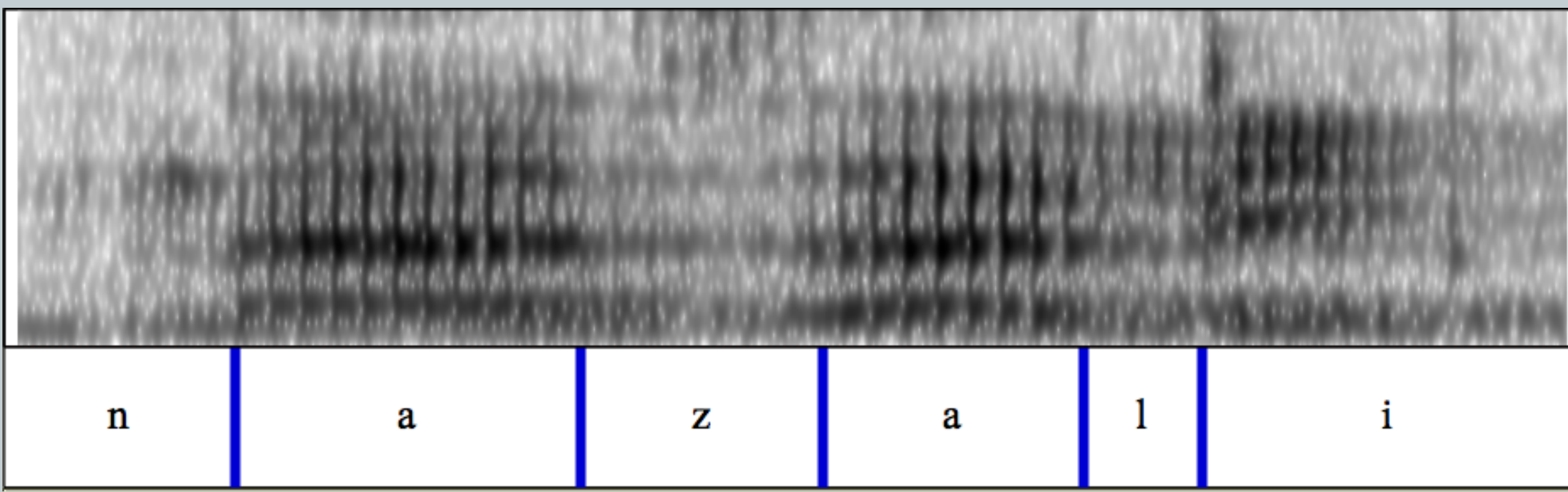
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SPECTROGRAPHIC EVIDENCE



INTRODUCTION

Speaker Background:

- 34 year old male
- Native proficiency in Kinshasa Lingala, high proficiency in French and English, additional proficiency in Tshiluba and Kikongo

Lingala Background:

- Originated as a contact language that arose out of a lingua franca version of Bobangi
- Now a native language for upwards of 5 million, remains a second language for a greater number
- Consonantal inventory : p/b, m, f/v, t/d, s/z, n, l, k/g (Meeuwis 2010, Guthrie & Carrington 1939:1988, Divuilu 2005)
- /z/ → [z, ɜ, dɜ] (Guthrie & Carrington 1939:1988)

ALTERNATION (/z/ → [θ])

/z/:

- In CVCV structures such as: *zomi* ‘ten’, *zolo* ‘nose’, *zuzi* ‘judge’ (presumably a borrowing from French *juge*)
- As part of a nasal-stop cluster (or alternatively as a pre-nasalized segment [nz]) such as: *nzete* ‘tree’, *sanza* ‘moon’, *nzoyi* ‘bee’
- No occurrence of [dɜ] for our speaker, [ɜ] in some French borrowings (e.g. *nager* ‘to swim’ → [konaze])
- Interdental fricatives? Not attested.
- Alternation only noticed in forms of *-zala*
- e.g. [azalikolota] : [aθalikolota]; [azalaki] : [aθalaki]

-zala:

- Used as a marker of tense and aspect or equative (infinitival form: *kozala*)
- Progressive present tense *-zali + ko-* (e.g. *nazali kolia* ‘I am eating’)
- In Kinshasa Lingala, this is typically reduced to *-zali + ko-* → *zo*, *nazali kolia* → *nazolia* (Bokamba & Bokamba 2004)

Question: What are the conditioning factors?

METHODS

- The data presented here were collected in a field methods course in 2017
- After the alternation was noticed from class elicitation tapes, a specific elicitation plan was created in order to target the alternation
- Following segments: /a/, /i/, /o/, and /e/; preceding segments: /o/ and /n/; word position: word-initial and word-medial; /z/ was onset-initial in the tokens tested; part of speech: verb, noun, and adjective
- The individual elicitation session was impressionistically analyzed for instances of the alternation and tokens were visually investigated in Praat (Boersma & Weenink 2014)
- Speaker was asked for metalinguistic commentary on the alternation

RESULTS

Linguistic:

- Only conditioning factor appears to be fast, casual speech and only in forms of *-zala*
- We must consider that the intervocalic environment could be causing the voiced quality to be carried through. The voicing of the segment is uncertain.
- In terms of place features, [z] and [θ]/[ɸ] are both [+coronal], but they differ in their specification for distributivity
- We can derive [θ]/[ɸ] from [z] by changing its distributivity /z/ → [+dist] / _____(z)ala
- If we wanted to postulate an underlying [dɜ], we can change its anteriority: /dɜ/ → [+ant] / _____(dɜ)ala

Speaker Awareness:

- [z] is the “good way to say it”
- “They are all the same” → allophonic status?

DISCUSSION

Proto-Bantu:

- Guthrie & Carrington (1939:1988) cite Lingala as having three allophones for /dɜ/: [dɜ], [ɜ], and [z]. /ɜ/ and /θ/ are [+distributed] (whereas /z/ is not).
- Likely that [dɜ] is the more conservative form since the Proto-Bantu phoneme was *dɜ (Hyman 2014)
- *ɜ/*dɜ: is [+distributed] enough of an argument?
- [z]:[dɜ] correspondence does not appear to be a good explanation

Language Contact:

- Dentalization of palatals and fricatives as a feature of the Thagicu languages of interior Kenya and northern Tanzanian languages (Wald 1987) However, this alone does not lead to a strong case for [θ]/[ɸ] to enter Lingala via language contact (cf. Bokamba 1977).

Lenition:

- It could be possible that a non-sibilant (i.e. less “tight”) could be a less effortful alternative to [z]. Additionally, the voiceless (from voiced) is, of course, less effortful (if the segment is indeed voiceless). However, it is difficult to make a lenition argument for the added distributed or dorsal features.

Lexical diffusion:

- The alternation is entering the language through *-zala* alone (for now)
- Change is gradual: does not affect all instances of the word, rule only applies in fast and/or non-careful speech, output of rule is phonetically gradient

Alternative possibilities:

- Change is from interdental to /z/ (not well-supported)
- Stable variation

CONCLUSIONS

- This alternation relates to the larger discussion of how sound change originates and proceeds— the Neogrammarian Controversy (Labov 1981). The evidence from this alternation in Lingala shows that sound change can be strongly lexically conditioned.
- In Guthrie & Carrington (1951:1988) and the variety described in Meeuwis (2010), there is a regular correspondence between [dɜ] and [z], so we see forms like *dɜzolo* ‘nose’ and *dɜzomi* ‘ten’
- Both [dɜ] and [θ]/[ɸ] are [+distributed], so it may be possible that a historical connection leads to the [θ]/[ɸ] allophone, but it being an innovation seems an equally likely explanation.

FURTHER RESEARCH

- Quantitative assessment of course recordings to determine more precise rates of the alternation
- Additional, demographically varied speakers
- Elicitations with *-zala* + extension suffixes (benefactive *-el-*, causative *-is-*, etc.)
- If course of change is to full deletion (see last spectrogram), what would it look like for this change to go to completion?

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