

Divergent units and fuzzy boundaries

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DIVERGENT UNITS AND FUZZY BOUNDARIES

WHAT DO WE MEAN BY DIVERGENT UNITS AND FUZZY BOUNDARIES?

- ▶ **Divergent units:** non-convergent segmentation points over all kinds of observable, structured, behaviour:
 - ▶ prosodic and phonetic
 - ▶ syntactic, lexical, verbal
 - ▶ gesture, gaze and other bodily-visual behaviours
 - ▶ sequence, action
- ▶ **Fuzzy boundary:** where it's not possible to classify something (or 'in between' categories)

OVERVIEW OF COMMON FINDINGS

- ▶ Apparently messy (*) data frequently patterns regularly, and is used to do particular interactional tasks, especially those whose formal exponents rely on phrasing: increments, trail-offs, add-ons, non-add-ons, etc.
- ▶ Several papers use bodily behaviour as evidence alongside linguistic evidence.
- ▶ Multimodal divergent units serve well as a projection device, which enables co-participants to have agency (not just to be passive recipients)
- ▶ Non-convergent boundaries/units provide structural richness which is a resource for participants in interaction

(*) i.e. not compliant with the traditional kinds of categories of linguistics etc.

SEGMENTATION IN ANOTHER DOMAIN: PHONETICS

- ▶ Segmentation is not necessarily linguistically informative. Information is distributed: the [±voice] contrast is realised by a cluster of features: a simple phonological contrast has complex phonetic exponents
- ▶ "The listener aims to arrive at meaning, not at a complete linguistic description, so he or she will accept the most probable meaning as soon as the overall evidence matches the expected sound pattern well enough." (Hawkins 2003: 391)

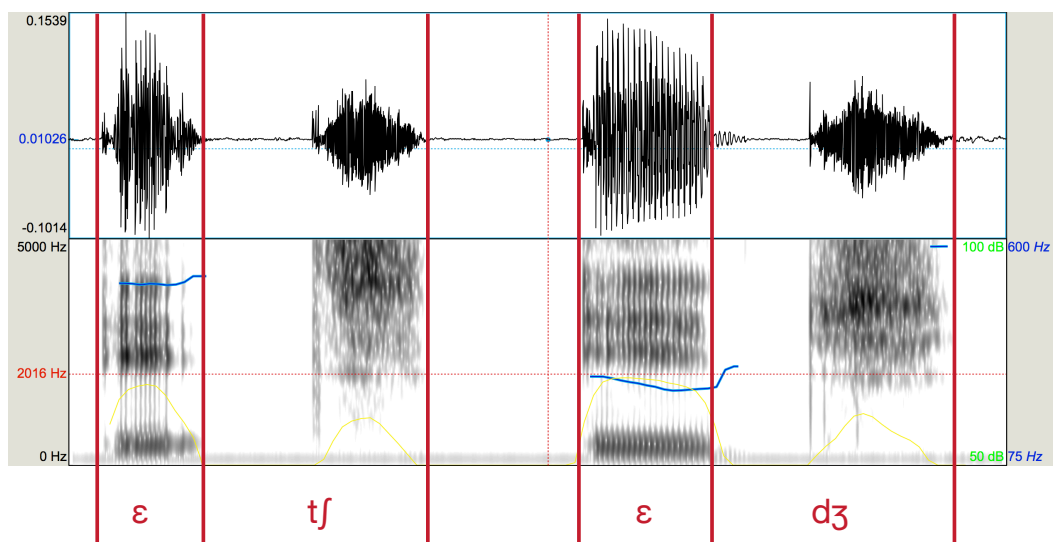
Hawkins, S. (2003). Roles and representations of systematic fine phonetic detail in speech understanding. *Journal of Phonetics*, 31(3-4), 373-405.

Local, J. (2003). Variable domains and variable relevance: interpreting phonetic exponents. *Journal of Phonetics*, 31(3-4), 321-339.

DIVERGENT UNITS/FUZZY BOUNDARIES IN PHONETIC SEGMENTATION

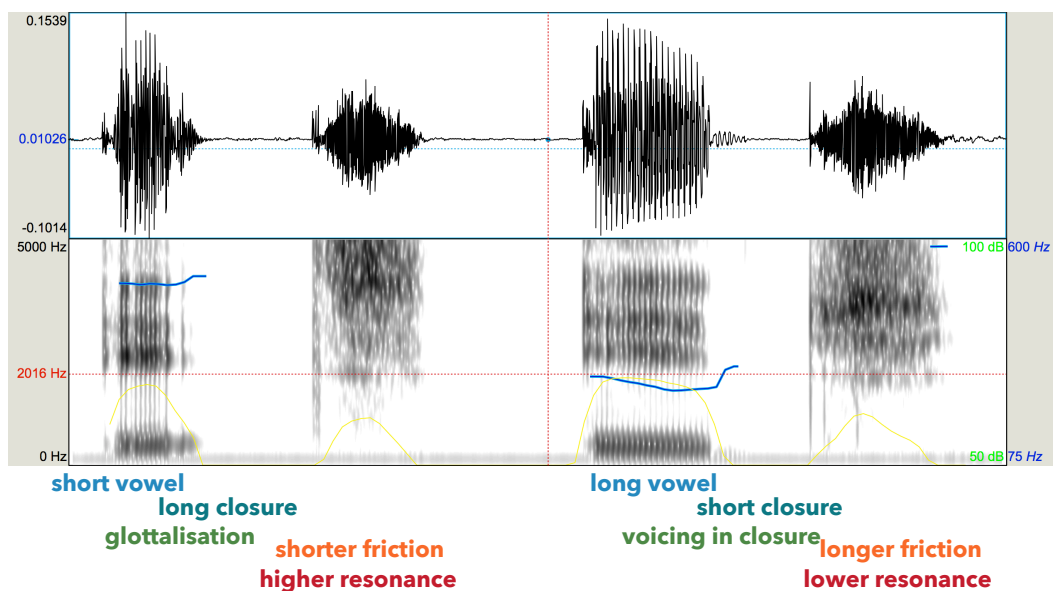
ETCH - EDGE (NZ)

boundaries ↔ units



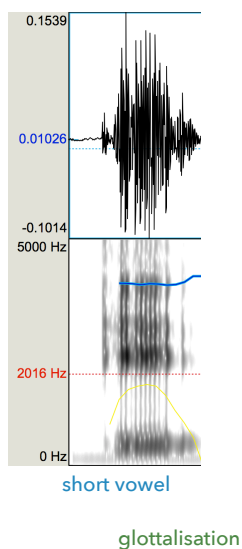
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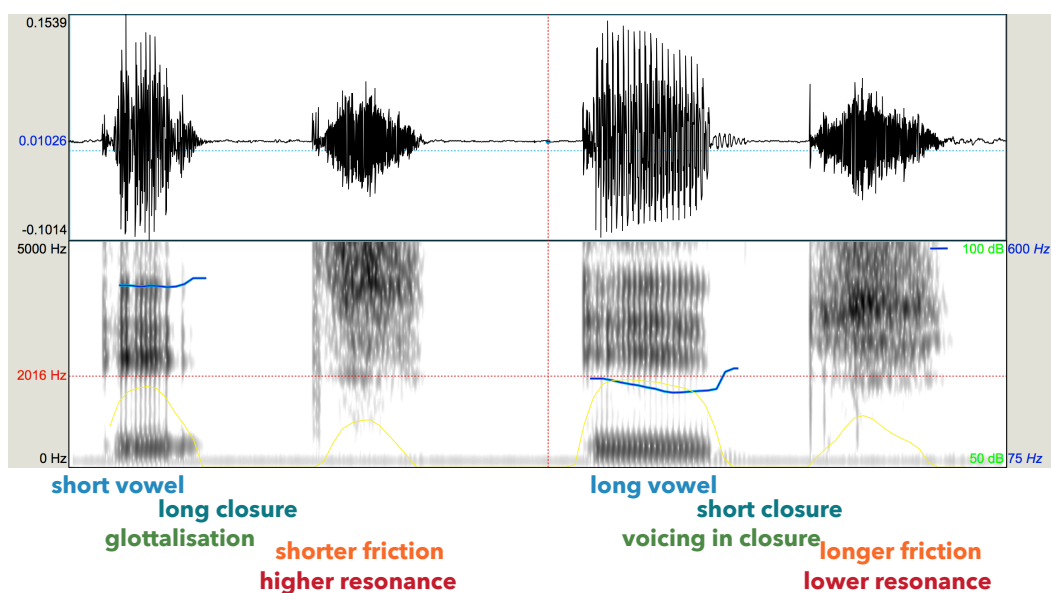


VOICELESS PLOSIVE ALREADY PROJECTABLE IN 'VOWEL'

DIVERGENT UNITS/FUZZY BOUNDARIES IN PHONETIC SEGMENTATION

ETCH - EDGE (NZ)

Windows not points



WHAT ARE THE ADVANTAGES OF DIVERGENT UNITS AND FUZZY BOUNDARIES?

- ▶ **Gestalts** are understood and processed more easily (Holler & Levinson 2019) and are perceived more robustly in difficult listening conditions (Hawkins 2003, 2010, 2014)
- ▶ They enable turns at talk to be structured and parsed, and related to one another (e.g. sí+pero, oh+okay) with both **retrospective** and **prospective actions**
 - ▶ adopting a stance towards a prior turn
 - ▶ projecting some next action or next speaker
- ▶ The formation and development of new linguistic practices

NON-CONGRUENT BOUNDARIES
=
INFORMATIONAL (SEMIOTIC)
RICHNESS

CONCLUSIONS

PROSPECT

- ▶ Informational richness is a **resource**, not a problem
- ▶ Develop not just an understanding of units, boundaries or other forms of segmentation; but also an understanding of how these **implement actions** and **handle emerging relevancies** in talk
- ▶ Develop more explicit accounts of how **multimodal gestalts (constructions, formations, designs)** are produced and perceived
- ▶ What are the **similarities and differences across languages**? What is the status of terms like 'trail-off' when the phonetics of 'trail-off' is different in different languages?