



Changes in Space: Fieldwork *Discussant session*

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Roadmap

- I. Methodological challenges
- II. Discoveries in fieldwork: how laboratory phonologists doing fieldwork are meeting these challenges
- III. Summary of findings
- IV. Where does fieldwork in laboratory phonology need to go?
- V. How can laboratory phonology better embrace fieldwork research?

I. A shift in methods due to COVID-19

Methods in phonetic and phonological fieldwork have shifted due to the ongoing pandemic.

1. Recruitment of speakers in sufficient numbers (due to travel and/or willingness to participate)
2. Unbalanced tokens (a convenience token set)
3. Variable audio quality from remote recording
4. Yet, acoustic analysis and statistical methods remain mostly stable.

The papers in this session illustrate how these types of limitations can be nicely addressed.

Larger numbers of participants but some reduced quality in the recordings can still provide sufficient audio quality for examining vowel production (Akinbo & Ozburn)

Recruitment from remote locations with data shared via Zoom/Whatsapp (but also, WeChat, Google Drive) (Akinbo & Ozburn; Lee, Jun, & Guillemot)

How is field data being acquired?

- **Traditional elicitation and laboratory methods** are still possible in many cases (Franich; Kirby, Brunelle, & Pittayaporn)
- **Word list data**; some controlled experiments with visual prompts done remotely (Lee, Jun, and Guillemot)
- **Team-based research with local, international collaborators** (Akinbo & Ozburn)
- Dependence on **corpus-based methods with spontaneous speech data** (a very positive position for people working in language documentation)

Methodological flexibility for the future

A push towards a more collaborative fieldwork
in the pandemic



A push towards capacity-building among
international collaborators

(better access, better training, better linguistics!)

Laboratory phonological fieldwork is leading the way here!

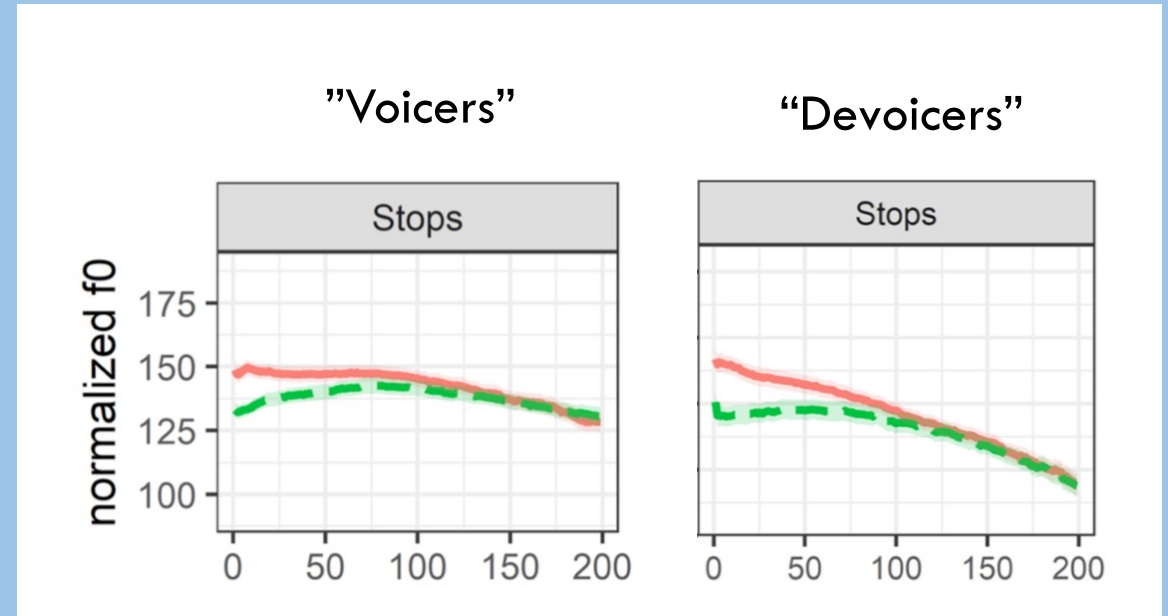
II. Discoveries and questions: Kirby, Brunelle, and Pittayaporn

What is the phonetic pathway towards tonogenesis in SEAsian languages?

Is phonation always involved?

Answer: No!

Speakers attempt to resolve the aerodynamic voicing constraint (Ohala 1983), but may be unsuccessful. Secondary cues persist.



Chru data from
Kirby, Brunelle, & Pittayaporn

Failed enhancement? Not all articulatory actions are successful at doing what the speaker intends.

How do speakers coordinate cues for enhancement across a population? i.e. do individual strategies fail or does the community decide on a secondary cue first and then everyone fails together?

Alongside apparent-time studies, work with several dialects of endangered languages often provides deep insights into patterns of ongoing sound change.

II. Discovery and questions: Franich

- What is the relationship between prosodic enhancement and coordination in speech?
- In-phase coupling of speech and co-speech gestures results in greater movement magnitude (Haken et al. 1985; von Holst 1973), an idea closely connected with work in articulatory phonology (see Parrell et al 2014).
- Most work on coordination in speech and non-speech gestures focuses on well-studied languages with contrastive stress.

- Greater duration and higher F1 for both English (stress language) and Medumba (non-stress language) speakers in the *onbeat* conditions.
- Correlates with greater jaw opening.
- Does coordination between the initial syllable and a metronome suggest a pathway for the evolution of stress? It appears to.
- But why does such coordination *not* lead to stress in all languages? (Franich's question)

Open question – what about information too?

Might the concentration of phonological information within a word also contribute to the evolution of stress?

In some languages, information indicating morpheme-identity is more evenly distributed within the word, while in others, it is concentrated (at the beginning or at the end).

In symmetrical languages, enhancement of a given syllable does not improve morphological parsing. In asymmetrical languages, it does.

- In these languages, there is a reason to enhance certain positions within words and this might lead to more stable patterns of stress and more phonetic reduction in positions with less information (DiCanio et al. 2022)
- Can we consider the informational content of phonological material in words as another precursor to the evolution of stress which, when paired with things like stable enhanced articulatory movement, results in stable patterns of stress emerging?
- Is the distribution of phonological information important for the evolution of stress?

II. Discovery and questions: Lee, Jun, & Guillemot

- What is the domain of tonal contrast in a language with a mixed prosodic/tonal system? How do lexical and post-lexical tone interact?
- Exploratory research with a typological aim.
- Found that tonal contrasts were only preserved in AP-initial position – Sikkimese has head/edge-prominence in tone production.

- Mixed prosodic systems are typologically rare, but usually reflect emergent tonal systems, e.g. in Curaçao Papiamentu (Remijsen & van Heuven 2005) or in Balsas Nahuatl (Guion et al 2010).
- Typological contribution: typically such mixed systems remain *understudied* or are the subject of substantial debate, e.g. Serbo-Croatian tone (Karlin 2018).
- Open questions: What is the status of the lexical vs. post-lexical tonal distinction for speakers/listeners? Are post-lexical tones more variable since they correspond with onset voicing?

II. Discovery and questions: Akinbo & Ozburn

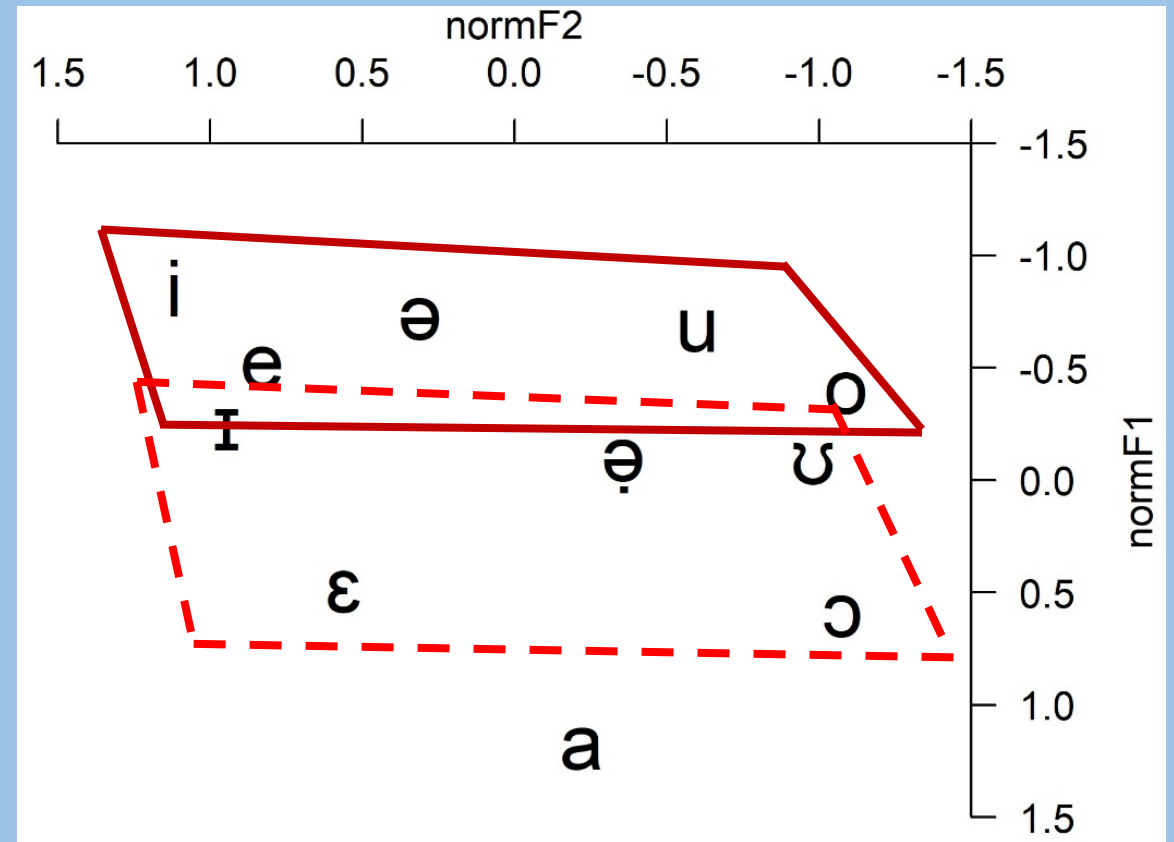
- What kind of phonetic/phonological fieldwork is possible during a pandemic?
- Investigation of ATR/RTR in Imilike Igbo, an underdescribed variety of Igbo; investigation into the perception of ATR in Dàgáárè.
- There are *very* few studies on the perception of phonological contrasts (of any type) in endangered or minority languages.

Innovative methodology – all work was remote, but the team worked to build research capacity among local speakers.

Complex/rare ATR/RTR system in Imilike Igbo since the language has 11 vowels and an interior/exterior vowel contrast (Rolle et al. 2020).

Apparent parallel shift of entire non-low vowel space with ATR contrast.

Is voice quality also involved, as the authors state for Nilotic languages?



Imilike Igbo data from Akinbo and Ozburn

- Perception data are quite interesting, but why is vowel identification accuracy so low in an ABX task with Dàgáárè listeners?
- Might this task be too non-linguistic? Speakers tend to be most familiar with categorical decisions relating to word-hood.
- An ABX task utilizes a type of metalinguistic awareness that might be harder in communities with limited literacy. For instance, native French listeners performed better discriminating Triqui tones in an ABX task than native Itunyoso Triqui listeners did (DiCanio 2012).
- How does literacy in Dàgáárè relate to the results?

III. What are we finding in fieldwork studies?

- Substantial **advances in prosody** and **prosodic constituency** (Lee et al; Franich)
- **Counter-examples to ostensibly universal patterns** (Kirby, Brunelle, and Pittayaporn on transphonologization; Akinbo & Ozburn on ATR/RTR contrast with schwas)
- We are far more likely to find **domain-general processes** when we examine a *typologically-diverse* set of languages (Franich)
- These findings are of **general interest** to laboratory phonology.

IV. Some growing directions for phonetic/phonological fieldwork

- Attention to both phonetic novelty and phonetic description of “typical” features.
- Sociolinguistic and historical linguistic approaches alongside laboratory phonological methods; this requires reciprocity in interest across fields.
- Capacity-building among different linguistic communities – teaching and providing tools for improved equal partnerships between researchers.


V. How can laboratory phonology better embrace fieldwork research?

Research questions in fieldwork studies are often of **general interest**; this contrasts to the notion that this work is mainly *language-specific*.

There is merit to 'language-specific' studies, but researchers can filter out such studies in literature reviews.

Novel findings from fieldwork need to **shift our perspectives**, but this requires that the work also be examined by non-fieldworkers.

Canonical notions persist in the literature because people don't read about "*exotic*" languages. This is irresponsible scholarship and it affects citation practice.



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