

Theoretical perspectives II:

Rethinking phonetics in the context of talk-in-interaction

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Aims

- to engage in some consciousness raising about what might constitute 'phonetic detail' and phonetic variation/variability;
- to explore the implications of adopting a *parametric phonetic* approach;
- to explore the consequences of this for understanding the inter-relationships between phonetic parameters (exponents) and the organisation of meaning in talk-in-interaction.

Background

There is a long and continuing tradition in research in linguistics, phonetics, cognitive psychology and speech perception and understanding of analysing language divorced from its natural site of occurrence – talk-in-interaction.

This tradition has arisen in part because researchers have shown a willingness to construe linguistic reality as residing in the single, embodied, individuated mind.

Background

This has resulted in a rather restricted view of language organisation and function and an over-emphasis on particular and rather localised aspects of the phonetic detail of speech related typically to so-called phonemic contrasts and lexical contrasts.

This emphasis has drawn attention away from the presence of other kinds of meaningful linguistic information in the speech signal and stands in danger of distorting the relative importance of various processes and kinds of phonetic detail in models of how speech is perceived and understood.

Background

The phonetic detail of everyday talk is thoroughly saturated by, and shaped by, ongoing interactional-sequential activities.

Background

Just as no utterance only does one thing at once so each part of the speech signal is related to several functions simultaneously.

- some systematic differences in phonetic fine detail are relatively localized in the speech signal, others stretch over several syllables;
- no a priori way of knowing that any bit of phonetics is not important – and the converse is also the case we cannot predict which bits matter;
- no order of detail can be dismissed, a priori, as disorderly, accidental or irrelevant;
- phonetic detail simultaneously provides pragmatic-interactional, grammatical and lexical information.

Techniques of observation

Analytic parametric listening:

- understanding vocal noises as the result of a range of co-present ingredients, components or *parameters*;
- in conducting auditory analysis (and then acoustic analysis) we listen in terms of independently varying auditory and movement parameters.
- untease various strands of auditory sensation into component factors
- need to do this to free ourselves from prejudices and from categories of description and analysis not set up to deal with speech in its natural home.

Some data: word-final variation

that	ŋəʔ
got	gɒtʔ
Vincent	vĩnsɛ̃ŋʔ
Mick	mɪkʔ
took	tʰʊʰkʰ
back	bakʰ
toilet	tʰəiʎitʰ

Is this variation happenstance?

Some data: word-final variation

- if all that we were concerned with modelling was lexical contrast we might answer 'yes' – another instance of well-known 'free variation' of word-final plosives
- but careful examination of the data shows that word-final aspiration of these voiceless plosives represents a particular kind of systematic lawful variation

Some data: word-final variation

(1) McN 1.1.3

A: have you got your snaps Vincent that Mick took^h
H: no Connie's got them

(2) McN 1.2.5

A: and I says oh oh she's away round to the back^h
M: aye (.) she's e[h
A: [gone to the toilet^h
H: all kinds of amenities I'll tell you

Grammar and detail: parametric bindings

However, in the grammatical chunk *I'm* (= 'I am') sharing regularly happens in everyday talk:

<i>I'm blowing</i>	[aĩm]
<i>I'm throwing</i>	[aĩŋ̩]
<i>I'm going</i>	[aĩŋ]
<i>I'm watching</i>	[aĩv̩]

Grammar and detail: parametric bindings

- ð can occur at the beginning of 'function' words in English
the this that these those then thus ...
- no content words begin with ð – if they have dentality it is θ
thin thistle theme thank thatch thought ...

Grammar and detail: parametric bindings

Joins between other talk and these two types of item are very different:

- (3) Vegtalk-eating-those:

do you know my favourite way of eating those



- (4) Youandyours-even-though:

even though we're a much improved society




- (5) Youandyours-all-that:

talk about respecting nature and animals and all that



Silences and projections

The function of so-called 'assimilation' is to project more talk from the same speaker.

- (6) Small-claims: 

so (0.6) um (0.3) you have so show in addition (.) that (.) they didn't take (0.2) due care (0.5) and attention


- (7) YT-Scottishmusic: 

so w what what sort of music do they play (0.3) kind of sort of Scottish music .hhhhhhh (.) or just (0.7) whatever they can lay their hands on

- (8) YT-formalgrammar: 

then suddenly you're wanting to do (0.4) formal (0.2) semantics and formal grammar and stuff which is (0.4) almost computer science

Projecting other things

(9) Jeremy-Clarkson: 




Mar: s[he was on Je]remy Clarkso[n that] (0.4) bigot

Wen: [shit on that] [yea::h]

(0.2)

Wen: exactly .hhh (.) and

Relativities of variation: repetition repairs

(10) Callhome5242-twins:   

A: and u[m what else (0.3) um (.) the t[wins are gett]ing big

B: [.hh [oh I had this-]

(0.7)

B: what

(.)

A: the twins are getting bi[g

B: [really I had this little boy in um (0.5)

to draw his blood today he was six years old a[nd he l]ooked

A: [a h a]

(.)

B: just like Danny

Relativities of variation: repetition repairs

Repetition repairs occurring after trouble source turns which are fitted in terms of both turn-taking position and sequential relevance exhibit the following systematic phonetic differences from the TS turn:

- they are louder
- the repeated words have longer durations
- they have an expanded pitch range
- they have long-domain articulatory resettlings

Relativities of variation: repetition repairs

(11) CallHome6045-sing



B: but the next Monday we're going to sing Christmas songs
(0.9)

B: .hh so come next Monday

A: .hhh oh

B: so we'll have some fun

A: [.hh you sing noche]

B: [.hh and the chil- so]me of the children are still in
school (0.2) but the [majo]rity have finished

A: [yeah]
(0.7)

A: you sing noche depaz
(0.9)

B: is the what
(.)

A: do you sing noche depaz

B: .hhh oh yes uh huh

Relativities of variation: repetition repairs

Repetition repairs occurring after trouble source turns which are disjunct in terms of both turn-taking position and sequential relevance have the following systematic phonetic relationship to the TS turn:

- they are not louder
- they do not have expanded pitch ranges (pitch ranges are either similar or compressed)
- they do not have longer durations
- they have similar articulatory and phonatory settings, voice qualities, and vowel and consonant qualities

Relativities of variation: repetition repairs

(12) CallHome4431-bathroom



A: you're- you know you've said a lot of hurtful things too
well god damn it

(1.8)

A: I'm sick of getting trounced on

(0.7)

B: you in the bathroom

(0.4)

A: huh

B: you in the bathroo[m

A: [no I'[m just cooking] (.) din[ner]

B: [in the kitchen] [oh]

A: .hhhhhhhhh so- (.) anyway hhhhhh that's what's new
here with that (.) situation

Abrupt joins

(13) NO.1.24.gasbill.meter



AR: and that was in nineteen ninety ni[ne

Call: [uh huh December
ninety nine

AR: so it's two years later and they haven't got back to you
and you've not bothered [so I] presume (0.2) .hh

Call: [no hm]

AR: you've managed without a gas meter what are you doing
for heating are you electric heati[ng

Call: [no well that's (.) th- th- they've
actually fitted a gas meter in
(0.4)

AR: right

((talk continues on particulars of the gas meter which the caller has had installed, and then on what action AR sees in the caller's future regarding the gasbill))

Take home messages

1. we need to develop a theory of phonetic exponency which relates to a sequential action-based analysis of talk-in-interaction;
2. we need to develop a robustly sceptical view of the 'units' (and 'domains') routinely employed in phonetic description and phonological analysis;
3. we need to treat so-called prosodic and non-prosodic resources equally and not give analytic privilege to one kind of phonetic resource over another.