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Phonetic design as a social accomplishment: arguments for socially shared cognition.

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1 Introduction: phonetics, mind, meaning

Meaning in phonology:

- the lexicon has primary role
- form/function in work on intonation and focus (e.g. Ward & Hirschberg 1985, Pierrehumbert & Hirschberg 1990, Cruttenden 1997)
- frequency, word class (cf. Bybee 2001) and accommodation to hearer (Lindblom 1990)
- paralinguistic meaning (e.g. Laver 1994, Ladd 1997, Gussenhoven 2002) and indexical meanings (Ochs 1996), e.g. social identity (Docherty & Foulkes 2000), social acts and activities, affective and epistemic stance, can all be marked phonetically

Some problems:

- how to provide an empirical warrant for categories
- the discrete categories of traditional phonology may not be the most appropriate ones
- most work assumes that autonomous individuals are primary, and aggregates of people or activities are derivative; socially negotiated forms of meaning find little or no place in phonological theory, despite the fact that the primordial site for talk is in interaction (cf. Schegloff 1991)

Our aims:

- to provide an analysis of an inherently social activity—agreement—using categories and structures motivated by participants' orientation to them

- to explore the implications that talk is *designed for a recipient* not as a mere fact of production, but as a way of constructing one form of meaning.

2 Overview of assessment sequences

2.1 Lexical resources (Pomerantz 1984)

Table 1. Lexical resources for (dis-)agreement, Pomerantz (1984)

Agreement type	Linguistic form	Example
strong agreement	upgraded assessment term	*hot → boiling*
	modifier	*not bad → not bad at all*
'same' assessment	repeat of assessment term	*nice → nice*
	partial repeat but no assessment term	*that's nice → yes it is*
'downgraded' assessment	scaled-down or weakened assessment	*beautiful → pretty* *really cool → kinda fun*
strong disagreement	antonym	*boring → really good* *like X → hate X*

2.2 Preference organisation (Pomerantz 1984, Sacks 1986)

'Preference' is a technical term, and does not refer to individuals' wishes or preferences. Preferred actions are socially normative ones. Dispreferred actions are accountable (i.e. they have to be explained). Preference has consequences for the way that sequences of talk are built.

Preferred turns (e.g. agreement):

- gap between first pair part and second pair part minimised
- agreement takes up whole turn
- agreement is indexed soon

Dispreferred turns (e.g. disagreement):

- disagreement delayed:
  - no immediately forthcoming talk
  - repair initiation
  - devices for delay, e.g. *well*, *uh*, etc.
- common format: [agree + disagree]; [agree] component done with 'same' or 'downgraded' assessment

2.3 Epistemic authority and access (Heritage 2002, Heritage & Raymond 2002)

- In making an assessment, a speaker makes a claim to some grounds on which to assess (e.g. knowledge, experience)
- One ground on which not to assess is lack of knowledge or evidence
- As well as agreeing/disagreeing, participants are frequently jostling over authority to assess.

3 Data

A collection of c.100 assessment pairs from several sources amounting to approximately 40 hours of naturally-occurring talk:

- the CallHome corpus, a corpus of phone calls from US Americans to friends and family abroad
- the "York Lab Data" corpus, consisting of pairs of friends (mostly students in their early 20s) chatting in a recording studio
- British (local and national) radio phone-in shows
- the Holt corpus
- collections of data known as "NB", "SBL" and "Rahman"

In the data fragments, 2→ has an overt assessment term, e.g.:

```
A     1→   DP + {verb, copula} + assessment term
B     2→   DP + {verb, copula} + assessment term

A     1→   I like sitting in the window.
B     2→   Oh I hate it
```

This exludes very common pairs, e.g. (GTS : 4 : 15):

```
A     1→   he's terrific!
B     2→   he is.
```

Phonetic analysis concentrates on relation of 2→ to 1→.

4 Two forms of agreement in assessment sequences

4.1 Strong agreement

4.1.1 Overall shape

- 2→ is a lexical upgrade of 1→
- Gap between 1→ and 2→ minimal.

4.1.2 Data fragments

Fragment (1) smc/00.0907.german castle

```
B          and there was one day when I had like work to do and
    stuff
           so I said "right this is what you're doing todahahay"
           showed them like in the guide book where it was
           sent them off on their own=
A          ="listen it's just south of here" [hehe
B                                            [hehe .mmh
A          "and if you take highway duh"
B     1→   it's supposed to be really really pretty;
A     2→   oh it's supposed to be g:orgeous.
           crowds are supposed to be pretty
           bad [°in the summer°]
B              [yeah    really] bad cos it's like one hundred percent
           touristy
```

Fragment (2) nrb/01.irishman

```
K   1→ °I find that gu#y#, (.) really funny #no:w#,°=
J      =°that Iris[h one°
K                 [£↑Irish guy£
J   2→ ↑he's ↑hila:riou[s
K                       [because I thought he was really (.) scary
       and really like .hh ehm sort of set in his ways and
J      [yeah        ]
K      [he's just in]terested isn't he he's like .h "well I was
       r:eading about this"
       and I'm like "((* * *
       [ *     *     *    *   ))"]
J      [but he's quite interested]
K      yeah
J      he is a bit frightening though I mean that black nail
       polish
K      horrendous quite scary isn't
```

Fragment (3) Callhome 4610 290

```
B      I'm in the Hamptons
A      Eah
B      E [I'm
A        [which one
       (0.5)
B      ehm
       (0.3)
B      actually I'm in Amagansett [which is] between
                                  [(click) ]
B      Bridgehampton and Easthampton I guess
A   1→ it sounds enormously po[sh]
B                            [pt]
A   2→ it'[s       ] it's superposh here I am going from Santa Fe
          [(click)]
B      to the Hamptons my summer is just filled with luxury
A      s[ounds wonderful]
B       [.hh    ha    ha]  ha
A      how's Helena
```

4.1.3 Phonetic characteristics

Overall, the phonetic characteristics of 2→ as compared to 1→ include (cf. Curl 2002):

- an increase in loudness
- an expanded pitch span
- pitch higher in the speaker's range
- slower tempo
- closer, tenser articulations (closer to 'hyper-speech' than 'hypo-speech')

Table 2. Pitch span (semitones) of Fragments 1-3:

	Fragment 1	Fragment 2	Fragment 3
1→	5.7	3.7	4.5
2→	7.3	7.9	5.2

Impressionistic records of the assessment pair in Fragment 1:

1→ ʔsːɸɜs t̪ˢ̪ βɪ ɻʲrːɻʲɪ ɻʲɪlʲɪ pɹɐʔɪi

2→ ɐ ɪtspɔst̪ˠ̪ β̆i̯k˺ gːʷɔːɹd̪ʒɪs

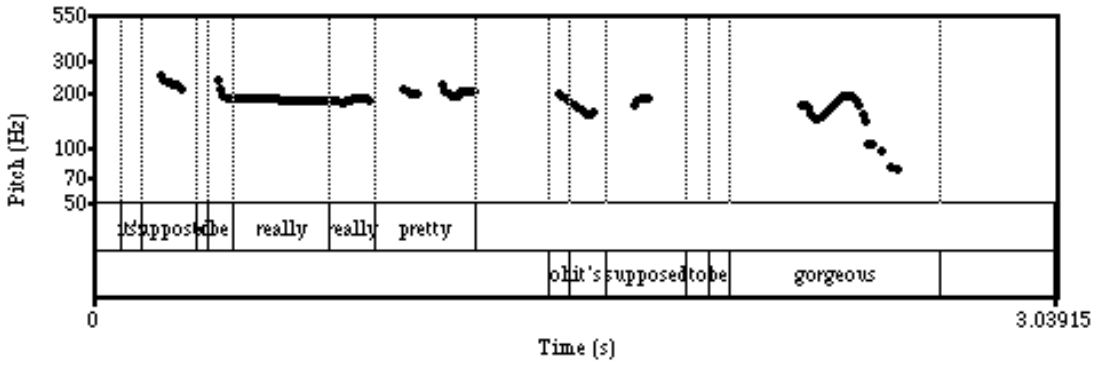

Figure 1. F0 traces of 1→ and 2→ in Fragment 1.

1.2 Weak or 'same' agreement that prefaces disagreement

1.2.1 Overall shape:

- 2→ is a lexical downgrade of 1→, or a 'same' assessment
- 2→ is often delayed with respect to transition relevance at the end of 1→
- at 3→ a contrasting assessment is made by the same speaker, giving rise to the format [agree + disagree]

1.1.2 Data fragments

Fragment (4) smc/00.0425.househunting

```
B       they came back and stuff and it's just like .h
        you haven't got time, to search for a #house#;
A       yeah [you           can't]
B            [and they're there ] I mean I came
        [back here in the middle of Aug#u#st,]
A       [you     can't   do   that   from    ] thousands of miles
        aw#ay#.
B       and you need at least one person who's willing to do it
        all, to sort out, to find some#where#,
A   1→  and it's (.) a l:ot °of eff#or#t°=
B   2→  =°it is quite a lot of hassle°,
    3→  unless you like cos sometimes it's just luck(y) isn't it
        you just like walk in and find someone who who's got a
```

```
        house for the right number of people
```

Fragment (5) gw/00.washing machine

```
H?      °'ts crap°
E       they should just put a slot machine in that- that bloo[dy
H                                                             [↑mm
        (0.6)
H       stupid
        (2.0)
E       [I mean why]
H   1→  [but  it's ] better than tokens #though#;
        (0.4)
E   2→  yes it is better than token[s,
H                                  [cos like you always went to the
        porter and he said "oh we've got none" like went back two
        days later and he still had none
E   3→  .mt we-uhm (1.0) my card always says bad card all the time
```

Fragment (6) nrb/01.reluctant lover

```
J       he wouldn't stop asking her out
        he used to ring her like three times a day and she'd go
        "no: no:" .h or she'd say yes and not turn up
        and then she just completely fell for him
K       ! a:[h: that's love]ly=
J           [  °together°  ]
K   1→  =she's- she's- she's rea:lly nice in't [she
J   2→                                         [>she is n#i#ce,=<
    3→  =.h I do find that she just says stuff just for the sake of
        £saying stu[(h)uff though£
K                  [yeah
        [yeah
J       [even  when she's not got that much to say
```

1.1.3 Phonetic characteristics

- 2→ is generally quieter than 1→
- 2→ is generally faster than 1→
- the pitch span of 2→ is narrow, usually compressed relative to 1→
- 2→ often has fall-rise intonation followed by a contrasting assessment
- 2→ is generally lower in the speaker's range

Table 3. Pitch span (semitones) of the assessments in Fragments (7)-(9)

	Fragment 4	Fragment 5	Fragment 6
1→	6.0	6.5	5.1
2→	3.6	4.7	4.6

Impressionistic records of the assessment pair in Fragment 7:

1→ ʔã̃ɾɪʔsʔəlːːɑt̚ʔəvɛfə̰˞t̚

2→ ɪ̰ɪzz̥kwaḛə̰̞l̰ɒ̰fhasl̞ˠ

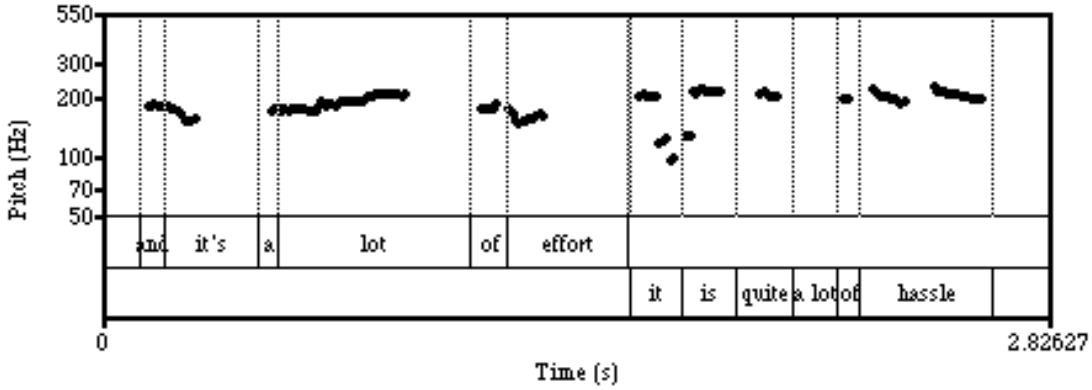

Figure 2. F0 traces of 1→ and 2→ in Fragment (7)

2 Phonetic exponency and 'agreement'

The phonetic design of second assessments displaying agreement is sensitive to the broader sequential context of the turn, and in particular, it is sensitive to the organisation of preference. The exponents of 'agreement' must be stated with regard to a prior (and, crucially, another's) turn.

Preferred action (agreement)	**Dispreferred action projected (disagreement)**
'upgraded' lexis relative to 1PP	'same' or 'downgraded' lexis relative to 1PP
'upgraded' phonetics relative to 1PP	'downgraded' phonetics relative to 1PP

Phonetic resources alone are enough to project upcoming disagreement (Fragment 7).

Fragment (7) Holt U88.1.10 pay

```
S       That's alright I just wanted to make sure: (.) whether
        you'd p'hh gone back or no[t.h
F                                 [Yes I did. No[I got that=
S                                              [.hhhhhhh.p
F       =thanks 'n I, I've also heard about th'of course about
        the cash ↓in toda:[y.↓
S   1→  [gYes::. Yes isn't that good at l:ong
    1→  la:[st. [((sniff))
F   2→     [That[s u-very good news. B't'v cour[se it (0.3)
S                                              [khhhhhhhh
F   3→  we'll haf to pay out a lot a'that I[guess
                                           [.hhhhhh ihYe:s but
        at least it'll bring us int'th'black hhh.hhh in the
        middle of Ma:y whi:ch is just the time when we should
          be[.kmhhh[hhh.glp.tk]lp
F         [(0.5) [ih Y e : s]But buh[but (.) do we owe: I mean=
S                                    [u h h h h h h
F       =ih- we haven' paid any of the (Almans) 'n people like
```

```
        that yet I[(take it)
S                [eeYES we paid some of them-
```

Pitch span of 1→ is 8 semitones; of 2→ is 6 semitones.

3 Talk-in-interaction and the Grammar

Examples of other cases where turns display consistent phonetic relations to others' turns:

- other-initiated self-repair sequences (Curl 2003)
- the organisation of turn transition (e.g. French & Local 1983; Local, Kelly & Wells 1986; Ogden 2001);
- collaborative completions (Local 2003)

Properties of the Grammar:

1. it must attend to the flow of talk in time, monitoring others' talk not just for content but also for form
2. it must contain statements of phonetic exponency which are sensitive to (a) others' talk and (b) sequential and social organisation
3. it must contain units which allow for the construction of orderliness in talk, including notions such as 'turn' and 'sequence'; these are inherently categories of talk-in-interaction.

> …linguistic organisation and storage is based on experience with language where articulation, perception, meaning, and social import are all related intimately.
>
> Bybee (2001: 57)

> Interaction and talk-in-interaction are structured environments for action and cognition, and they shape both the constitution of the actions and utterances needing to be 'cognised' and the contintencies for solving them.
>
> Schegloff (1991: 168)

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