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Abstract:

Linguists, and other analysts of discourse, regularly make appeal to affectual states in determining the meaning of utterances. We examine two kinds of sequence which occur in everyday conversation. The first involves one participant making an explicit lexical formulation of a co-participant's affectual state (e.g. 'you sound happy', 'don't sound so depressed'). The second involves responses to 'positive informings' and 'negative informings'. Through consideration of sequential organization, participant orientation and phonetic detail we suggest that the attribution of analytic categories of affect is problematic. We argue that phonetic characteristics which might be thought to be associated with affect may better accounted for with reference to the management of particular sequential-interactional tasks. The finding that stance does not inhere in any single turn at talk or any single linguistic aspect leads us to suggest that future investigations into stance and affect will need to pay attention simultaneously to matters of both linguistic-phonetic and sequential organisation.

Keywords: stance, affect, conversation, sequence, phonetics, intonation

Stance and affect in conversation: on the interplay of sequential and phonetic resources*

1. Introduction

Linguists, and other analysts of discourse, have a long-standing interest in the expression of stance, and their analyses regularly make appeal to affectual states in determining the meaning of utterances.¹ For instance, claims about particular pragmatic practices and stylistic effects (e.g. epistemic markers, facticity, irony, politeness, reported speech, sarcasm) and the intended force of utterances are routinely linked to affectual states (Blakemore 1992; Jaszcolt 1999; Sperber and Wilson 1995). Within intonation studies and descriptions of voice quality there is a continuing tradition of employing lay attitudinal categories (e.g. 'challenging', 'surprised', 'sympathetic', 'sad', 'involved', 'uncertain', 'passionate', 'exasperated') in trying to account for the distribution and meaning of intonation contours (Ashby and Maidment 2005; Bolinger 1989; Cruttenden 1997; Hirschberg 2002; Ladd 1996; Sweet 1911; but cf. Selting 1996 for a rigorous analysis of so-called 'astonished repairs' in German which takes into account both prosodic and interactional details).

For some time, experimental linguistic and social-psychological studies have explored relationships between phonetic-prosodic features and the expression of stance and affect (see e.g. Banse and Scherer 1996; Cowie and Cornelius 2003; Greasley et al. 1995; Roach et al. 1998; Tolkmitt et al. 1988). That is, linguists and social psychologists have taken the possible relationship between stance and affect and the phonetic design as something worth investigating. Work to date has had one of the following features: the use of actors in the production of data; the use of external, lay raters to identify attitudinal content; a focus on prosodic aspects of the talk. The possible relationship with the sequential (turn-by-turn) organization of talk has, it seems, been overlooked: there is, as yet, no integrated exploration of how sequential and parametric phonetic resources figure in the expression of stance and affect in conversation. This paper represents an initial exploration of the extent to which phonetic, sequential, and lexical resources are drawn upon in displays of stance and affect in everyday conversation. We examine recordings of sequences of talk drawn from everyday conversations to explore the possible interplay of general phonetic (not only prosodic) features, sequential organization and displays of stance and affect (for other studies of stance and affect based on recordings of everyday conversations, though without sustained or systematic attention to the phonetic details of the talk, see e.g. Chafe 1986; Clift 2006; Du Bois 2007; Kärkkäinen 2003, 2006; Haddington 2006). We examine everyday conversation not only because of its ecological validity, but because it provides for the demonstration of participants' orientations to what we as analysts are proposing as being significant. That is, it ensures that our claims reflect categories which are significant for the participants *themselves*, rather than exemplifying and confirming any pre-theoretical assumptions we may hold. This significance is explored and warranted principally through the application of Conversation Analysis's powerful 'next turn proof procedure', which requires close inspection of a 'current' turn for what it can tell us about how the current speaker is treating what has gone before (Heritage 1984; Sacks, Schegloff and Jefferson 1974: 729).

In what follows, we examine two kinds of sequence. In the first, a participant produces an explicit formulation which, to use Schegloff's parlance (Schegloff 2007: 87) "notices' something' apparently arising from the vocal behavior of the co-participant (e.g. 'you sound happy', 'don't sound so depressed').² A warrant for taking the view that these formulations

may arise from the vocal behavior of a co-participant is provided by Schegloff (1986). As part of an analysis of telephone call openings, Schegloff draws attention to the ability of participants to notice 'anomalies in the sound in the voice, such as mood, illness, and, most, commonly, being awakened' (1986: 124).³ He also provides an analysis of the resultant formulations and the kinds of sequence in which these formulations occur. The second kind of sequence involves responses to different kinds of affectual states (see e.g. Goffman 1978; Wilkinson and Kitzinger 2006). Within this work connections have been made between the phonetic design of the responses and the affectual states which result from the informings (see also e.g. Heritage 1984: 345; O'Connor and Arnold 1961:48; Roach 2000: 157; Sweet 1911: 3).

In sections 2 and 3 we deal with how explicit lexical formulations referring to the phonetic design of talk in particular work (excluding other kinds of conversational phenomena which have been described as 'formulations': see e.g. Heritage and Watson 1979). Section 4 deals with aspects of responses to informings.

2. 'Voice quality' as an interactional resource

Extract 1 shows a case of one participant (Jenny) picking up on the phonetic features of a coparticipant's (Simon's) prior talk. (For cases similar in a number of respects to Extract 1, see Schegloff 1986: 124-5.)

Extract 1.⁴ Rahman.A.2.JSA(9). Jenny (Jen) has called her friend, Ann. Ann's son, Simon (Sim), has answered the telephone.

Sim:	Redcah five foh sev'n <u>d</u> ine?, (0.3)
Jen:	Hello i-is <u>th</u> at eh <u>Chr</u> istopher,
Sim:	Sibon,
Jen:	Oh it's Si- oh: you've gotta co:ld thaht's why I
	couldn' <u>r</u> ecognize youh Is yih <u>mu</u> m thea <u>:</u> h?,
	(0.3)
Sim:	MOM it's f' <u>YOU</u> :.
	(0.4)
Sim:	Sh'z <u>j</u> uus cuubig,
	(1.0)
Jen:	A(h)'right <u>t</u> hank you,
	Jen: Sim: Jen: Sim: Sim:

In line 5, Jenny remarks on Simon's voice quality: 'oh: you've gotta cold'. In this case, we can locate a clear phonetic basis for Jenny's formulation. Simon's first two turns have the denasal voice quality (Abercrombie 1967: 94-95; Laver 1980: 88-90) typically associated with a blocked nose and a cold, evident in the usually nasal sounds: 'seven', 'nine' (line 1), 'Simon' (line 4).⁵ Aside from the apparent factual accuracy of Jenny's formulation, her reference to Simon having a cold is not a simple 'statement of fact', or even expression of sympathy that Simon is unwell. It forms part of an *account* for why she failed to correctly identify Simon when he answered the telephone: 'thatt's why I couldn' recognize you.'. This extract shows that interactants can respond to each other's voice quality, should they have both a material basis for it, and something to be gained from doing so.

Conversely, the material basis for making some kind of state-attribution may be present, but the opportunity passed over.

Extract 2. Rahman.C.1.IIJ.(16):1. Ida has called Jenny to invite her to go shopping with her and another friend, Jano.

1		Jen:	*Hello:?,*
2		Ida:	Hello Jenny.
3			(.)
4		Ida:	[It's me:.
5		Jen:	[Oh hello theah.
6		?Jen:	.hhh
7		Ida:	Uhm ah'v ruung to ahsk uhm .hh wouldju like a ruun
8			uup to Middlesb'r in the mohrn[ing.
9	\rightarrow	Jen:	[.hh kHey that's
10			funny I wz gon'to ahsk hhyou
11			the [same think. ((very hoarse))
12		Ida:	[Well,
13		Ida:	iYe[s:
14		Jen:	[An'=
15		Ida:	=Well Jano's ruung you see:,
16		Jen:	Oh[^:::.
17		Ida:	[She ruung abou'sev'n uh'clock'n ah said
18			.hh Well ah cahn' rring Jenny y't cuss she
19			be eIthuh shopping ohr gone [to ().]
20		Jen:	[No I didn']t
21		Jen	go:. I didn't g[o: tonights.]
22		Ida:	[Oh well I <u>di</u>]dn' know.=

In Extract 2, we can hear from Jenny, as well as coughing before she says '*Hello:?,*', noticeably disturbed tense whispery phonation coincident with the turn which begins at line $9.^6$ There would therefore seem to be the material basis for some kind of formulation by Ida as to Jenny's current physical state (e.g. 'Yih vyce is still crohky': see Extract 3). However, there is no such orientation by Ida to Jenny's vocal characteristics. Taken together, Extracts 1 and 2 suggest that one participant *may* comment on the way their co-participant sounds where they sound 'out of the ordinary', but do not *have* to do so, at least not at that moment.

Extract 3 is taken from some three and a half minutes later in the same call as Extract 2, during which time Jenny has not sounded particularly hoarse, and has not coughed.

Extract 3. Rahman.C.1.IIJ.(16):4. Arrangements have been made for Ida, Jenny, and Jano to meet the next day.

1	Ida:	[Bou'twenty pas'nine.=
2	Ida:	=[A: l [^right?]
3	Jen:	=[That-[That'll] be fi:ne yes.=
4	Ida:	=[l : <u>L u</u> v]ly.]
5	Jen:	=[That u be lo]v e]ly.
6		(.)
7	Ida:	[O [:^ka:y th] e : n ,]
8	Jen:	[.h[Oh that's] that's ahh]hh Cz funnily
9		ah th- I: [thought .hh=
10	Ida:	[Yes.

11		Jen:	=ah wonder if ^I:da'd fahncy a run tih
12			Middles[ber in the=
13		Ida:	[Ye:h
14		Jen:	<pre>=m[oh:ning. ((hoarse from `Cz funnily'))</pre>
15		Ida:	[Ye(h)eh
16		Jen:	.hh Mm:.
17		Ida:	Yeah.
18		Jen:	Cuz I wz goi- ah've been (.) going tih go
18			b't I:- (0.2) i i-tihday I couldn'be
20			bothuhd[hh[h e h]heh[unh .hheh
21		Ida:	[n:[No.] [No.<
22	\rightarrow	Ida:	Yih [vyce is sti:ll crohky.
23		Jen:	[*eh*
24		Jen:	.t It's not- I don't feel bahd tho[ugh
25		Ida:	[Noh.
26		Jen:	it's no[t eh
27		Ida:	[B't 26 it's still verry
28			[crohky.]
29		Jen:	[It wz a bit t]ight lahs'night.B't my chest is bettuh
30			tih[day.
31		Ida:	[Go <u>o</u> :d.

With the exception of the final syllable of her 'lovely.' (line 5), which is produced with a fallto-low in pitch and creaky voice, the voiced portions of Jenny's talk at the start of this extract (lines 3 and 5) are all produced with regular, modal phonation, and no indication of hoarseness or laryngeal tension. As documented in Gail Jefferson's , Jenny's voice becomes noticeably more hoarse on producing 'Cz <u>funnily</u>' (line 8), and this hoarseness persists throughout the remainder of the extract.

This hoarseness 'switches on' at a point in the interaction where possible closing is in the air: arrangements have been made, a series of topically disengaged turns are delivered in the first part of the extract, and at line 7, Ida delivers the kind of 'O₂^ka:y the<u>in</u>,' which regularly figures as a first terminal component in a move to close a call (Button 1987). The point at which Jenny's voice becomes hoarse once more (line 8) coincides exactly with the point at which any unfinished business – such as her health, or who precisely is culpable with respect to difficulties in the arrangement-making – which is yet to be talked about can be nominated for discussion. This usage achieves the reopening of talk. Jenny's turn is concerned with a report of her abandoned shopping trip (and the fortuitousness of Ida's invitation to go the next day). However, this 'official business' is not addressed in what Ida does subsequently, but the 'unofficial business of the turn is unproblematic, instead talking about how Jenny sounds, suggests that it is the unofficial business which has greater significance for both parties at this point.⁷

By attending to both phonetic and sequential properties of Extracts 1 to 3, we have shown that prosodic/voice quality features, and commentaries on those features, are interactional resources and must be understood as part of sequences of action and interaction. It would seem that even presumed physiologically determined phonetics resulting from transient physical states (coughs and colds) may be manipulable and interactionally deployable. In what follows we look more closely at commentaries which claim their own basis in another speakers' prosodic/voice quality features, and which relate to the affectual, rather than physical, state of the co-participant.

3. Explicit lexical formulations of affectual states

We want now to explore further what is happening when noticings about the way a speaker sounds are produced in interaction, in terms of both the features to which the noticings are responsive, and the interactional consequences of the noticings themselves. The noticings that we are concerned with from this point on relate to the psychological state of a co-participant: they are explicit lexical formulations of affectual states. We might reasonably expect to find phonetic correlates of affect in these locations, so they are a useful 'stopping-off point' in the current exploration of affect, phonetics, and sequence, and of the contribution made by the phonetic shape of talk to the interpretation of affect. In what follows we talk about only a few cases, though we examined around 33 hours of audio recordings, which yielded around 70 cases of self- and other-attributions of affectual states. Here we deal only with other-attributions.

The formulations concerning the physical state of a co-participant in Extracts 1 and 3 above all had some kind of material, phonetic basis in the talk which preceded them. Likewise, certain attributions of affectual states can also follow some sort of independently identifiable material basis, as in Extract 4.

Extract 4. TG-1s. Ava and Bee are teenage friends who have not spoken for some time.

1	Ava:	H'llo:?
2	Bee:	hHi:,
3	Ava:	H <u>i:</u> ?
4	Bee:	hHowuh you:?
5	Ava:	Oka:::y?hh
6	Bee:	
7	Ava:	[<i a-uh:m<="" got="" if="" know="" td="" wan]'dih="" yih=""></i>
8		wutchimicawllit. A:: pah(hh)khing place °th's
9		mornin'. hh
10	Bee:	A pa:rking place,
11	Ava:	Mm hm,
12		(0.4)
13	Bee:	Wh <u>e</u> :re.
14	Ava:	t! Oh: just anypla(h)ce? I wz jus'
15		kidding yuh.
16	Bee:	Nno?=
17	Ava:	=[(°No).]
18 →	Bee:	=[W h y]whhat'sa mattuh with y-Yih
19		sou[nd HA:PPY,] hh
20	Ava:	[Nothing.]
21	Ava:	u- I sound ha:p[p <u>y</u> ?]
22	Bee:	[Yee]uh.
23		(0.3)
24	Ava:	No:,
25	Bee:	Nno:?
26	Ava:	No.
27		(0.7)
28	Bee:	•hh You [sound sorta] cheer <u>[f</u> ul?]
29	Ava:	[°(Any way).] [·hh]
30		How'v you bee:n.

One plausible basis for Bee's formulation at lines 18-19 ('Yih sound <u>HA:</u>PPY,') is the phonetic design of Ava's talk up to that point. Ava produces her '<u>Oka:::y</u>?hh' at line 5 with a noticeably very long second syllable produced with rising pitch, suggestive of some kind of 'kidding around' (Schegloff 2007: 153). That this turn by Ava is affectually loaded is indicated by Bee's launching of a formulation at line 6 ('Yihsou:nd...'). Although this formulation is not brought to completion, there is sufficient in what is said by Bee to suggest that she was going on to make some kind of noticing concerning Ava's affectual state. Ava's laughter during 'pah(hh)khing' (line 8) and 'anypla(h)ce?' (line 14) also contributes to the sense that she is happy, and may be part of what Bee is picking up on in her eventual formulation at lines 18-19. It would seem, then, in this case that the phonetic design of the talk is a significant part of what is leading to Bee's formulation.⁸

Extract 5 is different from Extract 4 in certain respects and supports the view of affect – or, at least, the public claims of affect – as something which arises from a *constellation* of features of different kinds.

Extract 5. Holt.U88.1.4-326s. Gordon (Gor) has called Dana (Dan). They have been discussing the previous night's events. Gordon has apologised for a late-night telephone call he made to Dana which upset her mother. Dana has reported having been upset at the behaviour of some of her friends: specifically the design of turn and sequence.

1		Gor:	LISTEN c'n you come over tolday.
2			(0.2)
3		Gor:	.k
4		Dan:	°Yeh okay°
5		Gor:	.hhhh
6			(0.4)
7		Gor:	.k.gk.k YOU <u>can</u> lp
8			(.)
9		Dan:	M-hm
10		Gor:	You feel alright.
11			(0.4)
12		Dan:	Yeah
13			(0.6)
14	\rightarrow	Gor:	Cz you don't (.) You sound a bit um (0.6) .t
15	\rightarrow		preoccu↓pied.
16			(0.5)
17		Dan:	That's okay
18			(0.5)
19		Gor:	You sure.
20			(.)
21		Dan:	°Mm°
22			_ (1.1)
23		Gor:	$((w)) \underline{Cuz} hh- (.) ((n)) .glk I wanna see you.$

At lines 14 - 15 Gordon delivers a formulation concerning Dana's affectual state: 'You sound a bit um (0.6) .t preoccupied.' This formulation provides an account, on Dana's behalf for why her acceptance of Gordon's 'c'n you come over today' (line 1) has not been straightforward. Her response to Gordon's formulation ('That's okay', line 17) claims that irrespective of whether or not she is or she sounds 'preoccupied' this should not be taken by Gordon as having a bearing on her ability or desire to come over. She is, in essence, refuting Gordon's account for what has transpired earlier in the sequence. The material basis for Gordon's formulation seems not to be provided by Dana's voice quality around this section of interaction: the phonetic design of her talk here is not in any way out of the ordinary in comparison with her normal vocal behavior. Crucially, the material basis for Gordon's formulation in lines 14 to 15 lies rather in the organization of turn and sequence: the minimality of the responses she provides to Gordon's turns (lines 4, 9, 12), and the silences which follow Gordon's first pair parts (lines 1, 7, 10) in which a response from Dana is expectable but not forthcoming (lines 2, 8, 11).

Extract 5 opens up the possibility that while a range of resources are involved in providing a material basis for a formulation of a co-participant's affectual state, this basis need not necessarily involve the phonetic design of talk: turn design and sequential organization may be sufficient to provide a material basis for the ascription of affect. From an analytic point of view, this highlights the fact that we need to consider more than just the phonetic design of talk in order to understand how affect is encoded in talk-in-interaction.

A further, and final, instance of an affect formulation is given in Extract 6.

Extract 6. CH.6067-1290s. Ruth (Rut) and Hannah (Han) have been talking about a letter Ruth has received from a friend to whom Hannah gave Ruth's address.

1 2		Rut:	that was a long time ago (so/still) (0.3)
3		Rut:	.hhhhh so she'll be getting a letter from me soonhh
4			(.)
5		Han:	goodhhh
6			(.)
7	\rightarrow	Han:	you sou[nd so] sleepy sweetie
8		Rut:	[yeah]

The material basis for Hannah's formulation in Extract 6 seems quite straightforward, and is phonetic in nature. Ruth's turn at line 3 has the following features:

- a lax turn-initial inbreath;
- a switch from diplophonic phonation during the voiced parts of 'should be getting a 1...' into creak phonation on 'fro' and then breathy phonation on '...m me', where the [m] at the end of 'from' is produced as a denasalised bilabial approximant;
- a lax breathy, lowered larynx production of 'soon' which ends in a denasalised alveolar closure.

Taken together, these features give the percept of Ruth continuing her talk while preparing to yawn and producing a yawn coincident with the end of 'soon'. Assuming that yawning is one indicator of sleepiness, Hannah's formulation can be considered to have a material phonetic basis in Ruth's immediately prior talk.

What is striking about this formulation is what happens in its wake. In spite of the (unusually) straightforward phonetic basis for Hannah's formulation, Ruth goes on to dispute the formulation by supplanting it with her own, alternate explanation for the features which Hannah' s turn at line 7 seem to address.

Extract 6 (continued)

9 10	Rut:	`m not sleepy I'm just kind of sad that I think people tried calling and I missed them
11		(0.2)
12	Han:	.hhhh
13		(0.2)
14	Han:	well they will keep trying- I assure you
15	Rut:	yes
16	Han:	.hhhhh I was thinking of calling my parents I don't
17		know (0.3) .hhh (0.2) we shall see

One explanation for this 'negotiation' of affect around lines 7 to 10 is that phonetics is in fact a highly suspect indicator of affect, and that alternate interpretations of the same phonetic features are possible. Alternatively, for the purposes of the interaction, the 'yawning' is being dismissed by Ruth as not relevant to the interpretation of the ongoing talk. In either case, the potential of a 'many-to-one' mapping of affectual states to phonetic characteristics may be valid and analysts should be open to this possibility. However, in the case of Extract 6, this seems implausible. What Hannah seems to be responding to with her formulation is *yawning* by Ruth. It seems highly unlikely that Ruth, on having been prompted by Hannah's formulation to reinspect her own 'yawning talk' in order to validate, or supplant, Hannah's formulation, views her own yawn as a sign of sadness rather than sleepiness.

Irrespective of the precise details of single cases, a formulation of a co-participant's affectual state serves to provide for the production of talk by its recipient on his/her own state. Although other actions may be being accomplished by these formulations, they all solicit talk of a particular kind: in each case talk on the recipient's state is either forthcoming (e.g. Extract 6), or if not, then it is pursued (Extracts 4 and 5).

In summary, we examined these other-attributions of affectual state in the hope of identifying consistent links between the explicit lexical formulations, and the design of the talk which precedes them. This part of the investigation was not entirely successful: voice quality, turn design, and sequential organization appear to play a role, though in different measures for each case, with all three features not being consistently pressed into service. Even a formulation based on apparently obvious phonetic correlates of a speaker state (yawning) was rejected by co-participant. Overall, this suggests that there is no straightforward mapping between the design of talk (either in terms of voice quality, turn design, or sequential organization) and the ascription of affect. However, we have managed to uncover at least something about the ascriptions: for all they may not be good indicators of 'affect phonetics', we can now begin to understand them as a resource for getting a co-participant to talk about their state. We have been through some of the issues behind *claiming* an affectual state in interaction. In what follows next, we look at some issues in *displaying* one.

4. Responses to informings

After any turn at talk in conversation, the recipient of that talk may express an attitude or stance towards what has been said by a co-participant. This may be regarding, for instance, the accuracy of what has been said, its affectual import or whether or not what has been said was previously known. One particular activity which promotes attitudinal and affectual

responses is where one participant imparts positive or negative informing to co-participant ('good' or 'bad' news — Freese and Maynard 1998; Heritage 1984; Local 1996; Maynard 2003). An instance is shown in Extract 7, where Joyce informs Lesley of the positive outcome of her husband's operation and Lesley produces an appropriately fitted response to the informing at line 7. We can tell that the response is 'appropriately fitted' as Joyce continues her telling unproblematically.

Extract 7. Holt.M88.1.2.59s. Lesley (Les) has called Joyce (Joy) to find out how Joyce's husband's operation has gone; Mr Williams is a surgeon.

```
1
                   we saw Mister Williams:=
         Joy:
2
         Les:
                   =[Yes,
                   =[an:' um: .p I went t'pick im up (.) Mister
3
         Joy:
                   Williams camein 'n said .hhh you'll be glad
4
5
                   to know I checked him an' .hhh
                                       ) it's as (0.3) ↑clear
6
                   (
7
                   as a whistle 'e[said,
                                  [.hhhh Oh that's ↓mar[v'lous.]
8 →
         Les:
9
         Joy:
                                                         [N o : :]:
                   No problems at lall 'e said aren't you plea:sed?
10
```

Speakers can display their understanding and attitude/stance towards an informing by making particular lexical choices (e.g. 'oh how *horrible*', 'that's *awful*', 'oh that's *wonderful*', 'how *adorable*'). It has also been suggested that responses to informings can display a speaker's attitude and stance to that informing, for instance, the valence (positive or negative) and 'weight' — the degree of the informing (how 'good', how 'bad'), by drawing on phonetic resources e.g. pitch (range and contour), loudness and features such as voice quality (e.g. Freese and Maynard 1998; Goffman 1978; Maynard 2003; Wilkinson and Kitzinger 2006). Standalone non-lexical responses to informings (turns consisting of e.g. 'oh', 'wow', 'gee(z)' and no other components) provide a particularly good site for exploring how and whether phonetic design and displays of stance may be related: given the lack of overt lexical content, their phonetic design could reasonably be expected to be an important resource for participants in signalling the stance they are taking.

A systematic search of the same audio recordings as for the study of formulations reported on in sections 2 and 3 above yielded a data-set of 651 informing sequences. There were 182 putative non-lexical responses (e.g. 'oh', 'wow' 'gee(z)'); there were 68 sequentially comparable tokens of standalone 'wow' (i.e. 'wow' with no other components in the turn) in response to informings, to which we restrict ourselves here. We pick up here on some suggestive data from the collection. The data are 'suggestive' in that non-lexical responses to positive or negative informings are not systematically discriminable in terms of their prosodic/voice quality features.

In our data there is an overlap with regard to the phonetic design of 'wow' tokens and the kind of informing to which they respond. First, we find that instances of 'wow' which are hearable as the same object occur as unproblematic responses to both positive and negative informings: there is no straightforward mapping between *valence* and phonetic design. Second, we find that instances of 'wow' which are hearable as the same object can be used in response to informings which differ in terms of *weight*: the significance for the interactants of the information being given.

Taken together, Extracts 8 and 9 exemplify this 'one-to-many' mapping, such that instances which are hearable as the same from the point of view of their phonetic design occur in response to more than one kind of informing.

Extract 8. CH.4571-150. Rebecca (Reb) and Harriet (Har) are talking about the niece of a mutual friend, David, who is living with him.

2 (0.5)	
3 Reb: .hhhh	
4 (0.2)	
5 Reb: I don't know (all : I:-:-) I don't know if	
6 she would've been is way if she hadn't had all of	the
7 problems she had in her life but she's kind of:	(.)
8 a goofball and .hh she ran up such big bills	
9 that I don't think they've had a phone for a who	e
10 yea:r: .hhhhhhh because [he can't pa]y them off:	
11 \rightarrow Har: [w o w]	
12 (.)	
13 Reb: but	
14 (0.6)	
15 Reb: and I don't know if she's [still] living there	
16 Har: [huh]	
17 Reb: or not	

Extract 9. CH.4807-336. Dad has been telling his daughter, Liz, about a trip he has recently taken.

1 2 3	Dad:	so it's been: umhh (0.3) .pth (0.4) .hhhh (0.2) ninety or a hundred for a mon:th now (.) down (°there°)
4	Liz:	jee(h)[z
5	Dad:	[down there: and it's been (.) .hhhhhh
6		toda:y and yesterday was the first da:y in
7		a long time we've had it less: than: (.)
8		a hundre:- or ninety: (.) and so it's in
9		the eighties and it feels: (0.6) marvellous
10		(0.7)
11 →	Liz:	[wow=
12	Dad:	[.mhhh
13	Dad:	=so (.) we finally get some relief from the weather
14	Liz:	huh huh (.) .hhh (.) it's like autumn here

In Extracts 8 and 9 we see informings which differ in their valence being responded to, in each case with a standalone 'wow'. In Extract 8, the informing conveys something both remarkable and negative: David's niece has run up such large telephone bills while staying in his house that he hasn't been able to pay them off, and consequently has been without a telephone for 'a whole yea:r:'(lines 9-10). Compare this with Extract 9. Liz's 'wow' follows Dad's reporting of a (positive) respite from extreme recent temperatures.

The instances of 'wow' in Extracts 8 and 9 are hearable as 'the same object' with regard to their phonetic design. We have provided graphical representations of the speech-pressure waveform, fundamental frequency and intensity for all the standalone 'wow' tokens

discussed in the appendix.⁹ Both tokens are durationally equivalent. They have loudness characteristics in keeping with surrounding talk from that speaker and from the coparticipant. Auditorily, both tokens are produced with approximately level pitch, just below mid in the speaker's range, with a narrow pitch span (excursion). Both tokens are produced with regular vocal fold vibration (voicing), and with audible breathiness. The token in Extract 9 begins with a short period of laryngealization (creaky voice). In both cases, the phonatory features are typical of that speaker's norm. With regard to articulation, both tokens begin with labiality (lip rounding) as might be expected; both tokens end with velarity (retraction of the tongue body towards the velum) and labiality.

Taken together, then, Extracts 8 and 9 are indicative of a kind of overlap in the marking of stance: the same phonetic object can be found in response to a negative informing ('bad news'; Extract 8) as it can to a positive informing ('good news'; Extract 9). There would seem to be no straightforward mapping between phonetics and stance, and vice versa.

The following data (Extracts 10 to 12) also suggest that the relationship between stance and phonetic design is not straightforward. Given that in each of Extracts 10 to 12 the response to the informing is composed of a single standalone 'wow' in response to informings with different weights, we might expect stance to be displayed through different and discriminable phonetic designs. However, as in Extracts 8 and 9 we find the same phonetic object in each case.

Extract 10. CH.4624-686. Debra (Deb) is telling Suzie (Suz) about college courses she is taking.

1 2 3	Deb:	that's why:- I really think that: (.) like (.) En:g- English and German goes together really we:ll in- if you're interestedin medieval .hhhh
4	Suz:	mm [hmm
5	Deb:	[because (.) um (.) in the pa:s:t English
6		and German used to be the same languag:e
7		(1.3)
8	Deb:	like about
9		(0.9)
10 11	Deb:	the year (.) before the year seven hundred (1.1)
12 →	Suz:	wow=
13	Deb:	=you know cuz like in Europe it was all like
14	Deb.	wandering: pagan tribes (.) and they just
15		like (.) um (0.6) they ca- (.) you know they
16		came down: the Goths and all themhh
ΤU		came down. the Goths and all themini

Extract 11. CH.4612-1656. Larry (Lar) is talking to Geoff (Geo) about living and working in Israel where he lives; Geoff is in the US.

1	Lar:	even now th- th- they just: (.) they opened up
2		a lot of ruh- new roa:ds now they were theyuh
3		they were building since you were here
4		(0.4)
5	Geo:	uh-huh
6	Lar:	but eh they were building while you were here
7		(0.5)

8	Geo:	ri[:ght
9	Lar:	[uhmmmm
10	Lar:	and you ca- (aws) Audrey s:aid she got to
11		Tel Aviv the other day in forty fin fi-
12		forty five minutes
13 →	Geo:	WOW
14		(0.5)
15	Geo:	with the traffic and everything
16		(1.0)
17	Lar:	(un widduh nyeah) traff- there was no traffic
18		until she got
19		(0.7)
20	Geo:	right [there
21	Lar:	[to thee uh::: er:: (.) yeah (.) Tel Aviv

Extract 12. CH.4092-187. Barbara (Bar), who currently lives in the UK, and Heidi (Hei), who lives in the US, have been talking about recent experiences at the gym.

1 2 3	Bar:	I found a gym yesterday here that's only eight pounds a mon:th (.)
4	Bar:	.hh
5		(.)
6	Bar:	which [is li:kehh .hh .mhhh twelve dollar:s twelve
7	Hei:	[mmmm
8		fifty:
9 →	Hei:	WOW
10		(0.3)
11	Bar:	yea:h it's at the hospital nearby:
12		(.)
13	Hei:	well that's a deal
14		(.)
15	Bar:	.thhh yeah: (.) yeah

In Extracts 10 to 12 a 'wow' which is distinctly different in phonetic shape from those in Extracts 8 and 9 is delivered in response to informings which differ in weight rather than valence. All three informings can be roughly characterised as neutral or positive, but the weight (i.e. the significance for the recipient of what is being said) increases each time. In these instances weight can be specified in terms of the relationship between the recipent and the informing. Maynard (2003) describes news deliveries as being about the teller (first person), the recipient (second person) or some outside party (third person). The informing in Extract 12 is first person news. In Extract 11 it is third person news. In Extract 10 it is 'zero person' news: the informing concerns not a person but an academic object — the historicity of language or languages. We might expect, then, that the response to the informing in Extract 12, where the participant is announcing personal good fortune, would come off as 'more emotive' than the response to Extract 11 where the direct beneficiary of what is being reported is a third party. Likewise, we might expect the response to the informing in Extract 11 to come off as 'more emotive' than Extract 10, where the informing concerns something of little direct relevance to its recipient. However, we find the same phonetic object in each case.

The three 'wow' tokens in Extracts 10 to 12 are all comparable in terms of their duration: they are neither particularly long or short in comparison with the whole set of standalone

'wow' tokens. Each is in keeping with the loudness characteristics of the surrounding talk. Each exhibits a rise-fall pitch contour, which begins mid in the speaker's pitch range. The rise, and subsequent fall, is in the region of four semitones in each case. The pitch peak is reached approximately at the durational mid-point of the token (this is not the case for all tokens in our collection of standalone 'wow's). This pitch peak corresponds with maximal loudness, with loudness decreasing as pitch falls: again, this need not necessarily be the case. Voiced portions have regular vocal fold vibration (modal voice) throughout. With regard to articulation, each token begins with labial-velar [w], and ends closer and backer than the tokens in Extracts 9 and 10. All three tokens exhibit labiality and velarity at their end.

The finding that there is no straightforward mapping between the phonetic design of 'wow', and the attitude/stance that might be attributed to a speaker is unexpected (cf. O'Connor and Arnold 1961:48; Heritage 1984: 345; Roach 2000: 157; Wilkinson and Kitzinger 2006). Despite paying careful analytic attention to the phonetic detail, we are unable to find any evidence (e.g. occurrence of particular pitch patterns in particular sequential structures or the particular design features of the talk subsequent to the response tokens) which would allow us to say with confidence that particular phonetic features of the responses are treated differently by participants as encoding different attitudes/stances with respect to the informing being done.

The attitudinal readings for such informing-response tokens often encountered in the literature (e.g. 'joy', 'sympathy', 'sorrow' etc.) may turn out to be epiphenomena arising in part from analysts' desire to handle the kinds of phonetic variability we have documented (compare the object evident in Extracts 8 and 9 with that evident in Extracts 10 to 12), when recourse to other predictors have failed.

In summary, what we are uncovering seems to be a 'one-to-many' relationship concerning phonetic objects: one phonetic object crops up in several, apparently disparate, sequential environments. One possible explanation with respect to 'wow' is that these tokens are deployed to register that an informing has been done but their phonetic design is such as to withhold a display of a stance with respect to the valence or weight of the informing. In Extract 12, for example, after having produced a 'wow' response, Heidi goes on to produce an explicit appreciation of the upshot of the informing ('well that's a deal'). In Extract 9, following Liz's 'wow', Dad goes on to reiterate part of his informing about the weather in such a way as to provide Liz with an opportunity to formulate a more explicit display of stance — though Liz does not take this opportunity.

5. Conclusion

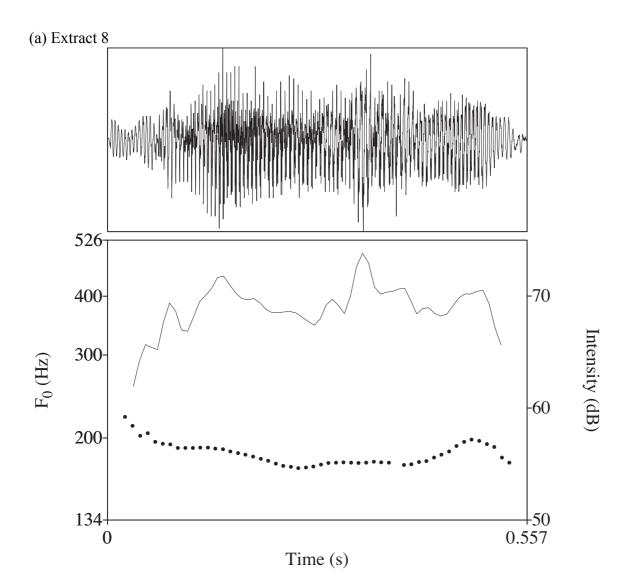
Taking as our starting point claims in the social-psychological, phonetic and Conversation Analytic literature concerning the relationship between the phonetic design of talk and the expression of stance and affect, we have examined two kinds of interactional sequence. The first kind of sequence involves one participant making an explicit lexical formulation of a coparticipant's affectual state (e.g. 'you sound happy', 'don't sound so depressed'). In these cases we demonstrated that they are a resource for getting a co-participant to talk about their state and are not necessarily straightforward indicators of the locus of 'affect phonetics'. The second kind of sequence involves responses to 'positive informings' and 'negative informings'. In these cases we argued for a 'one-to-many' relationship such that one phonetic object crops up in several, apparently disparate, sequential environments. In neither of these sequences was it possible to show regular and systematic correspondences between phonetic detail and the expression of speaker states.

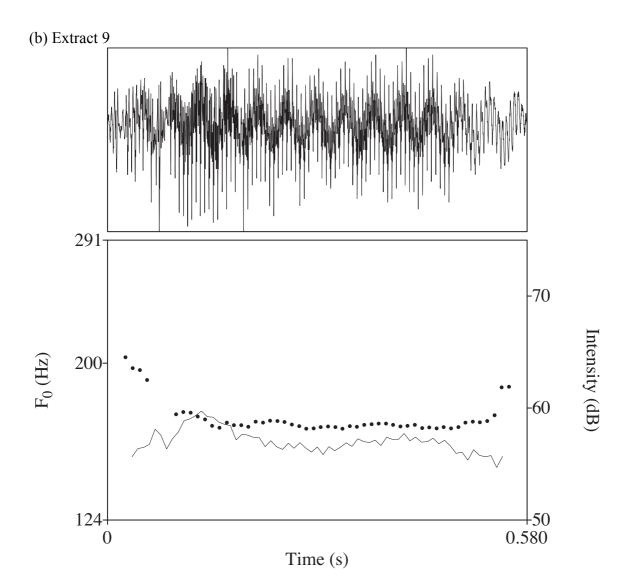
We argue on the basis of our findings that to assert that someone sounds 'happy', 'depressed', 'surprised' etc. without serious analytic work to support the claim, is problematic. To make progress in terms of 'locating' stance and affect, we need to do more than try to find evidence to support our intuitions. We think that our findings have consequences for how analysts should proceed in ascribing states to participants in talk: we should avoid making simplistic attributions of speaker states on the basis of the phonetic design of talk. This is not to claim that there is no relationship between phonetics and stance. Rather, we think that to support any such claims it would be necessary to base the analysis on explicit and close attention to the totality of the design of the talk (e.g., sequential organization, turn construction lexis, syntax, phonetic detail). As we have argued elsewhere (Local and Walker 2005; see also papers in Couper-Kuhlen and Ford 2004 and Couper-Kuhlen and Selting 1996), if we wish to make a claim that some auditorily available phonetic characteristic is an important element in the functioning and structuring of a particular turn or sequence, the analysis is required to provide evidence that participants themselves treat it, or orient to it, as important. This liberates us from analytic intuition and quasi-psychological speculation as to the motivating force behind the behavior in question. The phoneticfunctional correlation can then be analyzed in a systematic way, in line with normal Conversation Analytic practice.

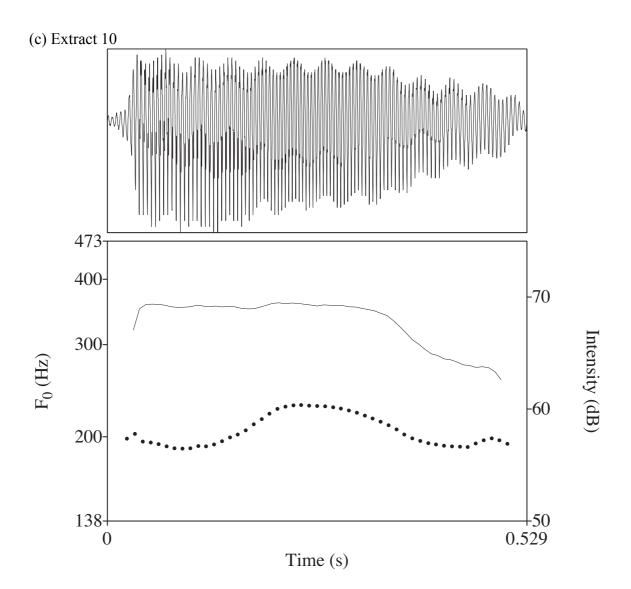
Appendix

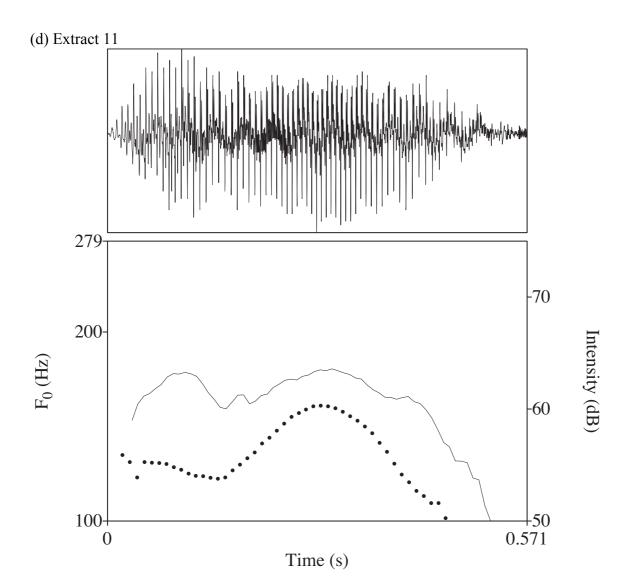
The figures show for each instance of standalone 'wow' presented in Extracts 8 to 12:

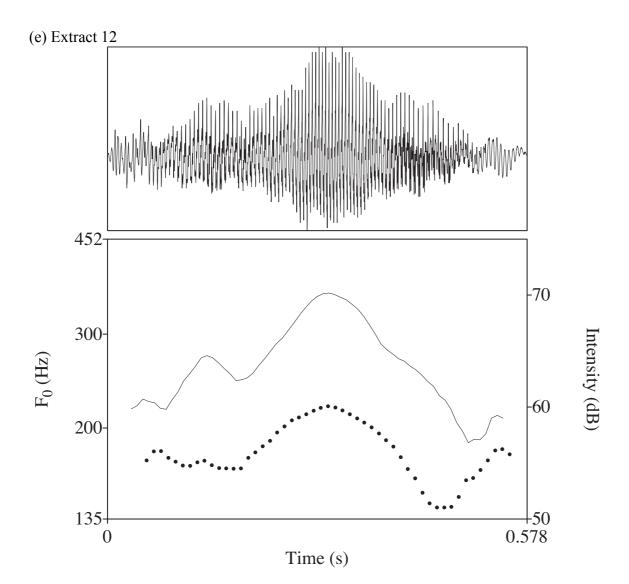
- a speech-pressure waveform (upper part);
- a F₀ trace (dotted line) plotted on a logarithmic scale, with the upper and lower limits representing the speaker's pitch range (established on the basis of F₀ measures for all utterances produced in the course of one minute of conversation);
- an intensity trace (solid line).











Notes

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1. We follow Biber et al. (1999) in employing *stance* as the more general term. We use *affect* to refer to states, emotions, evaluations and attitudes.

2. Wichmann (2002), notes: 'Some of the words co-occurring with *sound* ($\sim s$ etc.), e.g. *arrogant, blasé, patronising*, probably refer as much to the message itself as to the way in which it is spoken.' (2002:252).

3. Clark and Yallop (1995) refer to variations in a speakers' voice according to the speaker's social environment and emotional state, and listeners' ability to make judgments concerning emotional states on the basis of the phonetic design of talk: 'we are all accustomed to reading emotions from an overall impression of these properties of speech' (i.e. articulation rate, phonation mode and articulatory forcefulness) (1995: 84).

4. See Jefferson (2004) for a summary of transcription conventions.

5. The denasal quality is reflected in parts of Jefferson's transcriptions e.g. '<u>dine</u>?' for *nine*, '<u>Si</u>bon,h' for *Simon* and 'cuubig' for *coming*.

6. Notice also the comment '((very hoarse))' in the original transcription.

7. The official and unofficial business of Jenny's turn may not be completely unrelated. After all, the 'unofficial business' is a display of being unwell, and the official business involves a claim that she has not been shopping as she 'couldn't be bothered'. This could also be attributable to being unwell.

8. Ava's use of 'kidding' as part of a description of her own behaviour (lines 14-15), could also be taken by Bee as suggestive of some positive state on her part which may be consonant with being happy. A certain amount of resistance to Bee's formulation can be identified in Ava's conduct. 'Erring' following an explicit lexical formulation of this type is discussed following presentation of Extract 6.

9. The phonetic descriptions in this paper, are based on what we can *perceive*, rather than on simple acoustic measures. In part, this is because there are currently no agreed ways of providing justifiable, quantified measures of many of the things that are significant here.

References

Abercrombie, D. (1967). *Elements of General Phonetics*. Edinburgh: Edinburgh University Press.

Ashby, M. and Maidment, J. (2005). *Introducing Phonetic Science*. Cambridge: Cambridge University Press.

Banse, R. and Scherer, K. (1996). Acoustic profiles in vocal emotion expression. *Journal of Personality & Social Psychology* 70 (3): 614-636.

Biber, D., Johansson, S., Leech, G., Conrad, S., and Finegan, E. (1999). *Longman Grammar of Spoken and Written English*. New York: Longman.

Blakemore, D. (1992). Understanding Utterances. Oxford: Blackwell.

Bolinger, D. (1989). Intonation and its Uses. Stanford: Stanford University Press.

Button, G. (1987). Moving out of closings. In *Talk and Social Organization*, G. Button and J. R. E. Lee (eds), 101-151. Clevedon: Multilingual Matters.

Chafe, W.L. (1986). Evidentiality in English conversation and academic writing. In *Evidentiality: The Linguistic Encoding of Epistemology*, W.L. Chafe and J. Nichols (eds), 261-272. Norwood, NJ: Ablex Publishing Corporation.

Clift, R. (2006). Indexing stance: Reported speech as an interactional evidential. *Journal of Sociolinguistics* 10: 569-595.

Clark, J. and Yallop, C. (1995). *An Introduction to Phonetics and Phonology*. Oxford: Blackwell, 2nd edn.

Couper-Kuhlen, E. and Ford, C.E. (eds). (2004). *Sound Patterns in Interaction*. Amsterdam: John Benjamins.

Couper-Kuhlen, E. and Selting, M. (eds). (1996) *Prosody in Conversation: Interactional Studies*. Cambridge: Cambridge University Press.

Cowie, R. and Cornelius, R.R. (2003). Describing the emotional states that are expressed in speech. *Speech Communication*. 40: 5-32.

Cruttenden, A. (1997). Intonation. Cambridge: Cambridge University Press, 2nd edn.

Du Bois, J. 2007. The stance triangle. In *Stancetaking in Discourse: The Intersubjectivity of Interaction*, R. Englebretson (ed.), 139-182. Amsterdam: John Benjamins.

Freese, J. and Maynard, D.W. (1998). Prosodic features of bad news and good news in conversation. *Language in Society* 27: 195-219.

Goffman, E. (1978). Response cries. Language 54: 787-815.

Greasley. P., Setter, J., Waterman., Sherrard, C., Roach, P, Arnfield, S. and Horton, D. (1995) Representation of prosodic and emotional features in a spoken language database. *Proceedings of the XIIth ICPhS*, Stockholm. Vol 1, 242-245.

Haddington, P. (2006) The organization of gaze and assessments as resources for stance taking. *Text & Talk* 26(3), 281-328.

Heritage, J. (1984). A change-of-state token and aspects of its sequential placement. In *Structures of Social Action: Studies in Conversation Analysis*, J.M. Atkinson & J. Heritage (eds.), 299-345. Cambridge: Cambridge University Press.

Heritage, J. and Watson, D.R. (1979) Formulations as conversational objects. In *Everyday Language: Studies in Ethnomethodology*, George Psathas (ed.), 123-162. New York: Irvington.

Hirschberg, J. (2002). Communication and prosody: functional aspects of prosody. *Speech Communication*. 36: 31-43.

Jaszcolt, K.M. (1999). Discourse, Beliefs and Intentions: Semantics Defaults and Propositional Attitude Ascription. Oxford: Elsevier Science.

Jefferson, G. (2004). Glossary of transcript symbols with an introduction. In *Conversation Analysis: Studies from the First Generation*, Gene H. Lerner (ed.), 13-31. Amsterdam: Benjamins.

Kärkkäinen, E. (2003). Epistemic stance in English Conversation: A Description of its Interactional Functions, with a Focus on 'I think'. Amsterdan: John Benjamins.

Kärkkäinen, E. (2006). Stance-taking in conversation: from subjectivity to intersubjectivity. *Text & Talk 26: 694-731*.

Ladd, D. R. (1996). Intonational Phonology. Cambridge: Cambridge University Press.

Laver, J. (1980). *The Phonetic Description of Voice Quality*. Cambridge: Cambridge University Press.

Local, J. (1996). Some phonetic aspects of news receipts in everyday conversation. In . *Prosody in Conversation: Interactional Studies*, E. Couper-Kuhlen and M. Selting (eds.), 177-230. Cambridge: Cambridge University Press.

Local, J. and Walker, G. (2004). Abrupt-joins as a resource for the production of multi-unit, multi-action turns. *Journal of Pragmatics* 36. 1375-1403.

Local, J. and Walker, G. (2005). Methodological Imperatives for Investigating the Phonetic Organization and Phonological Structures of Spontaneous Speech. *Phonetica* 62: 120-130.

Maynard, D.W. (2003). Bad News, Good News. Chicago: University of Chicago Press.

O'Connor, J.D. and Arnold, G.F. (1961). Intonation of Colloquial English: A Practical Handbook. London: Longmans.

Roach, P. (2000). *English Phonetics and Phonology*. Cambridge: Cambridge University Press.

Roach, P., Stibbard, R., Osborne, J., Arnfield, S., and Setter, J. (1998). Transcription of prosodic and paralinguistic features of emotional speech. *Journal of the International Phonetic Association* 28: 83-94.

Sacks, H and Schegloff, E.A. and Jefferson, G. (1974). A simplest systematics for the

organization of turn-taking for conversation. Language 50: 696-735.

Schegloff, E.A. (1986) The routine as achievement. Human Studies, 9(2-3):111-151.

Schegloff, E.A. (2005). On Complainability. Social Problems. 52, 4. 449-476.

Schegloff, E.A. (2007). Sequence Organization in Interaction: A Primer in Conversation Analysis. Cambridge: Cambridge University Press.

Selting, M. 2006. Prosody as an activity-type distinctive cue in conversation: the case of socalled 'astonished' questions in repair initiation. In *Prosody in Conversation: Interactional Studies,* E. Couper-Kuhlen and M. Selting (eds.), 231-270. Cambridge: Cambridge University Press.

Sperber, D. and Wilson, D. (1995). *Relevance: Communication and Cognition*. Oxford: Blackwell, 2nd edn.

Sweet, H. (1911). A Primer of Spoken English. Oxford: Clarendon, 4th edn.

Tolkmitt, F., Bergmann, G., Goldbeck, T., and Scherer, K.R. (1988). Experimental studies on vocal communication. In *Facets of Emotion: Recent Research*, K.R. Scherer (ed.), 119–138. Hillsdale, NJ: Erlbaum.

Wichmann, A. (2002). Looking for attitudes in corpora. In *From the Colt's Mouth, and other places: studies in honour of Anna-Brita Stenström*, A.Hasselgren (ed.), 247-260. Amsterdam: Rodopi.

Wilkinson, S. and Kitzinger, C. (2006). Surprise as an interactional achievement: Reaction tokens in conversation. *Social Psychology Quarterly* 69: 150-182.