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The phonetic constitution of a turn-holding practice: rush-throughs in English talk-in-interaction*

Running head: Phonetic constitution of rush-throughs

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Abstract

There is a need to get to grips with the phonetic design of talk in its totality and without a separation of prosodic and non-prosodic aspects. Features of duration, phonation and articulation are all shown to be systematic features of rush-throughs, and bound up with the turn-holding function of the practice. Data are drawn from audio and video recordings made in a range

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of interactional settings, all involving speakers of English from the UK or the US. The paper concludes by reviewing some of the reasons why this holistic approach is desirable, namely: empirical findings, the parametric nature of speech, and a commitment to a mode of enquiry which takes seriously observable details of all kinds.
Key words: turn-taking, rush-through, duration, phonation, articulation

1 Introduction

There are at least three reasons to look at the phonetic design of talk in its totality and without a separation between prosodic and non-prosodic aspects.[1] First, a range of details is involved in the production and

1Definitions of 'prosody' in the literature are surprisingly hard to come by, and when they are given they may refer to different parts of the speech signal. A survey of the literature on 'prosody and interaction' (e.g. papers in Couper-Kuhlen and Selting 1996, Couper-Kuhlen and Ford 2004) suggests that for all practical purposes within that field prosody refers to variations in loudness, duration and (especially) pitch. Those are the features which 'prosody' is taken to refer to here. This is not meant to suggest that this is the only use of the term: this is clearly not the case.

interpretation of talk. Any part of an utterance can be described in terms of articulatory and phonatory quality, frequency (pitch), loudness and duration (Laver 1994). Because all of these features are always 'there' in the speech signal, they could conceivably have interactional relevance at any given point. Second, numerous studies describe practices in which clusters of phonetic features are implicated, and these feature-clusters can incorporate both prosodic and non-prosodic features (see e.g. Curl 2005; Curl, Local and Walker 2006; Kelly and Local 1989a; Local 1996, 2004; Walker 2004, 2007). The empirical nature of these analyses mean that their findings pose an important challenge for segmental analytic frameworks which focus on lexical contrast at the expense of other sorts of meaning (Ogden 2001). Indeed, these findings have arisen from studies which approach talk-in-interaction from a well-established non-segmental perspective (for overviews and analyses in this Firthian phonological tradition, see e.g. Kelly and Local 1989b, Kelly and Plug 2005, Ogden and Local 1994). Third, one principle of interactional phonetics (incorporated from conversation analysis; CA) is that "no order of detail in conversational interaction can be dismissed a priori as disorderly, accidental, or interactionally irrelevant"

(Heritage 1989: 22). There is no reason that this principle should not be followed in the study of the phonetic design of talk, just as it is followed in the study of other aspects of interaction (sequential organisation, lexical choice, grammatical structure, body position, gaze, gesture and so on). This principle provides a warrant for inspecting all aspects of the speech signal for their possible interactional relevance.

In what follows part of an account is presented of a practice – the *rush-through* – which is regularly referred to in the literature but which is yet to receive sustained analytic attention. In the course of the phonetic analysis a range of phonetic details is described without affording primacy to either prosodic or non-prosodic aspects (Local and Walker 2005). It will be argued that both prosodic (durational) and non-prosodic (articulatory and phonatory) features are systematic in the practice, and relate to its function in interaction.

The production of more talk by a current speaker following a point of possible completion may require some kind of interactional 'work' (Schegloff 1987a). One practice designed to handle this work has been dubbed the *rush-through*. Both the label given to this practice and existing

descriptions of individual cases suggest that the practice is describable in phonetic terms. However there is as yet no technical phonetic examination of the practice. Furthermore, descriptions given to date have been provided as part of other analytic enterprises (e.g. Ford and Thompson 1996: 165-166; Kitzinger 2000: 185-186; Roberts 2002; Schegloff 1982: 76, 1987b: 78, 1996: 93, 1998: 241). This means that both the (phonetic) form of the rush-through and its function in interaction has remained under-explored. This paper attempts to fill these gaps somewhat by providing a technical phonetic account of some instances of rush-throughs (section 2) and by offering some remarks on interactional aspects of a small set of cases (section 3). Some concluding comments are given in section 4.

The sample of data presented here are taken from a range of types of interaction (an everyday conversation over the telephone, a recording of face-to-face interaction, off-air recordings of television and radio interviews). All interactants are native speakers of British or American English with no known relevant pathologies. As has become standard in conversation analysis and interactional phonetics, detailed analysis of a small number of fragments is presented; aggregate measures are given at

appropriate points. The fragments discussed in detail have been selected as exemplars of more general patterns: the data presented here are a representative sample of a larger collection of 20 instances of rush-throughs.

2 Phonetic analysis

The following sections provide observations concerning the phonetic design of rush-throughs in terms of the following characteristics: duration (section 2.1), juncture (section 2.2) and pitch (section 2.3). It is important to note that these were not the only features considered in the course of the phonetic analysis: rather, they are those features which are either systematic, or of interest for other reasons. The phonetic analysis involves careful and repeated parametric listening, and inspection of acoustico-graphic records using the Praat computer analysis package (http://www.fon.hum.uva.nl/praat).

2.1 Duration

Fragment 1 is taken from a broadcast television interview between Michael Parkinson and actress Joanna Lumley. The rush-through occurs in line 13; the join between the turn-constructional unit (TCU; see Schegloff 1996, 2007) ending with the rush-through – henceforth the *first TCU*, even where this is not the first TCU in the turn – and the TCU which follows (the *second TCU*) is marked with the ◠ symbol; the main conventions are listed in the appendix to this chapter. With the exception of the transcription of Fragment 3 (which is taken directly from an existing transcription in circulation in the academic community) the transcriptions are prepared in such a way as to reflect aspects of the sequential organization of the talk, and to balance readability and detail. They are relatively systematized presentation transcriptions derived from more detailed working transcriptions (Ball and Local 1996; Kelly and Local 1989a, 1989b): readers are therefore encouraged to consult the audio recordings which accompany this volume for independent listening and analysis.

(1) Parkinson, 27/10/2007, Part 2, 0:03

(UK TV interview; Michael Parkinson [MP] interviewing actress Joanna Lumley [JL])

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1     MP:   you were this child of the Raj weren't you
2                 (0.4)
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3     JL:   I was I wa[s born
4     MP:             [yeah (.) and it's interesting we've
5           had quite a few people who (0.2) had that
6           similar backgrou[nd in:-:-
7     JL:                   [mm
8     MP:   coming up in:-:- growing up in India .hhhh and
9           it seems to me that it produces a remarkable
10          (0.6) child a remarkable person much more .hhhhh
11          self sufficient (.) resilient (.) and with a
12          different kind of approach to life than .hhhh
13          other people↷it is discernible
14                (.)
15    JL:   is it=
16    MP:   =mm:[:
17    JL:       [.hhh=
18    MP:   =very much so
19    JL:   I wonder how much of that is to do with the
20          travelling which was immense cos you never flew
21          in those days you always went .hh long boat
22          journeys
```

MP's talk approaches a point of possible syntactic and pragmatic (action) completion with his "…different kind of approach to life than .hhhh other people" (lines 12-13).[2] MP's talk up to this point makes a response from JL

2 There may be other points of possible syntactic and pragmatic completion preceding the rush-through in the same turn, as in Fragment 1. However, it is the point of possible

relevant (a response concerning the matter of why growing up abroad may produce a “remarkable person”: see JL’s eventual response along these lines beginning at line 19). However, rather than yield his turn at this point of possible completion, MP speeds up his talk on “other people” and goes on to produce a further TCU (“it is discernible”, line 13) without delay.

MP’s “other” in line 13 is faster than his preceding talk, and his following “people” is faster still. This rushed production of “people” is even significantly faster than his earlier turn-medial token of “people” at line 5: that earlier version has a duration of 393 milliseconds (ms), while the rushed version has a duration of 146 ms. This rushed version is therefore roughly twice as fast as the earlier version. That a TCU-final token should be so much faster than a TCU-medial token is especially remarkable as the ends of units of talk typically exhibit a slowing down (see e.g. Local, Kelly and Wells 1986; Turk and Shattuck-Hufnagel 2007; see also Barth-Weingarten 2009 where it is argued that a lack of final lengthening may provide for the production of the second element in a bi-clausal 'parallel-opposition' construction).

A second instance of a rush-through is shown in Fragment 2. The rush-

completion at which the rush-through occurs which is the focus of discussion.

through occurs at the end of CF's "…healthy environment" (line 9).

(2) Today, 28/02/2006, 5:10

(UK radio interview; Edward Stourton [ES] interviewing Caroline Flint MP [CF], then Minister for Public Health, on the day a report into childhood obesity was published; ES and CF are in different studios)

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1     CF:   and that carries on through school but it's also
2           what happens I think .hhhh in terms of
3           addressing these issues .hhh when a family turns
4           up in the doctor's surgery .hhh and (.) all
5           different (.) other areas of our lives .hh where
6           it can make an impact .hh y'know access to our
7           parks .hh access to sport .hh but ge[nerally
8     ES:                                      [.hhhh
9     CF:   creating that he[althy environment↷now n[o one
10    ES:                 [uhn-                  [ah-
11    CF:   person .hh can take responsibility for all
12    CF:   [of that  [.hh [but what w]e do need (.) if
13    ES:   [but it's [prec[isely     ]
14    CF:   I could just make this point
```

CF brings her talk to possible syntactic and pragmatic completion with her "generally creating that healthy environment" (lines 7-9). At the end of her first TCU there is a significant and audible speeding-up on "environment" of about the same magnitude as the speeding-up in Fragment 1.

Fragment 3 is taken from a telephone call. The rush-through occurs in line 26.

(3) MDE-MTRAC.60.1.3, 0:07

(US telephone; Joey has recent arrived at his father's – Tony's – home following a stay with his mother, Marsha)

```
4    Tony:    Joe got here I just wan'duh letchu kno:w
5             'ee uh [(      )
6    Marsha:         [Oh thank you fer callin,h
7    Tony:    He stepped outta the house longih- I
8             thought'e wz g'nna be back i:n en I would
9             remind him tuh ca:ll b't uh apparently he
10            wz going with Ilene tih the movies 'r
11            something (like that I didn't check=).
12   Marsha:  ehh hha hha hhuh .hhhh She call(s)/(ed)
13            him evry ni:ght.
14                  (0.3)
15   Tony:    Ha:h?
16   Marsha:  She call(s)/(ed) him evry ni[:ght.
17   Tony:                               [Oh really?
18   Marsha:  An' he wz out evry n(h)i(h)gh(h)t hnh
19                 (0.4)
20   Tony:    Tha:t's uh,hh (0.4) They're rilly quite
21            a nice couple.
22   Marsha:  At's w't evrybuddy says I haven't met her
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23                  but I- .hhh I guess I- I ↑wi:ll, hh
24      Tony:       Yeh probly you will,
25      Marsha:     .hhh Ah that's so nice'v you tih call
26                  Tony I appreciate it what time did'e get
27                  on the pla:ne.
28      Tony:       Uh::: (0.2) I: do:n't know exactly I
29                  think ih wz arou:nd three uh'clo:ck or
30                  something a' that sort.
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Marsha approaches a point of possible syntactic and pragmatic completion with her “appreciate it” (line 26), making a response from Tony relevant as she does so. While the tempo characteristics of her talk up to the fricative of “appreciate” are not especially remarkable, Marsha speeds up her talk significantly from this point. The talk which follows in that TCU is much faster than might have been anticipated on the basis of the tempo characteristics of the talk up to that point.

What can be heard in each of Fragments 1-3 is the current speaker approaching a point of possible syntactic and pragmatic completion, but rather than yielding their turn at that point, speeding up the talk and continuing into further talk without delay. Indeed, this speeding-up localised to the end of a TCU and continuation without delay are hallmarks of the

rush-through. While this speeding-up can be clearly heard, inspection of acoustico-graphic records makes it possible to provide independently verifiable measures of this speeding-up and quantified measures of its magnitude.

Figure 1 shows articulation rate plots for the talk leading up to the end of the first TCU in each of Fragments 1-3. The figure gives a visual representation of how quickly the sounds in each metrical foot are being produced. (A foot consists of a stressed syllable and all unstressed syllables following it up to, but not including, the next stressed syllable; Abercrombie 1964.) It is appropriate to take the foot as a domain of measurement for articulation rate as each foot contains exactly one stressed syllable: in English, stressed syllables are typically longer (produced more slowly) than unstressed syllables (Crystal and House 1990). The articulation rate for each foot is calculated in phonological segments per second, or sps; sps = $n(1/time)$, where n=number of segments, and $time$=duration of foot in seconds. (Articulation rate is expressed in sps because units containing more segments tend to have a longer duration than those with fewer segments; Crystal and House 1990.) The results of these calculations can then be

plotted on a chart. Each foot is represented by a dot centred over an orthographic label; the higher the dot, the faster the articulation rate.

@@ Insert Figure 1 a-c here

(a) from lines 12-13 of Fragment 1

(b) from lines 7-9 of Fragment 2

(c) from lines 25-26 of Fragment 3

Figure 1: Articulation rate plots for the first TCUs in Fragments 1-3.

It can be seen from Figures 1a-c that the final foot of the first TCU has a considerably faster articulation rate than the foot which preceded it. For each of the cases shown, the articulation rate of the final foot is roughly twice that of the penultimate foot. Neither the occurrence of this speeding-up, nor its magnitude, is particular to these three cases: the mean change in articulation rate from the penultimate foot to the final foot across a set of instances is +81% (min=25%, max=133%, standard deviation=37, n=14). This speeding-up is all the more remarkable given that we would expect a turn-final foot to be *slower* than a penultimate foot. Rush-throughs involve not just an absence of slowing down, but rather a marked speeding up. Of

course, one thing which this localised speeding-up around the possible end of a TCU provides for is starting up the post rush-through talk sooner than might have been anticipated by a co-participant. Evidence that these second TCUs begin earlier than co-participants anticipate will be presented in section 3. Before that, some further consideration of phonetic aspects of the practice; namely juncture (section 2.2) and pitch (section 2.3).

2.2 Juncture

The join between the first and second TCUs (i.e. those joined by the rush-through) routinely exhibits features of close juncture. Specifically, the two TCUs can be bound together by features of phonation (actions of the vocal folds) and articulation (movements of other vocal organs). Note that features of phonation and articulation would not typically be considered 'prosodic'. This binding together of the two TCUs works against a co-participant coming in 'in the clear' (i.e. without incoming talk occurring in overlap) after the first TCU.

In each of Fragments 1-3, and as part of the rush-through, there is continued vocal fold vibration (voiced phonation) across the join between

the two units. This continued vocal fold vibration can be heard in each case and identified visually in acoustico-graphic displays. Figure 2 provides visual representations of part of Fragment 3. In the figure, time runs along the x-axis. At the top of the figure are orthographic labels and a phonetic (IPA) transcription of Marsha's talk. The IPA symbols are centred over the relevant portion of the figure. Beneath the transcriptions is a spectrogram, which shows changes in frequency and intensity over time. (In a spectrogram, frequency is shown on the y-axis; intensity shows up as relative darkness.) Beneath the spectrogram is a fundamental frequency (F_0), or 'pitch' trace. (Pitch is the perceptual correlate of fundamental frequency. The fundamental frequency of a sound corresponds to the rate at which the vocal folds vibrate: the higher the rate of vocal fold vibration, the higher the F_0; the higher the F_0, the higher the perceived pitch.) The F_0 trace is presented on a logarithmic scale to take into account the non-linear perception of pitch whereby listeners perceive greater changes in pitch at lower frequencies. To give an indication of placement in the speaker's pitch range the F_0 trace is plotted on a y-axis which represents Marsha's baseline and topline pitches, established on the basis of one minute of representative

speech. Beneath the F_0 trace is a (sound pressure) waveform. All portions of the figure are time-aligned with one another.

@@ Insert Figure 2 here

Figure 2: Labelled spectrogram, F_0 trace and waveform of part of line 26 of Fragment 3

In addition to the continuation of voiced phonation being audible, there is evidence in each part of the figure that vocal fold vibration continues between the first and second TCUs in Fragment 3. This is especially remarkable given that, in citation form, “appreciate it” would be expected to end with a voiceless [t]. First, the waveform remains periodic across the join around 36.85 s. (Periodicity in a waveform is indicative of vocal fold vibration.) Second, Praat’s pitch tracking algorithm can reliably locate voiced frames (and hence F_0 values) across the join. Third, in the spectrogram there are vertical striations throughout this portion, which correspond to vibrations of the vocal folds.

Fragment 4 contains a further case of a rush-through, at the point of

possible syntactic and pragmatic completion on “doing things” (line 6).[3]

(4) Today, 11/08/2003, 08m42s

(UK radio interview; Sarah Montague [SM] interviewing Chris Bryant MP [CB] shortly after the death of Dr David Kelly, a British UN weapons inspector: the BBC and the government were investigated as part of the inquiry into the circumstances surrounding his death)

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1      CB:    I- I don't think it's a g:reat gladiatorial
2             battle between the BBC .hhh and government I-
3             (0.2) I think there are specific issues that
4             need to be answered and need to be looked at and
5             .hh and we need to ascertain whether there are
6             better ways of doing things↷so
7             there'[s   ac]tually I th]in-]
8      SM:          [but is]   Ming    ] Ca]mpbell right the
9             luhh Liberal Democrat foreign affairs spokesman
10            when he says .hh that uh- the result of this
11            could have a direct effect on the next election
```

In Fragment 4, the vocal folds can be heard to vibrate throughout the final sound of “things” at the end of the first TCU (line 6): the final /z/ is fully

3 The speeding-up on the final foot of CB's first TCU is in line with the speed-up observed in Fragments 1 to 3. The penultimate foot (“better ways of”) has an articulation rate of 18.4sps and the final foot (“doing things”) has an articulation rate of 27sps: an increase of 47.2%.

voiced. A time-aligned spectrogram and sound-pressure waveform of a relevant portion of the recording is shown in Figure 3.

@@ Insert Figure 3 here

Figure 3: Labelled spectrogram, F_0 trace and waveform of line 26 of Fragment 4. The arrow indicates the midpoint of the final voiced /z/

That there is simultaneous friction and voicing for [z] is evident from both the spectrogram and the waveform. The spectrogram shows high frequency noise (above c. 3.5 kHz) indicative of turbulent airflow, and regularly occurring vertical striations which correspond to vocal fold vibrations; likewise, the waveform is periodic with a frequency of c. 80 Hz, corresponding to low frequency vibrations of the vocal folds, and also shows random (aperiodic) higher frequency noise, indicative of turbulence. In utterance-final ('pre-pausal') position /z/ would usually be either partially or fully voiceless ('devoiced'). Smith (1997) reports that in an experimental study of devoicing of /z/ in American English, all tokens of sentence final /z/ by all speakers were fully devoiced; fully voiced tokens were only found when /z/ was followed by a sonorant consonant or vowel. (Smith 1997 deals

with American English data, though the findings are consistent with descriptions of fricative voicing in British English, too: see e.g. Abercrombie 1967: 138; Docherty 1992; Gimson 2001: 282; Jones 1962: 203; Laver 1994: 340-342; Ward 1945: 129.) Furthermore, in other pre-pausal productions of /z/ by the same speaker in the same interview, /z/ is not fully voiced. Figure 4 shows a time-aligned spectrogram and waveform of the word “intentions”, where /z/ exhibits final devoicing i.e. it is voiceless at its end.

@@ Insert Figure 4 here

Figure 4: Spectrogram and waveform of “intentions” produced by CB(Fragment 4). The arrow indicates the midpoint of the final voiceless /z/

Figure 4 shows that only the first 20 ms or so of friction associated with /z/ is accompanied by vocal fold vibration. After that there is turbulent airflow without vocal fold vibration (note the high frequency noise above c. 3.5 kHz in the spectrogram and aperiodocity in the waveform, but no vertical striations in the spectrogram or periodicity in the waveform). The key point concerning the fully voiced /z/ in Fragment 4 is this: fully voiced tokens

of /z/ only occur where a current speaker speaks next; in pre-pausal position /z/ is fully, or partially, devoiced. Therefore, the fully voiced [z] at the end of “things” in Fragment 4 projects more talk from the current speaker.

This maintaining of vocal fold vibration – which is a regular property of rush-throughs, including those in Fragments 1 and 2 as well as in Fragments 3 and 4 – makes it impossible for a co-participant to find any kind of gap (period of no vocal activity) in which they might begin their talk. If they do begin their talk, they will find that their co-participant is already ‘making noise’, i.e. their vocal folds are continuing to vibrate.

In addition to showing how phonation can be bound up with the practice, Fragment 3 also shows how articulatory details may be bound up in doing a rush-through. At the end of “appreciate it” there is considerable reduction of the articulatory gestures when compared with those which might occur in citation forms of the same words. For instance, there are no closure portions associated with either /t/. Furthermore, towards the end of “appreciate it” Marsha’s lips become rounded and the tongue is retracted. (Evidence for this is shown in the spectrogram, where there is a fall in F_2 from about 2000

Hz to about 1200 Hz beginning at about 36.77 s and lasting until about 36.82 s.) This retraction of the tongue body and rounding of the lips cannot be accounted for by the segmental make-up of “appreciate it”, since all of the vowel sounds in these fronts are front and unrounded. Rather, the tongue retraction and lip rounding is being done in anticipation of what is to come: the [w] of “what.”

These anticipatory gestures allow the current speaker to project more talk will follow. Furthermore, it means that while one TCU is being brought to an end, another has already begun. This point is returned to in section 3.

2.3 Pitch

Up to this point it has been argued that localised manipulation of articulation rate, phonation and articulatory details are among those features which figure in the execution of a rush-through. It is plausible that all of these features provide for the production of talk beyond a point of possible syntactic and pragmatic completion by (a) allowing talk to begin sooner than would have been anticipated (duration), (b) removing any gap between the first TCU and the following talk (phonation), and (c) the projection of more

talk (phonation and articulation).

Pitch, however, seems to play no such role in the projection of more talk to come from that speaker beyond the end of the first TCU. First TCUs have the pitch characteristics of complete intonation phrases. Figure 5 shows a labelled F_0 trace and waveform of the end of the first TCU in Fragment 2.

@@ Insert Figure 5 here

Figure 5: Labelled F_0 trace and waveform of part of lines 7-9 of Fragment 2

Figure 5 shows that there is a large fall in pitch on the final foot of the first TCU in Fragment 2 ("...vironment"). Note also the fall in pitch over "… ciate it" in Fragment 3 (Figure 2); in Fragment 4 (Figure 3) there is a fall in pitch over the final foot of CB's first TCU ("doing things").

In addition to their production as complete intonation phrases, first TCUs may exhibit pitch characteristics (including contour, excursion and terminal pitch) of other complete turns. For instance, Fragment 2 (Figure 5) and Fragment 4 (Figure 3) both exhibit final falling pitch (with falls of 15 ST and 12.1 ST respectively), in each case terminating in the lower quartile

of the speaker's range. Such large and clearly audible falls-to-low in pitch makes these TCUs comparable with other designed-to-be and treated-as complete units described in the literature (Ford and Thompson 1996; Local, Kelly and Wells 1986; Szczepek-Reed 2004). To illustrate the point that first TCUs may be comparable with other complete turns in terms of their final pitch characteristics, Figure 6 shows a F_0 trace and waveform of the end of the first TCU in Fragment 4 (Figure 6a) alongside F_0 traces and waveforms of TCU endings from the same interview as Fragment 4 (Figure 6b-d).

@@ Insert Figure 6 a-d here

(a) “doing things”

(b) “good morning”

(c) “the BBC”

(d) “programme”

Figure 6: F_0 traces and waveforms of TCU endings produced by CB (Fragment 4)

It can be seen that in each case, including the rush-through, the TCU ends

with a falling pitch: the final falls in Figure 6a-d measure 12.1 ST, 7.9 ST, 7.4 ST and 4.0 ST respectively. They also all end in the lower quartile of the speaker's pitch range, and all four end within 1ST of each other. It is important to note that Figure 6b-d show TCU ends which were followed just after by speaker transition which occurred 'in the clear', i.e. without overlap. In other words, the final pitch characteristics of the first TCU may be directly comparable with those of other treated-as-complete TCUs.

In summary, whatever work (if any) is being done by pitch in the rush-throughs, pitch does not seem to play a systematic role in the projection of more talk (cf. duration, articulation and phonation). This finding that pitch doesn’t project more talk is especially interesting given that pitch seems to be taken as a turn holding device *par excellence*: witness the use of stock phrases such as “continuing intonation” in the literature.

2.4 Summary

It has been argued that rush-throughs involve an approximate doubling of articulation rate in the final foot of the first TCU. There is also close juncture between the first and second TCUs. This may involve the

continuation of voiced phonation across this join and articulatory anticipation of the second TCU. (It is, of course, quite possible for close juncture to occur between TCUs where there is no rush-through: it is the co-occurrence of close juncture with localised speeding-up around the possible end of a TCU which are the hallmarks of a rush-through.) It has been argued that pitch features do not play a systematic role in the projection of more talk beyond the first TCU. Rather, the pitch features of the first TCUs seem designed to mark them out as complete, coherent units. While some of these phonetic features (localised speeding-up, continued phonation) are either stated or hinted at in existing descriptions of rush-throughs, other features (assimilation, the possibility of the first TCU exhibiting those pitch features found in other designed-to-be and treated-as complete utterances) are not. In any case, one aim of the preceding sections has been to offer a more rigorous phonetic account of rush-throughs, the descriptions of which have previously had an “informal, quasi-phonetic tenor” (Schegloff 2005: 470).

The next section presents an examination of some sequential aspects of the practice, and particularly those which relate to rush-throughs as a resource for continuing a turn past a point of upcoming possible completion.

3 Sequential organisation

The features of duration, phonation and articulation described in the preceding sections each militate against a co-participant starting up with reference to the end of the first TCU. The temporal compression at the end of the TCU provides for the starting of the second TCU sooner than the co-participant might have anticipated. Starting sooner than a co-participant anticipates puts the current speaker at an advantage in terms of talking past a point of upcoming possible completion at which a co-participant would otherwise be able to start their talk. As part of their basic set of rules of turn construction, Sacks, Schegloff and Jefferson (1974) make the following observation:

> "If the turn-so-far is so constructed as not to involve the use of a 'current speaker selects next' technique, then self selection for next speakership may, but need not, be instituted; *first starter acquires rights to a turn*" (Sacks, Schegloff and Jefferson 1974: 704, emphasis added)

The speeding-up which forms part of the rush-through provides for current speaker to be first starter following the first TCU. The phonatory and articulatory aspects of rush-throughs also seem designed to ensure that the current speaker is first starter. The continuation of voiced phonation means that at whatever point a co-participant begins their talk they will find that the current speaker is already speaking and may have already projected more talk to come via particular anticipatory articulatory gestures.

Given its design features it seems entirely plausible that rush-throughs represent a resource for talking past a point of upcoming possible completion. Indeed, it has been argued that ‘rush-throughs’ provide for the current speaker “to interdict another speaker’s starting up” (Schegloff 2000: 51). However, published evidence in support of this claim is relatively sparse, presumably because where rush-throughs have been discussed this has been as part of other analytic endeavours. Within the current collection of instances, there are three principle forms of evidence that the rush-through represents a resource for turn-holding along the lines assumed up to this point.

One piece of evidence in support of rush-throughs as a turn-holding device is relatively straightforward: co-participants do not usually come in with reference to the end of the first TCU. This is the state of affairs in Fragments 1 and 3: in neither case do the co-participants begin their talk with reference to the end of the first TCU. Of course, this absence of start-ups with reference to the end of the first TCU does not necessarily mean that the co-participants were in any sense *prohibited* from coming in at that point: it could be that they chose not to speak at that point. While this might account for some cases, it certainly does not offer a plausible account for all of the cases in the collection. Fragment 1 provides some evidence that the absence of an incoming from JL at the end of the TCU ending with the rush (line 13) is not because she chose not to come in at that point, or was otherwise unable to e.g. through a problem of comprehension. First, JL's eventual response to this TCU (beginning at line 19) doesn't suggest any difficulty in understanding MP's talk leading up to the rush-through, and neither participant's intervening conduct (lines 15-18) suggests any problem of understanding. Second, given the nature of the interview (a TV interview) JL is obliged to respond to MP's talk leading up to the rush-through, or at

least not responding to it would be an accountable course of action (Clayman and Heritage 2002). A more plausible account for why JL doesn't come in at the end of MP's "…other people" (line 13) is that the design of MP's talk, i.e. the deployment of the rush-through towards its end, militates against the start-up from JL which MP's talk made relevant: there would seem to be no other sequential or pragmatic factors for JL not coming in around the end of MP's "…other people" (line 13).[4]

The kinds of environments in which rush-throughs are deployed also provide a second form of evidence in support of the rush-through as a turn-holding device. In this regard, consider again Fragment 2. In Fragment 2 CF deploys a rush-through at the end of "generally creating that healthy environment" (lines 7-9). Just prior to the deployment of the rush-through there have been two audible indications from ES that he will start up talk at

4A reviewer raised the intriguing possibility that MP's inbreath at the end of line 12 "might be heard as projecting a rather longer stretch of talk than an imminent TRP." This may be the case: however, given that MP still deploys a rush-through at the next point of possible completion, he doesn't seem to have deemed the inbreath alone to have secured the space to produce more talk beyond that point of possible completion. The deployment of the rush-through shows an orientation to that point as one of transition relevance, irrespective of the presence of an inbreath relatively late in the ongoing TCU.

the next transition relevance place (TRP): his sharp inbreath during CF's "generally" (line 8) and his "uhn-" (line 10) which ends with glottal closure which is held until his start-up just after CF's rush-through (Local and Kelly 1986). CF's deployment of a rush-through can therefore be understood as responsive to ES's displayed intention to start up his own talk at the next TRP.

A third kind of evidence for rush-throughs as a turn-holding device comes from those occasions where co-participants do come in with reference to the end of the first TCU. When co-participants do come in with reference to the end of the first TCU, they begin their talk some way into the second TCU. In Fragment 2 ES makes a start on his own responsive talk ("ah-", line 10) with reference to the end of CF's first TCU. By the time that ES begins his talk CF is already a little way into her second TCU and clearly projecting more talk with her adverb "now". By deploying the rush-through at the end of the first TCU, CF has been able to reach a point of "maximum grammatical control" (Schegloff 1996: 92) before ES has been able to produce a response. Note, too, that ES's start-up occurs at just that point where CF's "healthy environment" might have ended had it not been for the

speeding up on the last word. Examples like Fragment 2 provide evidence to support the claim that rush-throughs allow the current speaker to start up their post-rush-through talk sooner than the co-participants themselves anticipate. A final point to note concerning Fragment 2 is that on finding himself talking in overlap with CF he drops out suggesting an orientation to CF being the “first starter” and therefore as having acquired rights to the turn by the time he begins.

The only case in the collection where incoming speaker holds on to bring talk to completion is Fragment 4. Following CB’s rush-through at the end of “doing things”, and a short way into his next TCU, SM starts up talk (line 8). This however does not contradict the notion that ‘rush-throughs’ secure for the current speaker rights to produce more talk past a point of upcoming possible completion. Unlike ES’s incoming in Fragment 2, SM’s talk in Fragment 4 is hearable as turn competitive (French and Local 1983). It is hearable as competitive principally due to the production of talk in overlap with high pitch. The first two syllables (“but is”, line 8) are not especially high for the beginning of a turn. However, the next (“Ming”) and the start of the syllable after that (“Camp”) do exhibit high pitch. This high

pitch begins at roughly the point where SM would be able to recognise that CB has elected to continue rather than yielding his turn after “things”. So, rather than drop out at this point (as ES did in Fragment 2) SM produces talk designed as competitive. CB drops out midway through the production of the first vowel in “Campbell”, and SM’s talk returns to something more like her expected norms for talk produced in the clear.

It is possible, therefore, to locate cases where a co-participant starts up talk in response to the first TCU, but on doing so they find themselves talking in overlap with the current speaker who, by that point, is some way into their second, post-rush-through, TCU. This lends support to the notions that as a result of their phonetic design these second TCUs really are begun sooner than might have been anticipated, and that the temporal compression evident in rush-throughs has interactional relevance. Also, in order to overcome the primary rights to speakership which the rush-through is designed to secure by virtue of the early start it provides for, an incoming speaker’s talk must be designedly competitive.

While rush-throughs, it is argued, represent a turn-holding device, it is not always the case that they are deployed where there is vigorous

competition for the floor. Consider again Fragment 3. Marsha deploys a rush-through in line 26, at the end of the TCU in which she offers an appreciation of Tony having called her. Note though that this is not the first time that Marsha has thanked Tony for calling her: her talk in lines 25-26 is a redoing of her earlier appreciation at line 6 (“Oh thank you fer callin,h”). Rather than receiving the kind of acceptance from Tony that Marsha's turn at line 6 made relevant (e.g. “no problem” or “you're welcome”), Tony began to produce an account for why he, rather than their son Joey, has called Marsha (line 7 on). That this appreciation was not overtly receipted by Tony adumbrates the possibility that the reissued appreciation, i.e. the appreciation ending with the rush-through at line 26, will also fail to secure overt receipt. By moving without delay into further talk following the appreciation, Marsha avoids the occurrence of any kind of gap in which a response from Tony might be noticeably absent (cf. Schegloff 1995).

In summary, there are at least three kinds of evidence that rush-throughs represent a resource for the production of more talk past an upcoming point of possible completion: (1) co-participants do not generally come in with reference to the end of the first TCU; (2) rush-throughs may be deployed in

response to bids to take the floor at the next TRP; and (3) where co-participants do come in, they come in some way into the second TCU.

4 Summary and implications

One aim of this paper has been to provide a more technical and rigorous phonetic account of rush-throughs: a practice which has been mentioned from time to time in the literature but which has not got beyond loose and inconsistent phonetic descriptions. On the basis of auditory and acoustic parametric phonetic analysis it has been shown that rush-throughs involve (1) an approximate doubling of articulation rate in the final foot of a TCU, relative to the preceding foot; (2) close juncture of the first and second TCUs, which incorporates features of phonation and articulation. Consideration has also been given to sequential aspects of rush-throughs in terms of their deployment and their treatment as a turn-holding device. The analysis presented here has shown that, while certain prosodic features (duration) are systematic in the practice, others (pitch) are not. Furthermore, certain non-prosodic features (phonation, articulation) are systematic.

The paper began by setting out some of the reasons why analysts should consider the phonetic design of talk in its entirety, and without *a priori* decisions to focus on some particular phonetic parameter(s). These reasons were: the nature of the speech signal, previous (and present) empirical findings, and a commitment to an analytic framework which, being grounded in the principles of CA, should be conscientiously inclusive in terms of the details it deals with. In their introduction to *Sound patterns in interaction* (Couper-Kuhlen and Ford 2004), Ford and Couper-Kuhlen (2004) outline the generally skeptical approach that CA takes towards categories of both social and linguistic orders. On the basis of the findings of this study, and previous studies which reach much the same conclusion, it is suggested that the same skepticism should be applied to the category 'prosody'. If we keep our minds – and our ears – open to the possibility that any aspect could, in principle, have interactional relevance at any given moment, we will be able to build a more complete understanding of how talk-in-interaction is organised. I take it that this is the goal of interactional phonetics.

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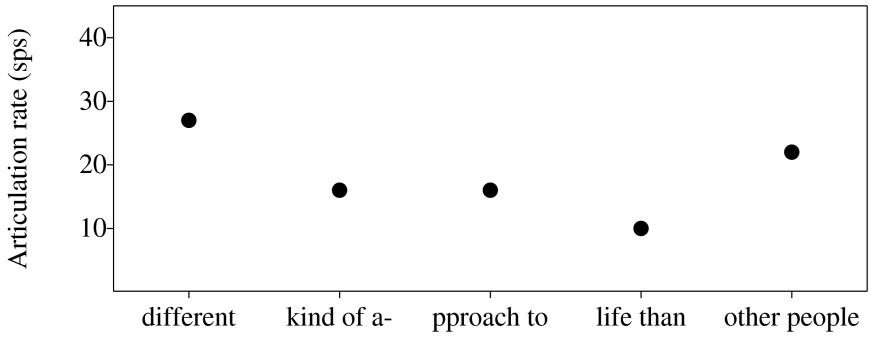
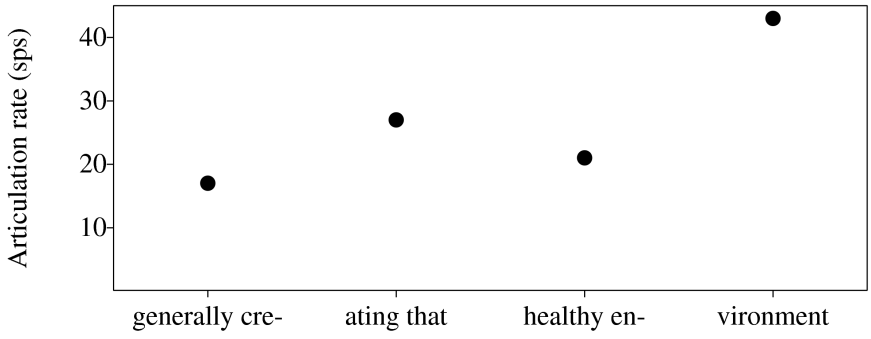
Appendix: transcription conventions

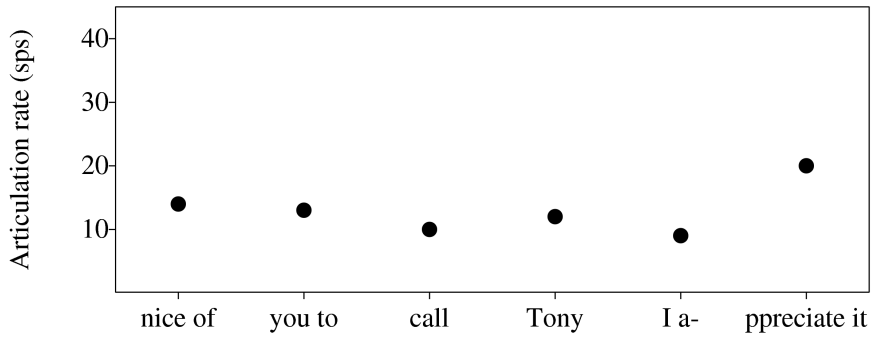
Turns at talk run down the page with the speaker identified at the left hand edge. The onset of overlapping talk is indicated by left-hand square brackets, ‘‘[’’; the end of overlap may be indicated by right-hand square brackets, ‘‘]’’. Silences are measured in seconds and enclosed in parentheses, e.g. (0.2); a period in parentheses indicates a silence of less than one tenth of a second (100 ms). Audible breathing is indicated by ‘‘h’’, with each ‘‘h’’ indicating one tenth of a second (100 ms); audible inbreathing is indicated by ‘‘h’’, or sequences of ‘‘h’’, preceded by ‘‘.’’: .hhh. A hyphen, ‘‘-’’, indicates oral or glottal ‘cut-off’. A colon, ‘‘:’’, indicates the sustention of sound: the more colons, the longer the sound. Where descriptions are provided, these are placed in double parentheses and italicized, *((like this))*.



(a) from lines 12-13 of Fragment 1



(b) from lines 7-9 of Fragment 2



(c) from lines 25-26 of Fragment 3

Figure 1: Articulation rate plots for the first TCUs in Fragments 1-3

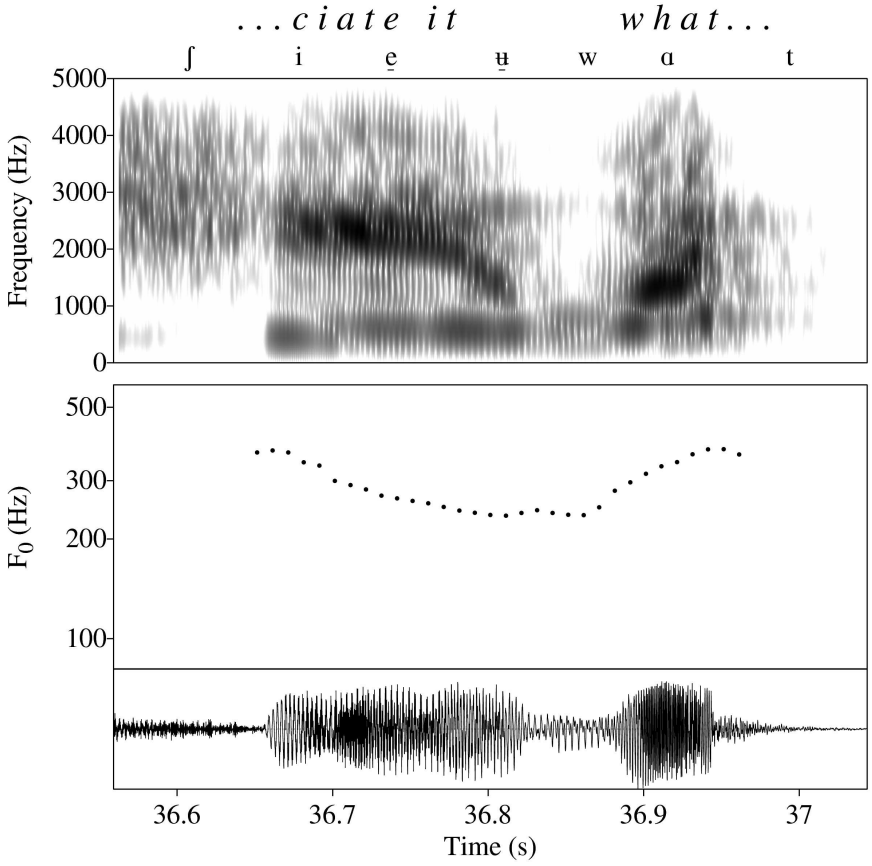


Figure 2: Labelled spectrogram, F_0 trace and waveform of part of line 26 of Fragment

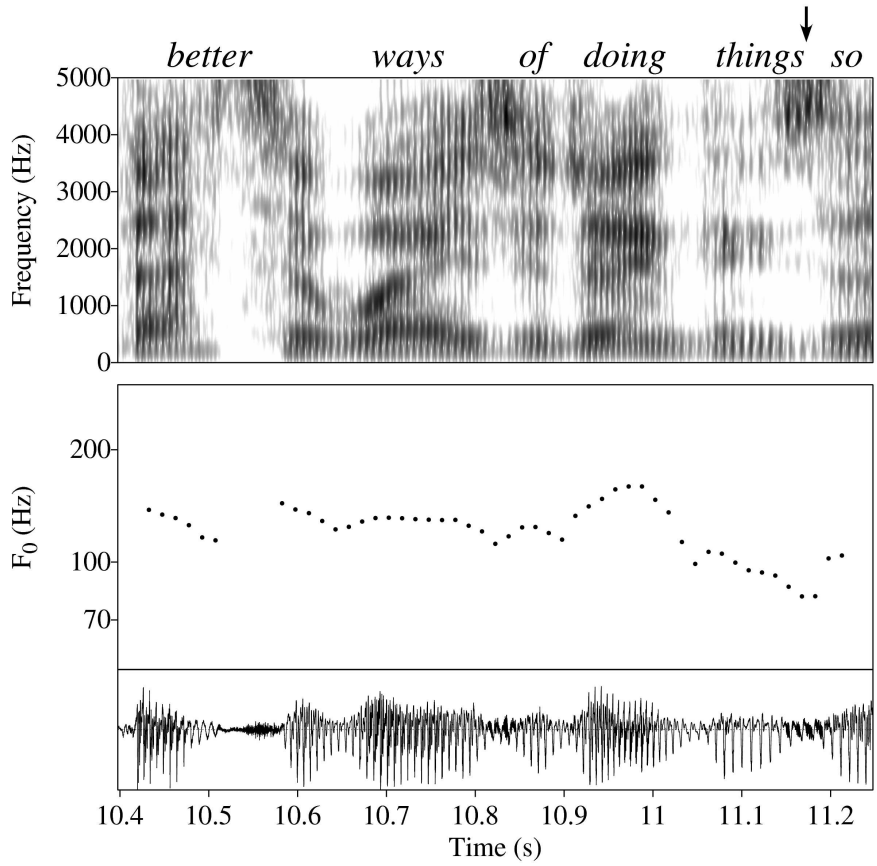


Figure 3: Labelled spectrogram, F_0 trace and waveform of line 26 of Fragment 4. The arrow indicates the midpoint of the final voiced /z/

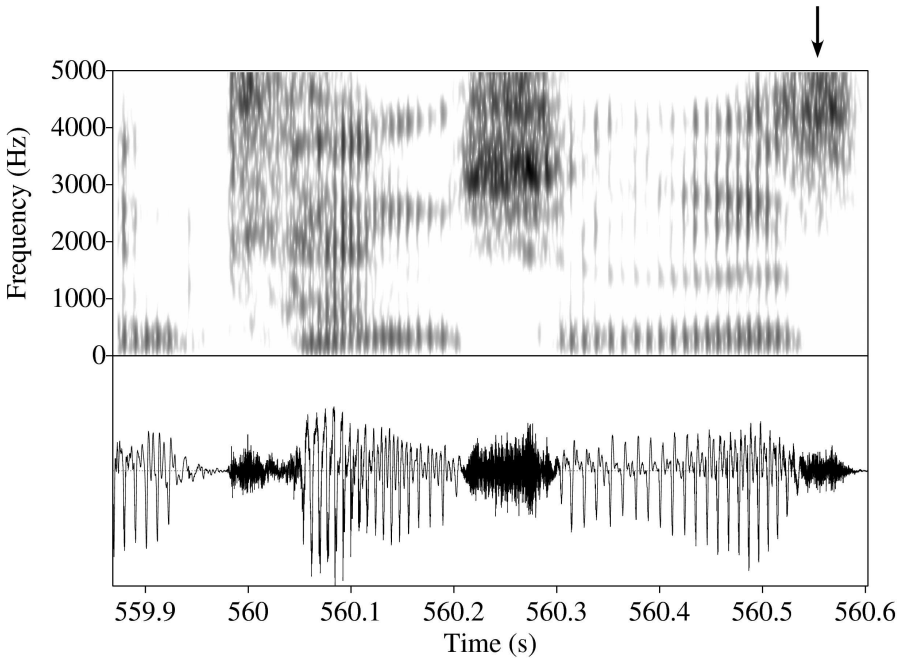


Figure 4: Spectrogram and waveform of “intentions” produced by CB (Fragment 4).

The arrow indicates the midpoint of the final voiceless /z/

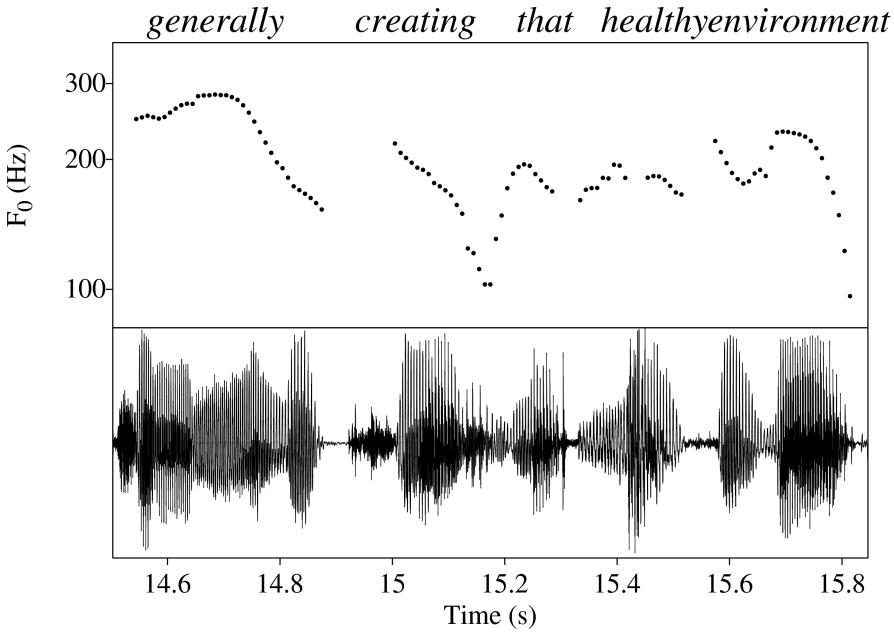


Figure 5: Labelled F_0 trace and waveform of part of lines 7-9 of Fragment 2

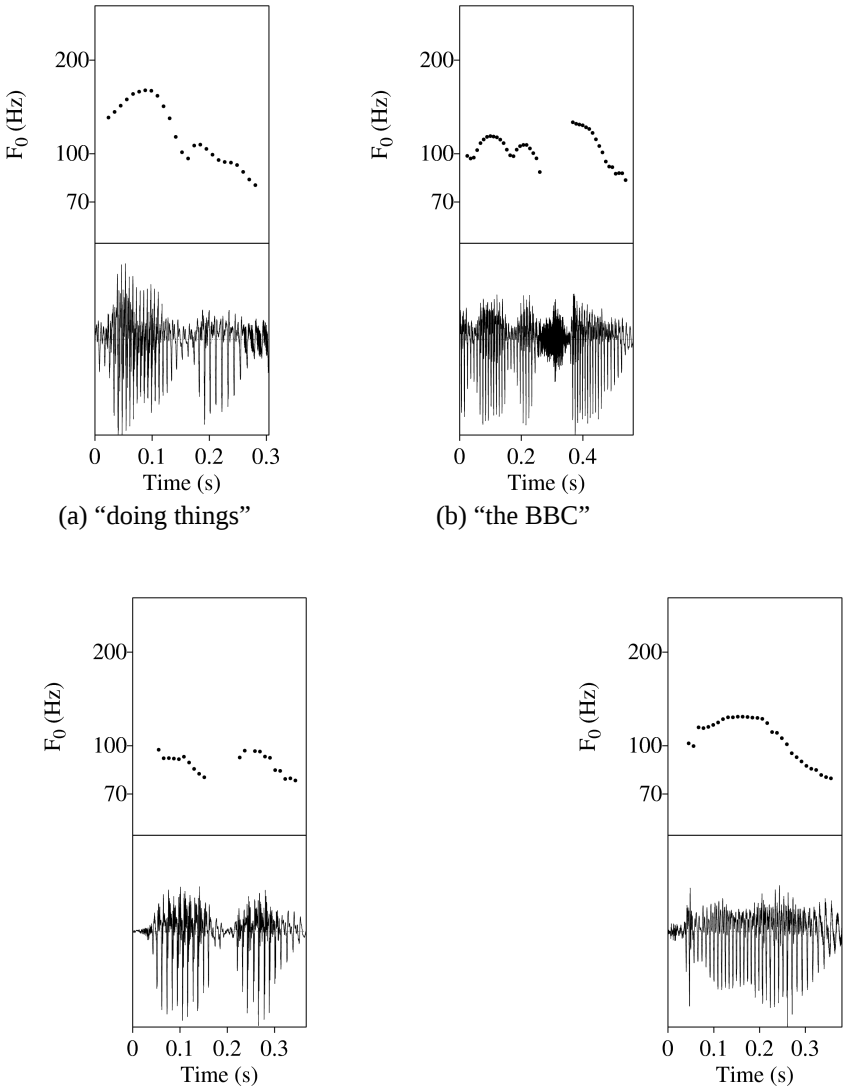


Figure 6: F_0 traces and waveforms of TCU endings produced by the same speaker as Fragment 4