CLICKS AS MARKERS OF NEW SEQUENCES IN ENGLISH CONVERSATION

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ABSTRACT

This paper analyses the use of clicks in naturally-occurring English conversation. It demonstrates that regardless of any paralinguistic functions that clicks may undertake, their occurrence is orderly and systematic, and intimately tied to the interactional structure of talk. Specifically, clicks are shown to function alongside various phonetic parameters, such as pitch and glottalisation (and the sequential and lexical organisation of talk), to demarcate the onset of new and disjunctive sequences. These findings challenge the traditional view that clicks function *only* paralinguistically in English conversation. They also highlight the fruitfulness of implementing context-bound phonetic investigations alongside interactional analyses.

Keywords: Clicks, Phonetics-Interaction Interface, Paralinguistic, Conversation Analysis, English.

1. INTRODUCTION

Traditionally, clicks have been regarded as having only a paralinguistic function in English, indexing various emotional and attitudinal states of the speaker; there is therefore no treatment of them in English phonology. The suggested states that clicks are said to convey include disapproval [14], irritation [10], exasperation [15] and regret [2]. Although various scholars have proposed many different paralinguistic functions of clicks, their claims typically share one important commonality: they are not based on empirical investigations of talk. Instead, they are often derived from anecdotal observations or the analyst's own intuitions. As a result, some of the claims are not borne out when applied to conversational data. Moreover, difficulties can be experienced when attempting to distinguish between the proposed paralinguistic functions of clicks, as many of the emotive states are strikingly similar, e.g. how can the clicks which signal 'impatience', 'irritation' and 'annoyance' be distinguished?

One way in which some of these difficulties can be overcome is by adopting a methodology in which (1) the data are drawn from naturally-occurring conversation and (2) any claims made about the function/s of clicks are grounded in—and constrained by—the observable orientations of the participants. The methodology of Conversation Analysis (CA) provides such a methodology and therefore, along with the phonetic investigations, underpins the research presented herein. This paper contributes to the growing body of research on the phonetics-interaction interface [16, 17, 18, 19, 20, 21, 27] and furthers our understanding of the use of clicks in English conversation (see [26] for further analysis of the function/s of clicks in English).

2. DATA AND METHODOLOGY

This main aim of this research was to examine the phonetics-interaction interface of clicks and their embedded contexts of production in order to identify any systematic and recurrent mappings between their phonetic and interactional organisation. The analyzed data consist of around 18 hours of naturally-occurring telephone interaction taken from six corpora: four comprise only British-English and two only American-English speakers. These corpora were recorded between 1960 and 2001, and mostly contain dyadic conversations between friends and family members aged between roughly 14-80 years old with typical speech and language abilities.

The methodology employed combines the sequential analysis techniques of CA [23] with impressionistic [12, 13] and instrumental (using PRAAT) phonetic investigations. The strict empirical stance of CA maintains that any claims made about the organisation of talk-in-interaction must be evidenced in the talk itself [23, 24]. An important feature of the phonetic investigation is the adoption of a parametric listening technique [1, 12, 13].

3. ANALYSIS

In total, 86 'New Sequence Indexing' (NSI) clicks were found in the disjunctive initiation of a new sequence after a preceding sequence had been collaboratively closed down. These NSI clicks were produced by 20 different speakers: 13 women and 7 men. The number of different speakers found to produce the NSI clicks indicates that they are not an idiosyncratic feature of one person's speech. Rather they appear to be a phonetic resource which English speakers can draw on to organize their talk-in-interaction, as recurrent patterns were identified in their embedded sequential and phonetic contexts.

3.1. The sequential properties of NSI click environments

The sequences which precede the NSI click turns are routinely closed down with the following sequence-closing devices: assessments [11]; figurative expressions [9]; sequence–closing repetitions [7] and minimal final closing tokens [24], such as *yep* [26]. The types of sequence that NSI clicks initiate are varied and include call closings [27], requests and news informings [26]. After the NSI clicks, 'prefatory discontinuity markers' such as *anyway* and *okay* are often produced; these features serve to explicitly mark out the following sequence as being disjunctive with the prior [9] (see also 3.3 on inbreaths).

The recipients of the NSI click-initiated new sequences always accept the disjunctive change in sequence. This is evidenced by them providing a sequentially fitted response to the new sequence rather than talk which returns to a previous or a new topic. The disjunctive NSI click turns therefore appear to be sequentially warranted, as the recipients treat them as unproblematic.

3.2. A canonical example

Fragment 1 provides a canonical example of an NSI click turn (L9-12) in its sequential environment (cf. audio file 1) (see [6] for details of the transcription system). The fragment begins with the final part of Norm's telling about his use of a dialysis machine (L1-5), which is closed down by a series of sequence closing assessments (L6-7) and a final closing token (*hm:*, L9). Lesley then proffers a click-initiated disjunctive shift in sequence (L9-12) (concerning an arrangement between Norman and Lesley's son, Gordon), in which *okay* functions as a prefatory discontinuity marker. Norm subsequently accepts Lesley's new sequence (L13), indicating that in this sequential location, it was sequentially warranted.

Fragment 1: Holt.SO.88.1.8/tell/

01:	N:	you leave Wincanton about three o'clock
02:		and get back about two in the morning
03:	L:	hhhh oh[:
04:	N:	[and work full time on top of that
05:	L:	oh [dear
06:	N:	[but it's a lot easier no:w hh huh
07:	L:	yes I'm sure
08:		(0.2)
09:	**L:**	**hm: [⊙] .hhh okay well I'll tell Andrew**
10:		**and uhm (0.3) I'm sure-and he was**
11:		**going to give you a ring anyway .hh**
12:		**before Sunday**
13:	N:	that's ri:ght yeah

3.3. The phonetic details of the NSI clicks

All 86 NSI clicks share the following phonetic characteristics:

- A posterior closure located at the velum
- An anterior closure with a variable place of articulation (see table 1 below)
- Ingressive airflow
- No voicing and no nasality

The clicks are always produced as singletons and are often released with the simultaneous initiation of an inbreath (cf. audio files 1-4). These inbreaths always have a high amplitude and are typically relatively long. In this position they function alongside other phonetic, lexical and sequential properties to demarcate the sequence boundaries (see [19] for a similar account of inbreaths in abrupt-joins).

Table 1 shows the different places of (anterior) articulation of the NSI clicks and whether they are released with the simultaneous initiation of an inbreath or not. The figures signify that the clicks are overwhelmingly produced with labiality (48%) or alveolarity (49%) and that they often occur with the simultaneous taking of an inbreath (62%).

Table 1: The different places of (anterior) articulation of the NSI clicks and the occurrence of inbreaths

	[⊙]	[⊙̪]	[!]	[‖]	Total
With inbreath	22 (26%)	2 (2%)	29 (34%)	0 (0%)	53 (62%)
Without inbreath	19 (22%)	0 (0%)	13 (15%)	1 (1%)	33 (38%)
Total	41 (48%)	2 (2%)	42 (49%)	1 (1%)	86 (100%)

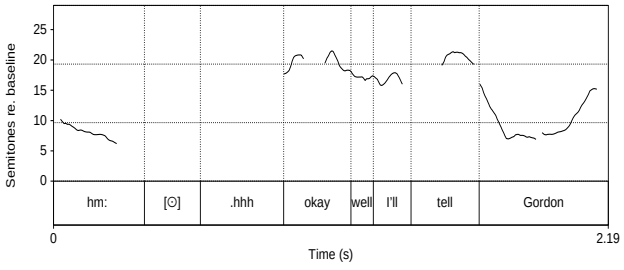
3.4. The phonetic properties of NSI click environments

The phonetic design of the talk which precedes and follows the NSI clicks corroborates claims in the literature regarding the phonetic properties of sequence closure and new sequence initiation respectively. Three parameters were found to be particularly relevant to the phonetic design of the embedded contexts of the clicks: pitch, 'articulatory segmental' features and voice quality.

3.4.1. Pitch

One of the most marked regularities in the phonetic design of the NSI click environments is found in the organisation of the pitch. The closure of the pre-click sequence is typically produced with a low pitch, placed low in the speaker's pitch range and with a narrow pitch span relative to that of the following click-prefaced new sequence. Conversely, the click-initiated new sequence is produced with a much higher pitch, is located higher in the speaker's pitch range and has a wider pitch span; its onset is also routinely produced with a marked upstep in pitch relative to the offset of the preceding sequence. Each of these pitch characteristics can be seen in Fig. 1, which provides a pitch trace of the final portion of the pre-click sequence (*hm:*) and the onset of the post-click disjunctive sequence (*okay well I'll tell Gordon*) of the NSI click turn in fragment 1 (cf. audio file 2). These characteristics have previously been found to be typical in the closing down and initiation of new sequences [3, 4, 5, 6, 19, 25]. They therefore add weight to the argument that NSI clicks are situated in sequence boundaries.

Figure 1: Pitch trace of pre and post NSI click sequences



3.4.2. 'Articulatory segmental' features

Another phonetic typicality identified in the NSI clicks turns is that in those turns which comprise multi-units (as in fragment 1), the final syllable of the first unit (which functions to close down the preceding sequence) is routinely terminated with a portion of complete closure. This closure is then maintained between the offset of the preceding sequence, through any 'silence' (which is not technically silence, as it is not a stretch of non-activity [13, 17, 20]) until its release in the subsequent click. It is therefore typical for the anterior release of the click to share the same place of articulation with the preceding sequence-final closure (if these two components are produced by the same speaker). The following transcription provides one such example, in which the initial pre-click *yep* closes down the preceding sequence and its final closure with labiality (and glottality) is held across the 0.2 second pause until its release in the onset of the click: [jɛ̤ə̤p͡ʔˀ (0.2) ʘ͡ .hhh ʔə̤ṳkʰɛ̤] (cf. audio file 3).

There are, however, cases in which the anterior release of the click does not share the same place of articulation with the preceding closure. Instead, a 'percussive' can occur in the release of the closure [22], after which a click (with a different place of articulation) is produced, as in [jɛ̤ap̚ (0.2) ʷʷ͡ ! ͡.hhh ʔɛ̃n̪ɪwɛ̤ᴵ] (cf. audio file 4). Clicks are also produced when there is no preceding oral closure, e.g. after a portion of vocalicity. This suggests that NSI clicks are not simply a by-product of speakers opening their mouths but are instead a mechanism which is under speaker control.

Interestingly, when the speaker does maintain an oral closure between the closing down of one sequence and the click-prefaced initiation of another, the recipients remain silent and the producer of the closure continues to produce the following click-initiated new sequence. This suggests that recipients orient to the closures as being indicative of speakers having more talk to produce, and supports previous claims that the maintenance of articulatory closures in conversation can serve as an interactional resource for turn and speaker management [13, 17, 20, 21].

3.4.3. Voice quality

Another commonality found across the NSI click turns is the occurrence of glottalisation—a glottal stop, creaky voice or both—in the onset of unit-first vocalically-initiated lexical items in click-initiated new sequences, e.g. notice the glottal stop and creaky voice in the onset of *anyway:*

[jɛ̪ap˺ (0.2) ʷʷ͡ ! ͡.hhh ʔɛn̪ɪwɛ̪ˈ] (cf. audio file 4) (also audio file 3). This finding therefore supports the argument that glottalisation indexes phrasal boundaries in talk [8]. However, it also furthers previous claims, as glottalisation is also shown to initiate new and disjunctive sequences.

4. CONCLUSION

This paper has examined the phonetics-interaction interface of clicks in English conversation and has shown that they are regularly produced in new sequence boundaries. In this location, these NSI clicks function alongside the phonetic parameters of pitch, 'articulatory segmental' features and voice quality (and the sequential and lexical organization) to demarcate the onsets of new and disjunctive sequences of talk. These findings are therefore markedly different from the claims that clicks function only paralinguistically in English. Instead, this paper has demonstrated that, in addition to any paralinguistic work that clicks may undertake, clicks have an orderly, sequential distribution which can be mapped onto the interactional structure of English conversation. Future research will continue to investigate other interactional uses of clicks in English, e.g. in word searching environments (see [26]). It will also examine those clicks which are traditionally regarded as functioning paralinguistically in order to identify any differences between the phonetic and interactional designs of these and other clicks in English talk-in-interaction.

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