CLICKS IN CHILEAN SPANISH CONVERSATION

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Abstract

Chilean Spanish speakers were audio and video recorded engaging in conversation to find out whether clicks in Chilean Spanish occur in sequences similar to the ones reported for English. Some other research questions are whether there are any tokens that function alongside clicks in which case it is relevant to see what their articulatory properties and interactional functions are. Finally, if there are gestures accompanying clicks, it is important to devise their functions. A methodological approach that combines the sequential techniques of Conversation Analysis (CA), and the phonetic techniques of impressionistic observation and instrumental analysis is employed with naturally-occurring conversation. The results show that clicks do have a regular distribution and are part of bigger meaning-bearing prosodic constructions in Chilean Spanish, which entails that they are indeed linguistic. Moreover, the similarities with English in the way a click helps to show "gearing up to speak", to index new sequences that are disjunctive with the prior, to signal trouble in finding words; and the differences such as the particular use of clicks used to display affect found for Chilean Spanish support this argument.

1. Introduction

Clicks are non-pulmonic, velaric, ingressive sounds that are part of the consonant systems of some southern African languages such as Xhosa and Zulu and Khoisan languages of the Kalahari region, but are mostly unknown in other places of the world. (Clark et al, 2007:120).

They occur more extensively in languages when considered as communicative functions such as the expression of 'yes' and/or 'no' (Gil, 2011), approval (Ladefoged, 2005:170), disapproval and regret (Clark et al, 2007:18), as well as exasperation (Laver, 1994). They are subsumed by Ward (2006:27) as a sign of personal dissatisfaction, and are also associated with communication with babies or with animals (Gimson, 1970:31; Clark et al, 2007:18; Güldemann & Stoneking, 2008:95). Eklund (2008:238) supports the statement that ingressive clicks are used for paralinguistic purposes in French by quoting Havet (1875) who points out that "ingressive t is used to express doubt; and ingressive palatal t expresses surprise, but can also be used to call horses"

Gil (2011) lists a variety of languages around the world where phonemic and non phonemic clicks are used. He provides a typological distribution map (see figure 1).

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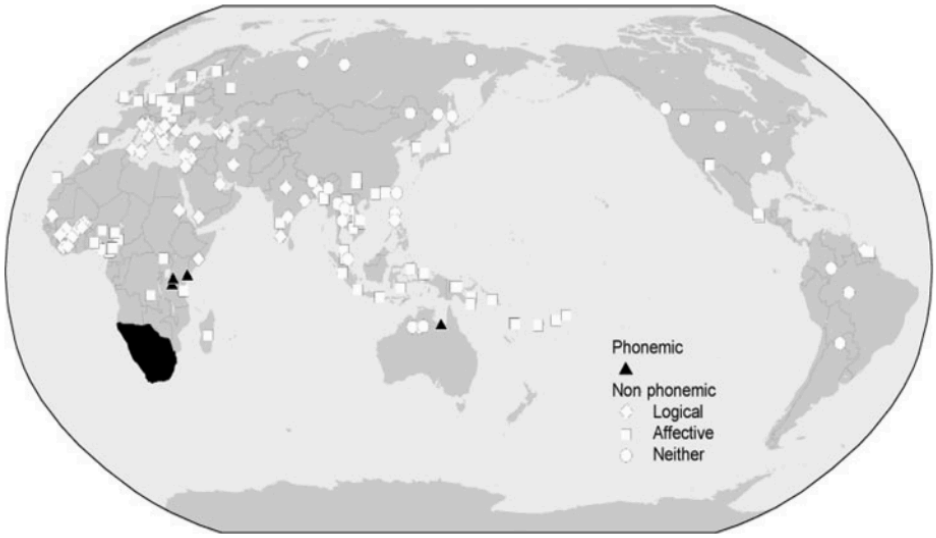

Figure 1. The global distribution of clicks (Gil 2011, Güldemann & Stoneking, 2008).

Güldemann & Stoneking (2008:95) concludes from this map that clicks should not be considered unusual speech sounds concerning their production and use, as they are widespread both "geographically and genealogically" among human languages.

1.1 Phonetic overview

Clicks have traditionally been characterised as ingressive, velarically intiatied suction stops (Catford, 2001:53). Nasal airflow, voicing and different phonation types can be coarticulatory accompaniments of clicks (Ladefoged, 2005:170). These accompaniments are common and phonologically meaningful for those languages that have clicks as parts of the repertoire of speech sounds.

Thus, in English they are not very common although there is occasional aspiration according to Ogden (2013:5) who also claims clicks in English are sequentially followed by "one of a large number of tokens such as *oh, ah, aw, oo*," which might be articulated in different ways with regard to articulatory properties such as amplitude, duration, voice and vowel quality, and glottal stop initiation. These tokens and their particular articulatory properties are essential in the display of affect and these are the ones that require a close acoustic analysis.

Ogden (2013:5) simplifies the classification of clicks in English to two, a central and a lateral one because as Ladefoged & Maddieson (1996:256-257) claim, the articulation of clicks is complex and the rate of movement of the articulatory release, tongue shape, apical and laminal distinction as well as the contact surface of these articulators, are aspects of the production of clicks that are not paid attention to in their description. These features are likely to be captured when using other methods such as ultrasound. This is what presupposes the main complexity, but it also possible that the features previously described do not have an impact on the different functions clicks can have. Therefore, a simple classification is what will be done for this study as well.

1.2 Functions of clicks

Recent studies on English (Wright, 2005, 2007, 2011a, 2011b; Ogden, 2013) demonstrate that clicks have an orderly, sequential distribution that can convey different functions according to their embedded contexts of production. Some of the findings are listed below.

1.2.1. Sequence markers

As clicks are relatively loud transient sounds, Ogden (2013:11) suggests clicks mark incipient speakership, acting as an audible signal in conversation ensuring others acknowledge this. The physical principle behind these clicks is that when people are about to speak, they open their vocal tract and this can produce a velarically initiated ingressive sound, in other words a click (Ogden, 2013:23). When there is contact and separation between the articulators generally with inhalation initiated pulmonically, then a percussive is produced. Clicks and percussives are often the culmination of other physical activities; lip closure, swallow, and release.

Following the CA terminology proposed by Sacks et al (1974), these clicks are generally found turn-initial, or Turn Constructional Unit (TCU) initial. TCUs are considered to be the basic units of talk, these are identifiable because there is a Transition Relevant Place TRP) at the end of them signalling the interlocutor in the conversation can start producing talk or more talk could be produced by the same speaker, this means a turn can be composed on one TCU or multiple TCUs. Similarly, Wright (2005, 2007, 2011a, 2011b) shows how clicks manage aspects of sequence organisation. They occur at boundaries between sequences, for instance at the end of a phone call. This type of click is what Wright (2007) calls New Sequence Indexing (NSI) clicks as they shift the direction of the talk from one topic to another. She proposes a particular sequential organisation and articulatory properties that differentiate one sequence as disjunctive with the prior which accounts for the function of clicks in such sequences.

1.2.2. Clicks in word searches

Clicks are often produced during word searches, and are used to signal trouble in finding words in conjunction with particles such as "*uh, uhm, mmm*, uttered on a mid-level pitch perhaps tagged on to (full forms of) words; in-breaths and swallowing; gaps in talk at points where longer syntactic units are projected." (Ogden, 2013:23).

The use of clicks in word searches seems to be more linguistically structured and particular than those that mark incipient speakership. Ogden (2013:23) suggests they may be an evolved form of more organic sounds such as clicks and percussives that mark incipient speakership."

1.2.3. Stance-taking clicks

Ogden (2013:3) states that the lay interpretation of clicks in English-speaking cultures associates them with a negative stance and is often described as ‘tutting’.This makes reference to both the sound and the negative stance conveyed .

Clicks that display some kind of stance or affect are designed to be heard, with a loud and deliberate action. They may be accompanied by body movements such as head turns and facial expressions. Ogden (2013: 23) writes

> "they are embedded in sequences of talk which can project the stance displayed in the turn with the click, and/or elaborated on after the click is produced, e.g. through overt linguistic material."
>
> (Ogden, 2013: 23)

Because clicks are often accompanied by response tokens such as *oh, ah, aw, oo* in the display of stance or by gestures, it is very difficult to demonstrate they can display stance by themselves. Ogden (2013:24) asserts that it is essential to look at longer sequences and non-verbal behaviour so as to better understand what is involved in stance-taking from a linguistic point of view.

All things considered, one of the motivations for this study lies in the fact that there is very little information about clicks in Spanish except for accounts of their onomatopoeic use in American Spanish (Zilio, 1986:139,143). There is a need for a crosslinguistic study of clicks to determine whether they work differently in different languages in both form and function, or if there are sequential differences. This would provide solid arguments to say they are linguistic or at least part of the speakers' cultural knowledge. This research addresses the following questions:

1. Do clicks in Chilean Spanish occur in sequences similar to the ones reported for English?
2. Are there any tokens that function alongside clicks? If so, what are they and what are their articulatory properties and interactional functions?
3. Are there gestures accompanying clicks? If so, what are they and what are their functions?

The rest of the paper is divided as follow: first the methodology for the research is explained in terms of data collection and different types of analyses in section 2. Then the results are presented, categorised and analysed in section 3. Finally, some concluding remarks are derived in section 4.

2. Methodology

For this investigation, a methodological approach that combines the sequential techniques of CA, the phonetic techniques of impressionistic observation and instrumental analysis were employed. To make sense of phonetics in conversation, a proper model of the way conversation works is needed, i.e. CA, as it is in conversation and through sequential analysis that we find a regular distribution for clicks whose function is not arbitrary, but learnt. This method is therefore important for making new discoveries about the nature of language.

2.1. Data

The data for the present study was collected from five pairs of Chilean participants, five female and five male speakers who ranged from 18 to 49 years of age. Participants knew each other from before, they were acquaintances, friends or married couples and the researcher knew them all. They were video recorded for thirty minutes per pair in a studio at the University of York. The couples sat next to each other so the camera could capture facial gestures and hand movements clearly. The cameras used were a JVC HY-GM100E full HD and Sanyo Xacti HD both recording onto SDHC cards at 1440 x 720. The audio was recorded at 44.1KHZ 16bit with a Zoom H4n audio recorder using a Beyerdynamic Opus 55 headset microphone, a DPA 4066 headset microphone and a Sennheiser EW100 radio microphone.

The audio was recorded on two channels to make the data more manageable for overlapping talk.

As previously mentioned, clicks occur at sequence boundaries; therefore there was the need to generate instances where participants would change the topic. Therefore, one of the participants in every couple was asked to go through a list of topics to cover. Generating some kind of emotional response was also relevant for this study, hence a mixture of positive, evocative and sensitive topics were included in the list: an experience at the hairdressers, life in York, the 2010 earthquake in Chile, etc.

2.2. Interactional and Phonetic Analysis

The data for this research is drawn from naturally-occurring conversation because as Wright (2005:2) explains "meaning is context-bound, emergent and contextually determined". Therefore, the method of analysis to be used in the study of clicks in this study is based on the orientations that participants display in naturally-occurring talk and not on an intuitive interpretation of what a particular utterance is thought to mean without considering its context. This methodology is what allows for conversation analysis to have the rigour of scientific analysis and to be the means to understand social communication.

The phonetic analysis of the data is carried out together with the sequential analysis. Impressionistic and acoustic analyses are employed to account for the parameters (pitch range, pitch movement, loudness, duration and articulatory properties) that function alongside the sequences studied. Parametric listening techniques proposed such as the ones described by Kelly & Local (1989) were used in this study, they propose such techniques to understand noises produced by the vocal tract as a range of co-working components that vary and have movement in order to avoid falling into categories of description unsuitable for naturally-occurring speech. Where possible the observations made have been corroborated through the use of PRAAT (Boersma & Weenink, 2013) by means of acoustic imaging to measure frequency, pitch, intensity and timing among other uses.

3. Results

This study comprises 2.5 hours of data from which 38 clicks could be identified. This means on average people click once every 4 minutes. In terms of classification by place of articulation, waveform and spectrogram observation helped to distinguish clicks from percussives when in doubt as from the waveform it is possible to see that clicks show two transients while percussives show only one in general. Video data helped in the recognition of lateral clicks as lips are twitched (generally to one side) as well as bilabial clicks as both lips are pressed together without protrusion. This is when impressionistic records play an important role. Figure 2 shows the classification of clicks by place of articulation.

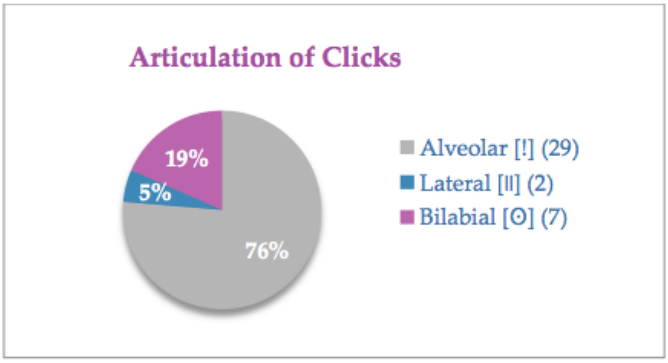

Figure 2. Number and percentages of clicks by place of articulation

Considering the turn as the basic unit of organisation in conversation (Sacks et al, 1974), the subsequent unit is the TCU. Figure 3 shows that if clicks are grouped by position in the turn, the majority are TCU-initial (28, 74%), 5 are TCU-medial (13%). These results are consistent with the findings for English (Ogden, 2013:9). Lastly, 5 clicks are TCU-final (13%) and most of these are of a special kind which will be discussed in 3.3.2.

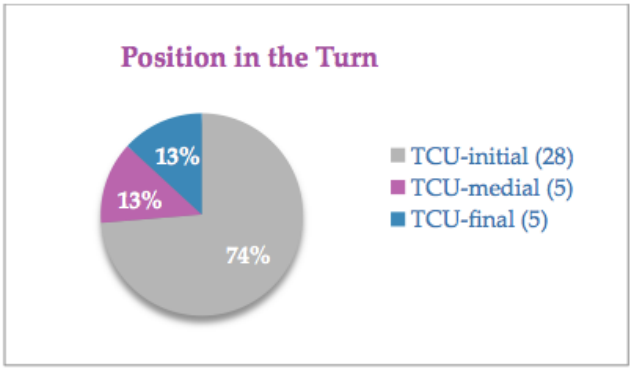

Figure 3. Number and percentages of clicks regarding position in the turn

Considering the different functions of clicks as proposed for the findings in English presented in the previous section, figure 4 shows that of the 38 clicks, 11 mark incipient speakership, 10 are in word searches and 17 display stance or affect. These different functions and contexts of clicks will be considered in detail by looking at different examples in the rest of this section.

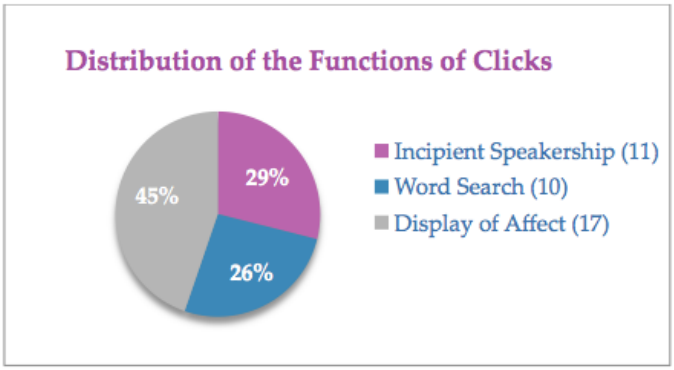

Figure 4. Number and percentage of clicks by function

3.1. Incipient speakership

In this study, there were cases where clicks were both turn-initial and TCU-initial. They are clearly signalling that the speaker is about to speak or wants to keep on talking. These clicks can also be as a result of other physical activity such as lip closure or swallowing. This is what was considered as plain incipient speakership. In line 5 of Example 1 Lía has started a new TCU that is cut off apparently because of the need to swallow which is what she does, after this she produces a click and restarts the TCU (line 7) using the same word she had used in line 5. (For transcription conventions see appendix).

Example 1
P1_Disney

```
01 Lía:  [to hasta los] DIÁlogos son medios (0.3) cantaitos;=
         everything even the  dialogues   are  kind of       sung
02       =y son como el (.) °hh (0.3) las co[neXIOnes]
          and they are like the           the  connections
03 Rosa:                                    [YA:     ].
                                             right
04 Lía:  entre una canción y la otra,=
         between one  song      and the other
05 Lía:  =pero,
          but
06 Rosa: YA:;
         right
07 Lía:→((swallowing))! <<f>pero no HAY otra conversación>.
                          but   there is no other  conversation
```

In other cases, clicks not only mark incipient speakership, but also introduce a new sequence that is disjunctive with the prior in terms of the topic of the conversation. Wright (2007) calls them **new sequence indexing** (NSI) clicks. In the following example there are several characteristics both in the sequential organization and articulatory properties that mark out the following sequence as being disjunctive with the prior; in plain terms, there is a change of topic.

Although there are few cases of these in the current data, it is interesting to discuss these in more detail as many of the features found for Chilean Spanish and discussed below are in accordance with Wright's (2007, 2011b) findings for this type of sequence in English. First, in terms of sequential properties, the type of sequence that precedes the NSI click turn in Example 2 below is an assessment, one of the categories proposed by Wright, and the 'prefatory discontinuity markers' that occur in English such as *anyway*, *okay* and *well*, also occur in Spanish, *bueno* 'well' in Example 2. Second, the pitch characteristics regarding the closing down of the sequence previous to the NSI click (low in the speaker's range and with a narrow pitch span) and the characteristics of the click-initiated new sequence (high in the speaker's range and with a wider pitch span) reflect what Wright (2007:1071)) proposes and what was found in this study. Third, Wright (2007:1070) suggests the clicks are often released with the simultaneous initiation of an in-breath, which can have a high amplitude and a relatively long duration and that is the case of Example 2. However, some other articulatory properties presented by Wright (2007:1071) such as a complete closure in the final syllable of the sequence preceding the click or glottalisation in the onset of the first lexical item in the click-initiated new sequences were not observed in the current data. The following example 1 shows many coincidences with what has been found for English.

In Example 2, León's closing down of the sequence in line 9 is breathy and low in intensity (42dB) with a pitch of 129Hz that is low in the speaker's range (average = 144Hz) with a narrow pitch span. León produces a long in-breath and another pause in line 11 after which he produces an alveolar click (see figure 5) followed by a TCU that is high in intensity all along (62dB) when compared to the speaker's average intensity (50dB) and the pitch is high (216Hz) on the speaker's range. The combination of an in-breath and a click is perceived by the interlocutor as marking incipient speakership as she makes no attempt to overlap in talk. This incipience is reinforced in this TCU by its loudness and high pitch. The speakers have gone off track in the conversation when León reintroduces the question asked by Rita earlier in the conversation with the discontinuity marker *bueno* 'well', getting back on the track of the conversation. The new sequence receives a fitting response (line 14) and Rita does not make an attempt to return to the previous topic.

Example 2

P3_MividaenYork

01 Rita: <<all>es que yo creo que aCÁ también es frio;>=
it's just that I think that it is also cold here
02 =pero es que uno <<whispery>está acostumbrado a:> al
but one is used to the
03 [FR]Ío y al vientito,=
cold and the wind
04 León: [<<p>SÍ.>]
yes
05 Rita: =este DÍA de verano por ejemplo de hoy. (0.7)
this summer day for example
06 León: si igual han haBIdo algunos días
yes there's been some
07 <<breathy>súper fríos acá:.=
really cold days here
08 =con VIENto súper helado.=
with very cold wind
09 =<<p>que yo CREO que puede ser como Punta Arenas.>>
I think it could be like Punta Arenas (a Chilean southern city)
10 León:→°hhh (0.4) ! <<f><<h>bueno y la mi VIda en York
well and the my life in York
11 es be es bastante amena.>>=
is is quite nice
12 =porque vivo con mi faMIlia?(0.5)
because I live with my family
13 Rita: ha ha haha[ha ha ha]
14 León: [<< :-)>de la que TÚ eres parte>.]
which you are part of
15 (0.3)

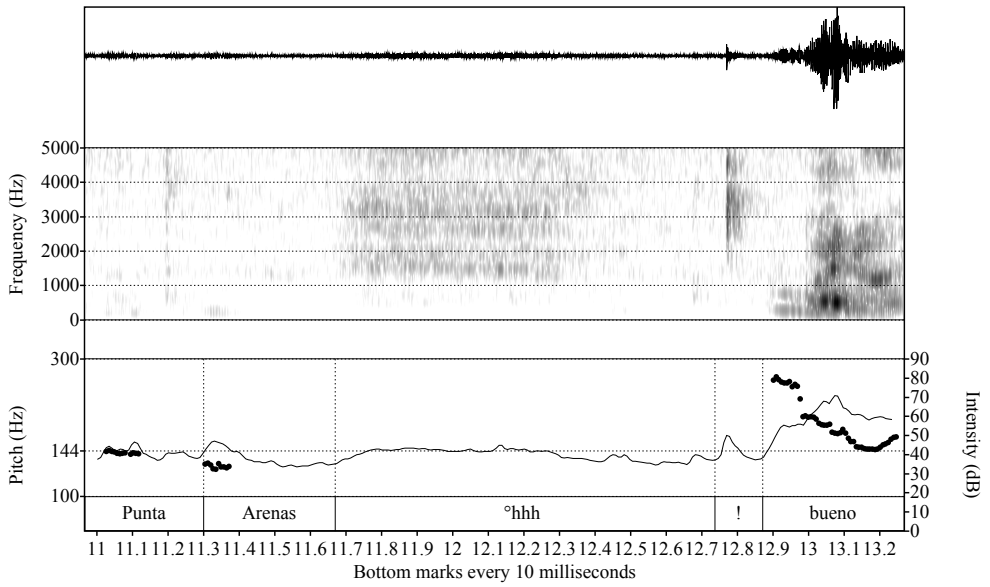

Figure 5. P3_MividaenYork - Waveform, spectrogram, pitch and intensity of closing down sequence previous to NSI click + in-breath + click-initiated new sequence.

3.2. Word Searches

Similarly to English, clicks are used in Chilean Spanish to signal trouble in finding words. They occur in conjunction with particles such as *eh, ehm*, in-breaths and swallowing or gaps at talk. Example 3 is a typical word search example. Rita is talking about how energy is displayed in massive events. In line 16 the problematic sequence begins with the lengthening of *mismo* 'same', resulting in *mismo:m:* and a long pause (1.6 seconds). In line 17 she swallows and produces a bilabial click. This is followed by the particle *ehm* (see Figure 6). The following TCU has a high pitch (259Hz) and a high amplitude (60dB). From line 18 through 22 Rita tries to explain the meaning of the word she is looking for. León displays understanding in line 23 by means of the particle *mm*. In lines 24 and 25 Rita identifies the word, *catarsis* 'catharsis' and repeats it in the following line reassuring herself it is the correct word with whispery voice quality and low amplitude. This is followed by a new TCU, line 27 where Rita ends this sequence by saying *esa es la palabra* 'that's the word' which does the same as the previous line, but also proves this was indeed a word search. As shown in Example 3, the TCU after the click is high in pitch and amplitude even though the word search is not resolved at that point but much later in line 25. This displays some similarity between what follows a click in new sequence indexing and word searches.

Example 3

P3_Catarsis

01 Rita: NO poh;
not really
02 allá es DONde quería llevar el a-=
that's where I wanted to take the
03 =el aSUNto de la energía.=
the energy matter
04 =esa MISma pasión que antes estaba <<len>confrontada
that same passion that before was confronted
05 en la batalla>? (0.6)

```
        in      battle
06      <<all>eso se traduce así;>
              that  translates     like that
07      en el f en el dePORte en el futbol
        in       in     sport     in     football
08      <<p>esta súper claro>.
             it is  very   clear
09      (0.5)
10 León:    MM.
             yes
11      (0.2)
12 Rita: es la misma enerGÍA pero- (0.2)
        it is the same   energy     but
13      pero <<len>PUESta: en una competencia: deportiva>;
        but          put       in  a    sports      competition
14      (0.6)
15      yo cacho que la MÚsica es <<p><<h>igual>>, (1.2)
        I believe    that it's the same with music
16      tiene el MISmo:m:, (1.6)
        it has   the  same
17  →   ((swallows)) ⊙  eh:: (1.4)
                        hmm
18      <<f>no ES eh>-=
            it's not hmm
19      =ES como ah eh- (.)
         it's like    hmm
20      todo es a faVOR de (así m),(.)
        everything is in favour of
21      no hay en CONtra o a favor,=
        there is nothing against or in favour
22      =no es una LUcha;
         it's not a    struggle
23 León: [MM,    ]
          yes
24 Rita: [es como] SIMplemente <<creaky>una:>, (0.4)
          it's like      simply                a
25      <<len>caTARsis>. (0.2)
              catharsis
26      <<whispery><<p>caTARsis (xxx xxx). (0.3)
                       catharsis
27      Esa es la palabra.>>
        that's    the  word
28      (1.0)
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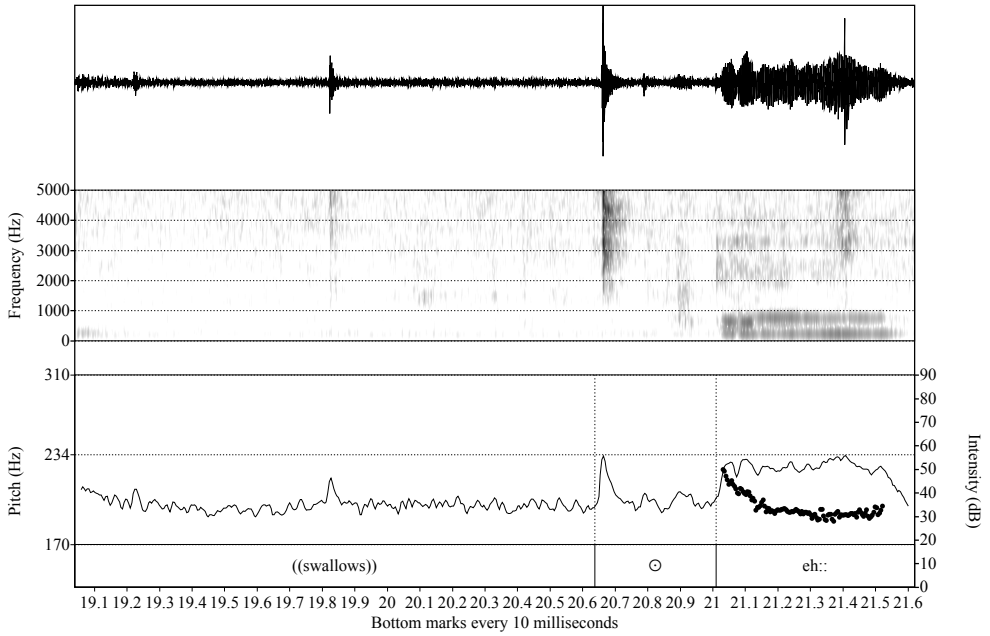

Figure 6. P3_Catarsis - Waveform, spectrogram, pitch and intensity of swallowing + click + particle *eh*

3.3. Display of stance

As described in the introduction, clicks "are part of a family of verbal and non-verbal practices" (Ogden, 2013: 23-24) to display stance at the beginning of turn, and this would not be the case of percussives. This is also true for Chilean Spanish, although there many of the cases involving clicks and gestures where clicks are turn-final.

Clicks that display some kind of stance or affect are high in amplitude and are often a deliberate action and they are designed for the interlocutor to hear (Ogden, 2013: 23). They may be accompanied by response tokens such as *ah* in Chilean Spanish and gestures such as eye blinks and hand movements. The following sections will try to shed some light on what the phonetic properties of the tokens in the environment of clicks are and see what bodily movements are associated with them (in the current data). In this respect, proposals regarding the construction created by the association of clicks and gestures will be given.

3.3.1. Clicks + ah *as change-of-state token*

The following is a comparison of examples from the same speaker where she displays understanding by means of a sequence that begins either with a click followed by the change-of-state token *ah* or just with this particle. In both cases the particle *ah* is turn initial and prefaces words that further display understanding on what so far has been problematic in the conversation, hence the denomination "change-of-state token".

Regarding what is being done in these cases, we could consider what Heritage (1984:321) states about the particle *oh* in English. He claims "there are occasions in talk where recipients may wish to show that prior talk has been adequately descriptive and/or that they have competently understood its import." In this sense, the repositioning of *oh* to turn initial is a resource used by speakers to ensure they display their understanding to their interlocutors.

Example 4 comes from a group of cases where a speaker initiates the turn with a click followed by the change-of-state token *ah* 'oh'. Rocío asks Lucas a question in line 2, from there onwards they start negotiating their memories regarding what he has done, particularly what the last film he saw at the cinema was. As he fails to remember, in line 25 he changes the direction of the conversation and refers to a film he would like to see instead. After a 0.8 seconds pause, Rocío does a click (line 28) followed by the particle *ah* 'oh' which is 0.8 seconds long, breathy and has a falling intonation contour (see figure 7). This construction displays she knows the reference Lucas has mentioned.

Example 4

P4_BradPitt

01 Rocío:pero: SÚper chistosa;=
but really funny
02 =y tú cuál fue la última que VISte? (0.8) en el CIne?
and you what was the last (film) you saw at the cinema
03 Lucas:<<len>en el CIne.> (0.6) uh: <<len>no he Ido hace::,>
at the cinema wow I haven't been since
04 (0.9)
05 [desde que lleGAmos a york]que no he ido al cine.
since we arrived in York I haven't been to the cinema
06 Rocío:[<<h>ah tú no has Ido acá en york.?]
oh you haven't gone here in York
07 Lucas:(0.7) <<creaky>un a::.
one
08 (1.1)
09 un año: y TRES meses que no voy al cine.
one year and three months that I haven't gone to the cinema
10 (0.5)
11 Rocío:<<creaky>O:[::h>
wow
12 Lucas: [y en chile la última que fuimos a ver al
and in Chile the last one we went to see to the
13 cine ni me aCUERdo cual es
cinema I don't even remember which one it is
14 (1.0)
15 QUÉ podría haber sido?
what could have been
16 (0.6)
17 Rocío:no SÉ.
I don't know
18 (2.7)
19 no me acuerdo como (.) SPIderman o[:,
I don't remember something like Spiderman or
20 Lucas: [NO::-
no
21 (1.0)
22 que mala meMOria,
such a bad memory
23 (0.9)
24 Rocío:((laughs)) (0.8)
25 Lucas:pero me gustaría ir a VER la de:: (0.2) brad pitt eh
but I would like to see the one with Brad Pitt hmm
26 world war zeta.

```
          World   War   Z
27        (0.8)
28 Rocío:→[ !            ]Ah:::.
                           oh
            [((eye blink))]
29        (1.4)
30        pero al CIne <<creaky>o:::, (.) te gustaría VERla: por
          but at the cinema            or          would you like    to see it  on
31        internet.>
          the internet
32        (0.6)
33 Lucas:<<h>no: <<creaky>me gustaría verla> en el CIne yo creo.>
               no                I would like to see it      at the cinema   I think
34        (1.0)
35        aunque AHOra igual hay hartas que son tres de,
          although   now           there are lots    that  are    3D
36        (1.0)
37        que uno podría verlas en el CIne.
          that   one  could     watch      at the cinema
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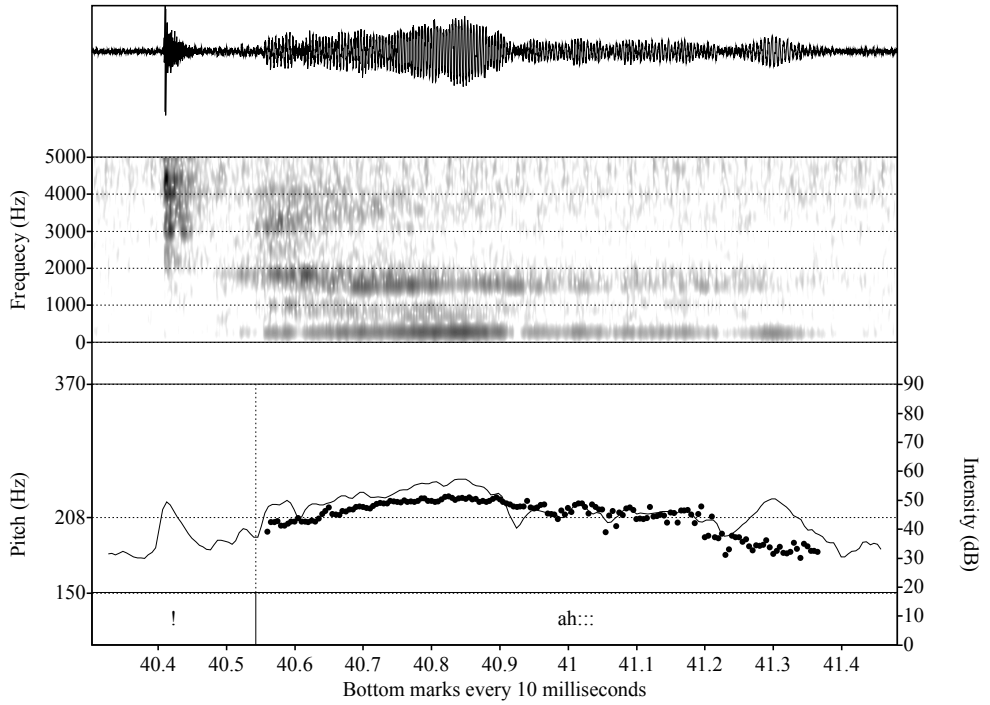

Figure 7. P4_BradPitt - Waveform, spectrogram, pitch and intensity of click + ah:::

The speaker in question also blinks at the same time she clicks as can be seen in in figure 8 where there are three examples where Rocío has her eyes closed in the production of the click and opens them afterwards. This could be a further sign that this click is displaying recognition as it is important for the maintenance of these kinds of conversations that speakers understand one another and that they display this understanding by means of gestures and continuers. The click and the blink in these cases are a recognisable practice, this is, once a speaker has done it, the trajectory of the current action can go where it should be and the conversation progresses.

Figure 8. Blinks produced simultaneously with clicks + subsequent eye openings for three cases in the collection

It is interesting to see that there are similar cases with and without clicks in Chilean Spanish. Example 5 is one from a group of cases where the same speaker produces sequences of realisation, this is, the particle *ah* 'oh' plus an utterance that displays understanding, where no clicks are uttered. Lucas states a fact in lines 17 and 18, but Rocío in line 20 disputes this. In line 22 Lucas insists on his assumption. Rocío in line 23 asks *sí* 'yes' with a rising intonation to confirm, then Lucas confirms it in line 24 and adds *acuérdate* 'remember' in line 26 which is in overlap with Rocío's realisation in line 27. The change of state is marked by the particle *ah* ‘oh’ that comes in fast together with the rest of the turn and in overlap with the previous turn (see figure 9). Lucas responds to this realisation with *sí* ‘yes’ in line 30.

Example 5

P4_Reloj

01 Lucas:oye este reloj ya está bien maLIto,
hey this watch is quite bad now
02 (2.4)
03 Rocío:por QUÉ?
why
04 Lucas:(0.3) porque MIra está todo ne:gro aquí;
because look it's all black here
05 Rocío:(.) <<h>DÓNde;> (1.4)
where
06 porque es por el meTAL poh. (0.7)
it's because of the metal
07 Lucas:vamos a tener que camBIARlo, (1.0)hh (0.8)
we're gonna have to change it

```
08        [hhh°
09 Rocío:[he visto Unos por internet;(0.5)
          I've seen      some  on the internet
10        que son baRA<<laughing>tos;> hehehe
          that  are   cheap
11 Lucas:(0.4) ?<<creaky>ah> (0.4) <<whispery>CUÁle:s,
                              oh                    which ones
12 Rocío:(0.9) <<h>como así de PLÁStico?>=
                     like          plastic ones
13        =<<h>bien: deseCHAbles.>=
               quite    disposable
14 Lucas:=no: po si la (.) la idea es comPRAR uno que dure
          no      if  the      the  idea   is   to buy     one  that  lasts
15        po;=
16        =<<creaky>ESte: la correa es de cuero-> (0.2)
                     this one  the  strap     is made of leather
17        <<creaky> y ya te ha durado CUÁNto,> (0.2)
                     and it has already lasted for how lomg
18        todo lo que estamos JUNtos. (0.2)
          all the time we've been        together
19        CAsi;
          almost
20 Rocío:(0.5)<<all>n:<creaky>o no me lo regaLASte> al
                     no              you didn't give it to me       at the
21        principio> (.)
          beginning
22 Lucas:<<h><<all>te o regalé para> tu primer cumPLEaños;>
                     I gave it to you   for      your first       birthday
23 Rocío:(0.2) SÍ:?
                yes?
24 Lucas:(0.3) SÍ:-
                yes
25        (2.0)
26 Lucas:          [aCUÉRdate;       ]
                    remember
27 Rocío:→<<all>[ah me regalaste]> el reLOJ,
                  oh  you gave me         the  watch
28        y un día en el sPA.
          and a day    at   the  spa
29        (3.5)
30 Lucas:SÍ-
          yes
31 Rocío:(.)o sea hace CUÁNto tiempo? (0.9)
             that means how  long       ago?
32        lleVAmos?
          we've been together?
33        (2.0)
34 Lucas:hace [TRES años;]
          three  years   ago
35 Rocío:     [llevamos  ]CUAtro años juntos.
                we've been together four   years
36        (1.3)
37 Lucas:cuatro Años. (0.2) <<creaky>tcho::h>
          four years                          wow
38 Rocío:(.) tch (0.4) <<all>pégate con una PIEdra en el
```

```
            hey                 hit yourself with  a     rock     on the
39        [pecho oye.]>
          chest
40 Lucas:[ha  ha    ]haha
41        (0.5)
42 Rocío:tch ha
43        (1.0)
```

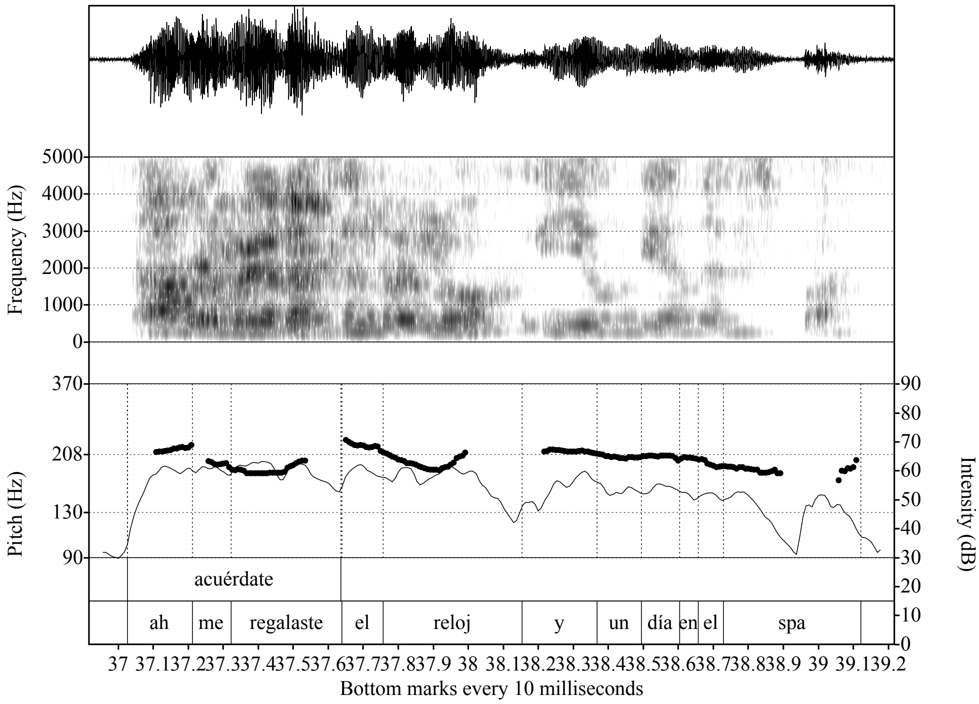

Figure 9. P4_Reloj - Waveform, spectrogram, pitch and intensity of *ah*

In all these examples, there are some important differences in length. In examples where clicks are uttered, the particle *ah* ranges from 508 to 838 milliseconds, as opposed to a range from 110 to 145 milliseconds in the cases without clicks. Furthermore, in examples with clicks there are long pauses (0.4 to 0.8 seconds) before the clicks are produced. This suggests those cases with the structure click + *ah* are a way of acknowledging the length of the pause which could be assumed as problematic and the click is clearly a sign of incipient speakership. Examples without clicks on the other hand are quite different. In all of them the *ah*-prefaced turn comes in overlap, this shows they are not dealing with a problem, but just help to create intersubjectivity, the relation between one's subjectivity and that of another.

Regardless whether there is a click or not, in some of the examples, both participants are negotiating their memories about certain events as they have different perspectives and recall different details about them. The display of understanding comes when one of the participants is able to recognize such events. In other examples one participant is recounting events and the displays of understanding seem to be inferences that the listener has drawn in relation to such events. Interestingly, in these examples the storyteller always confirms what the listener has said to display her understanding.

All things considered, there seems to be certain orderliness concerning the display of understanding with and without the accompanying production of clicks. Both in the location relative to the prior turn and in the articulatory rate in their production. When referring to the

particle *oh* in English - equivalent to *ah* in Chilean Spanish as already mentioned - Schegloff (1991:157) adds

> "*oh* can claim a change in the speaker's state, but its utterance enacts an interactional stance and does not necessarily reflect a cognitive event."
>
> (Schegloff, 1991:157)

However, in all of these cases, *ah* does in fact seem to bear a cognitive load often signalling a shared understanding between speakers, or an inference by one speaker is made and then confirmed.

3.3.2. Clicks and gestures

The following cases from the present study show sequences in which clicks were used in a display of affect and are also accompanied by gestures. These clicks are of a very specific nature forming part of a bigger construction that includes body movements and particular articulatory properties such as lip protrusion. These accompany the production of the click alongside distinctive lexical choices such as repetition. All of this is constrained by contextual cues.

The first case (Example 6) shows how the repetition of clicks is used to express negation in Chilean Spanish. What is interesting about this example is the strength of the formulations throughout the sequence and how that relates to the high number of negative particles and repetition of lexical items. There is the probability that the speaker who does most of the talking orients to this negative stance so she gets a strong response, but as it is possible to see in the transcription that such is not the case. There is repetition of the word *nada* 'nothing' in line 7 where the speaker goes into creak with a decreasing pitch and intensity as can be seen from figure 11. Line 23 is very similar to line 7, this time the word *no* is repeated with lip protrusion and head shaking as can be seen in figure 12. This is followed by three alveolar clicks that also have lip protrusion and are accompanied by head shaking. This evidence makes clear that the clicks here are another way of saying *no* as can be seen in figure 10 where Lía's head movements change as she says *no* and produces the clicks. In lines 29 and 30, there is more repetition of lexical items, the word *cantado* 'sung' is repeated six times as shown in figure 13. The repetition of the click seems to function as a metronome (Ogden, 2013: 314) as these occur in regular time intervals. In a sequence that is so loaded with repetition, it is easy to understand that the click is repeated following the same fashion, perhaps as a way of reiterating the point, especially because all of these repetitions are self-initiated and do not convey repair.

Example 6

P1_LesMiserables

01 Rosa: es un mu[siCAL]?
is it a musical?
02 Lía: [es un musi]cal enTEro. °h
it is a musical entirely
03 enTEro.=
entirely
04 =o sea no hay ninGUna <<all> parte de la película
I mean there is no part of the movie
05 donde es conversada>.
where they talk

```
06       (0.2)
07 Lía:  <<dim>N[Ada nada <<creaky>nada nada>>].
                 nothing nothing          nothing nothing
08 Rosa:         [Ah:: no te puedo creer ya    ],
                  Oh    I   can't    believe you  ok
09       (.)
10 Rosa: [YA::         ]
         right
11 Lía:  [to hasta los] DIÁlogos son medios (0.3) cantaitos;=
         everything even the  dialogues    are   kind of        sung
12       =y son como el (.) °hh (0.3) las co[neXIOnes]
          and they are like the                 the   connections
13 Rosa:                                          [YA:     ].
                                                   right
14 Lía:  entre una canción y la otra,=
         between one  song       and the other
15 Lía:  =pero,
          but
16 Rosa: YA:;
         right
17 Lía:  ((swallowing))! <<f>pero no HAY otra conversación>.
                                 but    there is no other  conversation
18       (0.3) no es como los de DISney que:=
               it's not   like   the Disney ones     where
19       =acTÚAN un rato;
          they act for a while
20       [CANtan un rato,]
          they sing for a while
21 Rosa: [SÍ y cantan ya.]
          yes and they sing right
22 Lía:  <<creaky>y después acTÚANn otro rato>;
                    and then     they act     another while
23     → <<creaky><<all><<dim>NO [no] no no> ¦w ¦w ¦w (0.2) °h (.)
                                 no   no   no  no
24 Rosa:                          [YA.]
                                  right
25 Lía:  NO.
         no
26       (0.5)
27       <<breathy>ahhh [ok>
                   oh    ok
28 Lía:                 [esto ES:- (0.2) e:hm hh° (0.6)
                          this  is           hmm
29       <<creaky><<dim><<acc>canTAdo cantado cantado
                              sung       sung      sung
30       cantado cantado cantado>>>.
         sung     sung      sung
31       TOdo el rato; (.)
         all   the  time
32       <<creaky>TOdo el rato>.
                   all   the  time
32 Rosa: [°h <<f>MIra y <<all>pero y de qué,]
                   look  and       but   what about
33 Lía:  [o sea la película emPIEza   ]con el can[tando y:]-
          I mean  the  film       starts        with him  singing     and
```

```
34 Rosa:                                                [ha ha ]ha ha
35 Lía:  (0.3) eh:: <<h>como pa darte el conTEXto>?
                hmm        like    to   give you the  context
36       así hasta COmo, (0.3)
         and even when they say
37 Rosa: [<<h>como una introducción>?]
               like     an     introduction
38 Lía:  <<h>en FRANcia> del <<creaky>no sé que>.
             in   France              I  don't   know   when
```

Figure 10. P1_LesMiserables - no followed by three clicks with lip protrusion, sequential images show headshaking.

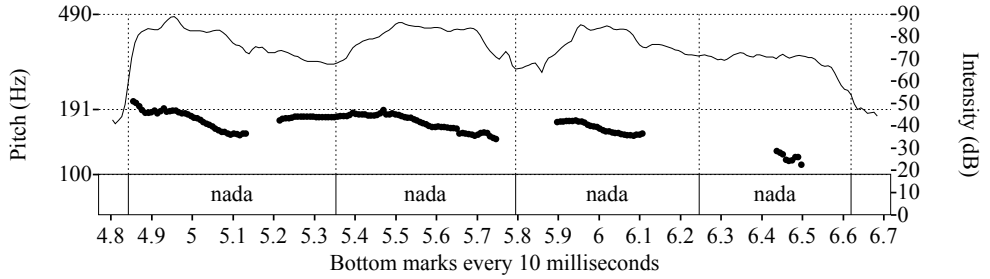

Figure 11. P1_LesMiserables - Pitch and intensity of the repetition of *nada* 'nothing'

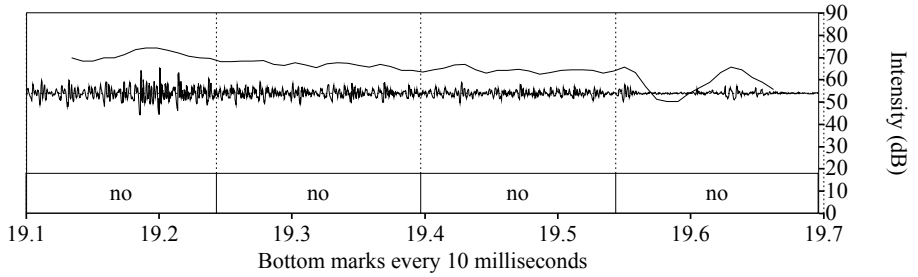

Figure 12. P1_LesMiserables - Waveform and intensity of the repetition of *no*

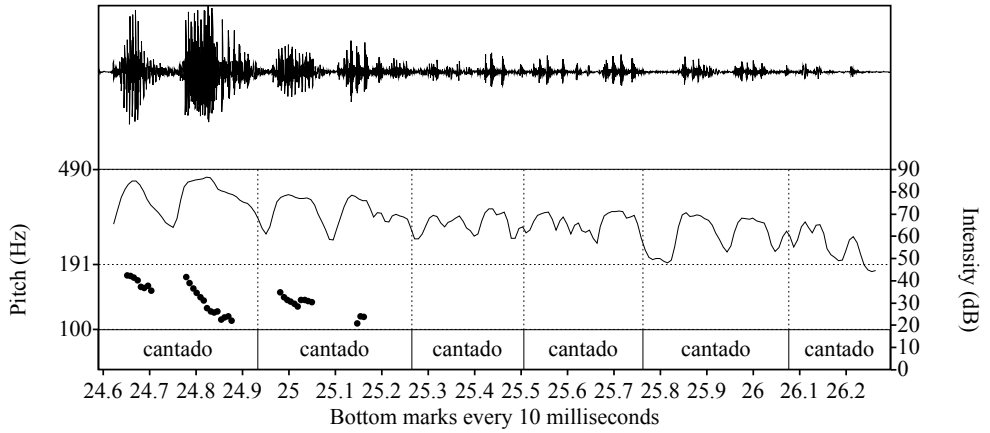

Figure 13. P1_LesMiserables - Waveform, pitch and intensity of the repetition of *cantado* 'sung'

For the analysis of example 7, some concepts that Liddel & Metzger (1998) have proposed for the study of sign language will be introduced. The first one is the idea of blended mental spaces where speakers can imagine that real entities are present anywhere around them (Liddel & Metzger, 1998:663). Another important concept is that of constructed actions which refers to the narrator's construction of another's actions and these provide a visual message that needs to be accurate to be understood (Liddel and Metzger, 1998:672). These ideas help to explain the clicks in the following examples which are part of a constructed action.

In example 7, Lía is talking about how, when her daughter plays, her eyes shine. Rosa laughs in overlap with Lía's line 13 where she proceeds to imitate the ways her daughter's eyes shine by means of gestures and an alveolar click that has lip protrusion, the gesture and protrusion can be seen in figure 14. From the video, it is possible to see that she intended to click more than once because she keeps the lip posture for longer than the click duration. The waveform in figure 15 shows there is activity and a peak in intensity similar to that of the click, perhaps indicating a percussive. The pitch trace is also included to support this argument.

Lía has real space elements to use in this construction as well, her own eyes in this case and elements that are part of her recollection of how her daughter's eyes shine. The shine, *per se*, is something that cannot be imitated with a body movement or subject to deixis. What Lía uses instead is the wiggling of her fingers to resemble the flickering of the eyes shine and the click is aligned with the hand movement. In line 14 Rosa displays her understanding with the word *ya* 'right'.

Example 7

P1b_Ojitos

01 Rosa: A:Y [que entrete.]
oh that's fun
02 Lía: [°hh](.)y AHÍ yo la voy a ver poh. (0.2)
and there I go to see her
03 Rosa: [Y:A.]
ok
04 Lía: [jugar](0.3) pero en verDAD a mí me encanta
play but the truth is I love
05 verla jugar;=

to see her play
06 =no porque TANto que me guste el voleibol,=
not because I like volleyball that much
07 =<<all>sino que> °hh (0.2)
but
08 <<creaky>si alguna vez> PUEdes ir a verla,(.)
if you ever have the chance of seeing her play
09 a Ella le cambia la cara:; (.)
her face changes
10 o sea ella se MEte a la cancha, (.)
I mean she goes into the field
11 <<len>y le BRIllan> <<creaky>los ojitos>, (.)
and her little eyes shine
12 Rosa: ha[hahaha]
13 Lía: → [así como] ǃ͡ʷ
like
14 Rosa: YA.
right

Figure 14. P1b_Ojitos - click with lip protrusion and wiggling of fingers

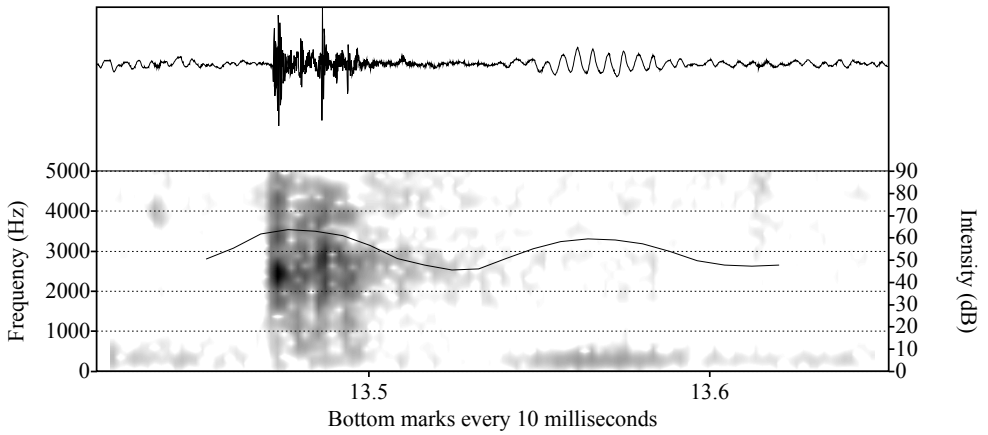

Figure 15. P1b_Ojitos - Waveform, spectrogram, pitch and intensity of click [ǃ͡ʷ] + possible percussive

4. Conclusion

Regarding the research questions previously posed, clicks in Chilean Spanish do occur in sequences similar to the ones reported for English. The findings for the distribution of clicks in terms of their function for Chilean Spanish show that for incipient speakership, NSI clicks behave similarly to English. The sequences which precede them are of the same kind, they have equivalent prefatory discontinuity markers, they are accompanied by in-breaths and they have the same pitch properties regarding the sequence previous and posterior to the NSI click. In the case of plain incipient speakership, clicks are turn- or TCU-initial. They are generally the culmination of other physical activity such as lip closure or swallow and function as an audible signal that may indicate one is about to talk and wants the interlocutor to acknowledge this.

Clicks in word searches were also found to function as they do in English; in order to signal trouble in finding words. They occur in conjunction with particles such as *eh*, *ehm*, which are equivalent to the hesitation markers found for English (Ogden, 2013:23), along with in-breaths and swallowing or gaps in talk. These clicks present similar properties to incipient speakership, but are more linguistically stable and structured.

Ogden (2013:24) had suggested that plain incipient speakership was likely to be similar in other languages and subject to individual differences that Scobbie et al (2011) identifies as "amount and texture of saliva", and individual features such as "'neutral' mouth postures". This short study may not be able to shed light on any of these individual differences, but it has shown that clicks marking incipient speakership do exist in Chilean Spanish and, most importantly, they behave similarly both sequentially and in terms of their phonetic environment to those in English. Ogden (2013:24) also suggested that since word searches and NSI involve more overtly linguistic elements, there was the likelihood to find important formal and functional differences between languages. As proved by this research, that is not the case because clicks in words searches and NSI clicks are very similar and so are their sequential environment and the articulatory properties that rule them.

For clicks that display some kind of stance or affect, the ones that are accompanied by a change-of-state token resemble similar cases in English. This research also proved that these cases with clicks differ from those displays of understanding without clicks, but still have a change-of-state token particularly in the duration of such token although the function is essentially the same for both cases. Eye blinks were also found to be simultaneously produced with clicks in the examples studied.

Finally, clicks were found to display stance when accompanied by gestures. They seem to be part of a bigger construction that includes body movements and particular articulatory properties (lip protrusion) as well as distinctive lexical choices (e.g. repetition) constrained by contextual cues. Ogden (2013:24) had also suggested this type of click to prove different in different languages and this is true for Chilean Spanish.

The findings of this research contribute to our understanding of the phonetic and interactional organisation of everyday social exchange in a language that had not been subject to this kind of study. Clicks are clearly not phonemic in Chilean Spanish, but the fact that they have a regular distribution and are part of prosodic constructions that convey meaning entails that they are indeed linguistic. Moreover, the similarities with English in the way a click helps to show 'gearing up to speak', to index new sequences that are disjunctive with the prior, to signal trouble in finding words; and the differences such as the particular use of clicks used to display affect found for Chilean Spanish support this argument.

Further research is needed to see if these findings are consistent and stable and to give a detailed account of those sequences in which clicks are said to occur but are not part of the data in this study. The need for conversations in less controlled settings is essential for such task.

Acknowledgements

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References

BOERSMA, PAUL AND WEENINK, DAVID. 2013. Praat: doing phonetics by computer [Computer program]. Version 5.3.48, retrieved 1 March 2013 from http://www.praat.org/

CATFORD, JOHN CUNNISON. 2001. *A practical introduction to phonetics*. Oxford: OUP.

CLARK, JOHN, COLIN YALLOP AND JANET FLETCHER. 2007. *An introduction to Phonetics and Phonology*. Oxford: Blackwell Publishing.

EKLUND, ROBERT. 2008. Pulmonic ingressive phonation: Diachronic and synchronic characteristics, distribution and function in animal and human sound production and in human speech. *Journal of the International Phonetic Association* 38. 3. 235-324.

GIL, DAVID. 2011. Para-Linguistic Usages of Clicks. In M. S. Dryer & M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Munich: Max Planck Digital Library.

GIMSON, A. C. 1970. *An introduction to the pronunciation of English*, 2nd edn. Bristol: Edward Arnold.

GÜLDEMANN, TOM AND MARK STONEKING. 2008. A historical appraisal of clicks: a linguistic and genetic population perspective. *Annual Review of Anthropology.* 37. 93-109.

HAVET, LOUIS. 1875. Observations phonétiques d'un professeur aveugle. *Mémoirs de la Société de Linguistique de Paris 2*, 218-221.

HERITAGE, JOHN. 1984. A change-of-state token and aspects of its sequential placement. *Structures of social action: Studies in conversation analysis*. 299-345.

KELLY, JOHN AND JOHN LOCAL. 1989. *Doing Phonology*. Manchester: Manchester University Press

LADEFOGED, PETER AND IAN MADDIESON. 1996. *The Sounds of the World's Languages.* Oxford: Blackwell Publishing.

LADEFOGED, PETER. 2005. *Vowels and Consonants: An Introduction to the Sounds of Languages*. 2nd edn. Oxford: Blackwell.

LAVER, JOHN. 1994. Principles of Phonetics. Cambridge: Cambridge University Press.

LIDDELL, SCOTT K., AND MELANIE METZGER. 1998. Gesture in sign language discourse. *Journal of Pragmatics* 30. 6. 657-697.

LOCAL, JOHN AND GARETH WALKER, 2005, 'Mind the gap': further resources in the production of multi-unit, multi-action turns. *York Papers in Linguistics Series 2*, 1, 133-143

OGDEN, RICHARD. 2013. Clicks and percussives in English conversation. *Journal of the International Phonetic Association*. 43. 3. In press

SACKS, H., SCHEGLOFF, E.A., JEFFERSON, G. 1974. A simplest systematics for the organization of turn-taking for conversation. *Language* 50. 4. 696-735.

SCHEGLOFF, E.A. 1991. Conversation analysis and socially shared cognition. *Perspectives on Socially Shared Cognition.* Washington, DC: American Psychological Association. 150-171.

SELTING, MARGRET, PETER AUER, DAGMAR BARTH-WEINGARTEN, JÖRG BERGMANN, PIA BERGMANN, KARIN BIRKNER, ELIZABETH COUPER-KUHLEN, ARNULF DEPPERMANN, PETER GILLES, SUSANNE GÜNTHNER, MARTIN HARTUNG, FRIEDERIKE KERN, CHRISTINE MERTZLUFFT, CHRISTIAN MEYER, MIRIAM MOREK, FRANK OBERZAUCHER, JÖRG PETERS, UTA QUASTHOFF, WILFRIED SCHÜTTE, ANJA STUKENBROCK, SUSANNE UHMANN1. 2011. A system for transcribing talk-in-interaction: GAT 2. *Gesprächsforschung* 12.
Online: www.gespraechsforschung-ozs.de/heft2011/heft2011.htm.

WARD, NIGEL. 2006. Non-lexical conversational sounds in American English. *Pragmatics and Cognition.* 14. 1. 129-182.

WRIGHT, MELISSA. 2005. Studies of the phonetics-interaction interface: clicks and interactional structures in English conversation. PhD Thesis, University of York, UK.

WRIGHT, MELISSA. 2007. Clicks as markers of new sequences in English conversation, in *Proceedings of the 16th International Congress of Phonetic Sciences*, Saarbrücken, 1069-1072.

WRIGHT, MELISSA. 2011a. On clicks in English talk-in-interaction. *Journal of the International Phonetic Association*. 41. 02. 207-229.

WRIGHT, MELISSA. 2011b. The phonetics–interaction interface in the initiation of closings in everyday English telephone calls. *Journal of Pragmatics*, 43. 4. 1080-1099.

ZILIO, GIOVANNI M. 1986. Expresiones extralingüísticas concomitantes con expresiones gestuales en el español de América. Actas de los congresos de la Asociación Internacional de Hispanistas IX. 139-151.

Appendix

Transcription conventions

GAT 2 (Selting et al, 2011) with some modifications.

http://www.gespraechsforschung-ozs.de/heft2011/px-gat2-englisch.pdf

```
Sequential structure
[  ] overlap and simultaneous talk
[  ]
=    latching
→    refers to a line of transcript relevant in the argument

Inbreaths and outbreaths
°h / h°      in- / outbreaths of appr. 0.2-0.5 sec. duration
°hh / hh°    in- / outbreaths of appr. 0.5-0.8 sec. duration
°hhh / hhh°  in- / outbreaths of appr. 0.8-1.0 sec. duration

Pauses
(.) micropause, up to approximately 0.2 sec duration
(0.2)- (2.0) measured pause (notation with one digit after the dot)

Other segmental conventions
:    lengthening, by about 0.2-0.5 sec.
::   lengthening, by about 0.5-0.8 sec.
::: lengthening, by about 0.8-1.0 sec.
ʔ    cut-off by glottal closure
eh, ehm, hesitation signals, so-called 'filled pauses'

Laughter and coughing
haha      syllabic laughter
hehe      syllabic laughter
hihi      syllabic laughter
((laughs))       description of laughter
<<laughing> >    laughter particles accompanying speech with scope
((coughs))       non-verbal vocal actions and events
<<coughing> >    …with indication of scope

Accentuation
SYLlable         focus accent


Final pitch movements of intonation phrases
?    rising to high
,    rising to mid
–    level
;    falling to mid
.    falling to low

Changes in pitch register, with scope

<<l> >   lower pitch register
<<h> >   higher pitch register
```

Loudness and tempo changes, with scope

```
<<f> >        forte, loud
<<ff> >       fortissimo, very loud
<<p> >        piano, soft
<<pp> >       pianissimo, very soft
<<all> >      allegro, fast
<<len> >      lento, slow
<<cresc> >    crescendo, becoming louder
<<dim> >      diminuendo, becoming softer
<<acc> >      accelerando, becoming faster
<<rall> >     rallentando, becoming slower
```

Changes in voice quality and manner of articulation, with scope

```
<<creaky> >       glottalized, "vocal fry"
<<whispery> >     change in voice quality as stated
<<breathy> >      change in voice quality as stated
```

Other phonetic phenomena

```
[⊙] bilabial click
[!] alveolar click
[‖] lateral click
```

Gestures

```
((eye blink))     gesture as stated
```

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