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Abstract

This study examines how a nearly nonverbal, prelingually deaf young man and his speech-language clinician co-construct a conversation using the client's nonconventional contributions. It is shown how conversation is made possible through variations in the sequential placement of a single contribution by the client: an nasal sound construed as serving four distinct conversational functions: as a continuer; as a token of turn-constructional and topical completion; as an incomprehension token and signal for lack of verbal resources; and as a comprehension token. These functions are based on variations the sequential placement of the nasal and the differential treatment it receives by the interlocutors as a consequence. Results indicate that unconventional conversational contributions may be untypical in their form but typical in their function; that they may have subtly different functions when compared to their conventional cognates; or that they may have functions not found in typical talk.

Keywords: Communication impairment; Conversation Analysis; Interpersonal communication; Sequential placement

Functions of sequential placement:
Conversational co-construction of a single nonverbal contribution

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1 Introduction

Conversation with interlocutors with communicative disabilities poses the challenge of using nonconventional contributions to co-construct conversational sequences. These contributions, and the conversational functions they serve, may or may not be shared knowledge between interlocutors. If they are not, any successful unfolding of the conversational sequence raises the question as to how participants achieved this.

This study examines how a nearly nonverbal, prelingually deaf young man with various challenges and a speech-language clinician (first author) engage in a conversation using the client's nonconventional contributions to advance the sequence. In particular, it is shown how conversation is made possible through variations in the sequential placement of a single contribution by the client--an indistinct nasal sound. It will be argued that the interlocutors' co-construction of this contribution as four distinct actions--or: functions--allowed the interaction to unfold.

The method used to this end is Conversation Analysis (CA), a descriptive empirical approach to analysing talk-in-interaction (Jefferson, 1984; Sacks, Schegloff, & Jefferson, 1974; Schegloff, 1989) Interested in the systematicity of conversation (Goodwin & Heritage, 1990; Simmons-Mackie & Damico, 2003), its proponents have developed descriptive procedures that allow demonstrating how every aspect of ongoing talk is deployed systematically and helps shape how the conversation unfolds. The basic tenets of CA are that a) talk is a collaborative achievement (Schegloff, 1982, 1988), and b) it is sequentially organised (Sacks, Schegloff, & Jefferson, 1974). That is, the interactional sequence is shaped by the contributions of both interlocutors; those, in turn, are shaped by the sequence of talk in which they are embedded.

Conversation analysts recognise different degrees of constraint that contributions place on their subsequent. *Adjacency pairs* are sequences in which the first action conventionally requires a specific type of next action, such as greeting--greeting back, or question--answer. The looser notion of *next positioning* refers to the fact that any conversational action *projects* next actions. That is, what first speaker says enables and simultaneously constrains next speaker's response, albeit without strictly requiring a specific format or content (Goodwin & Heritage, 1990). The resulting dialog is a joint product which unfolds incrementally: an 'ongoing accomplishment' (Schegloff, 1987:73).

As per the classic formulation by Sacks, Schegloff, and Jefferson (1974), this accomplishment is made possible by the *systematics of turn-allocation*, that is, by systematic features of conversational contributions that project upcoming points of turn completion, and

hence a possible speaker transition. Projectable units of language include constructions at the sentence, clause, phrase, and word level; projection of completion is also achieved by nonverbal behaviours and prosody including pausing (Goodwin, 1981; Local & Walker, 2012).

Projected completion is part of the three-part structure of typical turns-at-talk. Turns relate back to prior turns; they advance the conversation by contributing to it; and they signal upcoming transition potential (Sacks, Schegloff, & Jefferson, 1974). Thus, *turn-constructional units*--bids of talk that can serve as complete turns--feature a twofold systematics of linguistic and turn-internal structure that makes for projectable completion points at which there is opportunity for speakership transition.

At potential transition points, speakership may or may not change, depending on the respective projections of interlocutors' contributions. Speakers may use fillers such as *um* to signal that their turn is still underway. Used by the listener, the same contribution projects a claim to speakership change. By contrast, if the listener contributes *uh-huh*, she signals her acknowledgment of the contribution and her ongoing availability as the listener. In this function, the signal uh-huh serves as a *continuer* (Schegloff, 1982, 1988, 2007).

Analysts in the CA tradition differentiate between the *form* of a given conversational contribution--e.g. a verbal turn-at-talk or *uh-huh*--and the *action* it may project. For example, *uh-huh* may be deployed--and treated--as a continuer, or it may serve as a signal for understanding on part of the listener. The two cases differ in that the latter is open to refutation: the current speaker may find out, later during the conversation, that the listener did *not* comprehend to the speaker's satisfaction. In its continuer function, by contrast, the device simply projects continuing availability of the listener regardless of whether the speaker's contribution has been comprehended (Schegloff, 1982, 2007). The *sequential placement* of a contribution is crucial in determining which kind of action it projects. A single *uh-huh* at a possible turn-completion point may project continued availability of the listener. Uttered four or five times consecutively in parallel with ongoing talk, it may project a lack of interest on part of the listener and hence reduced availability (Clift, 2005; Schegloff, 1982).

Given the highly situated import of conversational contributions, CA rejects any notion of pre-existing categories of conversational behaviour that could be applied to data. As Schegloff puts it, such a procedure would be 'a taxonomic act, not an analytic one' (2007:252). The CA stance insists that any contribution, no matter how minute or unexpected, can and must be analysed for its relevance and systematic fit into the ongoing interaction. Conversational actions may be describable in everyday, intuitive terms (e.g. *greeting, promise, threat*), or they may serve functions that cannot readily be captured in everyday language (e.g. *continuer*) (Jefferson, 1984; Schegloff, 1982, 1988, 2007). This open-ended approach makes CA an ideal tool for the investigation of unconventional interactional behaviours. Consequently, CA has been used for various populations with communication impairments.

Stiegler (2007) used CA to analyse a variety of nonverbal, vocal, and beginning verbal behaviours of an 8-year old boy with autism and identified the following communicative functions: demand, request, response, protest, warning, agreement, and continuation and expansion (of preceding action). Individual behaviours fulfilled several functions; likewise, the same function could be expressed in different behaviours. The author also showed how the participant contributed at sequentially appropriate locations, thereby fulfilling his 'conversational responsibilities' in the same way a non-disabled interlocutor would. Tarplee & Barrow (1999) focused on an autistic child's delayed echoic productions and found that they served to initiate conversation and elicit responses, and thereby to co-construct extended interactional sequences.

Tarling, Perkins, & Stojanovik (2006) examined the conversational contributions of a 12-year old with William's syndrome. They report that despite severe linguistic limitations, their participant used turn-taking, topic management, and repair to adapt to his interlocutor's needs, resulting in more or less conventional unfolding of the interaction. They suggest that it is communicative, rather than linguistic ability that makes for the widespread view that William's syndrome is characterized by relatively unimpaired language.

Of particular interest to the present investigation, Mahon (2009) analysed teaching interactions between a 12-year old, prelingually deaf boy and his teacher. She found that the boy's multi-element turns--constructed using multiple modalities, typically word approximations and gestures--were embedded in a structured sequence carefully maintained by the professional. The teacher initiated or pursued a topic--or redirected the child's attention--using various communicative devices, including multi-element turns and silences, thereby affording the child an opportunity to contribute; after the child's turn, she acknowledged the child's contribution with a verbal-only summary or expansion.

Research on communication involving limited verbal capacities has also been carried out in the field of aphasia. A well-known example is Goodwin (1995), whose participant relied on three vocabulary items--*yes*, *no*, and *and*--to co-construct conversational meanings with his interlocutors. Nuance provided by prosodic variation and gestural complements allowed for construal of a variety of meanings based on local communicative and interpretive efforts. Simmons-Mackie, Damico, and Damico (1999) used CA paired with ethnography to explore clinician feedback in aphasia therapy. They found that clinicians tended to structure the interaction as sequences of requests, responses, and evaluations. In less constrained interactions with aphasics--i.e. conversations--interlocutors negotiate meanings using various quasi-verbal and non-verbal devices to establish mutual understanding (Damico, Simmons-Mackie, & Wilson, 2006; Damico, Wilson, Simmons-Mackie, & Tetnowski, 2008).

As this brief overview illustrates, impaired communicators use a variety of interactional devices--verbal, quasi-verbal, and nonverbal--to co-construct conversational sequences with their interlocutors. In this process, dyads rely both on the devices deployed, as well as on their sequential placement. Extant literature also suggests that interactions range from open-ended conversation to structured formats.

The present study serves to further these insights. The participant in the conversation of interest is a barely verbal, congenitally deaf young man whose preferred mode of communication was a simplified form of Signed English; his verbal contributions were highly unintelligible at the time of the study. His interlocutor, the clinician (first author) does not sign. Hence, during their first encounter, the interlocutors had to rely on a very restricted set of verbal utterances, unconventional conversational contributions, and support through visual and gestural modalities. Despite these limitations, a lively conversation ensued that lasted for 149 turns. The initial research question for this study was therefore: how did client and clinician co-construct a prolonged conversation from a limited expressive and receptive repertoire?

Preliminary analyses revealed that co-construction of the sequence in question was made possible not so much by variation in the *form* of the client's contributions, but relied heavily on variation in the *sequential placement* of the same nonverbal device: an undifferentiated nasal rendered here as *[N]*. The main question this study sought to answer was therefore: how do variations in sequential placement of a single interactional device enable co-construction of prolonged conversational sequences?

2 Method

Participant. The target participant in the interaction analysed here, who will be named John, presented with a severe language and speech delay/disorder, poor auditory reception, and reading ability at a second-grade level at the time of the study. His communicative disability was secondary to CHARGE syndrome, a rare genetic disorder that affects physical and cognitive development (Griffin, Davis, & Williams, 2004). John's presentation included severe sensorineural hearing loss, left facial paralysis, a bilateral gaze nystagmus, and coloboma in both eyes. In addition, he had been born with choanal atresia, a bifid uvula (suggesting possible velopharyngeal port issues), ankyloglossia, and a mild cognitive impairment. John had had minimal auditory support from bilateral hearing aids until his early teens; he had received a right ear cochlear implant in March 2007, i.e. 3;10 years before the time of this study. He had been receiving therapy since the Spring 2009 semester, with the main goals of improving his auditory discrimination and increasing his language production to functional 2-3 word utterances.

John grew up on a farm in a small, rural municipality, and without ready access to specialized services. In special education throughout high school, his curriculum targeted skills of daily life. He was not instructed in sign language; his habitual medium of communication, particularly in his family, was a simplified form of Signed English including a variety of 'home signs', i.e. unconventional signs developed spontaneously. At the time of the study, John had begun to use of verbal language within therapy sessions, but not in daily life. His intelligibility was still severely compromised so that his verbal output was not meaningful to untrained listeners.

In order for the reader to better follow the examples below, it needs to be mentioned that at the time of this study, a small house on the family premises was being built for John.

Data collection and analysis. The present study analyses the first 149 turns of the first encounter between the clinician (first author) and John. The first session was chosen because interpretive and co-constructional efforts could not, at this point, rely on a shared interactional history or 'common ground' (Clark, 1996). Analysis ended at turn 149 because the subsequent interaction was characterized by a request-response-evaluation sequence (Simmons-Mackie, Damico, and Damico, 1999), and hence did not require co-construction of conversational meanings in the strict sense of the term.

Raw data consisted of an audio recording taped with a Sony ICD-UX 200 digital audio recorder, and of clinical notes to supplement the audio track. The initial 149 turns of the interaction were transcribed using narrow phonetic transcription (Ball & Müller, 2005); timings were measured using the free Audacity software (Audacity development team, 2015).

The transcript was scrutinized for mechanisms of conversational co-construction using the classic CA approach outlined in Goodwin & Heritage (1990), Jefferson (1984), Sacks, Schegloff, & Jefferson (1974), and Schegloff (1982, 1988, 1989, 2007). As the prominence of John's nasal became apparent, focus was centred on the device's sequential functions. It was decided to use the term *function*, rather than *action*, to account for the unconventionality of the *[N]* device. *Action* implies that the analyst infers, on part of the speaker, an intention to execute an identifiable conversational move. To speak of a *function*, by contrast, presupposes only that the contribution in question can be understood to serve a demonstrable end within the ongoing interaction, with no reference to assumed intentions. Consequently, *function* was defined as a property of the interactional sequence, rather than a specific meaning constructed by either

interlocutor. This also helped mitigate the issue of privileged interpretation, raised by the fact that the main analyst was also one of the interlocutors.

In addition to classic CA methods, analyses included principles from the broader methodological literature for qualitative research in order to describe generalities in the functions of *[N]* (Corbin & Strauss, 2008; Damico & Simmons-Mackie, 2003; Denzin & Lincoln, 2005; Janesick, 1994; Simmons-Mackie & Damico, 2003). Also, the Gricean framework of 'conversational maxims' (Grice, 1975) was used occasionally to substantiate analyses. Instances of *[N]* were categorised based on functional similarities. Codes were developed for each function. These codes were then reviewed, and the transcript was coded again, by a second analyst blind to the original coding. Codes were amended to be more precise and distinct from one another; disagreements in coding of instances of *[N]* were resolved through negotiation. An agreed-upon final coding served as the basis for this article. Functions were also analysed in terms of proportional occurrence, reported in terms of percentages below.

3 Results

In this section, findings will be reported as follows. First, basic statistics on the conversational sequence in question will be detailed, including statistics on the relative frequency of the *[N]* device and details of John's verbal contributions (*Finding 1*), which led us to focus on the *[N]* device as the main object of analysis. In the main portion of the section, the four conversational functions of the device will be detailed, including examples for each (*Finding 2*). Several *[N]* served multiple functions; this will be discussed briefly (*Finding 3*).

Finding 1: Basic statistics of the conversational sequence. John contributed 68 of the149 turns at talk, i.e. 45.6% of all turns; the clinician contributed 67 of 149 turns, or 45%; and the clinician's assistant, 14 of 149 turns, i.e. 9.4%. Thus, John's challenges did not prevent him from contributing to the interaction as an equal in terms of participation.

Of John's 68 turns, 53 (77.9% of his total contributions) either included (n=27, 39.7%) or consisted solely (n=26, 38.2%) of a nasal sonorant. The exact phonetic characteristics of the sound in question varied and could not always be determined with certainty, but since this did not appear to have an import on its conversational function, its differing instantiations were treated as variations of the same underlying production, and indiscriminately rendered as *[N]*.

42 of John's turns (61.8%) included verbal elements. These consisted exclusively of one- or two-word phrases, including reduplicated one-word phrases, and most were highly unconventional phonetically. As a result, they served a projective function--that is, they were used by other speaker to continue the conversational sequence--in only 24 turns (35.3% of John's turns). In 20 of these, projection was facilitated by the multimodality of the interaction: contributions consisted of references to floor plans of their homes that John and the clinician were drawing. Thus, only 4 of John's turns (6%) contained projective verbal elements not supported by other modalities. This underscores the relative importance of the *[N]* device. It was therefore decided to focus on the sequential placement of this device for the main analysis.

***Finding 2: Functions of* [N].** There were 87occurences of the nasal *[N]* in the sample. 3 of them were deemed unanalysable due to lack of data--i.e. because of unintelligible stretches of talk in the vicinity, or insufficient data to interpret the interaction. The remaining 84 instances were analysed for sequential placement of the nasal, i.e. for a) its positioning in relation to prior or ongoing contributions, b) its potential projections, and c) the actually occurring subsequent turn. Through this analysis, 4 distinct conversational functions of *[N]* were determined:

1. acknowledgement of prior speaker and indication of ongoing interlocutor status (continuer function);
2. turn-constructional and topical completion of John's verbal contribution, and hence a place of possible speaker transition (completion function);
3. indication of lack of comprehension and/or verbal resources (incomprehension function);
4. indication of comprehension of prior speaker's turn (comprehension function).

The *continuer function* was determined to be present in 28 out of 68 turns (41.2%), with 42 out of 84 *[N]* (50%) serving it. The *completion function* was found in 25 out of 68 turns (36.8%), and in 32 out of 84 *[N]* (38.1%). The *incomprehension function* was observed in 8 out of 68 turns (11.8%) and 16 out of 84 *[N]* (19%). The *comprehension function* was found in 6 out of 68 turns (8.8%) and 10 out of 84 *[N]* (11.9%). 18 instances of *[N]* (21.4%) were coded as serving two of these functions simultaneously, hence numbers and percentages reported here exceed the actual n and 100 per cent.

Function 1: continuer function. The most prevalent function of John's nasal that emerged during analysis was that *[N]* was treated by the conversationalists as an indication of John's ongoing presence as an interlocutor and his availability to the person speaking. Example (1) shows an instance of this function at the very beginning of the interaction. (Turns are numbered 1 to 149, and labelled C = clinician; J = John; for further transcription conventions see Appendix.)

(1) 1C so
2J [N]
3C how are you doing?
4J [N]
(1.0)
5C doing ok?

The clinician opens the interactional sequence with the pre-greeting *so* (Schegloff, 2007), followed by the greeting itself (*how are you doing*). *so* alerts the interlocutor to the fact that an interactional sequence has begun; by the same token, it serves as a turn-allocation device (Sacks, Schegloff, & Jefferson, 1974), signalling that the speaker intends to continue talking. The conventional response to this projection is 'to exhibit (…) an understanding that an extended unit of talk is underway (…), and that it is not yet (…) complete' (Schegloff, 1982:81).

Conventionally, this function is frequently fulfilled by continuers such as *uh huh*, *yeah*, and the like (Schegloff, 1982), although in this particular position--following a pre-greeting--it may be surmised that a subtle nod, a shift of gaze, or a low-volume *mh* would be more typical. Either way, the clinician takes John's *[N]* in example (1) to project continuing talk in a precise parallel to conventional devices, as evidenced by his contribution in turn 3. Thus, the *[N]* in turn 2 can be analysed to serve as a continuer.

Based on the projective import of the second *[N]* (turn 4), however, it may be argued that the nasal does not fulfil the same function as conventional continuers. John does not appear to be following the semantic content of clinician's talk here, or he would have responded with a version of *good* as projected by clinician's first-pair part of the adjacency pair 'greeting'. (As later interactions revealed, he was familiar with this sequence, and capable of realising a

recognisable production of *good*.) Instead, he offers another *[N]*; as this is not an expected placement for a continuer, the conversational sequence is briefly interrupted.

It is noteworthy, in this regard, that conventional continuers do not necessarily indicate comprehension. As Schegloff (1982) shows, a device such as *uh-huh* can be used as a continuer in the absence of comprehension to a) advance the conversational sequence and b) avoid other-initiated repair. John's second *[N]* arguably serves the former: it projects understanding that an extended unit of talk is underway and that John is available for its continuation. However, due to its placement in lieu of a second-pair part, it fails to serve the latter. This is a dispreferred move in conversation, and hence it results in a rupture of the sequence. Nonetheless, the interaction continues, indicating that both interlocutors agree that they are still talking to one another, despite any difficulties on the semantic plane. Thus, *[N]* effectively takes up a dual role not encountered in typical conversation: as a continuer and to indicate *lack* of comprehension. This is reflected in the coding scheme (see below).

Example (2), taken from the end of the transcribed interaction, shows three *[N]* in the continuer function. John is not reacting to the lexical content of clinician's conversational bids but both interlocutors take his nasals to indicate that he is attending to clinician's talk, and continues to be available as an interlocutor. (The interaction continued past turn 149.)

(2)
146C	[↓h̩] awesome
147J	[N]
	(0.6)
148C	hey um (1.1) let's do some /words\=
149J	\ [N] /=[N]

Half of John's *[N]* in 41.2% of his turns served this function. This makes the continuer function the most frequent function of *[N]* in this sample.

Function 2: completion function. The second function of *[N]* is linked to John's verbal contributions. In turns that included verbal items, *[N]* served as a token of completion of the turn-constructional unit, and/or of the topic encoded in it. Of interest to CA analysis, such completion also indicates a possible place of speaker transition. Example 3 shows two instances of this function.

(3)
18C	/this is\
19J	\([lʊ])/ [hɔm]
20C	uh-huh
21J	[lʊp hɔm N]
22C	my /home\
23J	\[N]/ [hɔm] (0.3) [N]=
24C	=mhm (2.1) this is the living room

The final nasals in turn 21 and 23 serve the completion function. (The first *[N]* in turn 23 serves a different function, viz. to indicate comprehension, as will be discussed below.) John's elliptical statement*, ([lʊ]) [hɔm]* 'your home' complements the clinician's *this is*. Accuracy of reference is verified by clinician's *uh-huh*, upon which John reiterates his contribution, postfacing it with *[N]*. Clinician then offers a verbal confirmation (*my home*), to which John

responds with another reiteration of the referential phrase--leaving out the possessive pronoun--and, after a brief pause, another nasal.

The rationale for the 'interactional work' (Walker, 2012) done by this function is based on John's verbal difficulties. As seen in (3), his productions were highly unconventional, not only because of their phonological properties. Consider the noun phrase *home* in turn 23. It is not conventional, for two reasons. The first is syntactic: reference to the clinician's home requires a possessive pronoun, either freestanding (*yours*) or in a phrase with the head noun (i.e. *your home*). The second is pragmatic: A sequence composed of an incomplete sentence and a phrasal completion (turns 18 and 19) does not, after prior speaker's acknowledgement of the completion's accuracy (turn 20), project repetitions of the first piece of information (turns 21 and 23). As per the framework provided by Grice (1975), such redundancy violates the conversational maxim of quantity, and arguably those of relation and manner as well. More is said than is needed; as a result, the relevance of the contribution is hampered, and its semantic import obscured.

These issues affect the mechanisms of turn-taking. *your home* in turn 19 projects a transition place right after *home*: the noun phrase has been completed, hence another participant may take up speaker role. In turns 21 and 23, by contrast, completion cannot be readily projected. In turn 21, one might expect addition of more verbal material to justify reiteration of the same information and add to its relevance, thereby clarifying the intended meaning of this bid (Grice, 1975). Turn 23 is even less conventional in that it lacks the three-part structure of a typical conversational turn (Sacks, Schegloff, & Jefferson, 1974). There is no pronominal link to prior talk in turn 23, and its topic is semantically obscure: *home*, standing by itself, is usually understood as a directional adverb. Hence, it does not fit in a conversational sequence about a dwelling.

Despite these issues, however, the conversation proceeds smoothly without occurrence of a lapse, i.e. a stretch of silence due to non-assumption of speakership (Sacks, Schegloff, & Jefferson, 1974). This can be explained by assuming that completion and transition points are functionally determined through the sequential placement of *[N]*. Consider the sequence of turns 23 and 24. After the third iteration of the noun phrase *(your) home*, John introduces a very brief pause before producing *[N]*, onto which the clinician immediately latches his confirmation token *mhm* and proceeds, after a pause, to discussing a detail of the referent. In doing so, he not only treats *[N]* as a signal for speaker change, but also for topic shift. Example (4) shows the same function for *[N]*:

(4) 11C how is your /new\ (1.0) new house?
12J \[(**d1:**)]/
(1.2)
13J [haʊ] (0.9) N̄ (2.9) [ha**Ji:**] (2.1) N̄ (0.6) N̄
(2.1)

Turn 11 consists of an open-ended question, responding to which presupposes not only lexical comprehension but also broad pragmatic skills. John is not able to meet this challenge, and a brief lapse occurs. He then reiterates the clinician's noun phrase as a single word *house* and offers what may be an inverted noun phrase *house new*, i.e. an unconventional repetition of the clinician's bid. Both utterances are unconventional syntactically and pragmatically, and hence lack a projectable completion point, resulting in ruptures to the conversational sequence.

This function is therefore assumed by the nasal, again supported by pausing. The first *[N]* occurs after a brief pause, which in itself projects completion. A 2.9 seconds-long lapse ensues after the nasal, projecting speakership change. As no such change occurs, John reiterates his bid in altered form. Another 2.1 seconds-long lapse follows, and then John offers the nasal twice to indicate completion since the pause has, again, not resulted in speaker change.

In this example, it is not the other speaker's reaction but the placement of *[N]* that suggests its intended function as completion point. This analysis may raise criticism: if second speaker does not treat *[N]* as signal for speaker change, how can it be analysed as serving this function?

The answer to this is twofold. First, John signals completion simply by discontinuing his talk; the nasal serves as a reinforcement of this signal. Second, and importantly, speaker change is not mandatory at a projected completion point, and typical conversation does include instances of lapses (Sacks, Schegloff, & Jefferson, 1974).

Note that placement of *[N]* subsequent to a verbal bid occurred in 25 of the 27 turns that contained verbal elements (88.9%). This can be taken as a strong indication that in this position the nasal routinely served to indicate completion.

Function 3: incomprehension function (including display of lack of verbal resources). Only 17.9% of John's turns contained an *[N]* that served to signal lack of comprehension and of verbal resources to continue talk--another indicator for the relative smoothness with which the conversation progressed. Example (5) shows three instances of this function.

(5) 7C how's your new hou/se\?
8J \[N]/ (0.3) [N]
(12.5) *(sound of felt tip marker on paper)*
9C how's your new hou/se\?
10J \[N]/ (3.1) [haɲɨ:]

In turn 7, clinician inquires about a topic of interest: the cabin being built for John on the family premises. John replies to the inquiry with a double rendering of his nasal (turn 8), after which the conversation breaks down and a lapse of 12.5 seconds occurs. During this lapse, the clinician writes down his inquiry to present it to John as a visual reinforcer. However, John's reply is, again, limited to his nasal, and succeeded by a pause of 3.1 seconds, after which he proffers a verbal bid *[haɲɨ:]*, possibly a repetition of part of the clinician's inquiry with inverted syntax *(house new)*, as discussed above.

The lapse following turn 8 suggests that John does not understand the inquiry and/or lacks the verbal resources to respond to it, and that his reply *[N](0.3) [N]* serves to signal this difficulty. This interpretation is corroborated by clinician's take on the situation as he tries to facilitate comprehension with his written model. Yet John cannot surmount the conversational obstacles, so he resorts to another *[N]*.

It may be tempting to treat all three *[N]* indiscriminately as signals for lack of comprehension and verbal resources. Note, however, that there are slight differences in their sequential context. No indication of comprehension is given in turn 8. By contrast, John's bid in turn 10 suggests his comprehension issues may not be absolute. If *[haɲɨ:]* is, indeed, *house new*, then he must be credited with at least partial lexical understanding of the written or the spoken sentence, or of both, as *house new* is a creative rearrangement of the linguistic input he has received, not a mere repetition. And yet, John does fail to respond to the conversational topic

offer, which suggests that by turn 10 he may have comprehended the clinician's bid, in part or as a whole, but still be unable to respond to it. In this case, *[N]* in turn 10 would not signal lack of comprehension but lack of verbal resources.

Example (6), turn 15, shows another such use of *[N]*. The exchange shown here is part of the same, ongoing topic sequence. John is still struggling as to how to respond to clinician's persistent query, as evidenced by the 4.7 seconds of lapse after this nasal.

(6) 14C so how **is** the new /house\?
15J \[N]/
(4.7)
16C let me show ya something. I'll show ya /my\ house=

Function 4: comprehension function. Just as John deployed *[N]* to signal lack of comprehension, he also used it to signal the opposite, viz. comprehension. This function had the lowest incidence of all, with only 10 occurrences in the sample, in 8.8% of John's turns. This does not, as could be suspected, reflect a low level of understanding. Recall that he used his nasal to indicate *lack* of comprehension as well; this latter function was found only in 17.6% of all turns. It would be implausible to presume John failed to comprehend most of the conversation.

The reason for the low incidence of *[N]* as a comprehension token appears to be that when John comprehended the ongoing talk, he was usually able to contribute to it using verbal, gestural, onomatopoetic, or visual-graphic means. In other words, comprehension itself facilitated production, and made use of *[N]* less necessary. Example (7) shows three instances of *[N]* used as a token of comprehension.

(7) 44C can you draw your /new\ house?=
45J \[N]/ =[N] (0.9) [N]
(85.3) *(sound of felt tip marker on paper)*
46C mhm (1.6) great

Clinician's request in turn 44--that John draw a floor plan of his future house--is acknowledged by John using three consecutive *[N]* in turn 45. That this acknowledgement included comprehension of clinician's request is confirmed by the fact that John did, indeed, proceed to draw such a floor plan, as evidenced in the audio recording by the sound of the marker on paper, lasting for 85.3 seconds; by clinician's affirmation in turn 46; and by the continuing conversation--not rendered here--about said plan (the sequence in example (4) above is taken from that topic stretch).

Example (8) shows six *[N]* in three distinct functions. The second occurrence in turn 88 and the first two in turn 90 indicate comprehension of clinician's talk, as evidenced by its placement parallel to clinician's talk and in particular the subsequent verbal contribution *[bi:p]* 'sleep', a confirmation of clinician's inquiry.

(8) 87C are y- (0.5) =you /liv\ing there?=
88J [N]= \[N]/ =[bi:p] (0.4) [N]
89C /you sleep\ there?
90J \[N] [N]/ [bi:p] [N]
91C awesome

The third occurrence of *[N]*, in each of these turns, functions as a completion marker. The first nasal in turn 88 was coded as a continuer, as its placement suggested an exact parallel with common continuers such as *uh-huh* or nods. For the same reason, the second nasal in turn 88 received a double coding. In addition to being coded as an indicator of comprehension due to its close precession to the verbal bid, it was also coded as a continuer, based, again, on its placement. This leads to the next aspect of the discussion: the multifunctionality of *[N]*.

***Finding 3: Multifunctionality of* [N].** The analytical categories for *[N]* may be criticised as overly exclusive. Take, for example, the nasals that signal lack of comprehension and verbal resources (incomprehension function). Why should these occurrences not also be analysed as tokens of acknowledgment and continued interlocutor status (continuer function)? After all, they *are* proffered, and signals of termination of availability do *not* occur, hence they imply continued interlocutor status, and are treated as such by both conversationalists. By the same token, why should many of the nasals discussed under the continuer function not also be analysed as indicators of lack of comprehension or verbal resources? For in many of those, the reason that John uses the nasal may well be that this is the only conversational bid he can offer.

The answer is that many occurrences of *[N]* were, indeed, analysed as having two functions (this is reflected in the numbers and percentages used throughout this paper). Of note, *all [N]* serving the incomprehension function were coded as simultaneously serving as continuers. This analysis is based on the way they are treated in the course of the interaction: every time *[N]* functions as a token of lack of comprehension and resources, it is also treated as a token that John wishes to continue being involved in the interaction. This is not a matter of course: it is easy to imagine incomprehension signals that simultaneously serve a discontinuing function--e.g. a dismissive hand motion accompanied by a head shake and shift of gaze away from speaker. Hence, the fact that all incomprehension tokens were treated as continuers is relevant.

By contrast, several instances of *[N]* were analysed as serving continuer but not incomprehension function. Example (1) shows such an instance. After John's first *[N]* (turn 2), clinician keeps talking, revealing an underlying assumption of attentiveness on John's part. The reason he can make this assumption is that *[N]* occurs at a position typical for continuers. Hence, the first *[N]* was coded as serving continuer function only. By contrast, the second *[N]* (turn 4) is indicative of a conversational problem--evidenced by the pause--and hence it was analysed as an incomprehension token *and* as a continuer.

In this light, it may be asked why comprehension tokens would not also be analysed as signalling interlocutor status. The reason instances the of comprehension function were not treated as a simple subset of the continuer function is that it was assigned where instances of *[N]* were followed so closely by verbal or behavioural contributions that there would have been no need to deploy any continuers. For example, if a typical speaker were to deploy a continuer at the placement of the first two *[N]* in turn 90 (example 8), the result would be pragmatically odd, and interpretable as displays of lack of interest in parallel to close successions of conventional continuers (cf. Schegloff, 1982). No such interpretation is seen in this sequence.

So far, overlap of continuer function with incomprehension and comprehension functions has been discussed. As comprehension and lack of comprehension are mutually exclusive, no *[N]* were analysed as simultaneously serving these functions. Likewise, no codes of simultaneous continuer and completion function were assigned. Sequential placement of completion tokens at the end of John's own contributions precluded their coding as continuers.

By the same token, no instance of *[N]* was analysed as serving completion and incomprehension function simultaneously. Of note, the fact that a verbal contribution is completed does not preclude that contributor fail to comprehend prior talk--the contribution may be semantically 'off', for example. However, it is difficult to imagine that speaker would proffer a verbal bid and then signal that prior talk to which the bid refers was not understood; or that listener would treat the nasal, and not the erroneous verbal bid, as indicator for incomprehension. The only plausible placement for an instance of *[N]* serving to indicate both completion and incomprehension would be at the end of a request for repair. However, no such occurrence was found in the present sample.

Finally, no overlap of completion and comprehension function was found, as they presuppose quite different sequential placements. Closely related to continuers, comprehension tokens occur after or in parallel to other-talk, not after own-talk.

5 Discussion

In this study of a first-time conversation between a barely verbal interlocutor--named John in this paper--and his clinician, it was found that co-construction of the functions of unconventional contributions is a prime means of conversational achievement. Specifically, four different functions of a single unconventional contribution-- an undifferentiated nasal--were determined depending on its placement in the unfolding interactional sequence. These findings have important empirical and clinical imports; both will be discussed in turn.

With regard to the study of conversation in general, the present findings support and extend existing evidence on the function of conversational contributions. It is well-known that interlocutors' bids serve a wide array of functions. Some of these can be readily identified using colloquial terminology (e.g. *greeting, promise, threat*). Others do not align with everyday notions, and may serve several functions simultaneously. An example, discussed throughout this article, is *uh-huh*, which can serve both as a continuer--a signal of ongoing listener availability and passing of the opportunity to speaker transition--and as an indication of comprehension of the ongoing talk. Of interest to the present study, the latter function is equivocal in the way the former is not: comprehension may or may not actually have occurred (Schegloff, 1982, 1988, 2007).

The present study extends the knowledge base on non-colloquial functions by examining an unconventional contribution that served two well-studied conventional functions, albeit in not entirely typical ways, and two less-common functions. John's nasal *[N]* served as a continuer and as a comprehension token; both are agreed-upon features of typical conversation (Schegloff, 1982, 1988, 2007). It also served as a token for lack of comprehension or verbal resources, a role not typically played by a token that can also signal comprehension; and as a signal of utterance completion and hence of potential for speaker change, which is not typically signalled explicitly by a non-verbal, vocal bid.

In its function as a continuer, *[N]* bore close resemblance to typical continuers such as *uh-huh* or *yeah*. Examples (1) and (2) illustrate this: *[N]*occurs either in close succession to prior speaker's turn, or in parallel with speaker's contributions, much as conventional continuers would (Schegloff, 1982). However, placement of *[N]*in this function also displays subtle differences to typical continuers. Consider example (1): the first nasal is recognizable as a direct parallel to a subtle nod, a shift of gaze, or a low-volume *mh*, all of which might serve to indicate listener availability after being addressed with a pre-greeting. By contrast, the second nasal is

deployed in lieu of the projected second-pair part *good* or *fine*, indicating not only ongoing availability but also lack of comprehension and/or verbal resources. It thereby serves a dual function, and an uncommon one at that: the second function conventionally assigned to continuers is to signal comprehension, not its opposite.

In example (2), the final two nasals are uttered in rapid succession, which is not typical in common continuers; in fact, rapid succession of continuer tokens may indicate lack of interest (Schegloff, 1982). Since nothing in the interactional sequence suggested such a function, this unusual bid can be classified as an alloform of conventional continuer usage. Similarly, *[N]* was used in an alloform in its function as a comprehension token. As seen in examples (7) and (8), it was deployed in more consecutive instances than typical comprehension signals. Thus, both continuer and comprehension function featured more rapid successions of the token than would be typical.

Of particular interest is the fact that *[N]* did not only serve as an indication for comprehension but also for the opposite, viz. lack of comprehension. This dual function is not seen in typical talk: comprehension signals invariably have a form different from incomprehension signals. The former may take a form such as *uh-huh* or *yeah* while the latter may be realized e.g. as *huh?* or *pardon?*, providing both phonetic/linguistic and prosodic contrasts. It can be presumed that this contrast has evolved to maximize communicative efficiency: opposing functions should plausibly be realized by differentially featured signals. This finding, then, illustrates how the same unconventional contribution can creatively be put to use by speakers to cover differential and even opposing conversational functions. In the absence of contrastive form, sequential placement takes on particular importance. If the token is followed by an appropriate conversational action, it can be interpreted as an indicator of comprehension. If it is followed by an inappropriate action or a lapse, it can be understood as an incomprehension signal.

Another major finding from these observations is the absence of hedging of dispreferred moves in John's talk. Overt display of incomprehension is dispreferred in typical conversation; for example, the comprehension token uh-huh can be used to *pass* on the opportunity of displaying incomprehension (Schegloff 1982, 1988, 2007). Such actions are typically framed in terms of 'face' (Goffman, 1967) or 'politeness' (Levinson, 1983): their interactional import is to avert embarrassment of either interlocutor and ensure upkeep of the conversational relationship. The comparable directness of John's contributions, then, suggests that typical interlocutors may experience discomfort interacting with disabled interlocutors not solely because of the difficulty of understanding and being understood but also because of the face-threats potentially associated with instances of failed comprehension.

One last remark on the incomprehension function of *[N]* is due. As stated in the analysis, there were subtle differences in instances of this function, as it could convey both lack of comprehension and lack of verbal resources. It may be surmised that John's comprehension difficulties were not always absolute, as shown in example (5), and that part of the difficulty signalled with this particular function pertained to production, rather than comprehension. Possibly due to the small number of instances, it was not feasible to differentiate those two uses and classify them as two different functions; it was therefore assumed that instances of the incomprehension function also signalled lack of verbal resources when accompanied by verbal bids that displayed at least partial comprehension of prior bids.

The finding that *[N]* functioned as a completion signal of a verbal bid is of particular interest to conversation analysts. Its relevance stems from the importance of projectable turn

completion points in the turn-allocation system (Sacks, Schegloff, & Jefferson, 1974). Projection is achieved in a range of ways, but explicit marking by means of a non-verbal, vocal contribution has not yet been documented. Typical speakers mark completion, and potential speaker change, by means of intonation, gaze shifts, and phonetic features at the closing of terminable units (Goodwin, 1981; Local & Walker, 2012); disabled communicators use the same resources, even though they may not deploy them in their conventional form (Clarke, Bloch, & Wilkinson, 2013; Beeke, Wilkinson, & Maxim, 2009).

The closest cognate to *[N]* as completion token documented to date is the 'trail-off conjunction' (Walker, 2012). Typical speakers produce conjunctions such as *but*, *and*, or *so* with prosodic properties that mirror those of preceding grammatical completion points (e.g. falling intonation) *after* completion of a grammatical unit, that is, after a potential transition point. Speaker change routinely occurs as a subsequent, corroborating that interlocutors treat these conjunctions as completion signals. This is in contrast to conjunctions with non-completive prosodic properties, which signal continuing talk. As Walker points out, no research to date has investigated the differential import of trail-off conjunctions as opposed to grammatically complete transition points. By contrast, the present study suggests a distinct function for post-utterance *[N]*: faced with the difficulty of projecting completion of utterances that are unconventional in all aspects of language, interlocutors in this study construct this marker as an explicit, recognizable token of completion.

As regards the clinical import of the present findings, it is informative to hark back to the studies reviewed above. There is evidence that therapists, when interacting with individuals with communicative disabilities, rely on highly structured interactional formats. The reasons for this may be purely therapeutic, but another element may also be at play. In interacting with disabled interlocutors, normative expectations of communicative actions are likely not met; the anticipation of obstacles to the progression of the interaction may lead therapists to choose structured formats over conversation. This amounts to adopting a 'deficit perspective' vis-a-vis the disabled individual (Anzul, Evans, King, & Tellier-Robinson, 2001), i.e. to viewing them in terms of their inability to meet conventional expectations. Taken to its extreme, this perspective may result in undesirable consequences such as labelling, stereotyping, or exclusion (Philips & Ruscello, 1998; Damico, Müller, & Ball, 2010).

Yet as Anzul et al. (2001) point out, there is an alternative stance: a focus on actual contributions rather than on perceived shortcomings. In adopting such a focus, the interactant cannot typically rely on preconceived expectations of conversational actions, since proffered contributions may be quite different from conventional turns-at-talk, with regard to their form as well as in terms of the actions projected by the speaker. In order to co-construct conversation with a disabled interlocutor, then, it may be necessary to adopt what could be termed a 'difference perspective': An attitude of open-ended, on-line interpretation of the functions of unconventional contributions in their particular placement, with the goal of co-constructing the conversational sequence.

6 Limitations

This study suffers from the general limitation of qualitative investigations of single cases. It cannot be claimed that findings are applicable to other interlocutors with challenges similar to John's: the systematics observed may be unique to him.

Also, this study involves a larger amount of data than more typical CA studies, and highly unusual data at that. This resulted in the challenge of appropriate delineation of turn-constructional units. For example, in turns 63 and 64 in example (4), *[dʒu: vʌʃ dʒu: N]* was transcribed as one turn, and *ah ok, washing dishes* as another. The rationale for this was based on the relative temporal proximity between the second *[dʒu:]* and *[N]* on the one hand, and *ah ok* and *washing dishes* on the other. However, it would have been possible to count each as *two* turns, which would have made the interpretation of *[N]* as a token of confirmation for *[dʒu: vʌʃ dʒu:]* less convincing. In addition, such rearrangement of turn-constructional units would change the numerical findings reported above.

Finally, due to logistical and ethical reasons, the accuracy of the transcript could not be checked against the audio recording. Thus, the data for this study is the product of one transcriber only (first author). This may have introduced unnoticed errors and hence jeopardize the validity of our findings.

7 Conclusion

In this study, it was demonstrated how an unconventional conversational contribution--an undifferentiated nasal--served four distinct functions in the unfolding sequence of talk between a disabled interlocutor and his clinician. Specifically, it was found that the nasal served as a continuer; as a token of turn-constructional and topical completion; as an incomprehension token and a signal for the lack of verbal resources; and as a comprehension token. These functions were shown to emerge from the sequential placement of the nasal and the consequential interactional treatment it received by the interlocutors.

Results indicate that unconventional conversational contributions may be untypical in their form but typical in their function; that they may have subtly different functions when compared to their conventional cognates; or that they may have functions not found in typical talk. In the latter case, it is plausible to assume that such functions emerge precisely to compensate for the obstacles inherent in conversing in the presence of communicative challenges.

In sum, the present study adds to our understanding of the forms that communicative differences may take, and it offers insight on the kinds of functions they may serve. It also shows that analysing untypical contributions for their conversational import has the potential of providing insight into how they are not simply different, but systematically so.

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Appendix: transcription conventions

↓	Falling intonation
/xxx\ \xxx/	Overlap
xxx= =xxx	Latch (no perceptible pause)
bold	non-canonical stress