# Producing Sense with Nonsense Syllables: Turn and Sequence in Conversations with a Man with Severe Aphasia

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# Producing Sense with Nonsense Syllables: Turn and Sequence in Conversations with a Man with Severe Aphasia

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This paper investigates the collaborative production of meaning and action in the speech of a man in his early eighties named Chil diagnosed with severe nonfluent aphasia. Our data are drawn from over 200 hours of videotaped naturally occurring interaction in Chil's home recorded by Charles Goodwin and Marjorie Harness Goodwin over the past seven years.<sup>2</sup> In 1981 a massive stroke in the left hemisphere of Chil's brain left him with extremely limited language capacities; the right side of his body is paralyzed (thus making gesture possible only with his left arm and hand) and his entire vocabulary consists of three words: Yes, No, and And. He can also produce vocal response cries such as Oh and Ah. Chil possesses not only a restricted vocabulary, but also a restricted phonology. Most of his lexically empty syllables begin with either a voiced alveolar stop (d) or an Aleveopalatal glide (y) followed by a limited number of vowels. Despite his severely limited resources Chil is an effective conversationalist. Indeed he is a recognized figure in his town and strikes up conversations with strangers as he uses his electric scooter to do the family's shopping, go to restaurants and movies by himself, buy cappuccino at Starbuck's etc. How is this possible?

<sup>&</sup>lt;sup>1</sup> His medical records at discharge in 1981 report "severe expressive and moderate receptive aphasia, moderate dysarthria and verbal apraxia." There has been little improvement in his condition since that time.

<sup>&</sup>lt;sup>2</sup> Chil is the father of one of the authors of this paper, Charles Goodwin.

While lacking a rich vocabulary, Chil can produce syllables such as deh, duh and yih. These syllables lack both a semantics and a syntax, and could be termed nonsense syllables. Chil cannot use them as arbitrary, conventionalized signs to perform reference (e.g. he has no terms for cats, dogs, tables, people, or indeed anything). However, Chil can concatenate multiple syllables into larger tone units. Pitch movement, stress, rhythm and loudness are varied within these units to produce recognizable tunes, in, as we will demonstrate in this paper, a meaningful and conversationally relevant fashion. To use prosody without a lexicon Chil relies upon semantic structure in the surrounding talk. Chil is thus able to build appropriate conversational action with talk that lacks a lexicon by using prosodic resources with fluency and skill (see Couper-Kuhlen and Selting 1996 for the importance of taking sequential organization into account in the analysis of prosody). The prosodic resources used by Chil are subtle and complex. In earlier versions of this analysis we attempted to use both pitch tracks and a variety of transcription devices (such as musical notation) to try and capture on the printed page relevant aspects of Chil's prosody. However none of what we could do provided an adequate visual record. Thus, in the remainder of the paper we will sometimes have to tell the reader about crucial differences in Chil's prosody, without demonstrating those differences in the detail that we would like. This is not because we consider the precise description of Chil's prosody unimportant. Precisely the contrary: the analytic problems at issue here are too crucial to pretend to capture with transcription tools that we ourselves recognize as inadequate. We hope in the future to make progress on this issue.

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In the present paper Chil's use of *Yes* and *No* to construct meaningful action by guiding the talk of others will be noted only in passing. However, both his use of this vocabulary, and his ability to say something gesturally by using his hands to display numbers, are analyzed in other work (Goodwin 1995, in preparation-b). Through use of these resource Chil is able to co-construct a wide variety of intricate statements by embedding his limited talk within the talk of others. In essence he and his interlocutors co-construct meaning and action through use of the sequential resources provided by the organization of conversation.

In addition to Chil's ability to vary his prosody in an intricate and locally relevant fashion, he can also precisely slot his talk into the sequential organization provided by the talk of others. Unlike some aphasics he possesses an excellent sense of timing, and uses his restricted repertoire without hesitation, indeed with a fluency of interactional pacing, tracking and movement that is comparable to that of normal speakers. Through his fluent command of prosody Chil is able to display a wide range of affect, and moreover to link this affect to the performance of relevant conversational action, such as evaluation and assessment.

Chil is able to supplement the resources in his speech production with a range of different kinds of embodied action (gesture, displays of orientation and intentional focus, etc.). Moreover he makes extensive use of phenomena in his environment that are already rich with meaning. We will argue that he builds action in concert with others by juxtaposing semiotic resources from a range of different phenomenal fields (e.g. talk, gesture, posture, resources in the environment, etc.). Rather than affecting him alone, his inability to produce speech leads to changes in the ecology of sign systems used by multiple participants within conversation to accomplish meaning and action. Fluent speakers themselves produce speech with lexical content that elaborates, and is elaborated by, their gestures. However, Chil can produce only gesture and not the lexically rich talk that typically stands in a relationship of mutual elaboration with gesture. One consequence of this is that in conversations with Chil actions that are routinely produced by a single individual in a **single turn** often require a

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<sup>&</sup>lt;sup>4</sup> Interestingly, this fluency might arise in part from the very severity of his impairment. Since he has almost no vocabulary his speech production is free from word searches and repetitive efforts to pronounce words in an acceptable fashion.

<sup>&</sup>lt;sup>5</sup> The present study contributes to a growing body of research that is linking the study of speech disorders arising from brain trauma and other factors to the analysis of conversational interaction. See for example Holland 1991, Klippi 1996, Kolk and Heeschen 1992, Laakso 1997, Local and Wooton 1995, Milroy and Perkins 1992, Schegloff 1994, Simmons-Mackie, Damico and Nelson 1995, Wilkinson in press.

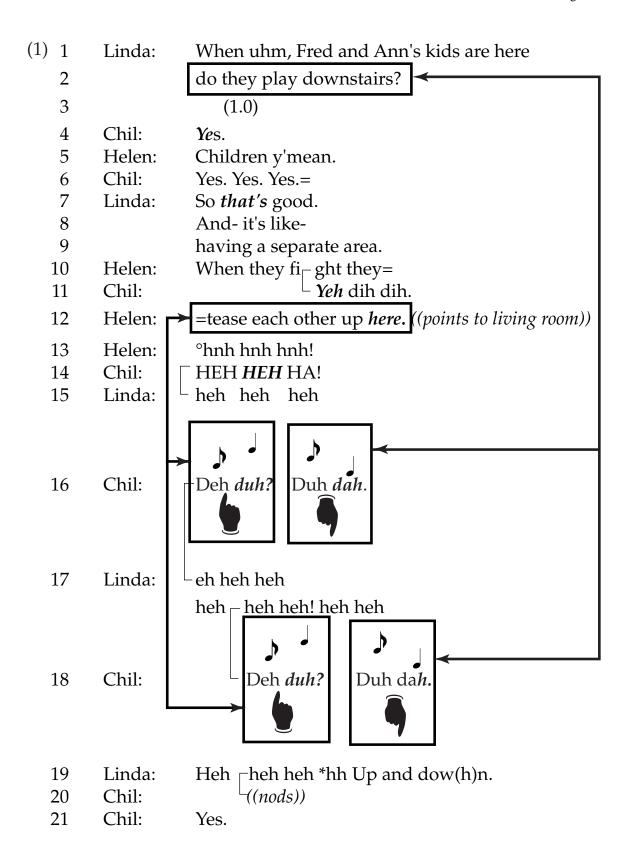
**multi-party sequence.** This interplay between turn and sequence in his interaction is the theme of the present paper.

# Building an Utterance by Tying to the Talk of Others

The following provides an example of Chil's ability to say something meaningful. Chil and his wife Helen's are talking with their daughter-in-law Linda in the living room. Linda inquires about their grandchildren, well known for their rough, enthusiastic play, asking if the children play downstairs in the basement (lines 1-2). After Chil answers "Yes" (line 4) Helen comments that they "tease each other up here" (line 12) while pointing to the living room where they are seated. Chil and Linda look at each other and simultaneously produce synchronized three-syllable laughs (lines 4-15). Chil in line 16 then raises his good left arm above his head while holding his hand flat and produces a two syllable "Deh *duh?*" with rising pitch.<sup>6</sup> He then drops his hand while producing another two syllable unit, only this time with falling pitch "Duh dah." As Linda laughs with appreciation he repeats this sequence of actions in line 18, producing another four lexically empty syllables (hereafter referred to as nonsense syllables). The first two, which carry a pitch rise, are again accompanied by a rising hand, and the final two, which fall in pitch, occur simultaneously with the drop of the gesturing hand. After laughing in response Linda glosses what Chil has just said as "Up and dow(h)n." and Chil answers "Yes."

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<sup>&</sup>lt;sup>6</sup> In this paper we follow the standard transcription system developed by Gail Jefferson for the analysis of conversation (Sacks, Schegloff and Jefferson 1974, pp. 731-733). We case *Bold Italics* rather than underlining to mark talk spoken with special emphasis.



For Linda the nonsense syllables that Chil produces in lines 16 and 18 constitute an appropriate and relevant move within their conversation, and moreover they communicate a prepositional content which she glosses as "Up and down" (line 19).

Chil's ability to produce conversationally relevant meaning and action here is made possible through the creative deployment of a range of different semiotic resources.

- First, the iconic properties of pitch allow him to make visible a contrast between high and low within his talk.
- Second, this is both focused and elaborated by his simultaneous gesture. Indeed, the way in which both pitch movement and unit boundaries in the stream of speech are precisely matched by the boundaries of gesture movements making visible the same high-low contrast is consistent with Bolinger's (1986, 1989) suggestion that at least some gesture should be included within the domain of prosody.
- Third, the indexical properties of language, and most crucially the sequential organization of conversation, allow Chil's iconic nonsense syllables to be tied to semantic structure provided by the talk of others. This is accomplished not only by the way in which his prosodic gestural packages make visible iconically a salient semantic contrast in the immediately prior talk, but also by additional sequential work on his part. Thus his laugh in line 14 is visibly tied to what Helen has just said while simultaneously acting as a preface, an interpretive framework, for the prosodic contrast that immediately follows.
- Fourth, by selectively reframing and reinterpreting what has just been said Chil makes an original contribution to the conversation. As Helen in line 12 talks about the children fighting and teasing upstairs she points toward that very place, the room they are sitting in. If reference were all that was at issue in Chil's action he could have easily used a similar pointing gesture. Instead he links the description in lines 10 and 12 to an earlier one (line 2) by using features of prosody to establish a contrast between two spaces, as well as the possibility of movement between them (e.g. the children are running up and downstairs, in effect all over the house).

- Fifth, this contrast is further elaborated through repetition. Moreover this repetition seems to carry information about aspect, e.g. to display a repetitive state of affairs<sup>7</sup>.
- Sixth, this repetition occurs within a participation framework marked by a relevant affective stance as displayed by Linda's ongoing appreciative laughter at what he is saying.
- Seventh, the sequential organization of conversation provides participants with resources for checking their understanding of what Chil is saying. Chil's talk does not make use of an arbitrary, conventionalized sign system. Determining precisely, or even roughly, what he is saying, and assuring that his interlocutors' understandings are compatible with Chil's is a pervasive, systematic problem. In line 19 Linda formulates what he has displayed iconically in explicit language and in line 21 Chil affirms the correctness of that gloss with a "Yes." On other occasions refusals by Chil to accept his interlocutors' glosses lead to quite extended sequences (Goodwin 1995, in preparation-b).

In brief though Chil is able to use prosody and gesture to perform relevant action, the unit required for the analysis of how this is done is not him alone, but rather the larger community of interacting participants within which his actions are embedded (e.g. he borrows meaning from their talk), and the sequential structures that make possible the public accomplishment of relevant meaning and action within conversation.

### **Summons Request Sequences**

In the data just examined Chil built complex action by tying his actions to phenomena in earlier talk. This parasitic organization provides resources that can be used to build complex next actions. However, if Chil wants to initiate new action he is deprived of these sequential resources, and indeed getting others to understand something novel that does not emerge from talk or activity already

<sup>&</sup>lt;sup>7</sup> Andersen (1990) has called for analysis of tense and aspect that is not restricted to a narrow set of syntactic and morphological markers, but instead takes into

in progress is a pervasive problem for Chil (see Goodwin in preparation-b). We will now investigate how he does this.

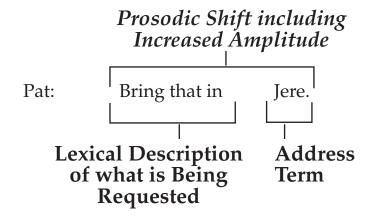
# Performing a Variety of Different Actions Within a Single Turn

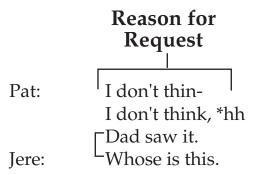
The theme of this volume is Turn and Sequence. One of the phenomena we want to explore is the way in which actions that can be done in a **single turn** by fluent speakers require a **multi-party sequence** for Chil to accomplish. To establish this contrast we will first look at an action built within a single turn by a fluent speaker, Chil's daughter Pat. Then we will argue that Chil lacks some of the resources deployed by Pat and examine the sequential resources he and his interlocutors use to adapt to this state of affairs.

In the following by saying "Bring that in here Jere" Pat successfully requests that someone else perform a specific action. What resources does she use to accomplish this? In these data Pat, her daughter Jessica and Chil are sitting at the kitchen table on Christmas day. From there Pat can see Jere in the living room. Pat has been talking about her brother Bob:

account the wide range of resources that speakers use to signal tense and aspect.

# (2) Pat: Bob was up early, *((voice shift including increased amplitude))*





Central to what Pat does here is her ability to use the lexical, syntactic and prosodic resources of language to construe with fine precision a range of phenomena relevant to the action that she is performing. First, by using a name as an address term she can specify one particular addressee from a larger pool of potential recipients. Note also that this particular addressee, Jere, is positioned to perform the action being requested in a way that others present aren't (i.e. he is the one holding the present being requested). Pat's ability to produce a name thus not only identifies an addressee, but also helps specify what precisely is being requested. Second, she is able to precisely formulate what she wants done by saying "Bring that in." Linguistic resources include the lexical verb *Bring* and the imperative form. The use of the demonstrative (*that*) to reference something that she can see that Jere is already attending to displays her ongoing analysis of the actions he is engaged in. This specification could also have been done with a noun such as "the calendar." Third she provides a reason for the request. Finally,

she uses increased amplitude (and other prosodic phenomena which are beyond the scope of this paper) to mark that the request to Jere is disjunctive with her earlier talk to Chil. The increased amplitude can also signal a shift in addressee, e.g. that instead of continuing to talk to Chil and Jessica who are at the table with her, she is now addressing a more distant recipient.

# A Request by Chil

The only one of the resources noted in Pat's turn available to Chil is his ability to vary his prosody. We will now look at how he initiates a new action that does not depend upon structure in the immediately prior talk. Chil is having pancakes on the deck of his son Keith's house. Because Chil's paralysis affects muscles on the left side of his throat, Chil can choke if his food is not cut into small pieces. Just after giving Chil a plate with pancakes on it Keith is called away to the phone and Chil is left alone.

In line 4 Chil produces a loud three syllable utterance which is responded to several seconds later by Chil's daughter-in-law Linda, with an upwardly intoned "Yeah Dad?". The sequence appears to be a variant of what Schegloff (1968) has analyzed as a Summons Answer sequence. It functions to bring two participants into a state of mutual accessibility and interaction. Moreover Linda's "Yeah Dad?" is both a subsequent move to Chil's summons, and, with its rising intonation, a new first pair part addressed to Chil. Like the answers analyzed by Schegloff, it displays a readiness to attend to further, as yet unspecified action.<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> By aligning participants specifically for a subsequent sequence, i.e., what Chil will then request, the summons-answer sequence thus also constitutes what Schegloff (1980) has analyzed as a pre-sequence.

However, Pat's call to Jere, examined above, demonstrated how participants, indeed members of this same family, can build utterances with a quite different structure to request action from a co-participant who has temporarily left the room. Rather than summoning Jere, Pat told him immediately what she wanted him to do.

It is important to note that the stream of nonsense syllables that carry the prosody of Chil's utterance cannot target a particular addressee. Chil can't use names as address terms. In this case that may not be consequential. Anyone in the house can cut Chil's pancakes. However, as will be demonstrated below on many occasions a particular addressee is crucial to the constitution of the precise action being formulated.

In brief, what we find here is an instance of a pervasive sequence type used to align participants for subsequent interaction. Despite his drastically impaired ability to produce language Chil is using basic sequential resources to accomplish interactive tasks. However, this sequence is occurring in an environment where other ways of requesting what Chil wants done would be far more economical and effective. By the end of this multi-utterance, multi-party sequence Chil has accomplished far less than Pat did with her single utterance. Linda is now attending to Chil, but does not yet know what he wants. An extended sequence has been entered but not brought to a close.

Before examining how Chil tells the party he has summoned what he wants done, the range of resources he can use to initiate a summons sequence will be further investigated. We will pay particular attention to the problem of addressee selection.

#### Securing the Orientation of a Co-Participant

Those around Chil recurrently interpret a set of utterances from him as requests for their orientation, that is as first moves in the particular kind of summons-answer sequences being investigated here. The following provide some examples. We will not examine in detail what is happening in each example. For the moment we simply want to demonstrate that others do orient to Chil after talk like this, and that moreover, by producing utterances such as "What?", "Yeah?" and "What do you want Chil?", these parties display that they are prepared for and awaiting further action from Chil:

(4) Chil: Dih dih *duh*:.

(2.0)

Pam: What?

(5) Chil: Yih dih *duh*:.

(0.3)

Keith: Yeah?

(6) Chil: Dih *duh* duh.

(0.4)

Chil: °Duh:

Helen: What do you want Chil?

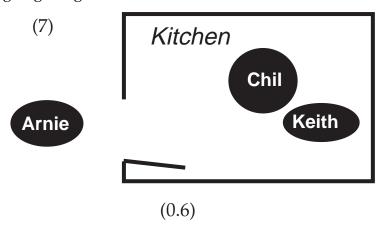
In brief, a pervasive sequential pattern in Chil's interaction takes the form of his using a brief string of nonsense syllables (typically three), with a distinctive prosodic shape (the analysis and precise description of which is beyond the scope of this paper) when others are not oriented to him. Parties who hear such an utterance treat it as a summons and shift their orientation to Chil while displaying their expectation of further action on his part.

#### Addressee Selection

In the data just examined Chil was able to call for an addressee, but not to specify a **particular** addressee from a larger pool of potential recipients, as Pat did in example 1 by using Jere's name as an address term. Without the ability to speak names is Chil completely deprived of the ability to perform one of the core actions instantiated in the turn-at-talk, specifying an addressee and/or next speaker?

Despite his inability to speak names Chil is able to perform limited types of addressee selection when summoning someone. Many of his methods accomplish this task negatively, that is by **excluding** potential addressees so that only a very limited set (frequently one) of those present remain as valid candidates. In the following Chil produces a summons. However instead of responding to the summons by turning to Chil to find out what he wants, his son

Keith **relays** the summons to a third party, calling Arnie by name. How is Keith able to find a specific addressee in an utterance that contains only nonsense syllables? Chil can use a variety of iconic resources, including both volume and gaze, to display attributes of participants in terms of how they are =positioned in the local surround. In the following Arnie has just left the kitchen to carry out a bag of garbage:



Chil: UH DIH **DUH**. DIH **DUH**.

Keith: Arnie!

Chil's utterance carries a distinctive summoning contour, marked in part by the way in which the last syllable in each unit is stressed. The precise description of the prosodic features used by Chil to produce a hearable summons is beyond the scope of this paper. The utterance is spoken with markedly loud volume (indicated by uppercase letters in the transcript). Such an action would be inappropriate as a move directed to someone standing right next to the speaker, and indeed Keith hears it as addressed to someone who has just left the room. Other embodied resources are also being deployed to accomplish addressee selection here. Chil is gazing toward the door where Arnie has just exited, and in his relay Keith also gazes toward that door. In brief, though Chil lacks a lexicon he is able to use other embodied resources, including volume contrast, gaze and postural orientation to help show those present who a summons is being addressed to. Note how his use of these resources depends upon an analysis of the current situation (for example where relevant participants are positioned).

Moreover by using such methods systematically Chil is relying upon his coparticipants to embed the actions he produces within a similar analysis.

What is at issue is not simply a difference in volume, but an action that displays an analysis of the particulars of the setting in which it is embedded. The talk is specifically designed for a distant addressee. Such use of prosody in no way makes up for Chil's inability to use names to select targets for his action. However it does demonstrate the importance of not restricting analysis of a conversational move, such as a summons, to morphosyntactic phenomena. Here we find a turn structured as a multi-modal performance in which the resources provided by the body and the setting where interaction is occurring are used in differentiated ways to show others what is relevant in the actions of the moment.

Lines 10-12 of the following provides another example. Here four people are sitting at the table with Chil, while Keith is at a counter behind them making coffee with his back to the group at the table. Everyone present unproblematically locates Keith alone as the addressee of lines 10-12, and moreover the action is analyzed as a summons. While speaking lines 10-12 Chil gazes toward Keith. No one at the table responds to Chil's utterance, while Keith turns to see what Chil wants, and produces a prototypical summons response ("Hm?") in line 13:

(8) Chil is seated at the table with Helen, Jessica and Julia. Keith is making cappuccino at the counter behind them.

```
1 Iulia:
                  How is it.
 2 Chil:
                  Yeah.=Eh dih de: ┌h.
                                    <sup>L</sup>Yeah.=
 3 Keith:
 4 Keith:
                 =But we're gonna rget something else=
 5 Chil:
                  =that makes it even better.
 6
 7
                       (0.3)
    Chil:
 8
                  Yes.
 9
                       (0.5)
10 Chil:
                  DUH DUH DUH.
11
                       (0.3)
12 Chil:
                  DUH DUH DUH.
13 Keith:
                  Hm? ((Keith turns quickly to Chil))
14
                       (0.4)
                     ((Chil waves his fingers
                     from Keith to himself,
                      signalling that he wants
                      something to be brought to him.))
15 Keith:
                  I will.
16
                  What.=You want me ta bring-
17
                  Ya want- the chocolate?
```

Two additional observations about these data will be briefly noted. First, line 12 exhibits another property of summonses as analyzed by Schegloff (1968, see also Goodwin 1981 for such recycling within the turn itself): recycling a summons that doesn't get an answer, and then stopping the recycle when someone at last responds (Keith turns to Chil in the silence immediately after line 12). Second , these data further demonstrate the importance of Chil's prosodic contour in specifying action and addressee. Note that line 2 also contains a three syllable unit with a strong final accent ("Eh dih de:h."). Moreover the talk that occurs before both this unit in line 2 and the summons in line 10 is a Yes. Just before line 2 Julia has been watching Chil taste a new kind of coffee. Her "How is it" asks for his evaluation of the coffee. His initial "Yeah" in line 2 is spoken with

noticeable appreciation. Unlike line 10, the prosody of line 2 however makes visible an enthusiastic assessment, an action that constitutes an appropriate answer to the request in line 1.9 It immediately follows the "Yea" that answers Julia's "How is it" and continues the prosodic display of appreciation found there. The Yes provides a preface for the three syllable unit that follows. By way of contrast line 10 follows Chil's just prior Yes in line 8 only after a noticeable silence. Indeed, rather than prefacing what is to follow that Yes is tied to lines 4 and 5 just before it, and indeed constitutes a way of closing and bounding that earlier sequence. Moreover there is a marked voice shift between the Yes in line 8 and the summons in line 10. This shift includes both an increase in volume, and a new intonation contour hearable as a summons, something quite different from the assessment prosody produced in line 2. The talk produced here displays entry into a new action unrelated to what its Yes was responding to. These data illustrate first, some of the resources deployed by Chil to select a particular addressee from a larger pool of potential recipients, and second how he can vary his prosody in order to make visible different kinds of action over syllable strings with a similar structure. Moreover, through increased amplitude he signals that he is not selecting someone at the table as an addressee (as in line 2 for example), but someone more distant, i.e., Keith who is standing behind them.

# Determining What Chil is Requesting

The successful completion of a Summons-Answer sequence creates an environment in which the party responding to the summons is orienting to Chil in the expectation that he will produce further action to indicate what he wants done. How is this accomplished? In a situation where the party making the request cannot produce lexical descriptions (as Pat did in example 1) how do he and his interlocutors publicly and mutually establish what is being requested? To begin to investigate this issue we will return to the example in which Chil is requesting help with his pancakes, picking up where we left off at line 7, that is

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<sup>&</sup>lt;sup>9</sup> This assessment quality of this prosody is exhibited in part by the glide over the terminal syllable of this unit. For more detailed analysis of Chil's assessments, including both their prosody, and his orientation to a recognizable activity structure see Goodwin and Goodwin (in press).

at the place where Chil has secured the orientation of a recipient through his summons-answer sequence:

```
(3)
 1
                       (9.5)
 2
   Chil
                 Dih dih duh: :.
 3
                       (1.8)
    Chil:
 4
                 DUH DUH DUH:.
 5
                       (2.5)
 6 Linda:
                  Yeah Dad?
 7
                       (1.0)
 8 Chil:
                 ((Chil makes hand motion (cutting)
                       over his plate))
   Linda:
                 No?
10
                       (0.5)
11 Linda:
                 Oh.- Cut it?
12
                       (0.3)
13 Chil:
                 Hmph.
```

By line 8 Linda can see Chil and is thus positioned to try and determine why she has been summoned. What resources does she use to formulate a candidate proposal (e.g., in lines 9 and 11) as to what Chil might be saying? How does Chil contribute to this process? Work on the organization of interaction within the turn provides a point of departure. While much research in Conversation Analysis has been concerned with how sequences of actions and turns follow each other, another line of investigation has focused on the interior of individual turns and actions as phenomena accomplished through the coordinated action of multiple participants. Not only talk but also visible nonvocal action (hearers are largely, though not exclusively silent) is central to the organization of this process. Thus C. Goodwin (1981, 1984) has demonstrated how the construction of both the turn and the utterances and phrases within it, are accomplished through an ongoing process of interaction in which the hearer is as active a co-participant as the speaker. Similarly M.H. Goodwin (1980) has demonstrated how speakers modify ongoing descriptions to take into account the operations being performed on that talk by her addressee(s) (see also Goodwin and Goodwin 1987). In the

data being examined here, at the end of the Summons-Answer sequence interlocutors typically find themselves in a position where they are looking at Chil (though there are exceptions). This creates a participation framework characterized by the simultaneous action of structurally different participants. Chil, the "speaker" produces action of some type (this need not involve talk, and might be done entirely through gesture) while his addressee analyzes that action. Note that what is involved here is not hearership as a passive process of waiting for the next opportunity to speak, but a participation framework characterized by active, differentiated work within a single turn. Thus Chil waits until his interlocutor is positioned to see what he is doing, and expects her to be actively analyzing what he is doing so as to be able to produce an appropriate next action, e.g., a proposal about what he wants done. The interior of the turn that occurs once Chil and his interlocutors are positioned to produce a next action to his summons, is organized as a process of multi-party interaction in which differentiated participants are actively taking into account what each other is doing.

How does what the interlocutor sees when she responds to Chil's summons provide her with resources for formulating a proposal about what he is requesting, that is for building their next move in the sequence?

In the sequence being examined here when Chil at last secures Linda's orientation he places his functioning hand an inch or two above his pancakes, closes the hand as though grasping something and pushes it rapidly back and forth over the pancakes. Linda correctly interprets this gestural display as miming the act of cutting the pancakes.

What phenomena must Linda take into account in order to appropriately see what Chil is doing here. With a few notable exceptions (for example Streeck 1996a, 1996b; LeBaron in preparation, Hutchins and Palen 1997, Ochs, Gonzales and Jacoby 1996; Haviland 1993), most analysis of gesture has drawn an analytic bubble around the body of the speaker/gesturer and investigated gesture as something done by the body alone. In the sequence being examined here something in the physical environment, the plate of pancakes, is as crucial to the meaningfulness of Chil's action as his moving hand. The intelligibility of Chil's gesture arises not only from the actions of his hand, but rather from the

conjunction of action displayed through the hand, and other kinds of semiotic structure in the surround (See Goodwin in preparation-a). Pancakes and the tools used to prepare them for eating are lodged within recognizable, culturally organized activities. Chil actively works to makes the conjunction between tools for cutting and the activity he wants to pursue visible to his addressees by moving his hand as close as possible to the pancakes. More generally, the way in which Chil lives and moves through an environment which is already richly sedimented with many different kinds of semiotic meaning provides him with some of his most crucial resources for accomplishing intelligible action. To coparticipate in this process his interlocutors must attend to not only his talk, but also his body and meaningful structure in the surround.

From a slightly different perspective one might ask how someone whose entire gestural resources are restricted to somewhat limited movements of his face, left arm, and hand is capable of gesturally indicating the extraordinary variety of objects, actions and events that are relevant to what he might want to communicate. Note that he doesn't attempt to depict the shape of a knife (for example by using a moving finger to outline its shape) but instead performs his gesture by demonstrating how a human body would use the tool being demonstrated. More generally the human body, as the primordial locus for tool use and the production of action in the world, provides an omnipresent resource for making visible all of the different kinds of phenomena it might articulate in some way. This use of the body as the master template for depicting objects and actions is by no means restricted to someone who can't speak. For example, while telling a story about a "big fight" at an auto race, a speaker makes visible one of the protagonists picking up a "god damn iron bar", not by depicting the shape of the bar, but instead by using a gesture that shows the character holding it. This mode of presentation not only achieves a natural economy by using the body's interaction with objects, rather than the objects themselves, as an organizing focus, but also simultaneously integrates the object being depicted into the action being described.

However, people who can speak can disambiguate the inherent ambiguity of an iconic sign system through concurrent talk. Chil can't do this and in 9, Linda initially interprets the waving hand over the pancakes as signal that Chil doesn't

want them (e.g. "get rid of them"). The structure of her talk in both lines 9 and 11, in which Linda proposes that Chil wants his pancakes cut, provides an example of a most frequent action type produced by Chil's interlocutors in many different kinds of sequences. The speaking interlocutor does what Chil can't: she uses the full resources of language to provide a guess about what Chil might be trying to say. Note that here, as in most cases, the status of what is being said as a candidate proposal is indicated by producing the guess with a rising contour "Cut it?" (through structurally different the use of rising intonation here seems related to the analysis of Try Markers in Sacks and Schegloff 1979). Chil can then accept or reject the proposal. On occasion these sequences can become quite extended (see Goodwin 1995, in preparation-b for more detailed analysis). What we want to note here is that the single-party, within turn, unproblematic use of lexical and syntactic resources to form a request (e.g. what we saw with Pat's action to Jere in example 1) here becomes a multi-party sequence which exhibits a particular division of labor. While the fluent speaker produces a description, the only party able to establish the correctness of that move is the addressee, Chil, who lacks the ability to produce language of his own. In terms of the categories proposed by Goffman in Footing (1981), Chil is the principal and author, while his interlocutor is the animator. This particular division of talkrelevant identities and labor is made visible through the display of tentativeness produced through the interlocutor's rising intonation.

Once Linda has formulated a proposal about what Chil might be asking her to do, the next move in the sequence is an answer from Chil, accepting or rejecting her proposal. How is this done? Though Chil could say *Yes* and/or *No* (and in other cases does), here he 1) continues the cutting movement after Linda's incorrect guess in line 9, and thus signals that the task of establishing a relevant gloss of his gesture should be continued; but 2) stops the cutting movement and relaxes his posture after the correct proposal ("Cut it?") in line 11. By terminating the gesture, without initiating a new action, he displays that Linda has appropriately understood the gesture.

It is possible to analyze what happens here as a sequence of actions with some turns, such as Chil's gesture, being accomplished entirely through use of semiotic resources other than lexico-syntax. However, it is crucial to take into account the way in which any such "action" or "turn" is constituted not by Chil's signs alone, but instead through the differentiated actions of multiple participants. Linda's informed seeing of what Chil is doing is as necessary as his gesture. More generally Chil depends upon his interlocutors functioning as fully embodied social actors who use not only their ears but also their eyes to see relevant events in both Chil's body and the setting where interaction is occurring. If an addressee such as Linda can't see this, she will lack the resources necessary to build her next move in the sequence: a gloss of what he is requesting.<sup>10</sup>

The very beginning of this sequence provides some demonstration of just how important the visual orientation of the addressee to the gesture is. Chil in fact pointed toward the pancakes with a cutting motion before Keith left. However just as this happened Keith was called away, and he never saw the gesture. Chil was thus unable to eat and initiated the sequence we find here. Keith's failure to see provides further demonstration of how important relevant embodied actions of the interlocutor are to the constitution of action by Chil. The assembly of the particular set of meaning-making practices necessary for the social constitution of a particular action is very much an ongoing, contingent accomplishment, something that can fail by virtue of something as simple as a shift in gaze.

The following example provides an opportunity to explore some of these phenomena further. It is a December day and Chil and Keith are making plans to go out. As the transcript begins Keith is walking past Chil toward the front door. Immediately after the summons in line 1 Keith interrupts his walk, turns around and looks at Chil. As soon as Chil sees Keith orient he lowers his gaze to the front of his own body and then sweeps his hand over his chest. In line 7 Keith formulates what Chil is requesting with "Uh: jacket."

<sup>&</sup>lt;sup>10</sup> In appropriate circumstances Chil can design speech for parties who can't see him, and indeed he engages in lengthy phone conversations. Here we are focusing on one particular but pervasive methodology he uses to accomplish social action by getting others to understand what he wants to tell them.

```
(9)
        Keith is walking out the door past Chil
 1
      Chil:
                   Yeh deh de:h!.
 2
                        (0.3) ((Keith turns around to Chil))
 3
      Keith:
                   Yeah?
 4
                        (0.6)
 5
      Chil:
                  ((hand motion in front of chest))
 6
                   Yeh deh =
 7
      Keith:
                  Uh: jacket.
 8
                        (0.3)
 9
      Chil:
                   ((nods)) Yeh.
10
      Keith:
                   Uh: sweater.
                        (0.2) ((shaking head))
11
                  -°No
12
      Chil:
13
      Keith:
                  <sup>L</sup>Uh oh uh sws
14
                   Uh more than a sweater.
15
                        (0.6)
16
      Chil:
                  No:.= ((starts to gesture from neck to head))
                  =Deh deh deh deh dih
17
                                    Yeah. And a hat,
16
      Keith:
17
      Chil:
                   Yes.
18
      Keith:
                  Right. Right. Right.
```

These data exhibit the same pattern found in earlier data. A summons secures the orientation of an interlocutor. As soon as that party gazes toward Chil, he produces a gesture. As demonstrated by the candidate proposal that the interlocutor produces as a next action, "Uh: jacket." (line 7), this gesture is treated as providing information about what is being requested. Chil in fact performs additional work to show Keith that he should take this gesture into account in building a next move. Thus as Chil begins the gesture he looks down toward his hand and the region it is moving over. Gaze constitutes a prototypical method for displaying intentional focus (Goodwin in preparation-c). By showing what region he is focusing on, Chil can display to Keith what he should take into account in order to produce a course of action tied to Chil's.

Indeed Chil's body makes visible a complex juxtaposition of quite different kinds of displays here. Like the pancake under the cutting gesture, the

chest/shirt under the gesturing hand provides a substantive focus for what the hand might be indicating, and indeed Keith's proposal of a "jacket" is precisely something that would fit (quite literally) the region being gestured toward. The gesturing hand, rather than miming the use of a tool, focuses attention on the place where the object being requested will be used. This combination of gesture and target is itself framed by Chil's own gaze which spotlights the relevance of what is happening precisely here for the actions of the moment. Chil's body is simultaneously 1) the target of a gesture; 2) the entity performing the gesture and 3) the visible locus of the focal actor's orientation as displayed through his own gaze. This gesture is thus accomplished through the juxtaposition of multiple visual fields with quite different properties. Moreover it is designed for someone else. As Keith begins to speak, Chil switches to gaze at Keith, and thereby shows that he is positioned to receive a response to what he has just done.

Several other features of the setting may also be relevant to Keith's ability to quickly formulate a candidate proposal as to what Chil might be requesting. First, this talk is embedded within an encompassing activity, leaving the house after breakfast. Second, this conversation occurred in December in the northeastern United States, i.e., when it was quite cold outside.

However, in large part because of their iconic generality, such gestural displays are inherently partial and incomplete. A range of quite different things can be attached to the body, and in cases where gestures depict the manipulation of objects, the body holds quite diverse tools in similar ways. This is not a problem for parties who can speak, since co-occurring talk can provide other crucial meaning-making resources (e.g. the lexical formulation of what is being gestured about as an "iron bar"). By way of contrast Chil's inability to provide a lexical construal of what his gesture is about is a real and pervasive problem. He and his interlocutors frequently require extended sequences to determine what in fact he is saying. In the present data Keith in line 10 changes his proposal from a *jacket* to a *sweater* (in fact Chil's typical outdoor garment was a Scandinavian cardigan, something woven as a thick sweater but tailored like a jacket with buttons). Chil rejects this new proposal in line 12. In line 14 Keith' revises this to "*more* than a sweater." Chil's rejection of this is accompanied by another gesture that is structurally analogous to the gesture in line 5. Chil lowers his gaze to his

own body, then places his hand near his neck and then, while shifting his gaze to Keith, moves the hand up around the side and top of his head, an action that Keith correctly glosses as *a hat* (line 16). Once again Chil's body performs multiple displays. A gesture being made with the hand targets another region of the body, while Chil's gaze both highlights the gesture and then looks toward its addressee for a response. The lexical formulation of what is being gestured about, an action typically provided simultaneously or almost simultaneously by a gesturer who can speak, here becomes the next move in the sequence, a move that will be performed by Chil's addressee.

## Collapsing the Sequence

The data so far examined exhibit a sequence structured so that different tasks are accomplished at different places within the sequence. First, a Summons-Answer sequence is used to align a recipient so that he/she is orienting to, and gazing at Chil. Only after this has been accomplished does Chil begin to indicate what he is requesting. This action is followed by a candidate proposal by the interlocutor of what Chil might be asking. If Chil rejects the proposal the sequence is recycled with an alternative (Goodwin 1995). When a proposal is accepted the requested action is performed.

It is however possible to collapse moves in this sequence so that some of these tasks are accomplished simultaneously. In situations where an appropriate addressee is already present, Chil can both summon his or her attention and display what he wants simultaneously. The following provides an example. Chil is sitting at the table with his wife and two grandchildren while his daughter-in-law stands behind them. His granddaughter Jessica has just started college. She has been talking about her dorm room and has also brought a package of photographs which are sitting on the table as the sequence to be examined here begins. Detailed analysis of the talk about the dorm room is not relevant to the points to be investigated here. We've used arrows to highlight those sections of the transcript that are relevant to the present analysis. What we want to focus on is how Chil summons Jessica with speech, while showing her that he is proposing to look at her pictures by visibly picking them up.

(10) Jessica is talking about her room at college. A package of pictures she has brought is sitting on the table.

→ 1 Chil: Neh nen em? ((Chil reaches for Jessica's pictures and gazes toward Jessica.)) 2 Jessica: *Ours* are pretty simple rooms though. 3 (0.5)4 Jessica: Our roo(h)m's go(h)nna t(h)otall(h) ch(h)ange= 5 =wh(h)en w(h)e g(h)o ba(h)ck from Chri(h)stma(h)s= 6 =cause I got so much stuff.\*hhh Linda: Yea ⊢h. -for Christmas. **Jessica**: 9 ta decorate (it) with. → 10 Chil: Dih dih duh? ((Chil lifts pictures while gazing at them. At the end of his talk Jessica gazes at him)) **→** 11 (0.8)→ 12 Jessica: Want me to *show* them to you? *Jessica moves to sit next to Chil* 

In both lines 1 and 10 a single turn is built through the juxtaposition of multiple meaning making practices lodged in different phenomenal fields. While summoning Jessica Chil simultaneously displays orientation toward the pictures. Chil thus uses talk to summon his addressee, while using the orientation of his body, intentional focus toward specific phenomena in the surround, and gesture, to display to that person what he wants, i.e. something about the pictures that Chil has just picked up. Though initially Jessica continues her conversation with Linda, just after line 10 she gets up and moves next to Chil, an action that puts her in a position where she can perform the requested action in line 12, i.e., showing the pictures to Chil. Though her utterance formulates an offer, her use of "them" to reference the pictures at issue displays that she is unproblematically treating these pictures as the substance of the action Chil is proposing. In her response she thus explicitly takes into account the materials he has displayed to be relevant through the embodied behavior that accompanies his talk. Here the

move to request the orientation of an addressee, and the display indicating what that addressee is being requested to do, occur simultaneously.

In these data, unlike the events examined earlier, the interlocutor who will be a co-participant in the action that Chil is proposing is already sustaining a coparticipation framework with him. Jessica is seated at the table with Chil. This provides one structural basis for Chil's ability to perform his request with a shorter sequence. It is not necessary to first secure the availability of an addressee through a summons-answer pre-sequence (though something like this might still be necessary in cases where someone seated at the table is engaged in interaction that excludes Chil). Thus Chil's action here differs in a number of ways from his utterances examined earlier. It is spoken, with normal rather than raised volume, and is thus appropriate to an addressee who is already sitting with him. Second it ends with a rising rather than falling contour. In part by virtue of this, his action here is hearable as a request to move to a new activity, rather than an insistent demand for attention. Finally, we find here another method for selecting a particular addressee from larger pool of potential recipients. The pictures are tied to events in Jessica's life, and not the lives of anyone else at the table. By indicating that they are the focus of his request, he simultaneously selects Jessica as his next interlocutor.

# A More Complicated Sequence

We will now examine a slightly more complicated sequence that brings together many of the phenomena noted so far in this paper, including addressee selection and making visible the object of a request. In the following Chil is taking his pills at breakfast. Most of those present in the house are in the kitchen with him, except for his daughter Pat, who is in another room. The sequence begins with Chil raising a query about one of his pills. At the end of the sequence it becomes clear that he has discovered that he has received only one of a particular kind of pill, instead of his usual two. Pat tells him that his doctor has changed his dosage.

(11) Chil is seated at the breakfast table examining his morning pills. Helen, Jessica and Julia are also sitting at the table. Keith and Linda are working at the kitchen counters. Keith leaves at line 10. At line 13 Pat walks into the room, but then leaves again immediately.

		,		Counter		
1	Helen:	(	)	Keith	Li	nda
				Jessica		Julia
2	Chil:	Dih dih <i>d</i> el (0.4)	າ:.	Helen (	Table	Chil
3		(0.4)				
4	Chil:	Dih <i>dah</i> da	h.		Pill	
5	O.L.	(1.0)			100	-
6	Keith:	Pills.			8	1
7		(0.8)			6. 3	11.3
8	Helen:	Pills?			A	5
9	T · 1	(1.0)	2		100	13
10 11	Linda:	Some water	r?			-
12	(Jessica):	°(Some for	mo?	<b>)</b>		
14	(jessica).	(Soffie for	Tite:	)		<b>1</b>
13	Chil:		$\lfloor_{\mathrm{No}}$ :	⊢dih <i>dih</i> di	h	
14	Helen:	└Sure Jessica=				
15		$_{\sqcap}$ =you can take $//that$ one.				
16	Pat:	(check.)				
17	Chil:	DIH <sub>F</sub> DIH <i>I</i>	DEH:.	_DIH <b>DAH</b>	I:. DIH	DAH:.
18	Helen:	L(		)		
19	-		(	)		
20	Julia:			└ Mom?	,	
21	Keith:				(	)
22	Pat:	Yeah?				

```
23 Chil:
                 DIH DAH:.
24 Julia:
                 He's saying something about this big white pill?
                                                Pills.
25 Keith:
26
                       (2.0)
                 P<sub>□</sub>at?
27 Candy:
                  └Pat.=Pat - he took-
28 Keith:
                            Oh: he- he di-
29 Pat:
30
                 Ah: he said for you to start taking one again.
                 Uh r:m *he *he he heh he ha ha
31 Chil:
32 Pat:
                    He changed it yesterday back to one.
```

Pervasively, throughout this sequence, Chil's interlocutors use the visible intentional focus of his body to make sense out of his talk. As Chil produces his first call for attention in line 2, he is looking at his pills and placing them in his fingers. In line 6 Keith correctly formulates Chil's request as having something to do with pills. Note that though Keith can see what Chil is attending to by looking at his embodied behavior, he apparently does not understand in detail Chil's activity. Keith's continuing failure to recognize what Chil might be asking suggests that he sees Chil doing "something" with pills, but not performing the specific action of counting them (i.e. he and everyone else do not realize that Chil has discovered that he is missing a pill). This penumbra of uncertainty around Chil's seeable action leads to other inaccurate proposals about what he might be requesting. Thus in line 10 Linda asks if he wants some water (e.g. something that can be used to take pills). Others present are using Chil's visible orientation to the pills as a point of departure for trying to figure out what he is requesting. Once again the basic unit required for the visible constitution of action is one in which an array of multiple meaning-making practices instantiated in a range of semiotic media with quite different properties (talk, the visible body, gesture, phenomena in the surround, etc.) are being juxtaposed in order to make visible something relevant to the projected course of interactive action.

Note also that the activities that Chil's interlocutors perform in order to act as appropriate hearers (e.g. parties able to attend to what Chil is saying and doing in order to build an appropriate next move) in no way fits an information flow

model of communication. Rather than simply decoding a message from Chil, others present actively operate on both what they hear and what they see, while taking into account features of the setting and the seeable activities in progress, in order to try to figure out what might be at issue in Chil's current action. Rather than succeeding or failing to recover his "message" they act as participants engaged in an ongoing, dynamic pursuit of the shape and substance of the action they are attempting to build a response to. As they check their candidate understandings with Chil this pursuit is organized as a thoroughly interactive process.

Within this process contingencies emerge which can be creatively exploited. Linda's offer of water in line 10 provides one example. Rather than simply declining the water (Chil in fact takes his pills in applesauce), Chil uses the sequential frame provided by her request to focus attention on something that is relevant. Instead of simply saying No Chil looks at Linda and then picks up one of his pills while visibly holding it in front of his face. He thus exploits the sequential structure provided by a request to publicly locate the pill as a crucial component of his query. The rejection of "water" provides him with a slot for the production of the correct item. For fluent speakers No after an offer (e.g., "Do you want a banana?") is frequently followed a move that states an alternative to what is being rejected (e.g. "No. I want an orange"). Though Chil can't say "pill" he can try to indicate an alternative to water. His "No:" is immediately followed by a three-syllable utterance that is coordinated with the action of lifting the pill. He thus positions it in the contrast slot made available by Linda's request for specifying the topic of his query. While doing the emphatic summonses that follow in line 17 Chil continues to hold the pill up high, in a focal "front stage" position, while gazing toward it (see the drawing on the transcript). His body becomes publicly visible as an intentional agent, an active person focused on a specific entity, the pill, while summoning aid. He thus organizes his body to produce a public display of intentionality that can be read and used by others as part of the process of building a response to the action he is performing.

In line 17 Chil produces three multi-syllable calls in quick succession, followed a moment later, by a fourth in line 23. All are spoken very loudly. However in these data four people are in the kitchen with Chil, three of them

sitting at the table with him. And indeed just before this at line 4, another summons, without heightened volume, received an answer from Keith. Further examination of the sequence reveals that the issue Chil is summoning help for can only be dealt with by one person, his daughter Pat, who is not in the room. As becomes clear at the end of the sequence Chil has found that he's been given one of a particular pill, rather than the two he normally takes in the morning. His daughter Pat, who is a nurse, is the person in the household responsible for dispensing his pills. When the people in the kitchen are unable to formulate a relevant gloss of what he is trying to say, Chil shifts to the one person who is an expert on this issue.

Chil lacks the ability to call Pat by name, or more generally to use lexical forms to specify a particular addressee from a larger set of participants. However, by using the resources provided by prosody, e.g. his ability to systematically vary volume, Chil is able to display that none of those in the room with him count as possible addressees for the action now being performed. The structure of the activity in progress requires specification of a particular addressee, something that Chil can't do lexically. Prosody is thus creatively used to overcome linguistic impairment. It provides a resource for accomplishing the task of specifying the addressee of the current action. This deployment of prosody is in turn embedded within, and shaped by, a larger course of conversational action, for example getting a particular recipient, such as Pat, to provide an answer to a relevant query.

All of these hearable and visible practices (e.g. visible orientation toward the pill, volume, prosody, etc.) are taken into account by Julia when she glosses Chil's utterance in line 24 as **saying** something about the pill that Chil is positioning as the focus of attention: "He's saying something about this big white pill?" And indeed, through this artful deployment of multiple semiotic resources, Chil is not just rattling off nonsense syllables, but as Julia states "saying something about" something, i.e. producing a full-fledged utterance that constitutes a recognizable, relevant action within conversation.

#### Conclusion

This paper has explored how damage to the linguistic resources of a speaker leads to a re-organization of the situated practices used by multiple participants to build meaning and action within interaction. Embodied displays, frequently linked to semiotic structure already sedimented within the material and social arrangements that make up Chil's lifeworld, replace a lexicon and syntactic structure as Chil's primary resources for building turns at talk.

Despite his inability to produce meaningful language, Chil not only understands the talk of others, but makes extensive use of the sequential organization of their talk to produce consequential action of his own. In this process his interlocutors provide the lexical and syntactic structure that he can't. They must shape their contributions in quite specific ways, for example by using rising intonation to formulate what they are saying for him as a candidate proposal, an action that makes relevant a subsequent response from Chil. What others can do within a single turn instead requires sequences for Chil and his interlocutors. This process has clear structural affinities with events at the opposite end of the life cycle, the talk of caregivers with children just acquiring language (Ochs 1988; Ochs and Schieffelin 1986).

As the first example demonstrated, the meaningfulness of Chil's utterances are not "encoded" in his talk alone. Instead the production of meaning and action draws upon resources provided by the sequential organization of the unfolding conversation he is contributing to. Chil relies upon the ability of his interlocutors to link what he is displaying through prosody and gesture to specific lexical items provided by their earlier talk. From a slightly different perspective Chil's aphasia becomes a crucible for the analysis of the body in interaction. His inability to produce syntactic utterances poses for the participants themselves the task of analyzing how a range of phenomena in the stream of speech, the body, and the setting where action is emerging are used to build both turns and sequences.

Traditionally aphasia has been analyzed as an individual impairment, something lodged within the individual, who loses crucial linguistic competencies such as the ability to produce syntactic units. From such a perspective various paradoxes emerge. For example it has been noted that people

with damage to the right hemisphere who have relatively intact linguistic abilities, nonetheless have more problems in social interaction than someone, such as Chil, with severe left hemisphere damage. The data analyzed in the present paper suggest that the relevant unit for the analysis of Chil's capacity to build meaning and action within states of talk is not however confined to his skull, or to phenomena within the speech he produces. Instead it must encompass the talk and action of others which provides the enabling context for building meaningful utterances out of what might otherwise be considered nonsense syllables. The practices Chil uses to build meaning and action are not lodged within his body alone, but instead within a unit that includes his interlocutors, the sequential environment and a semiotically structured material setting. It is here, and not through examination of linguistic output alone, that the ability to constitute meaning within states of talk must be assessed. What we see in Chil's family is a process of development, though one situated within the social group rather than the individual, and one occurring at the end of the life cycle rather than the beginning.

Interaction with a person with severe aphasia also has a moral dimension. It would be easy to treat someone who can't speak as something less than a full fledged person, someone whose efforts to communicate can be dismissed or not taken seriously. Indeed this way Chil's doctors sometimes treated him right after his stroke. However, despite Chil's inability to produce language his family does not ignore him, but instead treats him as someone who has something to say. They invest considerable effort in working out together just what that might be. All parties to the conversation adapt the way they build turns and sequences to the specifics of Chil's situation. By virtue of this the social production of meaning and action— the center of human social and cognitive life — remains an ongoing accomplishment despite Chil's inability to produce fluent language. This is made possible by the sequential organization of conversation, including its inherent flexibility, which provides participants with the resources necessary to adapt the organization of both turns and sequences to the details of their particular situation. Through this process not only meaning, but also Chil's status as person able to think for himself and build action through conversation, is reproduced on a moment by moment basis.

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