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Making Meaning Together
A distributed story of speaking and thinking

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Abstract

The relation of language to thought and mind is an ancient topic in linguistic theory. Normally language is related to thought in an individual mind. In this article, I explore the analogy between the dimensions and dynamics of individual perception as formulated by Husserl and the inter-individual perception and conceptualization found in everyday conversations.

The notions of horizon, perspective, appresentation, and apperception developed by Husserl for the phenomenology of individual perception are generalized to incorporate the mutual and cooperative calibration of consciousness evidenced in conversational discussions where speakers cooperate to construct an interpretation and evaluation of their experience. This process of local cooperative and mutual co-construction and evaluation of interpretations of experience takes place in what is referred to here as a course of development. An extended excerpt from a conversational discussion is used to demonstrate the interactive dialogic and dialectical work speakers carry out in an effort to make sense of their experience of the world and their relationship to the world and each other. Ways of talking are analysed as means of constructing restricted folk-theoretic world-views that rely on the dialogic-dialectical work of the speakers. Contributions to an on-going discussion are claimed to constitute folk theories actualized in real time in the talk where Husserl's notions of horizon, perspective, etc. of individual consciousness are given a distributed or shared interpretation in the establishment and maintenance of inter-individual consciousness in relation to the topics and events under development in the conversation.

Introduction

The relation between language and thought is a topic running through linguistic theorizing from antiquity to the present. There are numerous historical precedents when it comes to an attempt to relate parts of speech and linguistic categories in general to epistemological, ontological, or psychological categories. In antiquity, the Stoics claimed that a complete sentence expresses a complete thought. The medieval scholastic Modistae used Aristotle's ontological categories as a basis for the division of words into parts of speech and Thomas of Erfurt used Aristotle's four causes as the basis for the analysis of the criteria for acceptability of a sentence (Robins 1992). There has also been a modern attempt to use Kant's epistemological categories as a motivation for the grammatical categories of natural language (Heinrichs 1986).

More recently there has been a sustained effort in Cognitive Linguistics to relate the intra-individual dimensions of perception and conceptualization to a variety of language expressions on differing levels of linguistic and conceptual/perceptual complexity. Langacker (1987) relies heavily on the notions of figure and ground taken from Gestalt psychology in an attempt to give a cognitive motivation for the structure of linguistic expressions. Lakoff (1987) and Johnson (1987) utilize the notions of Ideal Cognitive Models and image-schemata that are based in the psychology of perception to give a cognitive semantic explication of the meaning of words and larger constructions, for instance, prepositional phrases. Talmy (2000) relates the psychology of perception, conception and attention to the cognitive semantic structure of whole sentences.

In most of this theorizing, written sentences considered outside of any context of use are taken as the starting point of the analysis of the relationship between linguistic expressions and thoughts, usually presumed to be held in some individual consciousness or mind. There has

been, however, a recent shift of interest towards relating linguistic expressions found in actual situations of language use to the thinking of the speakers of a language. Slobin (1996) has coined the term 'speaking for thinking' for the influence that the grammatical structure of a language is said to exert on the thinking of the speakers. Clark (1996) claims that a proper analysis of the cognitive aspects of language must depart from and incorporate social aspects of the relationship between speaker and listener in actual occasions of conversational language in use.

In modern analytic philosophy of language Quine (1996) postulates the equivalence of language and theoretical conceptualization. Davidson (1986) breaks up the hegemonic notion of command of a language into more or less individuated theories held by the users of the language. He claims that the speaker-listeners use what he calls theories to make sense of what is being said. The speaker-listeners have what he calls prior theories that resemble each other in certain respects, but differ in others, that they use as points of departure in their efforts to make sense. During an actual linguistic exchange the speaker-listeners create what he calls passing theories in the on-going exchange to arrive at mutually acceptable understandings. After the present linguistic exchange these passing theories sediment into the prior theories of the individuals to be utilized in future exchanges. Putnam (1975) proposes that there is a linguistic distribution of labour between lay and experts in the linguistic community concerning in particular the meaning of certain natural kind terms but also that in general the meaning of a linguistic expression is not to be found in the head of an individual speaker-listener.

In this article I use the emergent-dynamic theory of perception developed within Husserlian Phenomenology to explore the relationship between the dynamics of inter-individual perception and conceptualization and aspects of conversational dialog. I pursue a strategy of shifting the focus from sentences or other less complex linguistic constructions as the

expression of more or less complete thoughts by individual speakers/writers to the collective (inter-individual) process of producing a common sense in languaging in dialogic talk.

Husserl's emergent-dynamic phenomenology of perception

In a phenomenological analysis of subjective individual perception, Husserl (1986) claims that the identification and locating of an object of perception for a human consciousness takes place within a particular intentional **horizon** which is, he says, empty without being a void. The horizon is what Husserl refers to as a determinable indeterminate. How the horizon of consciousness in relation to the object is filled or determined depends on the **perspective** adopted by the perceiving subject on the object attended to. Due to the perspective adopted by the subject certain features or aspects of the object will be more prominent or obvious than others. Other features will be hidden from the subject. Those features that are hidden from the subject because of the subject's particular perspective belong to the **appresentation** of the object. These features constitute what the subject expects or anticipates to find were the object attended to from other perspectives. The perception of the myriad features or aspects of an object as belonging to a complex contiguous whole constitutes the **apperception** of the object. As I understand Husserl, the apperception of an object is what we are aiming at with the use of a common noun, name, or nominal phrase. The end product of the process of perception is the discovery or realization that the object is a particular instance of a general class of objects called "X". Important to Husserl's analysis of perception is the fact that it is not instantaneous but is a process that takes place over time (albeit usually a relatively short one) and has an exploratory and emergent character.

In the following, Husserl's notions are generalized in an interactive inter-individual direction to incorporate the mutual and cooperative calibration of consciousness evidenced in conversational discussions where speaker-listeners cooperate to construct an interpretation

and evaluation of their experience of the world. The collective inter-individual generation or production of a common sense involves an exploratory and emergent mutual determination (across speakers and turns) and re-determination when confronted with competing dialectical alternatives due to discoveries of new perspectives made by the various participants during the on-going linguistic interaction. The interactive inter-individual production of a common sense is here referred to as a course of development.

Following a line of research where the integration of verbal and gestural expression is seen as an essential part of spoken interaction (Kendon 1985, Hirsch 1989) and the expression of thought in language (McNiell 1995), the analysis contains comments on the contribution of gestures to the development of sense, thus blurring the border between the vocal-verbal and gestural (non-verbal) aspects of the development. In a course of development an interpretation of reality (social or otherwise) is interactively and dialogically worked up, through speech and accompanying gesture, and dialectically worked through for coherence, relevance, tenability, consequences, etc.

Analysis

An extended annotated excerpt from a conversational discussion is now presented to demonstrate the interactive dialogic and dialectical work speakers in conversation carry out in an effort to make mutual sense of their experience of the world and their relationship to the world and each other. The analysis aims to show the dialogic-dialectical work the speakers carry out as they endeavour to construct restricted inter-individual world-views.

The transcription below is based on a video-recording of a conversation that took place between three speakers of English in Gothenburg Sweden in the early 1980's. The participants knew that they were being recorded and had given their consent to the use of the

conversation for research purposes. The research purpose pursued at the time of the recording had, however, nothing to do with the present research focus. The participants were simply given the open-ended instruction to exchange views about the concept of 'nature'. The transcription was made by the author according to transcriptions conventions developed for the analysis of the vocal-verbal and gestural expressions found in face-to-face interactive argumentation (Hirsch 1989). The reader is referred to the appendix of this article for notes on the transcription conventions used, especially as concerns the marking of the overlap of the vocal-verbal and gestural aspects of the interaction.

Course of Development in Conversation

In the beginning of this excerpt, speaker A introduces a new topic into the conversation that has already been running for a while, thereby setting up an inter-individual intentional **horizon** to be filled out by later speakers (including speaker A) in the projected continuation. The proposed horizon has to do with the use by one of the other speakers of a nature/herbal medicine. Several aspects of the **horizon** are introduced in the first turns of the excerpt by speaker A: who uses the nature/herbal medicine, where it can be procured, what one does with it, and what effect the medicine has. As can be seen by the repeated laughter and smiling, the participants feel at ease and are open and friendly towards each other and are in general enjoying their participation in the conversation, in spite of the fact that they know the conversation is being video-recorded. Speaker A invites speaker C to engage in a co-construction of an intentional object by the use of a question. Notice the use of incomplete syntactic sentential structures and truncated reformulations in the delivery of the invitation, which seem, however, not to cause any understanding or interactional problems for any of the participants.

A: *<inhale><*but don't you*>* use some of this eeh / /

        <head nod toward C>

*<*nature medicine that you can get from this*>*

        <smile>

C&R:*<<laughter>><gesture>*

<C hand down from nose> <C lean back>

A:*<*what was it you tried last time / / this thing you drink*>*

        <laughing>

C:*<laughter>*

A: didn't you say it had an effect on you?

The first **perspective** adopted focuses on the name of the medicine. This perspective is developed interactively by all three speakers resulting in an extended description of the nature medicine's composition and origin. This perspective fills in some of the appresentational aspects of the initial indeterminate horizon that have to do with what the medicine is called and where it comes from, and introduces new aspects, e.g. how it has been used. This perspective pushes other appresentational aspects of the **horizon**, e.g. where the medicine can be procured, how much it costs, what form it comes in (e.g. pills, tablets, powder, or liquid), into the **appresentation**. The appresentational aspects of the horizon are possible but not necessary options for development that might or might not be taken up later in the discussion. C complies with the invitation and proposes a name for the intentional object alluded to in A's query, only to be asked for a repeat by R which is provided by A when giving a confirmation

of C's compliance with A's initial request. R then makes a request for more information about the object which may be directed to either C or A.

C:*<gesture>* mhm <ka kan>=kan jang *<gesture>*

<lean forward>   *<look down>*   *<look at R>*

R: = <what did you try>

            <smile>

A: kan jang <yeah>

            <head toss back>

R: what's that

C then launches into a long uninterrupted description of the nature medicine.

C: mm it's it's <a it's a a mixture ehm *<smack>* eh it's>

                        <look down & away>

it's <two different / /> <plants><that both have thou thousands of years use>

<look up + left hand rock><left hand to forehead> *<left hand across forehead>*

one of <one of them is it's called kan jang> it's been used for thousands of years

            <left hand down in circle>

in asia / / and then the other one <that comes from a> plant that the american indians use

<center>*<left hand open palm>*</center>

against <snakebite>

<R closes eyes tightly>

At the close of C's description of the nature medicine R visually confirms in simultaneous overlap with C's expression 'snakebite' an understanding of the description, perhaps showing signs of empathy with the victims of snakebite, but switches to a dialectical mode, when taking his turn to talk, by expressing a possible verbal and facial sign of doubt or disbelief.

R:<oh yeah>

<eyebrow raise>

R's signs of doubt are addressed by C in a general attribution of power to the herbal medicine, filling out details on the use and effect of the medicine.

C: eh it's really powerful stuff <it's real

<center>*<lean forward>*</center>

At this point, C is interrupted by R activating an **appresentational aspect** that has not been addressed before which has to do with why one takes the medicine. The smile and eyebrow flash may possibly be hinting at slightly 'taboo' or aphrodisiac aspects of the use of the medicine.

R: <powerful for <what>>*<laughter>*

<smile>   <eyebrow flash>

R's introduction of a possible line of development towards other appresentational aspects of the horizon is closed down in C's continuation where C goes on to specify the uses of the medicine by means of a combination of verbal and gestural expressions.

C: (healthy) too> / it's for eh oth <against infections><and viruses and if you have a cold>

<left hand up>   *<circle with left hand>*

or something <it helps your throat>(and so on)*<gesture>*

<left hand to throat>   *<deep swallow>*

A: mm

C: and <i felt like a cold coming on>$_1$ and I <took it every day>$_2$<and the>$_3$

<left hand circling>$_1$ *<left hand circling>$_2$*   *<A takes hands from table>$_3$*

<day that i stopped taking it>$_4$ *<<inhale>* then
<C push out with back of left hand & bring back>$_4$

<i the cold developed again>$_6$>$_5$
<R frown + perk lips>$_5$
<C wave out & back with left hand in circular motion>$_6$

<gesture>$_7$
<look down>$_7$

The C's vocal-verbal description of the use is carried out with accompanying gestural illustrations, e.g. C's *<left hand to throat>* and *<deep swallow>* accompanying and immediately following "throat". Note R's *<R frown + perk lips>* which overlaps with C's

speech without causing an interruption in C's presentation. This is further evidence of the tight-knit coordination and calibration of the mutual vocal-verbal and gestural construction of a course of development across participants in free and easy conversation.

R and A then concur with C's narrative as constituting a plausible **apperception** concerning the initially open and indeterminate intentional horizon surrounding the herbal medicine.

R:*<blowing><yeah>*

   <eyebrow flash>

A: yeah *<gesture>*

  <head nod>

R's eyebrow flash might be interpreted as a lingering dialectical scepsis as to the beneficial properties attributed to the medicine. C then introduces yet another appresentational aspect of the **horizon** of the medicine which has been repressed until now, namely, the taste.

C: it tastes absolutely <foul that's the only problem>

     <look up>

Returning to appresentational aspects of the **horizon** activated in the opening phase of the course of development, namely, the effect of the medicine, A queries C on the claimed health benefits attributed to the medicine. C filling out the **apperception** of the herbal cocktail confirms that the claimed health benefits are valid.

A:<and y y you sure it works>
<head nods + turn in chair>

C:<i'm sure> it <works yeah>

<head turn left> <head nod>

The general overall scheme of development observed in the conversational discussion follows a structure that is reminiscent of an Entry-Body-Exit procedure found in various information processing and problem-solving activities. Here, however, the procedure is carried out interactively across speakers and turns (see Hirsch 1989 and Clark 1996 for further evidence of this phenomenon). The Entry occurs with speaker A's introduction of the intentional horizon inviting C to tell about the nature medicine C drinks. The Body occurs during the ensuing incremental co-constructive dialogic-dialectical determination of the horizon and an emergent apperception of the intentional object. The Exit occurs when the horizon seems to be filled in to everyone's satisfaction and there is at least partial temporary consensus concerning the apperception of the initially indeterminate object. By engaging in this interactive languaging practice the speakers have constructed a common sense for the nature medicine 'kan jang'.

Discussion and Conclusion

Considering evidence of the type found in the conversational dialogue above, it could be claimed that speakers in free and easy conversational exchanges are not so much giving expression in talk and gesture in the dialogue to an individual, pre-established, pre-dialogic conceptualization or thought as being part of a process where talk and gesture by the various participants enable the establishment and maintenance of themselves as speaking and thinking sense-makers.

Using Quine's (1981) thesis of the theory-ladened nature of everyday things as a point of departure, and placing it within Davidson's (1986) re-definition or deconstruction of the notion of language, I would claim that languaging gives us theories which give us things. Things fall out of the way we talk about or deal with them in dialogue. It is theorizing linguistic practice all the way down, with uttered words and sentences and gestures used as constituents of theories on different levels of complexity actualized in the languaging of dialogue. In the dialogue analysed above the participants have created passing theories manifested in their talk and gesture to reach a mutual understanding of the herbal medicine 'kan jang'. These passing theories sediment into prior theories (knowledge of ways of speaking and thinking) which can be utilized as points of departure in conceivable future discussions of herbal medicines and in particular 'kan jang'. This folk-theorizing carried out in and through conversational languaging would be a complement to Slobin's 'speaking for thinking' which I would like to call 'thinking through speaking' where speaking includes gesture and other bodily expressions, which become especially important when the theorizing practice of languaging is coupled with practical action incorporating the manipulation of objects and rearranging of elements of the physical environment (Hirsch 2009). How much of this theorizing is specific or relative to the language being used in thinking and how much is general or universal is an avenue for future comparative studies of linguistic interaction.

The main gist of the argument of this article could possibly be summarized by saying that what is being proposed here is, in principle, a version of Putnam's (1975) distribution of linguistic labour thesis, but on a more restricted local and situational contextual level. There is not only a general distribution of labour in the collective of speakers of a language, between lay and expert, concerning the use of various natural kind terms, but rather a specific situated distribution of labour between speaker and listener/speaker in a particular interaction. The speakers distribute the linguistic labour of developing a coherent line of reasoning in the on-

going conversation. Neither meaning, nor the development of meaning is to be found in the head. For both we should rather look instead into the detailed dynamics of social communicative interaction.

If we round off by returning to the beginnings, the logical and epistemological claim that equates a complete thought with a complete sentence need not necessarily be abandoned under view proposed here. We must rather make a distinction between process and product. A complete sentence may just as well be the product of an inter-individual emergent process in line with the analysis of the collective 'thinking through speaking' witnessed in the conversation, as it might be the product of an isolated individual mind or consciousness. The analysis shows that expressions found in the conversation sometimes or even often deviate from completeness criteria for written language expression, but that the dialogic-dialectical theorizing and languaging progresses uninhibited in spite of this 'defect'. Even in cases where the formulation of a complete thought in a complete sentence can be attributed to a single individual mind or consciousness, I would like to claim, in line with Vygotsky (1978), that the individual is utilizing an internalized version of the social sense-making process we witness in the conversation. When the thought as product is available it can be held on to, written down, scrutinized, analysed, paraphrased, translated, passed on, etc. Thoughts formulated as complete sentences may be held in the individual psyche and consciousness but they do not necessarily have to originate there.

The end product of the interaction witnessed in the conversation might be captured in the formulation – 'kan jang is a herbal medicine that is a mixture of two different plants, one that has been used for thousands of years in Asia and another that the American Indians used as an antivenin against snakebites, and is used to prevent colds and other similar infections, but has an especially disgusting taste'. It is however doubtful whether this complete thought was held in conscious awareness in the individual mind of any of the participants before the interaction.

In contradiction to Clark (1996) there is no need for any extensive pre-planning for the formulation and expression of thought in the on-going conversation. All the participants need is a feeling of confidence in their practical knowledge of ways of speaking and thinking (prior theory) in the language in use in the dialogic-dialectical interaction to order to be able to throw themselves into the on-going conversation. It is also doubtful whether the formulation above really fully captures all the appresentational aspects of the object which are contained in the gestural illustrations that accompany the talk. The participants' interactive multimodal performance in the face of vocal-verbal and gestural dialectic probing makes for full-bodied, embodied, and sustainable thought.

To end, what the present analysis hopes to have shown is that the relationship between language and thought should be studied in the spirit of Wittgenstein's (1953) directive to look very closely at what people are actually doing when they are speaking a language, especially when it seems that they are engaged in something we would want to call thinking.

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Appendix I

Non-annotated transcription of the extended excerpt

A: *<inhale><*but don't you> use some of this eeh / /

        <head nod toward C>

<nature medicine that you can get from this>

        <smile>

C&R:*<<laughter>><gesture>*

<C hand down from nose> <C lean back>

A:<what was it you tried last time / / this thing you drink>

       <laughing>

C:*<laughter>*

A: didn't you say it had an effect on you?

C:*<gesture>* mhm <ka kan>=kan jang *<gesture>*

<lean forward>   <look down>   <look at R>

R: = <what did you try>

       <smile>

A: kan jang <yeah>

       <head toss back>

R: what's that

C: mm it's it's <a it's a a mixture ehm *<smack>* eh it's>

              <look down & away>

it's <two different / /> <plants><that both have thou thousands of years use>

<look up + left hand rock><left hand to forehead> <left hand across forehead>

one of <one of them is it's called kan jang> it's been used for thousands of years

       <left hand down in circle>

in asia / / and then the other one <that comes from a> plant that the american indians use

<left hand open palm>

against <snakebite>

<R closes eyes tightly>

R:<oh yeah>

<eyebrow raise>

C: eh it's really powerful stuff <it's real

<lean forward>

R: <powerful for <what>>*<laughter>*

<smile>   *<eyebrow flash>*

C: (healthy) too> / it's for eh oth <against infections><and viruses and if you have a cold>

<left hand up>   *<circle with left hand>*

or something <it helps your throat>(and so on)*<gesture>*

<left hand to throat>   *<deep swallow>*

A: mm

C: and <i felt like a cold coming on>$_1$ and I <took it every day>$_2$<and the>$_3$

<left hand circling>$_1$ *<left hand circling>$_2$*   *<A takes hands from table>$_3$*

<day that i stopped taking it>$_4$ <*<inhale>* then

<C push out with back of left hand & bring back>$_4$

<i the cold developed again>6>5

<R frown + perk lips>5

<C wave out & back with left hand in circular motion>6

<gesture>7

<look down>7

R:*<blowing>*<yeah>

　　　　　<eyebrow flash>

A: yeah *<gesture>*

　　　<head nod>
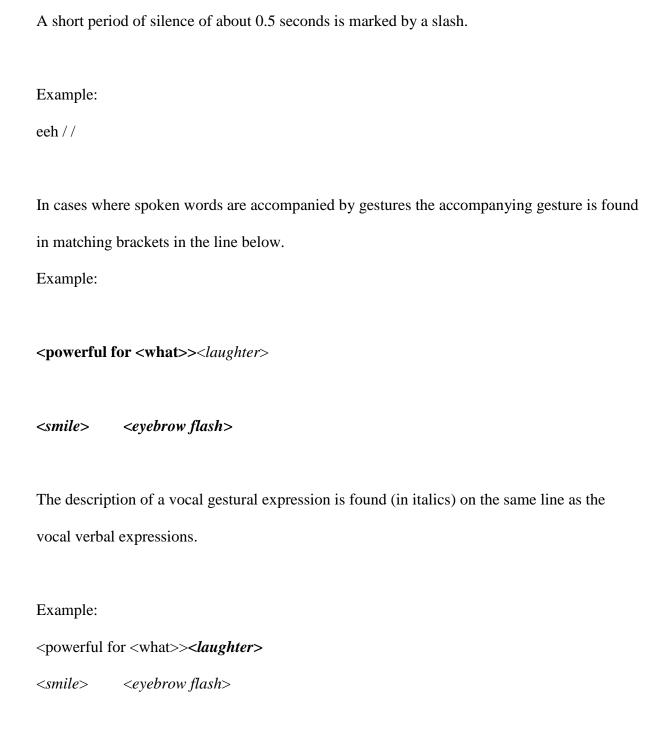
C: it tastes absolutely <foul that's the only problem>

　　　　　　<look up>

A:<and y y you sure it works>

<head nods + turn in chair>

C:<i'm sure> it <works yeah>

<head turn left> <head nod>
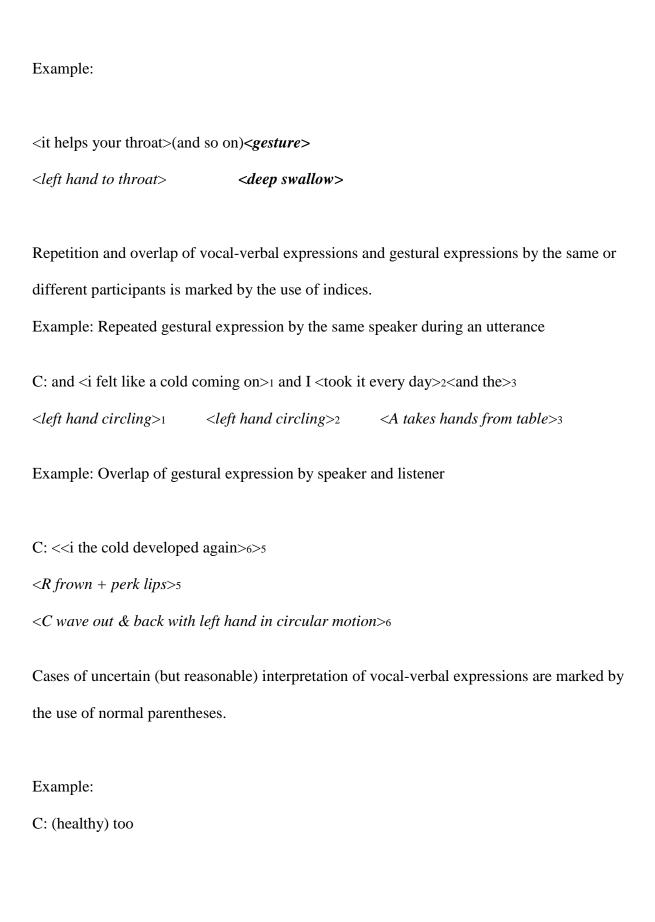
Appendix II

Transcription conventions:

In general, all text in italics is concerned with depicting or describing the gestural aspects of the expressions found in the recorded conversation. The non-italic text is reserved for the representation of the vocal-verbal expressions.

A short period of silence of about 0.5 seconds is marked by a slash.

Example:

eeh / /

In cases where spoken words are accompanied by gestures the accompanying gesture is found in matching brackets in the line below.

Example:

\<powerful for \<what\>\>_\<laughter\>_

\<smile\>   **_\<eyebrow flash\>_**

The description of a vocal gestural expression is found (in italics) on the same line as the vocal verbal expressions.

Example:

\<powerful for \<what\>\>**_\<laughter\>_**

\<smile\>   _\<eyebrow flash\>_

A non-vocal gestural expression not accompanying vocal expression is found on the same line as the vocal expressions, the description of the gesture is found in brackets on the line below.

Example:

<it helps your throat>(and so on)***<gesture>***

<left hand to throat>   ***<deep swallow>***

Repetition and overlap of vocal-verbal expressions and gestural expressions by the same or different participants is marked by the use of indices.

Example: Repeated gestural expression by the same speaker during an utterance

C: and <i felt like a cold coming on>$_1$ and I <took it every day>$_2$<and the>$_3$

<left hand circling>$_1$ *<left hand circling>$_2$*   *<A takes hands from table>$_3$*

Example: Overlap of gestural expression by speaker and listener

C: <<i the cold developed again>$_6$>$_5$

<R frown + perk lips>$_5$

<C wave out & back with left hand in circular motion>$_6$

Cases of uncertain (but reasonable) interpretation of vocal-verbal expressions are marked by the use of normal parentheses.

Example:

C: (healthy) too

Biographical note:

Richard Hirsch (born Atlanta, Georgia 1945), Associate Professor of Linguistics, PhD in Linguistics from Gothenburg University 1989, Docent in Communication Linköping University 1992. Presently working at the Department of Culture and Communication at Linköping University where he is Director of studies in General Linguistics and Linguistics in Cognitive Science. Dr. Hirsch's main areas of research are face-to-face argumentative communication, interactive decision-making, and task oriented interactive problem-solving in a cross-cultural perspective. Dr. Hirsch is presently engaged in research concerning the interrelationship between speech and gesture in visualizations and verbalizations used in teaching molecular biochemistry to high-school and beginning university students.