Emergency Communication and Conversation Analysis

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Emergency communication (EC) is more than knowledge transfer about disaster.

Empirical analyses of the ways people are “doing being in emergency situations” give insights about critical factors.

Ethnographic Conversation Analysis provides methods about interactive co-constructions of EC.

Research and reprocessing the empirical research up to date is necessary.

Elaboration of trainings must be based on this research.
Toxic gas alert?? (Meitingen, 6-6-2014)

Need for “effective communication”. But:

Starting point: „Language... is inherently underspecified... That is, no matter what anyone says, their utterances can never completely convey all of the potential or even relevant meanings about a given situation at any moment in time: There is always more that could be said.“

ATTENTION
EMERGENCY SITUATION IN PROGRESS

Please make your way to the nearest exit.

SOURCE
ATTENTION ATTRACTOR
REQUEST

Coding components (in written texts)

EXPLICATION OF TROUBLE SOURCE
Analysis of interpersonal interaction

- **Conversation Analysis** (CA) is an approach (Social Sciences and Applied Linguistics) that aims to describe and analyse talk as a basic and constitutive feature of human social life.

- **Methods**: Analyse transcriptions of video/audio-recorded, naturally occurring talk-in-interaction (sequences of local, *in situ* organizations of conduct)

- **Objectives**:  
  - discover how participants receive linguistic units and respond to one another in their turns at talk, with a central focus on  
  - how sequences of action are generated; in general:  
  - to uncover the often tacit reasoning procedures and linguistic competencies underlying the production and interpretation of talk in organized sequences of interaction."

Conversation Analysis (Ethnografic Discourse Analysis)

Questions concerning Intercultural Emergency Communication:
How do co-participants express, deal with specific
- situational (emergency) and
- interpersonal factors (emotions, language barriers)?

Recent research:
Co-participants use multimodal means for interpersonal communication;
Conversation analysis developed corresponding transcription techniques.

Nonverbal and paraverbal linguistic means are no longer considered to “accompany” verbal expressions, but:

**Utterances are compositions of different modes (multimodality)**
Conversation Analysis (Ethnografic Discourse Analysis)

Task here:

Describing co-constructions of emergency based on cases where people are “doing emergency” in intercultural contexts, using multimodal means (voice, gestures, face expressions, sounds...)

Paradox:

Actual research tendencies tend towards more complexity: from “conveying information” to the “co-construction of speech events using multimodal expressions”

Need for simplifying language use because of intercultural situations
Recapitulation of problem areas:
EC deals with (interpersonal) Communication under the conditions of

- **External forces** create unexpected situation (no routines)
- Externally caused emotional feelings: culture specific expression and interpretation of emotions
- **Interculturality**: culture specific knowledge (em. situations); values (power/hierarchies; uncertainty management...); problem solving habits/strategies
- **Missing common language**: asymmetric linguistic knowledge and different use of linguistic conventions in L1 and L2

Objectives:
- **Empirical studies in order to detect** (and then provide in ic trainings) the range of semiotic means used by co-participants
Multicodal and multimodal expressions

Code use that is in opposition or in congruence, that supports or weakens the message conveyed in the other code.

Each element is part of one linguistic unit, containing (Gestalt, meaning more than the sum of its components); combinations and interactions of two or more codes, e.g.

- verbal, paraverbal and nonverbal expressions (gestures, facial expressions, body orientations, clothing, proxemetics)
- written language (including different graphics, pictures)
- Spoken and written language combined into one expression

Here:
\[
\emptyset + \text{NØ} + \text{NØ!} + \text{PLEASE NO!}
\]
Multicodal and multimodal expressions

Transferred into interpersonal communication:

Attention attractor: vocal

Reinforcement: colour interpunctuation

Trouble source: circle

Message: written text

Speech act: ORDER to...

Nonverbal expressions ASK for...
(smile, body movement)

=> One expression/notice, one composition of meaning
Simplification/strategies

LEXICAL: “process and/or result of making do with less words”…”
(Blum-Kulka/Levenston 1983, 119)

Strategies (in translating texts):
- Use of superordinate terms when there are no equivalent hyponyms
- Approximation of the concepts in L1 and L2
- Use of ‘common-level’ or ‘familiar’ synonyms
- Use of circumlocutions instead of conceptually matching high-level words or expressions
- Use of paraphrases where cultural gaps exist
Simplification/strategies

SYNTACTIC: “process and/or result of making do with less words”…”
(Blum-Kulka/Levenston 1983, 119)

Strategies (in translating texts):
- Use finite clauses (instead of non-finite ones)
- Avoid embedded sentences (relative clauses..)
Simplification/strategies

Lexical  syntactic  stylistic

STYLISTIC: “…” (Blum-Kulka/Levenston 1983, 119)

Strategies (in translating texts):
- Break up long sequences and sentences
- Replace elaborate phraseology with shorter collocations
- Avoiding repetitions and redundant information
- Shorting overlong circumlocutions...

Resume: there are simplifications in all the modalities listed above (including the nonverbal, paraverbal etc. ones)

Reducing complexity and increasing the communication modes, could sharpen the comprehensibility (see research done by Temnikova and others 2012)).
Simplification/strategies

MULTIMODAL APPROACH

Communication through images, sounds, gestures, facial expression, finger movements, body postures/movements, use of space...


- Multimodal presentation:
  distinctive distribution of all lexical, iconic and other nonverbal items (e.g. lipreading)

- Use of each mode (type of sign)
  according to his function and best comprehensibility

- Combination of linguistic tools into a whole (Gestalt):
  Synchrony and mutual “synergy” of all linguistic units used

See Kleifgen, Jo Anne (20xx) Multimodality and Learning in a High-Tech Firm. New York: Routledge

A complex, but “good”, well formed Gestalt = simple to understand
<table>
<thead>
<tr>
<th>Actions</th>
<th>Communicative tasks</th>
<th>Interaction</th>
<th>Modalities/codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>identification/classification of emergency event, its components and possible consequences</td>
<td>reviewing, hypothesis building, anticipating...</td>
<td>1:1</td>
<td>oral (verbal, nonverbal, paraverbal)</td>
</tr>
<tr>
<td>providing visual information about an emergency situation</td>
<td>structuring the knowledge transfer</td>
<td>1:x persons</td>
<td>written (words, signs, icons)</td>
</tr>
<tr>
<td>oral in situ information about an emergency situation</td>
<td>co-constructing the type of event, dangers/implications, consequences/comands</td>
<td>1:1</td>
<td>oral, written</td>
</tr>
</tbody>
</table>
Communication:
Communication is a co-constructed process, co-participants use multimodal signs

Communication effectiveness:
is not (only) reached, if inputs are complete, „well“ presented...
but: if the „whole“ of the information is designed for an “easy”, effective interpretation, by using a recipient design (people or C2).

effective communication?

Bees

menace?
Poison alert?? (Meitingen, 6-6-2014)

Starting point: „Language... is inherently underspecified... That is, no matter what anyone says, their utterances can never completely convey all of the potential or even relevant meanings about a given situation at any moment in time: There is always more that could be said.“

Poison alert?? (Meitingen, 6-6-2014)

**Ending** point: „In the data presented here, student‘s utterances in the request slot were not only *underspecified*, but, in their nonnative-like formulations, they were frequently *misspecified* as well.“

<table>
<thead>
<tr>
<th>Basic competence</th>
<th>Intermediate comp.</th>
<th>Full competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>* improvises short-term, one-off tactics for bridging communication gaps;</td>
<td>* begins to relate problems of intercultural interaction to asymmetric native-speaker/non-native-speaker (NS/NNS) language competences and conflicting communicative conventions;</td>
<td></td>
</tr>
<tr>
<td>attempts to relate problems of intercultural interaction to different communicative conventions, but lacks the necessary knowledge for identifying differences;</td>
<td>* attempts to clarify his own or to adapt to the conventions of others;</td>
<td>* relates problems of intercultural interaction to conflicting communicative conventions and is aware of their effects on the communication process;</td>
</tr>
<tr>
<td>* tends to hold on to his own conventions and expects adaptation from others; is aware of difficulties in interaction with a non-native-speakers, but has not yet evolved principles to guide the choice of strategies like metacommunication, clarification or simplification.</td>
<td>* uses a limited repertoire of strategies (metacommunication, clarification, simplification) to solve and prevent problems when interacting with a non-native-speaker.</td>
<td>* is able to identify (and ready to adapt to) different communicative conventions or to negotiate new discourse rules in order to prevent or clarify misunderstandings;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* uses a variety of strategies (metacommunication, clarification, simplification) to prevent, to solve, and to mediate problems when interacting with a non-native-speaker.</td>
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</tbody>
</table>
Further research

In the future, research should be done in areas like

- **Communication under stress**: Do people from C2 fall back into their language and culture specific routines of speaking and interpreting??

- **Institutional Communication and its restraints/possibilities** (sequential order; display of emotions; choice of topics; see Zimmerman-case)

- **Segmentation and classification of the effects of linguistic tools** (within its multimodal context)

- **Create standard emergency communications procedures** (see Zimmerman, Don (2011). Fire fighters safety and survival. Burlington MA:Jones&Bartlett)
The end
Literature and readings

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- Kress, Gunther R./Leeuwen, Theo van (1996). The grammar of visual design. XX
- Li, Ying/Kuo, C.-C. Jay (2003). Video content analysis using multimodal information. For movie content extraction, indexing and representation. Norwell MAS: Kluwer
