The study of conversation in different disciplines

*Language philosophy*

How language is related to the world. The importance of studying language in use (e.g. Wittgenstein)
What characterizes speech acts (Austin 1962, Searle 1969)
Maxims for conversation (Grice)

*Linguistics*

Pragmatics, discourse analysis, dialogue
How can a conversation be described?
**Sociology**

Ethnomethodology: analysis of conversation to understand social action and interaction
Garfinkel (1967), Sacks, Schegloff m.fl.

**Psychology och psycholinguistics**

The importance of shared knowledge in conversation, ”common ground” (Clark)

**Computational linguistics, artificial intelligence**

Developing models for a ”natural dialogue” with a computer or a machine
(e.g. Grosz & Sidner, 1986)
Conversation analysis (CA)

CA appeared as a part of *ethnomethodology* in the 1960’s.

Focuses on how people’s everyday interaction is organized, and how participants show that they understand and orient towards each other’s actions.

Studies the underlying organisation of conversations: How the turns at talk are shaped, how they are oriented towards both other utterances, and the surrounding context.
CA has been used within HCI to study human interaction in connection with new technology, especially in workplaces.

Based on audio- and videotaped conversations that are subjected to transcription and detailed analysis.

The focus is not on language as such, but on the social interaction manifested in conversation.

CA is based on the following: conversation as well as bodily behavior in interaction is locally organised, i.e. *each action is oriented towards a preceding action.*
At the same time, each action is part of the context to which the following actions are directed.

The actions in a conversation are thus contextual in a double way: they are both *context-dependent* and *context-renewing*.

**Example: doctor-patient interaction**

An important observation was that the patient very often oriented his utterance to a moment where the doctor makes a natural interruption or pause in his interaction with the computer.

This shows that he is aware of places in the interaction that he can use as a *resource for an initiative*. 
Why is this recurring pattern interesting for HCI?

1. While the doctor is ”the user” of the system, the interaction is not independent of the patient’s contributions, but takes place within a cooperative activity.
2. These observations reinforce some of the arguments against HCI as a strictly cognitive, individual, goal-oriented process.
3. Possible design implication: improving the system dialogue to support its accessibility to the patient.
4. These insights could only partially have been reached with other methods, e.g. field observation and interviews.
How can a conversation be described?

Turntaking: speakers take turns in talking (or having ”the floor”)

• Every turn is composed of linguistic units and other actions according to a structural pattern
• Unusual that the parties talk simultaneously
• Very short pauses between contributions

Transition relevant place: a place in speech where a transition to next speaker could take place

A ”too long” (e.g. 1 sec.) pause is experienced as a silence, and will be subject to interpretation by the other party
Variations in turn-taking patterns

Examples of issues to study in conversation:

• Are the participants having an equal part of the conversational floor?

• Who takes the initiative to new topics?

• Does one participant often interrupt another? Is this related to social or institutional roles?

• Are there any problems in regulating turn-taking, that might relate to the medium of communication?
Structural units in conversation

Conversation has an inherent structure at different levels

Different units have been suggested to describe this structure at a local level:

- Initiative - response
- Adjacency pair (Scheglof & Sacks)
- Exchange (Sinclair-Coulthard)
- Dialogue game, move (Carlson m.fl.)

At higher levels: episode, transaction, activity type
Example of adjacency pairs: *question-answer, offer-acceptance, request-compliance*

If the second part of an adjacency pair is missing, this is something remarkable: a ”noticeable absence”

However: the second part is not always possible to identify. The important thing is *conditional relevance*: ”Given the first pair part, the second part is immediately relevant and expectable”

This explains e.g. why certain pauses occur if the conversation continues in a ”non-normal” way.
Insertion sequences in conversation

A conversation may have an embedded part:

May I have a bottle of beer?

Are you twenty-one?

No.

No.

No.

Not until the last ”No”, the expectancy of a relevant response has been fulfilled. This is called an insertion sequence (or an embedded subdialogue).
More general concepts have been proposed to describe conversation and explain its global structure:

Language games; activity schemas

Most important: conversation exhibits strong regularities

Note: large variation depending on context!

Ethnomethodologists studied *everyday interaction*

More recently, *institutional dialogue* has gained increased attention