



Einführung in Pragmatik und Diskurs

Introduction

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Motivation

- (1) Mutter: *Wie oft muss ich dir noch sagen, dass du dein Zimmer aufräumen sollst?*
Kind: *Noch vier mal, bitte.*

Motivation

(1) Mutter: *Wie oft muss ich dir noch sagen, dass du dein Zimmer aufräumen sollst?*

Kind: *Noch vier mal, bitte.*

(1') Mutter: *Räum' endlich dein Zimmer auf!*

Kind: *Nein, ich will nicht.*

- The “message” conveyed by a natural language expression goes beyond the sum of the meanings of the words and the form
- Meaning extensions and elaborations due to pragmatic inferences

⇒ *pragmatic meaning*

Aims of the course

- Study the mechanisms underlying the main *pragmatic inferences* and aspects of *pragmatic meaning*
 - conversational implicatures
 - pragmatic presuppositions
 - contextual reference
 - speech acts
 - conversational structure
 - discourse coherence
- Discuss algorithms that enable the use of these theoretical concepts in practical applications
 - inferring implicit meaning in NL understanding
 - conveying information implicitly in NL generation
 - dialog modeling
 - discourse modeling

What is pragmatics?

- Historical background
- Defining pragmatics
- Motivations for doing pragmatics
- Pragmatic concepts at work: an example

Basic reading: (Levinson 1983, Chapter 1)



Historical Background

Origin of Pragmatics

Charles Sanders Peirce (1898–1903):

- semeiotic (semiotics, science of signs): how signs enable us to understand, reason and talk about reality, which is external to the human mind
- **pragmaticism**: a methodology for conducting enquiry and understanding reality (how we go from perception to knowledge)
- an undecomposable triadic **sign structure**: the **sign**, is related to the **object** by virtue of being **interpreted** as such

Origins of Pragmatics

Charles Morris (1938)

- also interested in semiotics as a science of signs
- similarly to Peirce, a broad definition of pragmatics: all aspects of the functioning of signs in general
- distinguishes three branches of semiotics (three ways of studying signs):
 - **syntax**: formal relations between signs
 - **semantics**: the relation between signs and objects to which the signs are applicable
 - **pragmatics**: the relations between signs and interpreters
- unlike Peirce, allows pragmatics to be considered 'outside' of syntax and semantics, or: syntax and semantics to be considered 'without' pragmatics (interpretation), i.e., decomposes the triadic relation into diadic ones, studied separately

Origins of Pragmatics

Rudolph Carnap (1938)

- if an investigation makes explicit reference to language users, it is assigned to pragmatics

Bar-Hillel (1954), Montague (1968):

- pragmatics is the study of languages, both natural and artificial, that contain indexical or deictic terms
- interesting to logicians, because of a potential failure of generally valid schemes of reasoning:

I am Greta Garbo.

Greta Garbo is a woman, so I am a woman.

Summary

Two ensuing uses of the term “pragmatics” :

- broad use: the study of psycholinguistic and sociological phenomena in sign systems in general or in language in particular (as a division of linguistic semiotics; including disciplines such as psycholinguistics, sociolinguistics, neurolinguistics)
- successive narrowing of scope in anglo-american analytical philosophy and linguistics:
 - the study of abstract concepts that make reference to agents (Carnap)
 - the study of indexicals or deictic terms (Bar-Hillel and Montague)
 - since late 1960’s:
 - * **syntax**:
combinatorics of words and their parts
 - * **semantics**:
meaning (traditionally: truth-conditions)
 - * **pragmatics**: language usage

But, there is no agreed upon definition.



Defining Pragmatics

Definition 3 (e.g., Katz and Fodor 1963)

Pragmatics is the study of the (performance) principles of language usage, and has nothing to do with the description of linguistic structure.

- grammar is concerned with the context-free assignment of meaning to linguistic forms, while pragmatics is concerned with the further interpretation of those forms in context
- pragmatic theories explicate the reasoning of speakers and hearers
- cf. also (Chierchia and McConnell-Ginet, 1990):
 - **semantics**: what linguistic expressions mean
 - **pragmatics**: what speakers mean in using linguistic expressions

Problem:

- linguistic structure sometimes encodes or interacts with features of the context, e.g., *bunny* vs. *rabbit* implicate different types of addressees

In fact, pragmatics is especially concerned with the inter-relation of language structure and principles of language usage.

Definition 4 (e.g., Brown and Levinson 1978)

Pragmatics is the study of relations between language and context that are grammaticalized (i.e., encoded in lexicon, morphology, syntax or phonology), or encoded in the structure of a language.

- restricts the field to purely linguistic matters, guarantees linguistic relevance
- includes deixis, presupposition, speech acts

Problem:

- excludes principles of language use and interpretation that explain how extra meaning can be 'read into' utterances without being encoded in them, e.g., conversational implicatures (inferences arising on the basis of general rules or maxims of conversational behaviour)

Definition 5 (e.g., Gazdar 1979)

Pragmatics is the study of all those aspects of meaning not captured in a semantic theory.

PRAGMATICS = MEANING - TRUTH-CONDITIONS

- a broad understanding of *meaning*: involves different kinds of meaning components:
 - truth-conditions and entailments
 - conventional implicatures
 - presuppositions
 - felicity conditions
 - generalized conversational implicatures
 - particularized conversational implicatures
 - inferences based on conversational structure

Problems:

- defines pragmatics as the residue left by semantics (“pragmatics waste-basket”).
- fails to identify context-dependence as the unifying characteristic of pragmatic phenomena

Definition 6

Pragmatics is the study of the relations between language and context that are basic to an account of language understanding (i.e., calculation of the intended meaning).

i.e., the study of the inferences that connect what is said (utterance) to what is mutually assumed or what has been said before (i.e., context)

Strengths:

- recognizes that pragmatics is essentially concerned with inference
- avoids drawing a distinction between semantics and pragmatics along the line of what is encoded/unencoded in linguistic structure
- includes most aspects of the study of principles of language usage: for each systematic set of constraints on the use of language, there is a corresponding set of inference-procedures applied in understanding



Problems with Definition 6

- Includes in pragmatics the study of the interaction between linguistic knowledge and the entirety of participants' knowledge of the world.

Example: (Charniak 1972): *Jill wanted to get Bill a birthday present, so she went and found her piggy-bank; she shook it, but there was no noise; she would have to make Bill a present.*

Needed knowledge, at least:

- presents are usually bought with money
 - piggy-banks are used to hold money
 - money inside a piggy-bank rattles
- Relies on a notion of context, but there is no theory of (how to predict) what are the (linguistically) relevant contextual features in actual utterance situations.
- What is it to understand an utterance?

Definition 7

Pragmatics is the study of the ability of language users to pair sentences with the contexts in which they would be appropriate.

i.e., concerned with a recursive assignment of *appropriateness conditions*

- appeals to those who consider pragmatics part of linguistic competence (as involving a cognitive ability): linguists, e.g., van Dijk 1976, Lyons 1977; philosophers, e.g., Austin 1972, Searle 1969

Problems:

- exact overlap with sociolinguistics as the study of communicative competence (Hymes 1971)
- requires fundamental idealization of a culturally homogeneous speech community
- language “elasticity”:
 - speakers can be ‘inappropriate’
 - pragmatic constraints are generally defeasible, i.e., not invariable
 - exploitation of conventions to communicate some further pertinent message



Summary

There is no entirely satisfactory definition of pragmatics as an independent component!



Motivations for Doing Pragmatics

Motivations

Why is it useful? What motivates its investigation?

- an antidote to Chomsky's idea of language as a 'mental ability' (i.e., linguistic competence) dissociated from its uses, users and functions
- to account for context-dependent phenomena (e.g., pragmatic constraints on morphology, syntax or prosody)
- to simplify the task of semantics
- to narrow the gap between linguistic theory of language and accounts of linguistic communication
- to offer functional explanations for linguistic facts, i.e. by motivation by principles outside the scope of linguistic theory
- to establish the effects of language use on its structure, e.g., by cross-linguistic functionally-oriented studies one can discover more subtle ways of linguistic encoding



Simplifying semantics

- (2) *Some politicians are corrupt.*
intuitively means
Some and not all politicians are corrupt.

But one can say

- (3) *Some, and perhaps all politicians are corrupt.*
without uttering a contradiction

- semantic solution: “some” is ambiguous
- pragmatic solution: explain how principles of language usage allow for systematically ‘reading in’ to utterances more than they conventionally or literally mean



Non-Autonomy of Semantics w.r.t. Pragmatics

- (4) It is better to get married and have a child than to have a child and get married.
- p and q is semantically equivalent to q and p , so (4) is either contradictory or meaningless
 - pragmatic inference allows us to interpret “and” as “and then” in some contexts
 - pragmatic inference **before** semantic interpretation is what leads to assigning the correct truth-conditions to (4)

Filling the linguistic theory-communication gap

- (5) A. *I could eat the whole of that cake.*
B. *Oh, thanks.*

conveyed meaning: A compliments B on the cake, B accepts the compliment

- (6) A. *Do you have coffee to go?*
B. *Cream and sugar?*

conveyed meaning: If B can sell it, A wants to buy coffee to take away; B is selling A the coffee and is asking for more information

- (7) A. *It's rather cold in here, isn't it?*

conveyed meaning: A is cold and is asking B to do something to remedy that; A is being polite, so she does not issue a straightforward command/order

- linguistic theory tends to ignore hints, implicit purposes, assumptions, social attitudes, metaphors, irony, understatements, etc.



Pragmatics at work: An Example



Pragmatics at work: An example

- (1) A. *So can you please come over here again right now?*
- (2) B. *Well, I have to go to Edinburgh today Sir.*
- (3) A. *Hmm. How about this Thursday?*

- What information does this dialog provide above and beyond the semantic content of its sentences?
- What **implications** are carried by the sentences about the **context** in which they are being used?

We infer the following facts:

Inferred facts

- **Information about conversation structure**
It is neither the end nor the beginning of the conversation

- **Information about Speakers intentions**
A is requesting B to come to A at the time of speaking; B implies he cannot comply; A repeats the request for some other time.

- **Information about Speakers beliefs and intentions**
In requesting, A must:
 - (a) want B to come,
 - (c) think B is not already there,
 - (d) think B was not about to come anyway,
 - (e) expect that B will respond with acceptance or rejection and if B accepts, A expects he will come,
 - (f) thinks that asking B may be a possible motive for B to come,
 - (g) not be in a position to order B to come.



Inferred facts

- **Information about Speakers beliefs and about spatial relationships between participants**

A assumes B knows where A is;

A and B are not in the same place;

neither A nor B are in Edinburgh;

A thinks B has been to A's place before

- **Information about temporal parameters of conversation**

The day is not Thursday, nor Wednesday

- **Information about social relationships between participants**

A is male; B acknowledges that A has a higher social status than him

Partial Summary

- On hearing the text, the Hearer can compute the *contextual assumptions* made by this text i.e facts about **spatial, temporal and social** relationships between participants and about the **beliefs and intentions of the participants**.
- These inferences are **systematic** i.e. decodable by different interpreters in the same way.
- Without these inferences, the dialog cannot be understood.
- Hence these **inferences are part of the communicated meaning**.

How are they communicated?

Communicative Intentions Recognition

I1: It is neither the end nor the beginning of the conversation

(1) *A: So can you please come over here again right now?*

is not a possible opening utterance (not a regular opening form; “So” ties current utterance to previous utterance in same dialog segment).

⇒ **discourse coherence relations**

(3) *A: : Hmm. How about this Thursday?*

is not a possible closing utterance (requires a response; Not a regular closing form).

⇒ Inference due to **expectations about structure of conversation** and **use of discourse cues**.

I2i: A is requesting B to come to A at the time of speaking

Interrogative form

(1) *A: So can you please come over here again right now?*

functions as request, cf. also “please”

⇒ **Speech Act theory**

I2ii: B implies he cannot comply

B's response

(2) *Well, I have to go to Edinburgh today, Sir*

is interpreted as an answer, because a request requires a response:

⇒ **Conversational Structure**

and as a refusal: Implication relies on general principles of interactional cooperation: apparently irrelevant answer triggers inference to preserve the assumption of relevance.

⇒ **Conversational Implicatures**



I2iii: A repeats the request for some other time.

(3) *A: Hmm. How about this Thursday?*

is interpreted as a repeat request. This results from:

- Interpretation of “how about ...?” as a suggestion (**Speech Act theory**);
- Relevance assumption (**Conversational implicature**) and
- The interactional function of “Hmm” as a turn holding device (**conversational structure**).



I3: In requesting, A must:

- (a) want B to come,
- (c) think B is not already there,
- (d) think B was not about to come anyway,
- (e) expect that B will respond with acceptance or rejection and if B accepts, A expects he will come,
- (f) thinks that asking B may be a possible motive for B to come,
- (g) not be in a position to order B to come.

These inferences follow from assumption that dialog participants behave rationally and from conversational principles: if A request B to come then (a-g) follow.

⇒ **Speech act theory,**
Conversational implicatures



I4: A assumes B knows where A is;
A and B are not in the same place;
neither A nor B are in Edinburgh;
A thinks B has been to A's place before

Inferences arise from context-dependent meaning of **deictics** such as "here, come, go, you now" and the **presuppositions** of "again".

I5: The day is not Thursday, nor Wednesday.

Inference due to meaning of **deixis** "thursday, today"

I6: A is male; B acknowledges that A has a higher social status than him

Inference based on **conventional implicature** of word "sir".

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