5. Using language signs on suitable contexts

5.1 Bühler's organon model

5.1.1 Theory of pragmatics

Analyzes the general principles of purposeful action.

Describes how a cognitive agent can achieve certain goals.

5.1.2 Examples of pragmatic problems

- The use of a screw driver to fasten a screw
- The use of one's legs to go from a to b
- The scavenging of the refrigerator in the middle of the night to fix a BLT sandwich and satisfy one's hunger
- The request that someone fix and serve the sandwich

5.1.3 Nonlinguistic and linguistic pragmatics

Depending on whether or not the means employed are signs of language we speak of linguistic and nonlinguistic pragmatics.

5.1.4 Embedding linguistic in nonlinguistic pragmatics

Just as language recognition and articulation may be analyzed as a phylo- and ontogenetic specialization of contextual (nonverbal) recognition and action (cf. 4.1.3), respectively, linguistic pragmatics may be analyzed as a phylo- and ontogenetic specialization of nonlinguistic pragmatics.

5.1.5 Language as an organon

Embedding of linguistic pragmatics into nonlinguistic pragmatics:

PLATO (427(?)–347 BC)

KARL BÜHLER (1879–1963 AD)

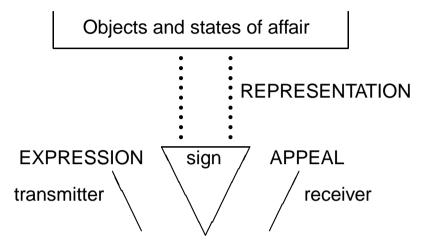
5.1.6 The tool character of language

Die Sprache ist dem Werkzeug verwandt; auch sie gehört zu den Geräten des Lebens, ist ein Organon wie das dingliche Gerät, das leibesfremde Zwischending; die Sprache ist wie das Werkzeug ein *geformter Mittler*. Nur sind es nicht die materiellen Dinge, die auf den sprachlichen Mittler reagieren, sondern es sind die lebenden Wesen, mit denen wir verkehren.

[Language is akin to the tool: language belongs to the instruments of life, it is an organon like the material instrument, a body-extraneous hybrid; language is – like the tool – a *purposefully designed mediator*. The only difference is that it is not material things which react to the linguistic mediator, but living beings with whom we communicate.]

K. Bühler 1934, p. XXI

5.1.7 Bühler's organon model



Representation refers to the language-based transfer of information. Expression refers to the way the transmitter produces the sign. Appeal refers to the way the sign affects the receiver beyond the bare content of the sign.

5.1.8 Shannon & Weaver's information theory 1949

Central notions besides transmitter and receiver are the band width of the channel, the redundancy and relative entropy of the codes, and the noise in the transmission. Its laws hold also in everyday conversation, but background noises, slurring of speech, hardness of hearing, etc., are not components of the natural communication mechanism.

5.1.9 Comparing organon model and CURIOUS (4.1.3)

The organon model describes the relation between the 'transmitter' and the 'receiver' from an external viewpoint and is therefore limited to immediate reference.

The SLIM model of CURIOUS describes the internal structure of the speaker-hearer and can therefore handle mediated reference in addition to immediate reference.

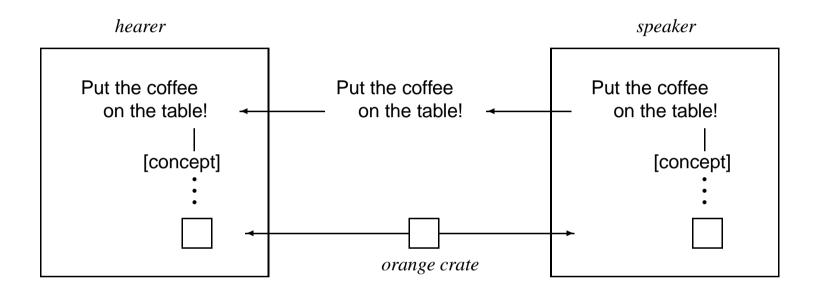
The organon function of 'expression' is to be located in component 5+ (language synthesis) of CURI-OUS.

The organon function of 'appeal' is to be located in component 1+ (language recognition) of CURI-OUS.

The organon function of 'representation' is performed by CURIOUS in the lexical, syntactic, and semantic components of the language-based database structure 2+ and interpreted in relation to the contextual database structure 2.

5.2 Pragmatics of tools and pragmatics of words

5.2.1 Nonliteral use of the word table: Principle of best match



5.2.2 Central question of linguistic pragmatics

How does the speaker code the selection and delimitation of the used subcontext into the sign and how can these be correctly inferred by the hearer?

5.3 Finding the correct subcontext

5.3.1 Postcard example

New York, December 1, 1998

Dear Heather,

Your dog is doing fine. The weather is very cold. In the morning he played in the snow. Then he ate a bone. Right now I am sitting in the kitchen. Fido is here, too. The fuzzball hissed at him again. We miss you.

Love, Spencer

5.3.2 Parameters of origin of signs (STAR-point)

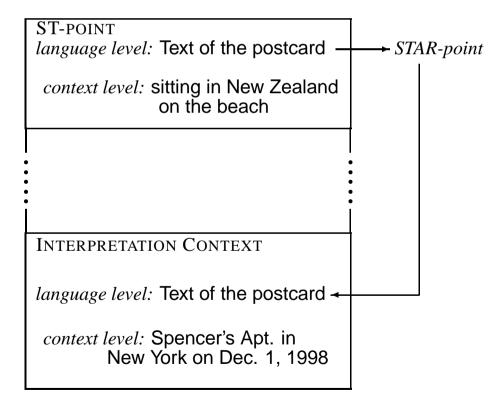
- 1. S =the Spatial place of origin
- 2. T =the **T**emporal moment of origin
- 3. A =the **A**uthor
- 4. R =the intended **R**ecipient.

5.3.3 Second principle of pragmatics (PoP-2)

The STAR-point of the sign determines its primary positioning in the database by specifying the *entry context* of interpretation.

5.3.4 Primary positioning in terms of the STAR-point

Heather's cognitive representation:



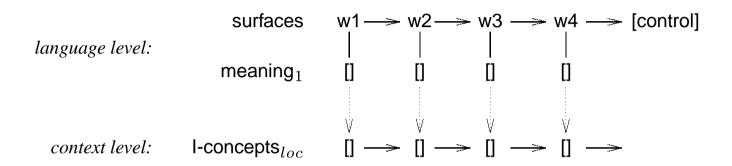
5.3.5 Fictitious STAR-point: Beginning of 'Felix Krull'

Indem ich die Feder ergreife, um in völliger Muße und Zurückgezogenheit – gesund übrigens, wenn auch müde, sehr müde . . .

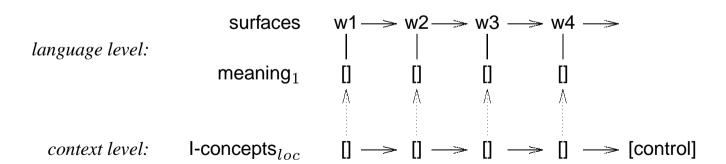
[While I seize the pen in complete leisure and seclusion – healthy, by the way – though tired, very tired]

5.4 Language production and interpretation

5.4.1 Schema of language interpretation (analysis)



5.4.2 Schema of language production (generation)



5.4.3 The time-linear structure of natural language signs

The basic structure of natural language signs is their *time-linear order*. This holds for the sentences in a text, the word forms in a sentence, and the allomorphs in a word form.

Time-linear means:

LINEAR LIKE TIME AND IN THE DIRECTION OF TIME.

5.4.4 De Saussure's second law: *linear character of signs*

SECOND PRINCIPE; CARACTÈRE LINÉAIRE DU SIGNIFIANT.

Le signifiant, étant de nature auditive, se déroule dans le temps seul et a les caractères qu'il emprunte au temps: a) représente une étendue, et b) cette étendue est mesurable dans une seule dimension: c'est une ligne.

Ce principe est évident, mais il semble qu'on ait toujours négligé de l'énoncer, sans doute parce qu'on l'a trouvé trop simple; cependent il est fondamental et les conséquences en sont incalculables; son importance est égale à celle de la première loi. Tout le méchanisme de la langue en dépend.

[The designator, being auditory in nature, unfolds solely in time and is characterized by temporal properties: (a) *it occupies an expansion*, and (b) *this expansion is measured in just one dimension*: it is a line.

This principle is obvious, but it seems that stating it explicitly has always been neglected, doubtlessly because it is considered too elementary. It is, however, a fundamental principle and its consequences are incalculable. Its importance equals that of the first law. All the mechanisms of the language depend on it.]

F. de Saussure 1913/1972, p. 103

5.4.5 Third principle of pragmatics (PoP-3)

The matching of word forms with their respective subcontexts is incremental whereby in production the elementary signs follow the time-linear order of the underlying thought path while in interpretation the thought path follows the time-linear order of the incoming elementary signs.

5.5 Thought as the motor of spontaneous production

5.5.1 The once famous motto of behaviorism

THOUGHT IS NONVERBAL SPEECH

5.5.2 The motto of the SLIM theory of language

SPEECH IS VERBALIZED THOUGHT.

Thought is defined as the time-linear navigation of a focus point through the concatenated propositions of the internal database.

5.5.3 The role of time-linear order for the semantic interpretation

Original order:

In the morning he played in the snow. Then he ate a bone.

Inverted order (incoherent):

Then he ate a bone. In the morning he played in the snow.

5.5.4 Alternative navigation through propositional content (anti-temporal sequencing)

In the morning Fido ate a bone. Before that he played in the snow.

5.5.5 Modification of interpretation by changing sequencing

- a. 1. In February, I visited the Equator. 2. There it was very hot. 3. In March, I was in Alaska. 4. There it was very cold.
- b. 3. In March, I was in Alaska. 2. There it was very hot. 1. In February, I visited the Equator. 4. There it was very cold.

5.5.6 The time-linearity of speech

Speech is irreversible. That is its fatality. What has been said cannot be unsaid, except by adding to it: to correct here is, oddly enough, to continue.

R. Barthes, 1986, p. 76