

Meaning-text theory: Lexical Functions (Igor Mel'čuk)

Course

Semantics: The Structure of Concepts

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Meaning-text theory: general outline 1

Any act of linguistic communication is believed to involve three major entities:

- (a) A content to be communicated by linguistic signals (MEANING)
- (b) A complex signal (acoustic or graphical), to be used in order to communicate the content (TEXT)
- (c) A MAPPING (set of correspondences) between meanings and texts:
NATURAL LANGUAGE



Meaning-text theory: general outline 2

- Meanings and texts are taken to be **formal objects** describable by means of formal languages and specifiable by a formal device.
- The **set of meanings** and the **set of texts** are **infinite**; the **set of correspondences** between them (formal rules) is **finite**.
- The **correspondence** between a specific set of meanings and a specific set of texts is, as a rule, **many-to-many**. One meaning can be expressed by a few texts (synonymy), and a text can express several meanings (ambiguity).

(1) The Food and Drug Administration has seriously cautioned expectant mothers to avoid one of life's simple pleasures: a cup of coffee.

(2) The FDA has strongly warned pregnant women against one of the small joys of life: drinking coffee.

(3) The FDA has issued an earnest warning to all women expecting a baby: they should not indulge in consuming coffee, which is among life's simple joys.

Are these exactly synonymous?

Meaning-text theory: general outline 2

- MTT deals with **strictly linguistic meaning** – the shallowest, literal meaning of utterances which can be arrived at solely on the basis of linguistic knowledge, without any reference to the extralinguistic context or common sense.
- In the MTT, meaning is no more than the invariant of synonymous paraphrases. (**Recall WordNet**)
- Meaning is taken to be **directly accessible to speakers**, i.e., to be a part of their intuitive knowledge of their language; therefore, meaning belongs to the linguist's data.

Theory with its own dictionaries:

- *Tolkovo-kombinatornyj slovar' sovremennogo russkogo jazyka*, (Mel' čuk and Zholkovsky, 1984)
- DECFC (*Dictionnaire explicatif et combinatoire du français contemporain*)

Lexical Functions 1

- A lexical function (LLFF) is a dependency **f** that associates with a given lexical unit **L** (its argument or key word) a set $\{L_i\}$ of (more or less) **synonymous lexical units** (its value) that express, contingent on **L**, a specific meaning associated with **f**:
$$\mathbf{f}(L) = \{L_i\}$$

Specific requirements on lexical functions:

1. A given relation has to embrace a relatively large number of pairs of words;
2. A given relation can be expressed in various ways, which implies the existence of a phraseological relation between the arguments and their values

Ex.: **Centr** ('the center, culmination of')

Centr(*crisis*) = the peak [of the crisis]

Centr (*desert*) = the heart [of the desert]

Centr (*forest*) = the thick [of the forest]

Centr (*glory*) = summit [of glory]

Centr (*life*) = prime [of life]

Lexical Functions 2

- Paradigmatic LFs: derivative, related with the selection of adequate value of the key word
- Syntagmatic LFs: combinatorial, encode the collocational potential of the key word

Examples of paradigmatic LFs:

Syn ('synonym')

Syn (to telephone) = to phone

Syn \supset ('more specific synonym')

Syn \supset (to fire upon) = to shell

Syn \subset ('less specific synonym')

Syn \subset (to modify) = to change

Syn \cap (intersecting meaning)

Syn \cap (to escape) = to elude, to avoid

Paradigmatic LFs:

Able ('such that it can L easily', 'such that it can be L-ed easily')

Able1 (*to cry*) = *tearful*

Able2 (*to prove*) = *provable*

Anti ('antonym, term that results from the negation of an internal element of the argument')

Anti (*to give*) = *to take back*

Anti (*wife*) = *girlfriend, mistress*

V₀ ('verb derived from V')

V (*analysis*) = *to analyze*

S₂ ('noun in the place of the second actant of the argument')

S2 (*to teach*) = (*subject*) *matter* [in high school]

S2 (*letter*) = *addressee*

Syntagmatic LFs:

Pred ('to be L')

Pred (*drunkard*) = *to drink*

Pred (*close*) = *to neighbor*

Magn ('very', 'to a high degree', 'intense(ly)')

Magn (*to laugh*) = *heartily, one's head off*

Magn (*patience*) = *infinite*

Magn (*thin* [person]) = *as a rake*

Ver ('as it should be', 'meeting intended requirements')

Ver (*punishment*) = *well-deserved*

Ver (*demand*) = *loyal*

Ver (*walk*) = *steadily*

Verbal syntagmatic LFs:

Oper, Caus, Func – “light verbs”

Oper (takes the argument as its DO)

Oper1 (*support*) = *to lend*

Oper2 (*support*) = *to receive*

Func (takes the argument as its subject)

Func1 (*proposal*) = *comes, stems* (from N)

Func2 (*proposal*) = *concerns* (N)

Caus (do something so that a situation begins occurring)

CausOper1 (*opinion*) = *to lead* [N to]

CausFunc0 (*crisis*) = *to bring about*

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