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-kombinatoryj 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 \( f \):

\[
f(L) = \{L_i\}
\]

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’)

- \( \text{Centr}(\text{crisis}) = \text{the peak [of the crisis]} \)
- \( \text{Centr}(\text{desert}) = \text{the heart [of the desert]} \)
- \( \text{Centr}(\text{forest}) = \text{the thick [of the forest]} \)
- \( \text{Centr}(\text{glory}) = \text{summit [of glory]} \)
- \( \text{Centr}(\text{life}) = \text{prime [of life]} \)
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’)**

\[ \text{Syn (to telephone)} = \text{to phone} \]

**Syn⊃ (‘more specific synonym’)**

\[ \text{Syn⊃ (to fire upon)} = \text{to shell} \]

**Syn⊂ (‘less specific synonym’)**

\[ \text{Syn⊂ (to modify)} = \text{to change} \]

**Syn∩ (intersecting meaning)**

\[ \text{Syn∩ (to escape)} = \text{to elude, to avoid} \]
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

$V_0$ (‘verb derived from $V$’)
- $V$ (analysis) = to analyze

$S_2$ (‘noun in the place of the second actant of the argument’)
- $S_2$ (to teach) = (subject) matter [in high school]
- $S_2$ (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
Bibliography


