PHRASALEX III

PHRASEOLOGICAL APPROACHES TO LEXICOGRAPHY

PHRASEBASE TALK

Introducing PhraseBase: A linguistic information System for language learners, translators and for NLP

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Overview

1. Structure and scope of the PhraseBase project
2. People
3. Theoretical foundations and development
4. Methodology and data

1. Structure and scope of the PhraseBase project

PhraseBase is a **Linguistic Information System** consisting of three main components,

- a dictionary,
- an ontology/thesaurus and
- a grammar,

primarily for second language acquisition and natural language processing (NLP)

PhraseBase → *phraseological database*

The theoretical framework behind PhraseBase is phraseological & cognitivist → Sinclair‘s theory, Hanks‘s formalisation, DiMuccio-Failla‘s further development

PhraseBase includes a PAD (Phrase-based Active Dictionary) → currently: multi-monolingual dictionaries for IT, DE, EN

Contrastive perspective: search for partial or total equivalence of frames (typical situations) across languages and cultures

Ideal user: advanced learner, translator

PhraseBase

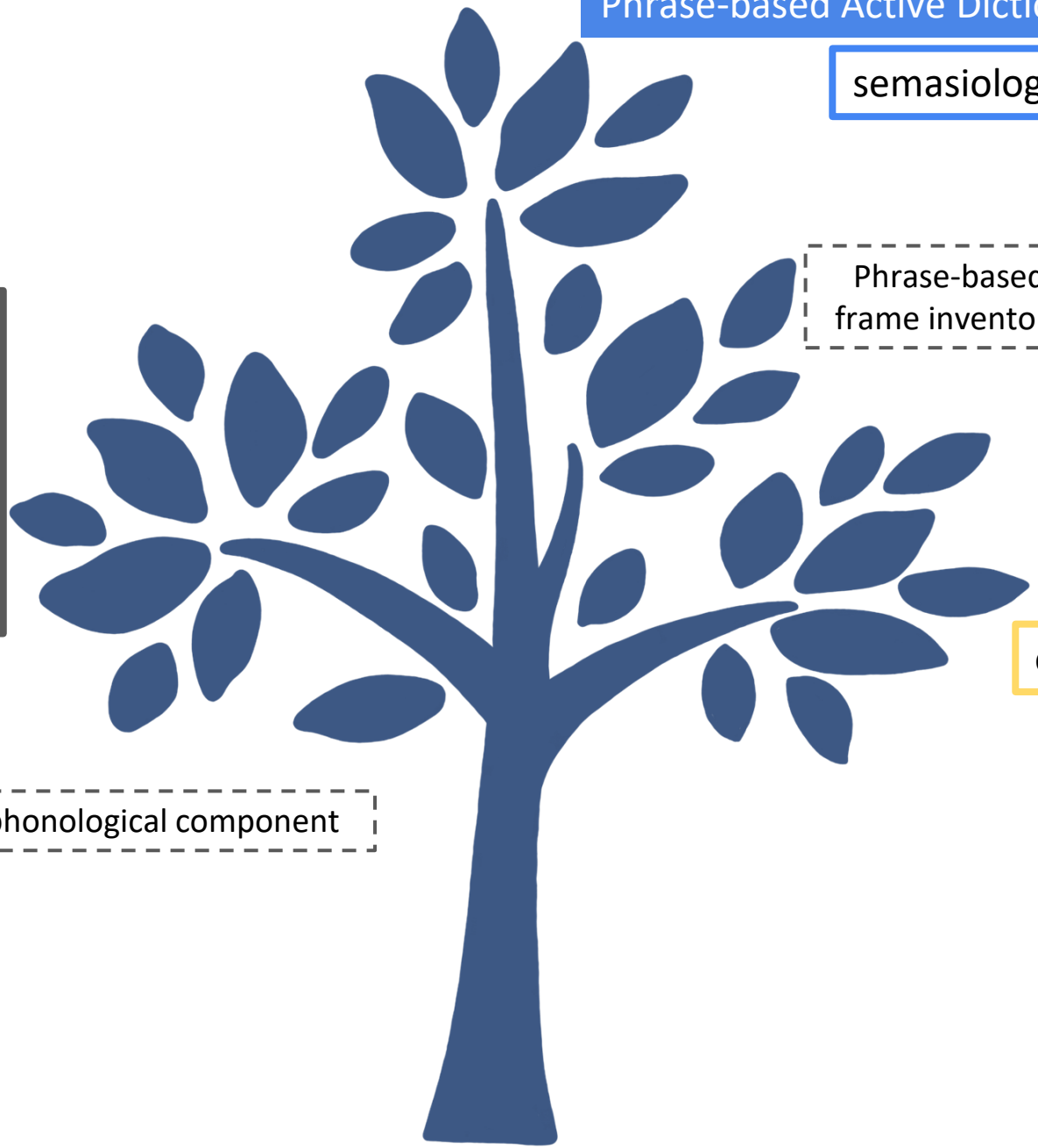
PAD
Phrase-based Active Dictionary

semasiological component

Phrase-based
frame inventory

inventory of
constructions
(constructicon)

grammatical
component



PHRASEnet
Phrase-based Wordnet

onomasiological component

phonological component

2. People

LAURA GIACOMINI (Innsbruck, previously Heidelberg/Hildesheim)	→ PI, project initiator, methodological framework, data modelling, data analysis
PAOLO DI MUCCIO-FAILLA (Hildesheim)	→ project initiator, theoretical and methodological framework, data modelling/programming, data analysis
ADRIANA ORLANDI (Modena and Reggio-Emilia)	→ organiser of PhrasaLex I, first experiments on FR
EVA LANZI (Heidelberg)	→ data analysis
SARAH PIEPKORN (Hildesheim)	→ data analysis, project on aspectuality of verbs
FRITZ KLICHE (Hildesheim)	→ NLP approaches to data analysis
LAURA REBOSIO (Innsbruck)	→ data analysis, project on ostensive, e.g. frame-based definitions
LINDA PROSSLINER (Innsbruck)	→ data analysis, project on idiomatic expressions for children
GIULIANO GIAMBERTONE (Innsbruck)	→ DB/web programming

3. Theoretical foundations and development

Session 1 on Thursday

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The lexicon of a language is phraseological in nature.

→ Semantic ambiguity can be reduced if one takes in consideration the context in which words are used.

→ Chunks of linguistic expressions – and not single words – are identified as lexical units.

→ Meaning distinctions can be (easily) ascertained because they correspond to *word usage patterns*.

Sinclair (cf. 2004: 133): *not isolated words, but **words in their contextual patterns of normal usage** are the most common lexical units of language*.

Sinclair (1991: 65): *It seems that there is a strong tendency **for sense and syntax to be associated***.

Hanks (cf. 2013: 192): *Normal collocations are statistically significant in a corpus analysis. Asking for the meaning of a word turns out in asking for the **meaning of a pattern**. Words in isolation have only potential meanings.*

Hanks (cf. 2013: 5): *In a better dictionary, it should be listed what is linguistically (semantically) normal and not, what is ever semantically possible. A distinction should be made between **normal meaning variations** and **exploitations**.*

DiMuccio-Failla & Giacomini (2017a,b)

About: ***word usage patterns***

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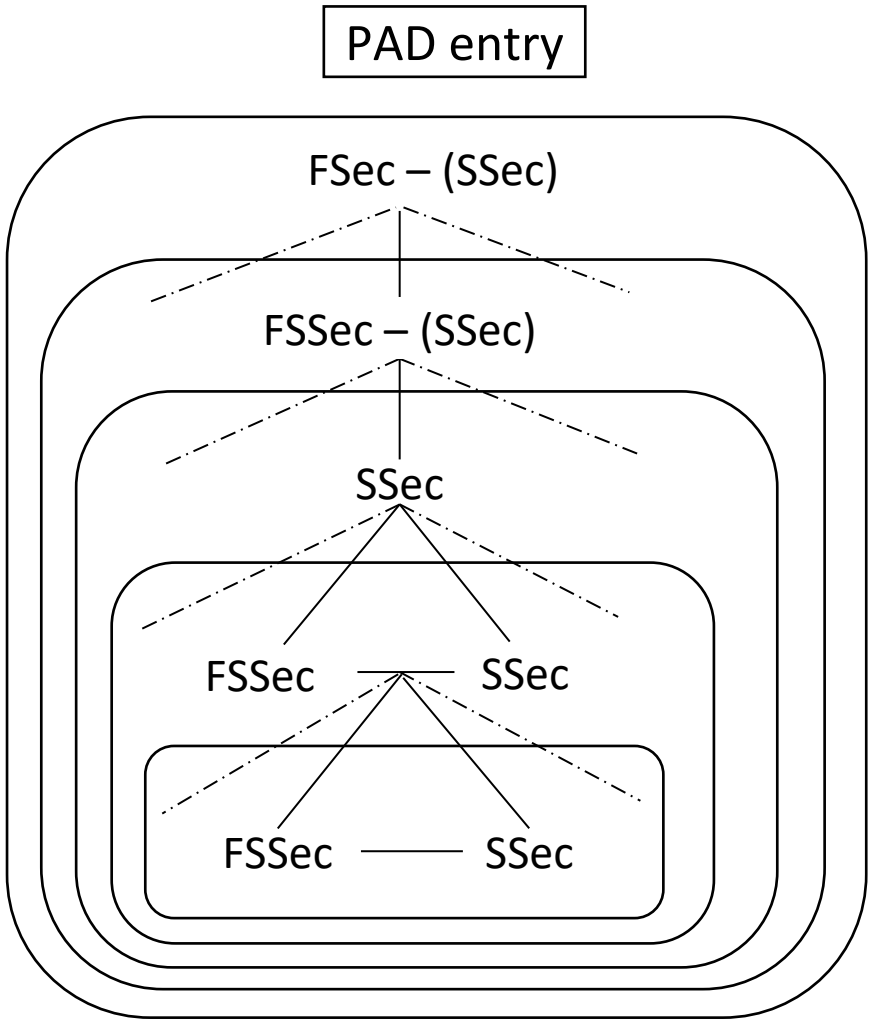
Examples: (1) so. puts sth. in a particular place or position ← *I put my phone in your bag.*
(2) so. puts so. somewhere ← *Dad puts the children to bed.*
(3) so. puts sth. on so. ← *The boss will put extra pressure on you.*

- A ***normal*** *word usage pattern* generally has only one meaning.
- *Normal* means ***typical***; typical, recurring patterns are the most frequent ones in a corpus; a *normal* meaning is the common, conventional meaning associated traditionally with that pattern within a specific linguistic community.
- A normal word usage pattern is determined by **four features**: its collocation, its colligation, its semantic preference and its semantic prosody.
- **Intuition** and **introspection** of the lexicographer are crucial in analyzing the data and evaluating evidence.

The PAD microstructure (1)

DiMuccio-Failla & Giacomini (2022)

FSec = Formal Section
FSSec = Formal-Semantic Section
SSec = Semantic Section



The PAD microstructure (2)

agree \ə ˈgriː\

VERB, REGULAR

to AGREE ‹WITH sb. / s. opinion› ‹ON/ABOUT s.e.› [opinion]

/ABSOLUTELY/TOTALLY/STRONGLY/CERTAINLY / NOT NECESSARILY / NOT QUITE

▶ to think that sb. is right ‹on/about s.e.›

~

▶ to share s. opinion ‹on/about *›

to AGREE (with each other) ON s. decision ‹THAT…›/‹TO do sth.› [expr. of decision]

|TOGETHER | BETWEEN ONESELVES | MUTUALLY [at a particular moment]

▶ ⌜to decide to do sth.⌝ together

~

▶ to choose sth. together

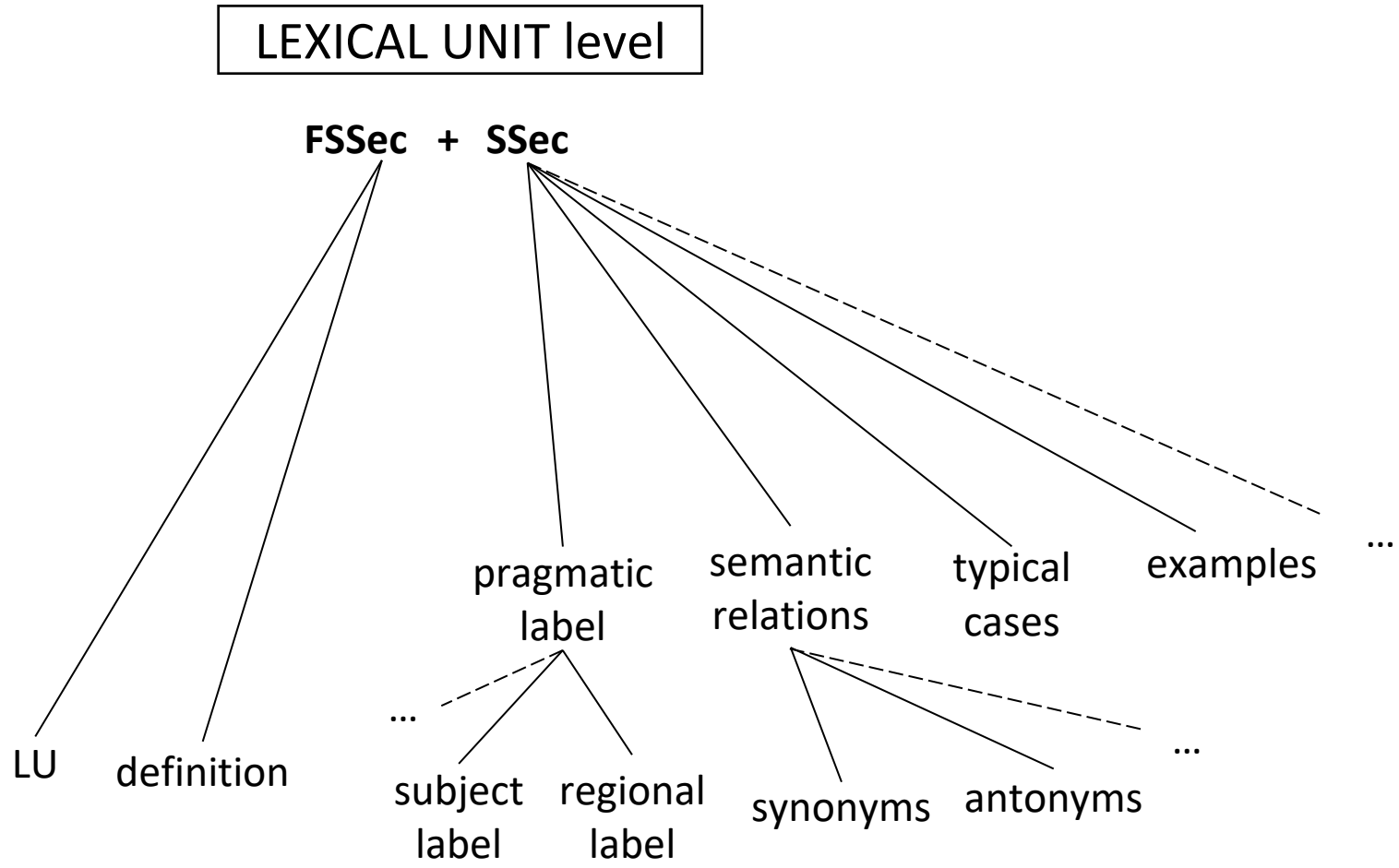
1 to AGREE ‹WITH a given person› …

… ■ **‹ON a given SUBJECT/TOPIC/ISSUE› OR ‹ABOUT a certain entity›** ○ **to think that a given person's opinion/assessment ‹on ·› OR ‹about ·› is right**

• EXAMPLES: ① … • SYNONYMS: ① [FML.] to CONCUR ‹WITH ·› ‹ON/ABOUT ·› ② to SHARE a given person's OPINION ‹ON/ABOUT ·› ③ [FML.] to BE IN AGREEMENT ‹WITH ·› ‹ON/ABOUT ·› ④ to THINK THE SAME ‹AS a given person› ‹ON/ABOUT ·› ⑤ [FML.] to BE OF THE SAME OPINION=MIND ‹AS a given person› ‹ON/ABOUT ·› ⑥ to HAVE THE SAME OPINION ‹AS a given person› ‹ON/ABOUT ·› • ANTONYMS: ① to DISAGREE ‹WITH ·› ‹ON/ABOUT ·› ② [FML.] to NOT SEE EYE TO EYE ‹WITH ·› ‹ON/ABOUT

The PAD microstructure (3)

DiMuccio-Failla & Giacomini (2022)



Cognitivist account on polysemy (cf. DiMuccio-Failla: forthcoming)

- Brugman & Lakoff (1988: 478): in a speaker's mind, the related senses of a word are organised in a radial set around one or more **prototypical concepts**. Each individual sense is a conceptual category organised around prototypical members.

  Example: The central sense of *over* combines elements of both *above* and *across.*

  → The links between the senses are instances of metonyms, metaphors, image-schema transformations, shifts within a semantic frame, ect. The boundaries of a single sense need not to be clear-cut. The lexical network is a **network** of minimally differing senses (Norvig & Lakoff 1987: 195).

- Johnson (1987): **embodiment** of mental concepts: *Image-schemata are structures for organizing our experience and comprehension* (cf. p. 29).

Presentation of word meaning through ostensive aids (PhD project)

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GOALS: 1) issuing guidelines for a systematic identification of polysemous senses and ordering them in the entry according to semantic-cognitive principles, with 'core/prototypical meaning' first.

→ syntactic constructions and cognitive representations of meaning are often at odds

→ what is the prototypical meaning?

→ can the user easily find the linguistic expression for the concept he/she has in mind? (*active*)

2) presenting word meaning through ostensive aids, e.g. phrase-based pictorial frames

→ what kind of visual aids are suitable for which words?

→ pictures have, like prototypical concepts, no boundaries

→ implementing AI?

4. Methodology and data

Session 2 on Thursday

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- Gathering collocations from corpora, general dictionaries, collocation dictionaries, …
- Grouping collocations according to their colligation and their meaning → search for appropriate semantic types
- Constant evaluation and introspection: selection of typical cases, examples, ect.
- Compiling the entry

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