SELEXENY
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Lexical Functions: The Naked Truth

ALAIN POLGUÈRE – UNIVERSITÉ DE LORRAINE, CNRS, ATILF

An editorial project with **Igor Mel'čuk** [OLST, Université de Montréal]

Title	***Lexical Functions: The Naked Truth***
Format	**Short (< 200 pages) open-access monograph**
Content	**Extensive, self-sufficient presentation of lexical functions**
Mode	**Pedagogical, but not popularizing**
Status	**Almost finalized – Draft available on demand**

1 What do we (roughly) mean by *lexical function* [LF]?

Knowing a lexical unit → Knowing lexical relations

- Speakers have the ability to navigate through the lexicon exploiting **lexical relations**
- The smoother the navigation, the more fluent you are in the language
- Cf. relational **mediostructure** of dictionaries [Gouws & Prinsloo 1998]

Entry **sorrow** [1] **1** in the online *Longman Dictionary of Contemporary English*

sor·row[1] /ˈsɒrəʊ $ ˈsɑːroʊ, ˈsɔː-/ ●○○ **noun**

1 [**uncountable**] a feeling of great sadness, usually because someone has died or because something terrible has happened to you → **grief**

great/deep sorrow

a time of great sorrow

sorrow at

He expressed his sorrow at my father's death.

sorrow for

Claudia felt a deep pang of sorrow for the woman.

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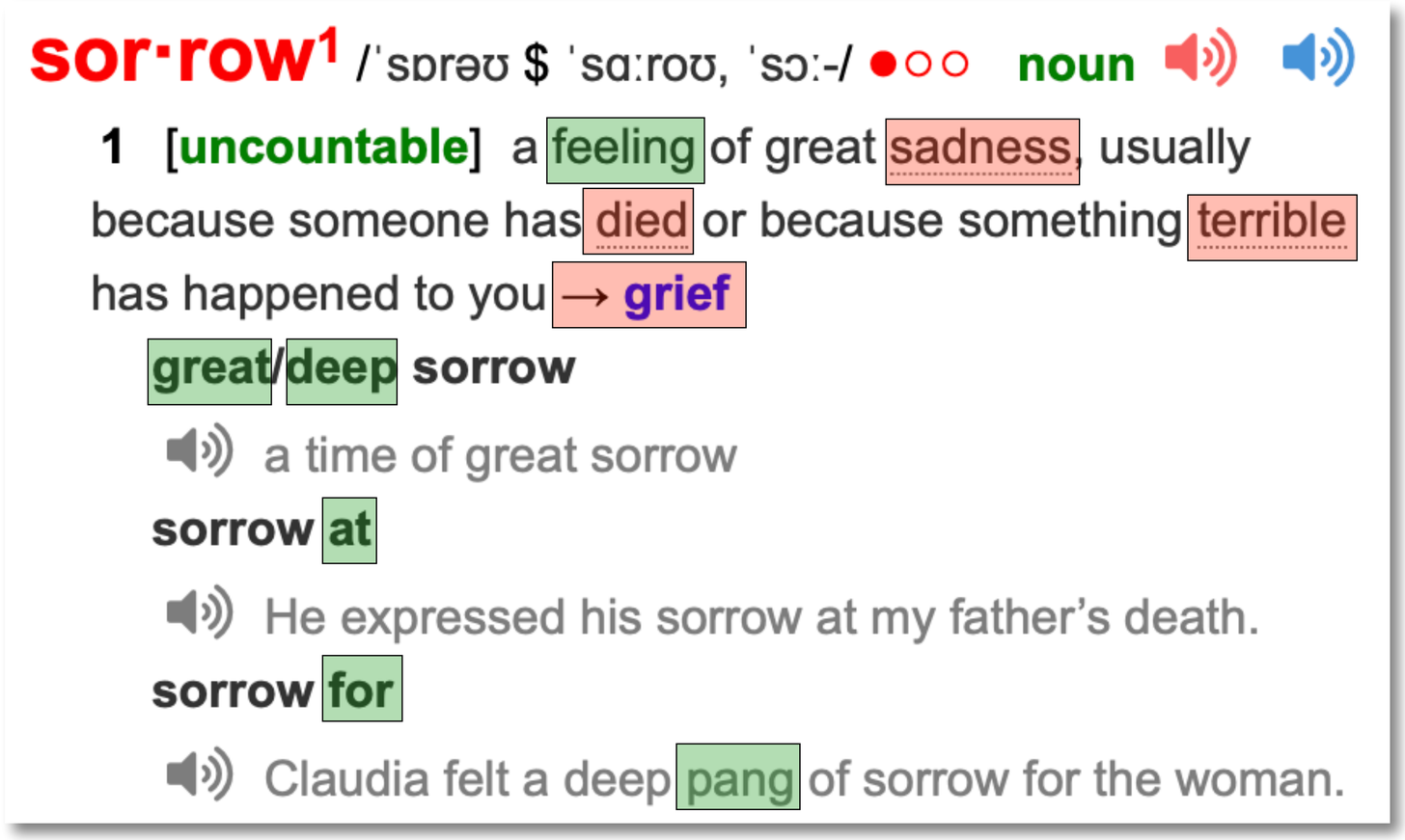

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Recurrent lexical relations

- Some lexical relations are omnipresent in natural languages
- See *Longman Dictionary*'s entry for **sorrow**[1]**1**

1.	`(Quasi-)synonym`	***sorrow***[1]**1** ↦ ***sadness*, *grief***
2.	`Generic term`	***sorrow***[1]**1** ↦ ***feeling***
3.	`Singulative`	***sorrow***[1]**1** ↦ ***pang of ~***
4.	`Intensifier`	***sorrow***[1]**1** ↦ ***great*, *deep***
5.	Lexically bound prepositions	***sorrow***[1]**1** ↦ ***at*, *for***

Lexical functions [**LFs**] are a formal theoretical and descriptive tool that accounts for the first four types of relations

1 What do we (roughly) mean by *lexical function* [LF]?

What makes LFs so special?

- Not just a list of recurrent lexical relations
- Repository of a rather small set of basic **universal** relations
  - Approximately 66 **simple standard LFs**
  - Organized as a **formal system**
    - Interconnected
    - Can be combined and computed on
  - Participate in **lexicalization** (and syntaxization) within the **semantics-syntax interface**
  - Participate in **universal paraphrasing** [Milićević 2007]

The problem with LFs

- For those who do use LFs – in lexicology, lexicography, grammar writing, language teaching, … –, they prove extremely useful (explanation, prediction, …)
- But only a bunch of happy few fully master the **notion** of LF and the **system** of LFs
  - Only superficial comprehension
  - Often cited, but barely used
  - Only a couple of LFs are accessible to the "general public" in language sciences – **`Syn`** 'synonym', **`Anti`** 'antonyn', **`Magn`** 'intensifier', …
- Why and how to remedy this?

Strategy: structure of the book

Ch. 1 Presentation of the book

Ch. 2 Preliminary linguistic notions

Ch. 3 Notion of lexical function [LF]

Ch. 4 Paradigmatic lexical functions

Ch. 5 Syntagmatic lexical functions

Ch. 6 Lexical networks

Additional content Appendix: sample lexicographic article, Index of notions, Index of LFs

Ch. 2 Preliminary linguistic notions

Main reasons why it seems such a difficult notion

- Presupposes the mastering of a significant set of **preliminary notions**

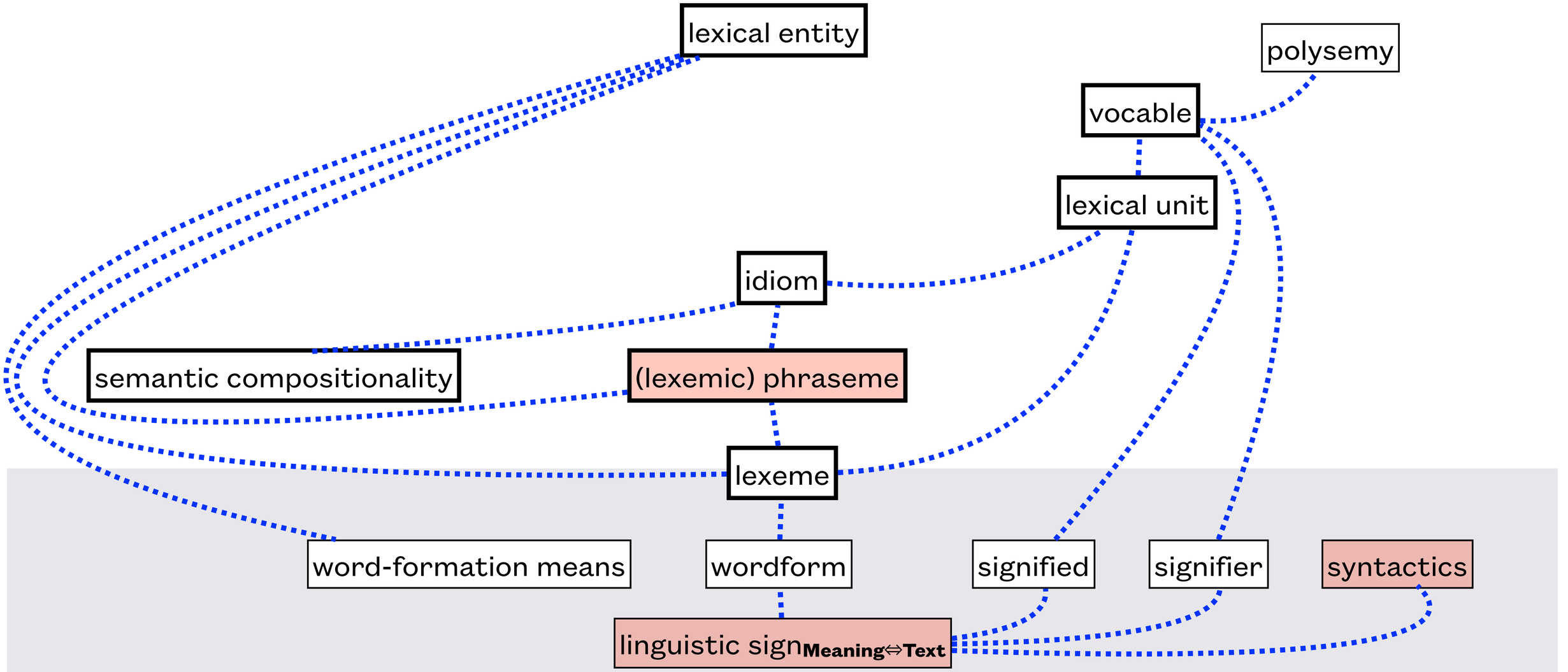
  Notion = < Concept, Term >

- From almost all modules of language organization [cf. Ch. 2]

  1. **Lexical** notions – types of **lexical entities**
  2. **Semantic** notions – **predicative** analysis and representation of **lexical / utterance meanings**
  3. **Syntactic** notions – **Semantics ⇔ Dependency syntax correspondence**

- Let's take a look at these preliminary notions

Building of lexical notions ⇒ Terminology and (formal, writing, ...) conventions



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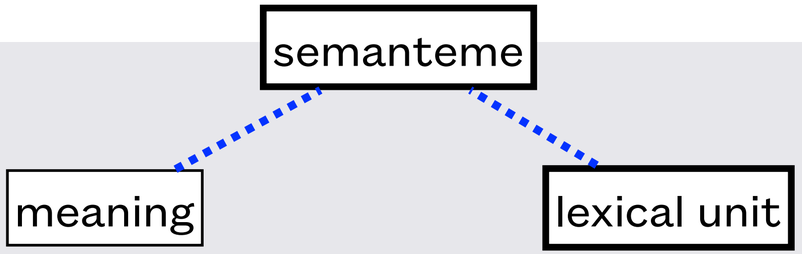

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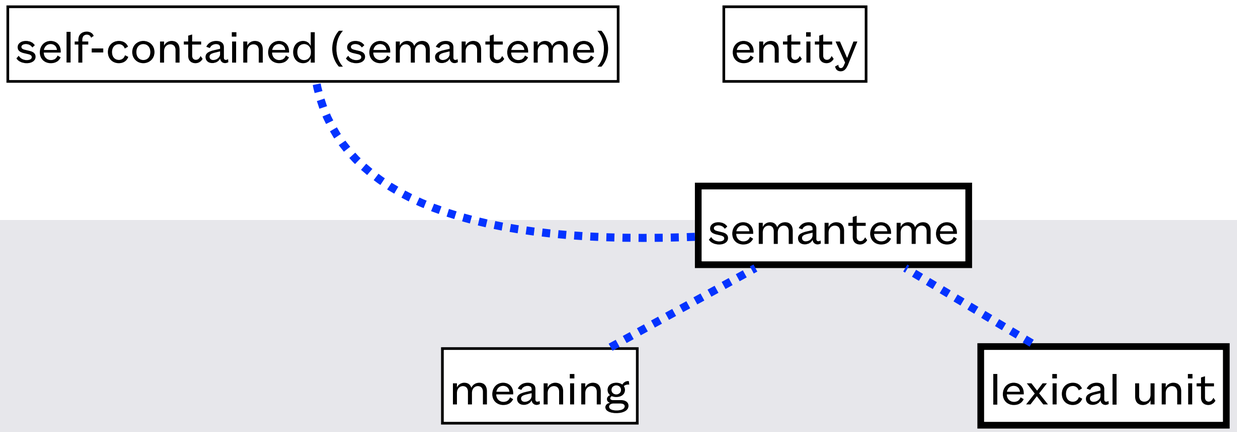

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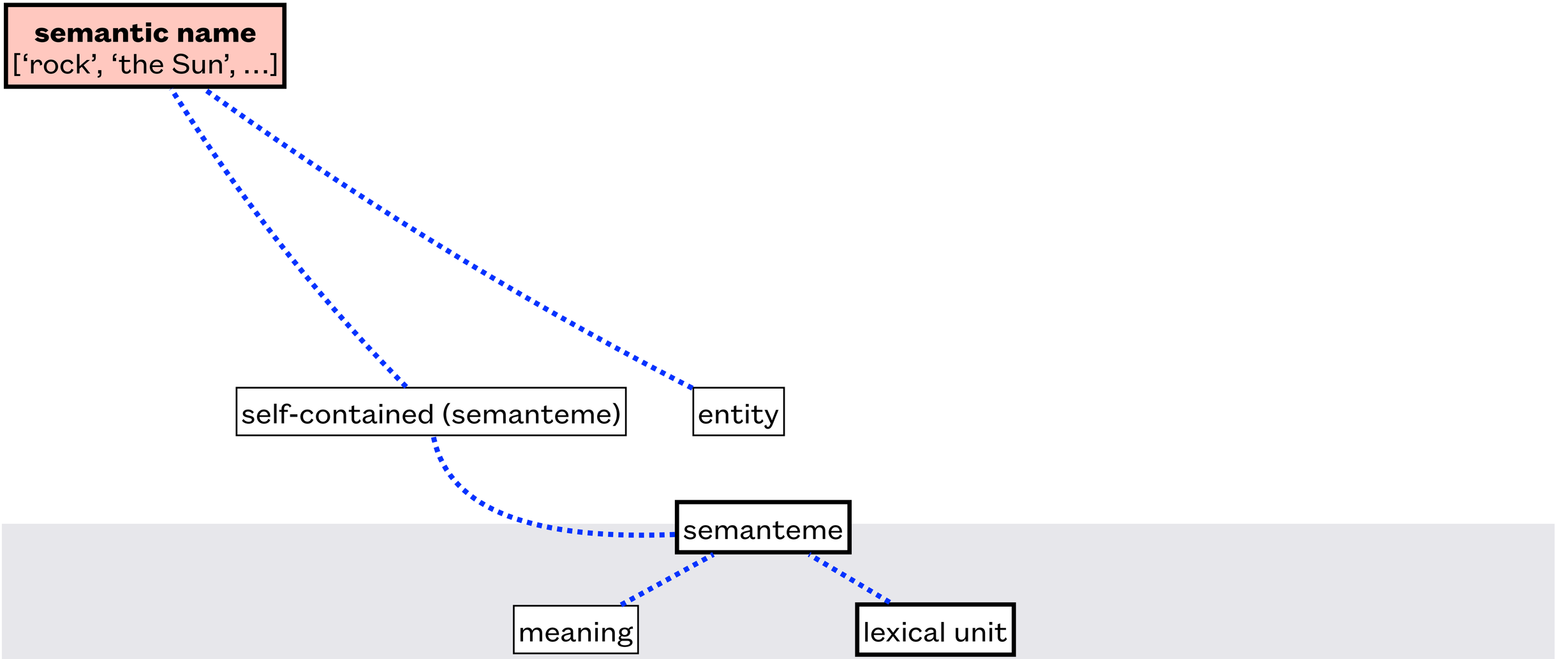

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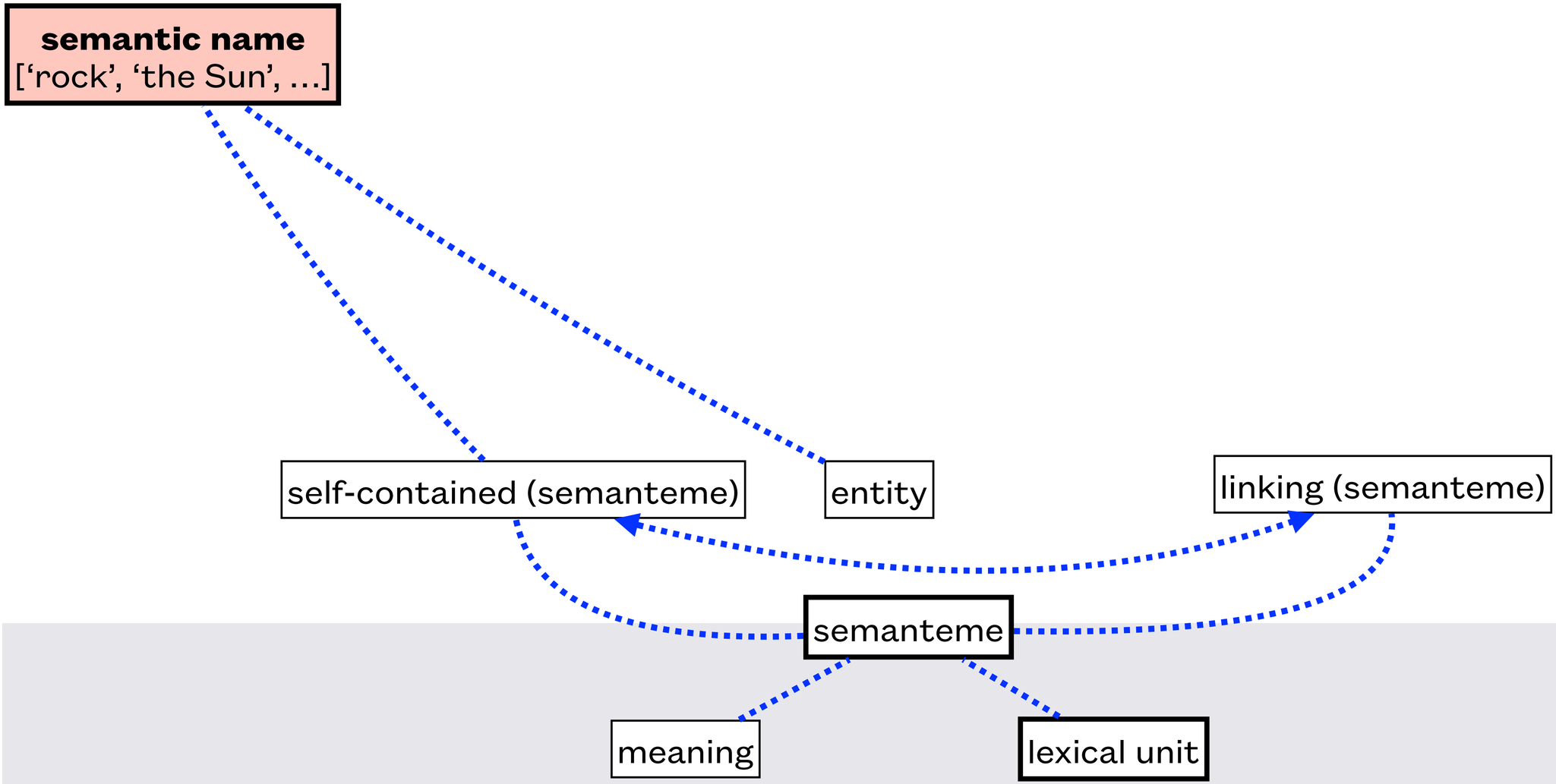

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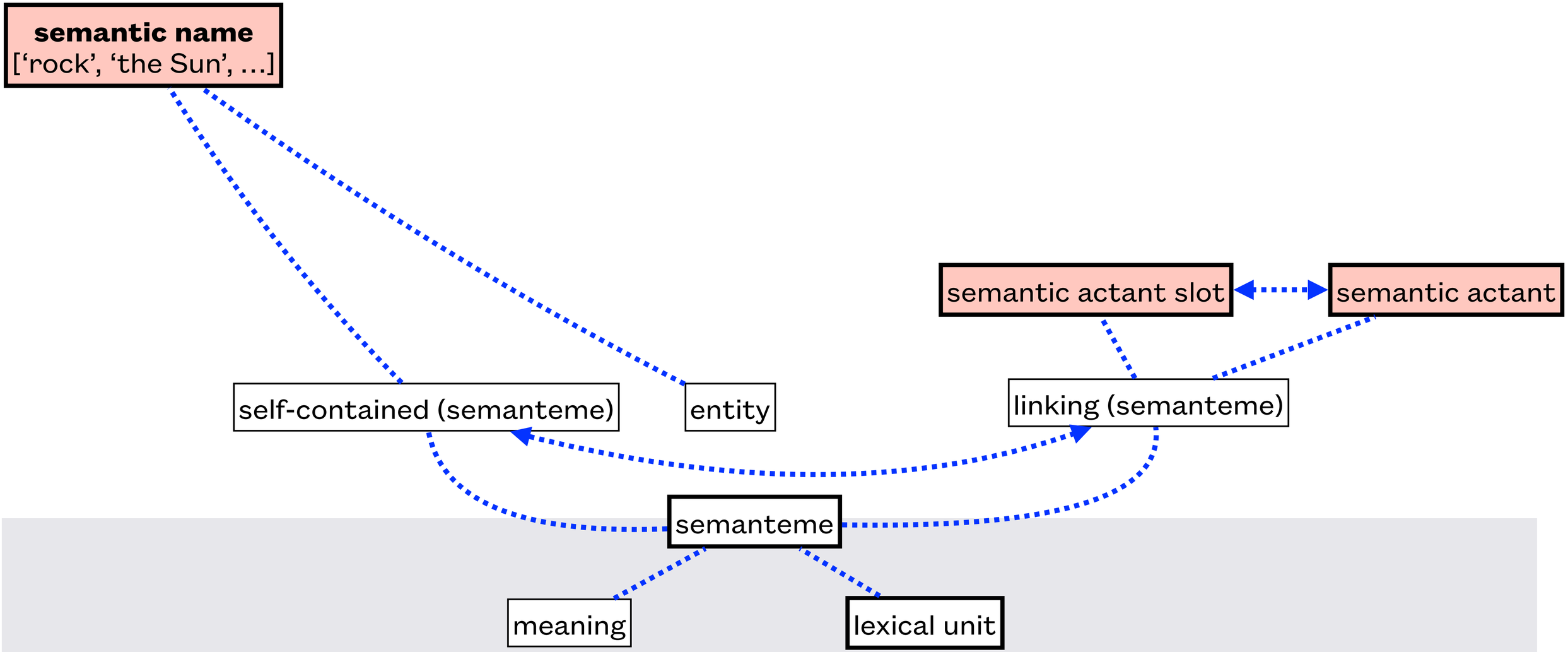

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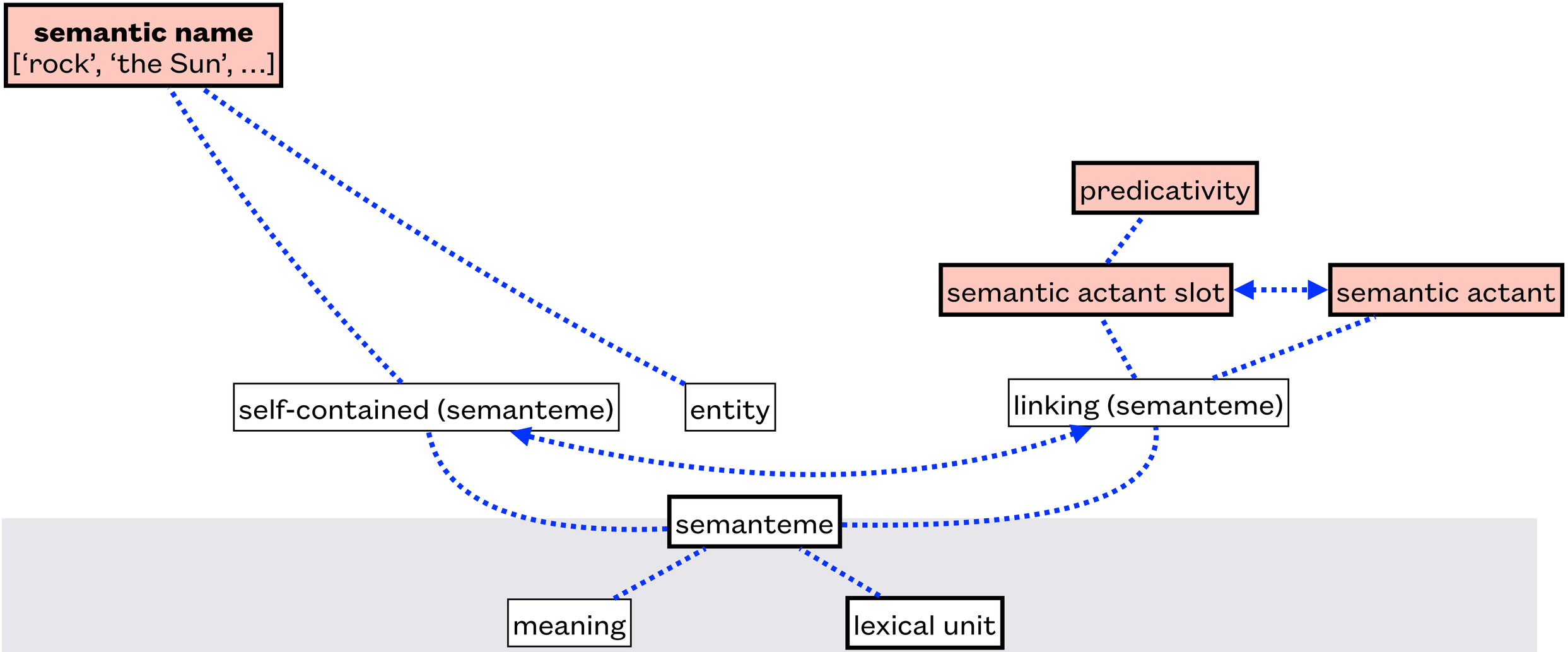

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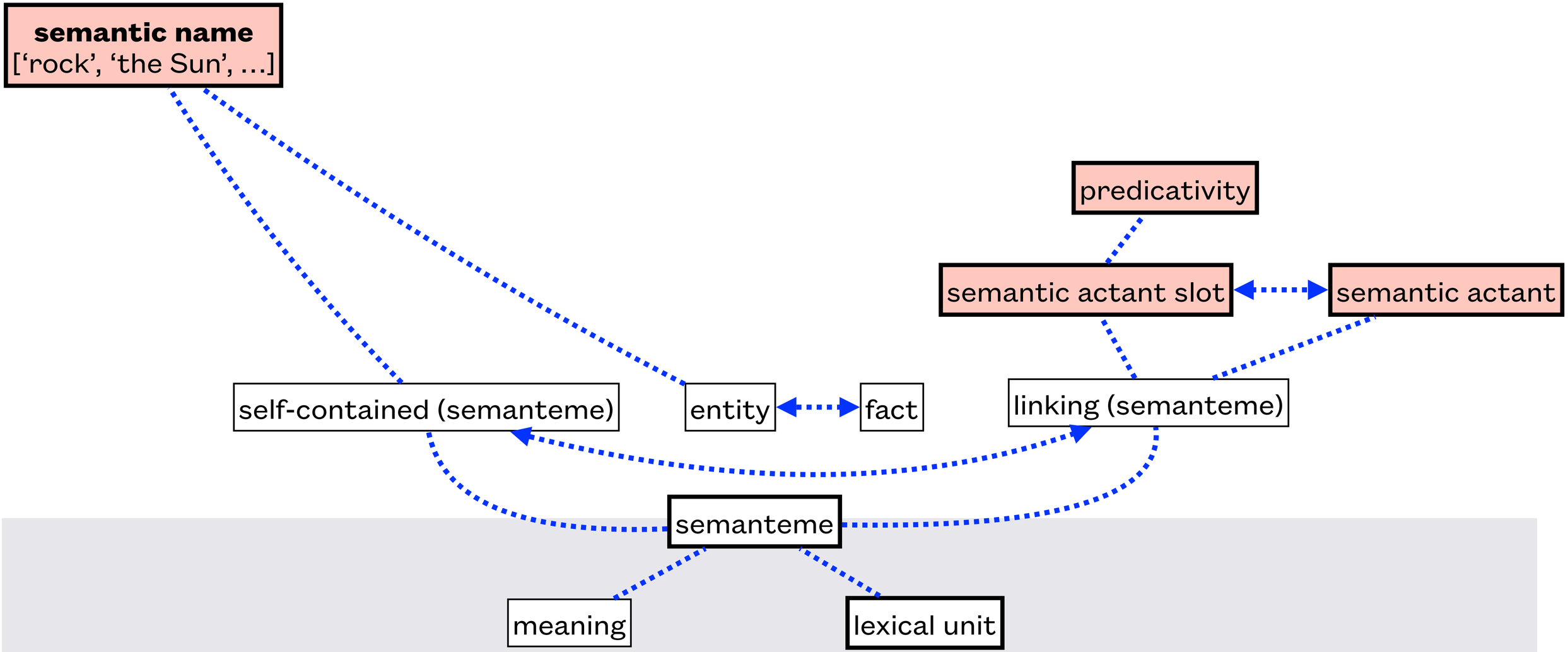

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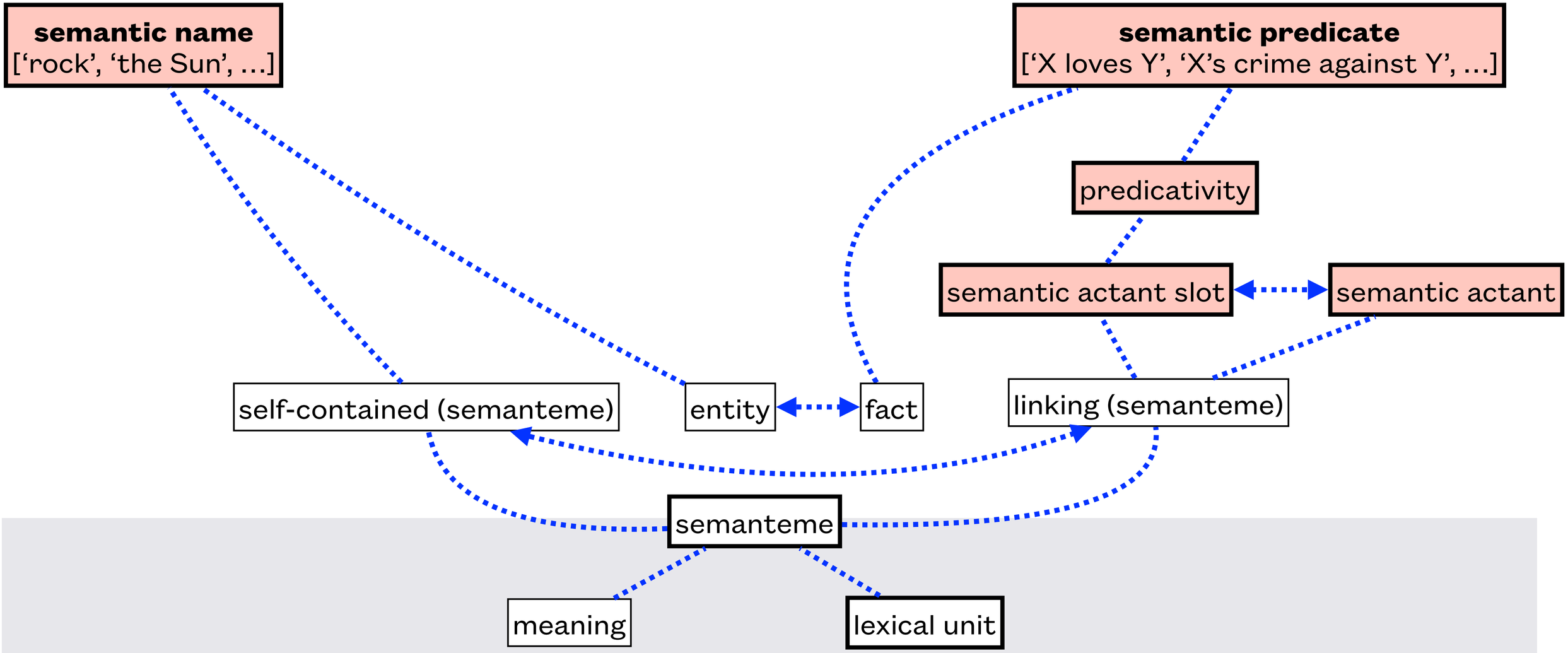

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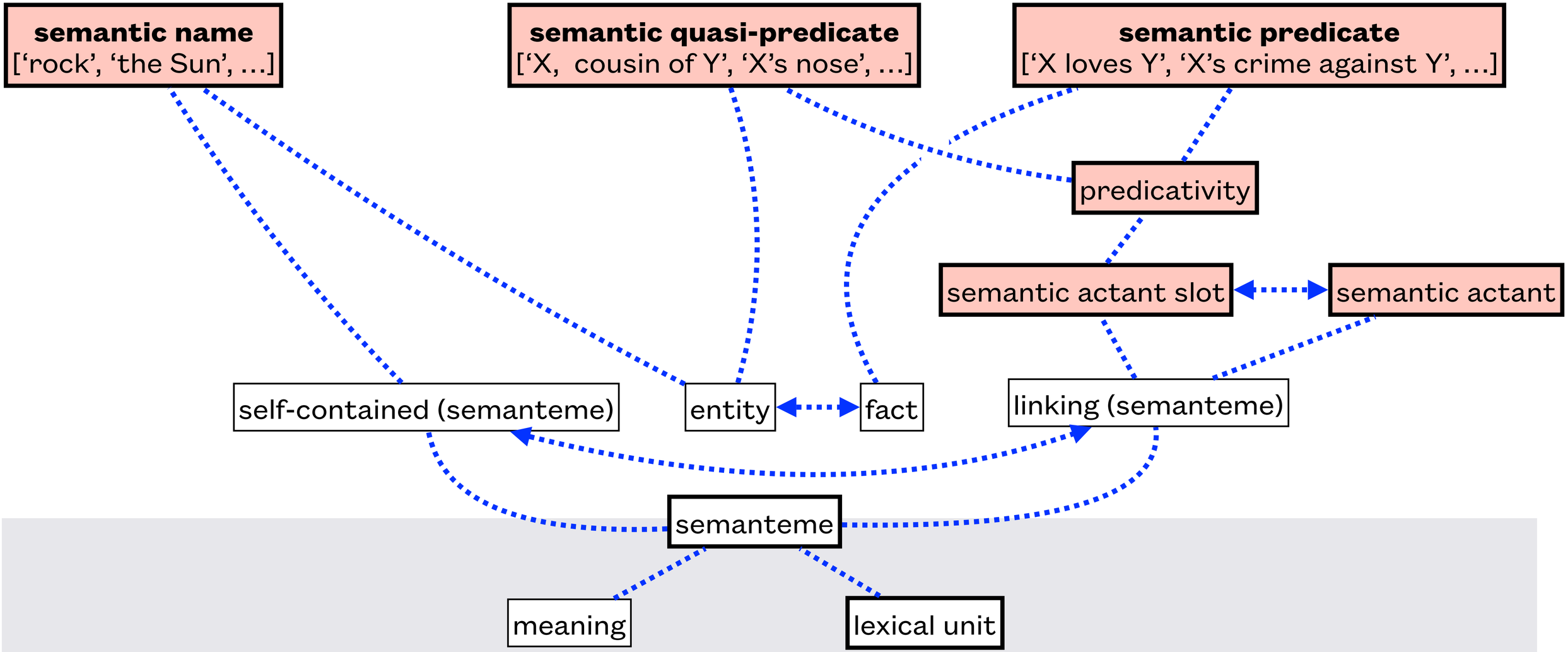

Syntactic notions

- Potentially a lot
- Focus on
  - Meaning⇔Text **syntactic structures** [**SyntS**] ⇒ **Dependency syntax**
  - Two-level dependency syntax: **deep syntax** [**DSynt**] *vs.* **surface syntax** [**SSynt**]
  - **Sem ⇔ DSynt correspondence**
-  **Speaker's perspective** – i.e., synthesis rather than analysis

Example: lexicalization of *burning desire*

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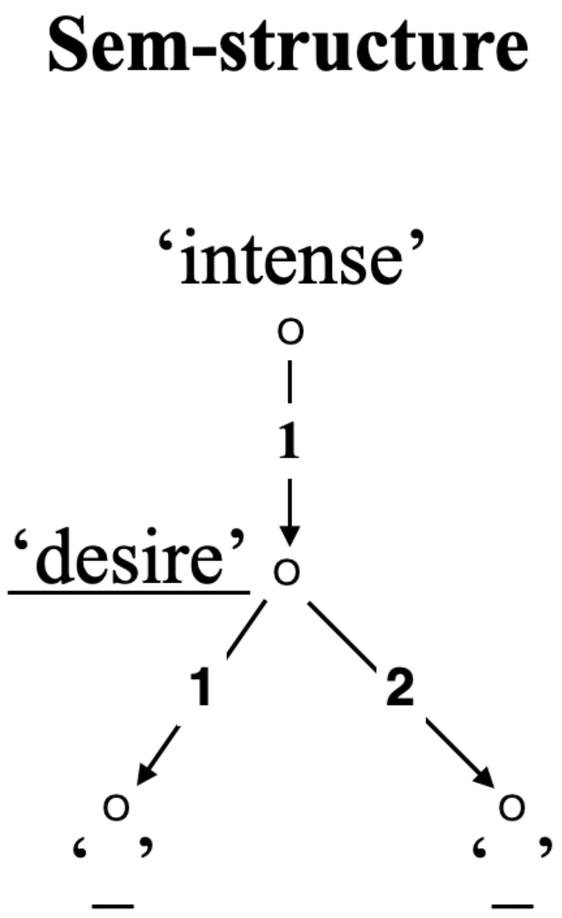

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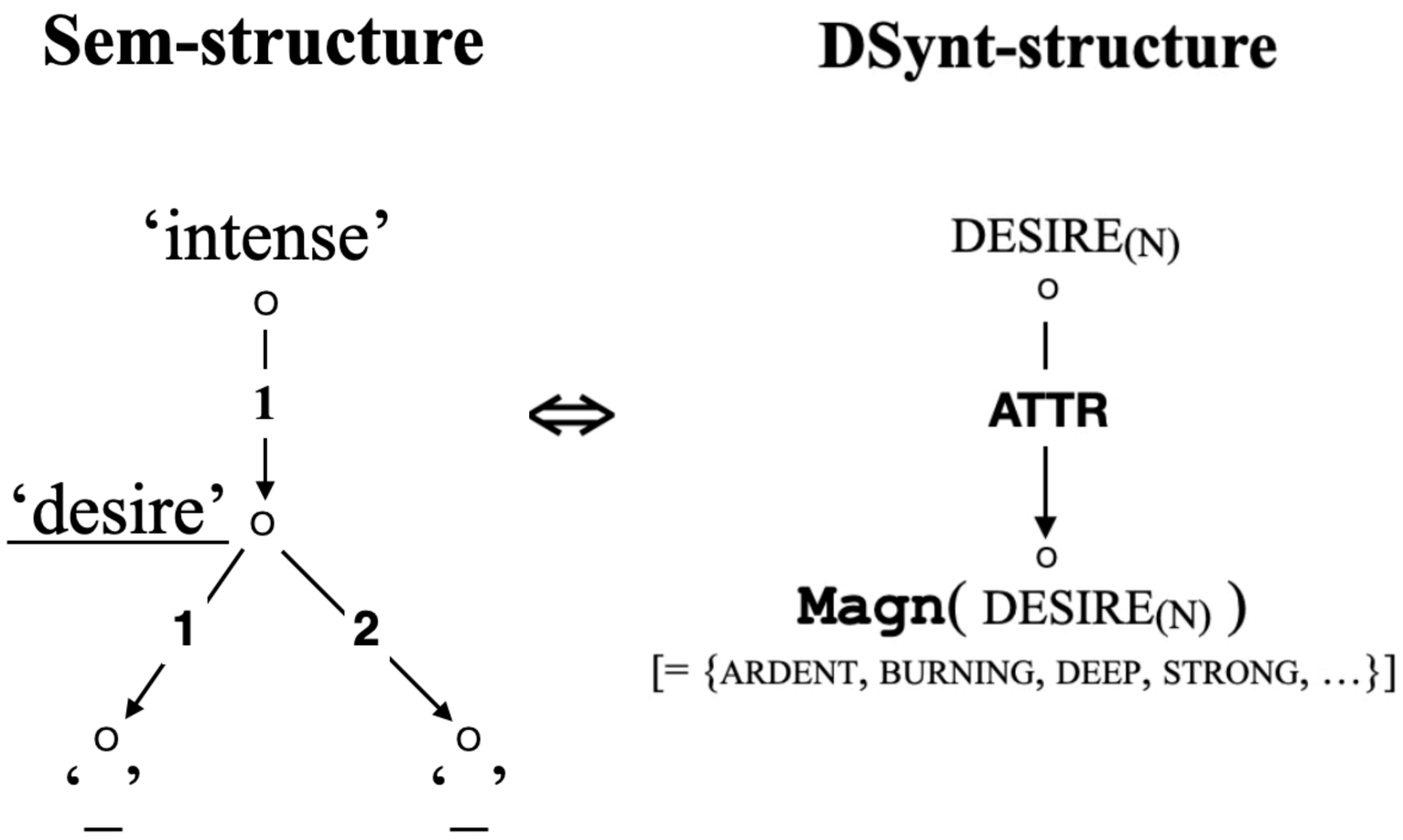

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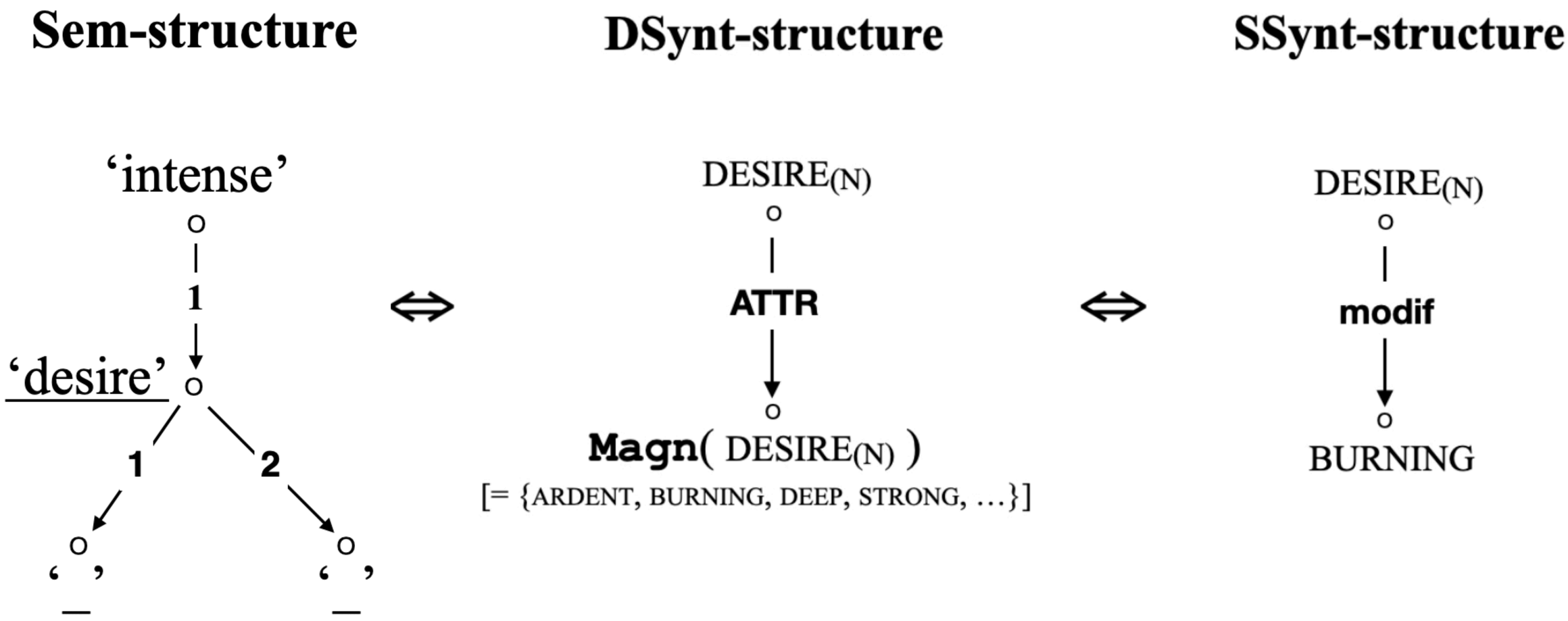

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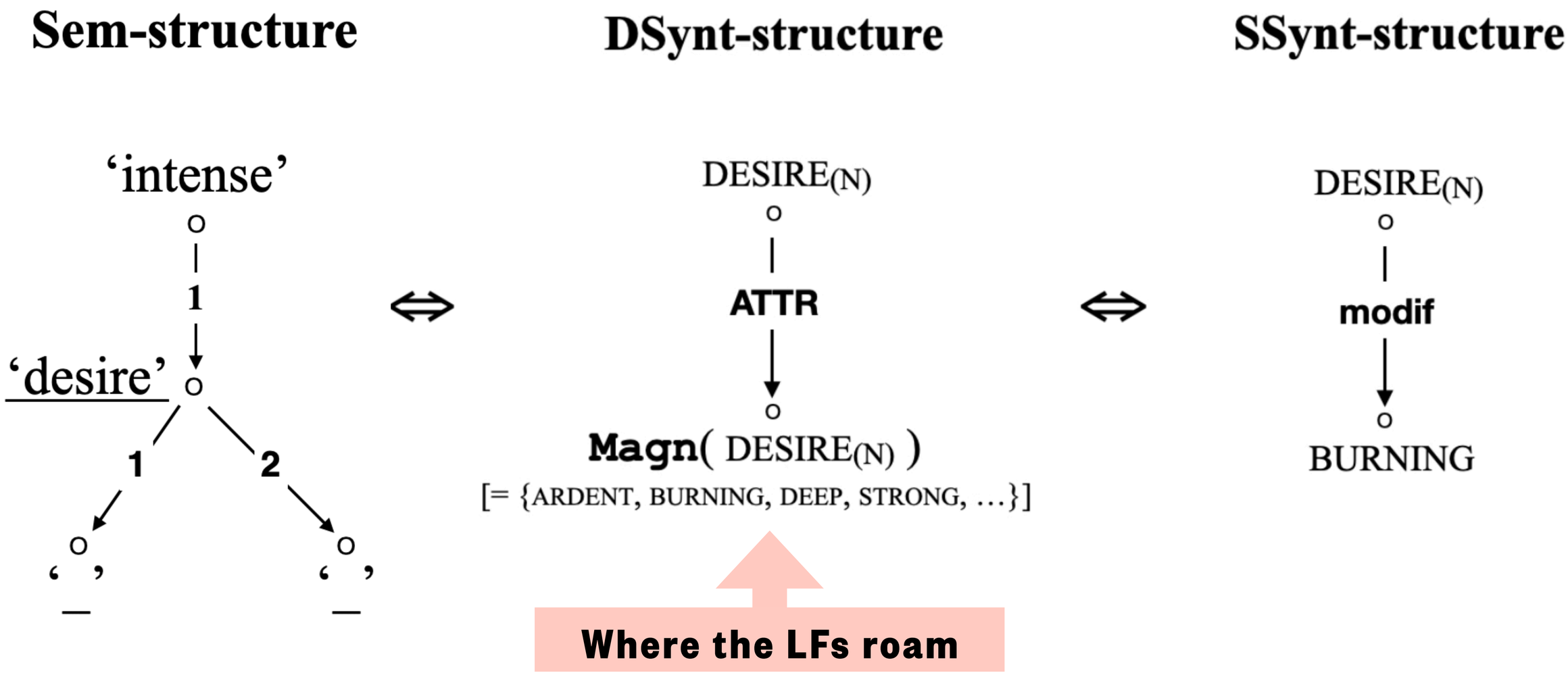

Ch. 3 Notion of lexical function [LF]

About (mathematical) functions

- **Mathematical function** *f* is a relation between a set *A* and a set *B* such that
  1. *f* **applies** to each individual element a_i of *A*, called *f*'s **argument**
     Notation: $f(a_i)$
  2. $f(a_i)$ returns, in constant proportion, an element b_i of *B*, called $f(a_i)$'s **value**
  3. by $f(a_i)$, each a_i is associated to one and only one b_i
- Example: $f_1(x) = 2x + 3$
  - $0 \mapsto 3$
  - $1 \mapsto 5$
  - $2 \mapsto 7$

  ...
- Notion of **lexical** function [LF] built on an analogy with **mathematical** functions

Notion of LF: definition

A **lexical function** `f` is a function such that

- it carries a meaning 'σ^{f}';
- it applies to a lexical unit L as its argument – this application being denoted as `f`(L);
- it returns as value a set of (quasi-)synonymous lexical entities that express 'σ^{f}' as function of L.

TABLE 3.1 – Notion definition: Lexical function [LF]

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  - **Magn**(*stubborn*) = ⌜*as a mule*⌝ — **Magn**(L) : '[L] to a high degree'
  - **S_0**(pursue) = pursuit — **S_0**(L) : Not a "genuine" meaning (change of part of speech)!

⚠ LFs in deep syntax

- Stumbling block in acquisition/understanding of the system of LFs
- LFs are **DSynt lexical units** that account for constrained lexical choices
- Recall **Sem ⇔ DSynt ⇔ SSynt correspondences** in Preliminary notions

Paradigmatic *vs.* syntagmatic LFs

- Well-known classification of LFs
- Distinction based on two phenomena
  1. **Semantic derivation** → **Paradigmatic LFs**
  2. **Collocation** → **Syntagmatic LFs**

Synthetic table for the system of simple standard LFs

Paradigmatic LFs [Ch. 4]				Syntagmatic LFs [Ch. 5]			
1	Syn	19	S_{res}	31	Germ	49	$Real_i$
2	$Conv_{ijk}$	20	S_{mod}	32	Culm	50	$Fact_i$
3	Anti (Non)	21	A_i	33	Epit	51	$Labreal_{ij}$
4	Gener	22	$Able_i$	34	Redun	52	Prepar
5	Figur	23	$Qual_i$	35	Magn	53	Incep
6	Contr	24	Adv_i	36	Ver	54	Fin
7	S_0	25	Sing	37	Bon (Degrad)	55	Cont
8	V_0	26	Mult	38	Plus	56	Prox
9	A_0	27	Imper	39	Minus	60	Obstr
10	Adv_0	28	Perf	40	Loc_{in}	61	Stop
11	Claus	29	Imperf	41	Loc_{ad}	62	Excess
12	Pred	30	$Result_i$	42	Loc_{ab}	57	Caus
13	S_i			43	Instr	58	Liqu
14	Equip			44	$Propt_i$	59	Perm
15	Cap			45	Copul	63	Son
16	S_{loc}			46	$Oper_i$	64	Manif
17	S_{instr}			47	$Func_i$	65	Involv
18	S_{med}			48	$Labor_{ij}$	66	$Sympt_{ijk}$

Tip. In the electronic version of the present volume, LF identification numbers are clickable hyperlinks leading to the description of corresponding LFs.

LFs structure lexicons as l**exical networks** – Recall mediostructure of dictionaries

➡ Lexicography of **Lexical Systems [Polguère 2014] + Ch. 6**

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"Traditional" lexicographic representation:

$\mathrm{Syn}_{\cap}$(*promise*$_{(N)}$)	=	*commitment*, *engagement*; *oath*, *pledge*$_{(N)}$, *vow*$_{(N)}$
Real_1(*promise*$_{(N)}$)	=	⌜*carry out*⌝, *fulfill*, *keep*$_{(V)}$ [ART ~]; *honor*$_{(V)}$ [ART ~]

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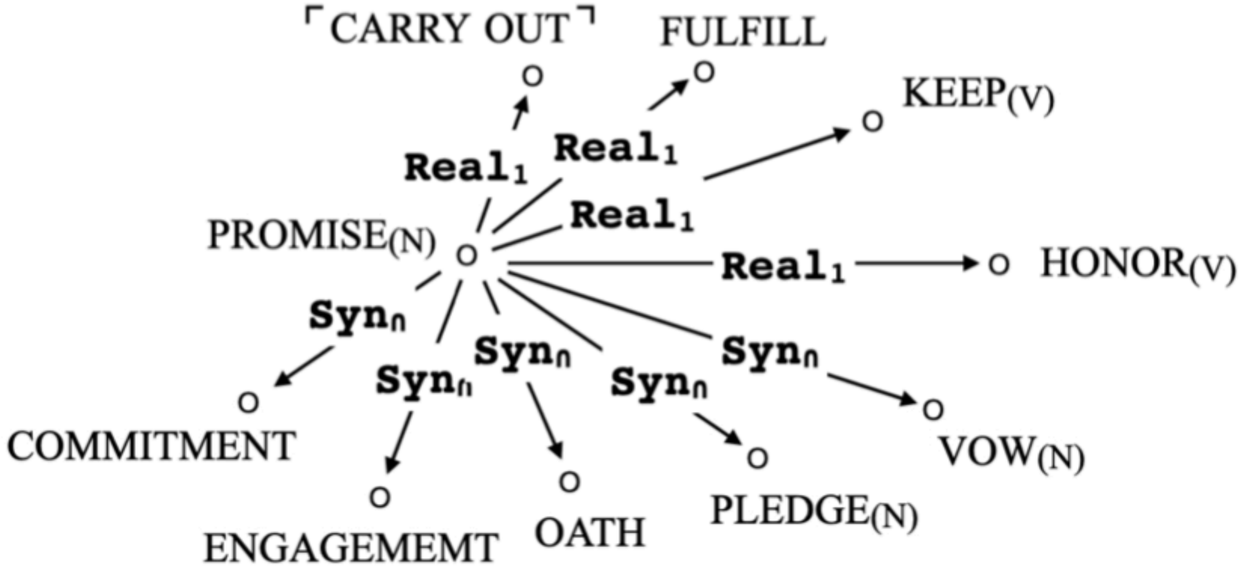
Equivalent network representation:



Ch. 4 & 5 Description of individual LFs

Description template for each LF

A) Identification number + formal name + name in English

[7] S_0 [Lat. *substantivum*]: nominalization

B) Semantic-syntactic characterization + **part of speech [PoS] table**

S_0 applies to a non-nominal lexical unit L and returns a noun having the same meaning as L.

S_0: nominal				
L	V	Adj	Adv	Claus
S_0(L)	N	N	N	N

C) Illustration in English, French and Russian

English

S_0(*present*$_{(V)}$)	=	*presentation*
S_0(*leave*$_{(V)}$)	=	*departure*
S_0(*fall*$_{(V)}$)	=	*fall*$_{(N)}$
S_0(*close*$_{(Adj)}$)	=	*proximity*
S_0(*Bang!*)	=	*gunshot*

French

S_0(*présenter*)	=	*présentation*
S_0(*partir*)	=	*départ*
S_0(*tomber*)	=	*chute*
S_0(*proche*)	=	*proximité*
S_0(*près*)	=	*proximité*
S_0(*Pan !*)	=	⌜*coup de feu*⌝

Russian

S_0(*predstavljat′*)	=	*predstavlenie*
S_0(*uezžat′*)	=	*ot′′ezd*
S_0(*padat′*)	=	*padenie*
S_0(*blizkij*)	=	*blizost′*
S_0(*rjadom*)	=	*blizost′*
S_0(**child language** *Pif-paf!*)	=	*streljat′*

And many comments, clarifications, historical/terminological/... remarks, etc.

Acquisition strategy

- Lots of **lexicographic or lexicography-related work**
- Focus on acquiring and hunting for **fundamental LFs**
  Cf. boxed LF numbers in the synthetic table
- **Observe** real-life lexicalization: it’s fieldwork everyday

References

- Gouws R. H., Prinsloo D. J. (1998). Cross-Referencing as a Lexicographic Device. *Lexikos* **8**, 17–36.
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