Key to the Exercises

Chapter 3: Linguistic Meaning

1. Here are some possible expressions of the meaning 'That Max left surprised everybody':

(1) *The fact that Max left* ⟨*departed*, *walked away*, *went away*⟩ *surprised* ⟨*amazed*, *astonished*, *astounded*, *shocked*, *stunned*⟩ *everybody* ⟨*everyone, all*⟩.
(2) *That Max left was surprising for everybody.*
(3) *Max's leaving* ⟨*departure*⟩ *caused everybody's surprise* ⟨*astonishment*⟩.
(4) *Max's leaving was a surprise for everybody.*
(5) *Max surprised everybody by leaving.*

(6) *Everybody was surprised at Max's leaving.*
(7) *Everybody was surprised because Max left.*
(8) *Nobody* ⟨*No one*⟩ *expected that Max would leave (but he did).*

(9) *Max left and surprised everybody.*
(10) *Max left, surprising everybody.*
(11) *Max left, causing* ⟨*provoking*⟩ *everyone's surprise.*
(12) *Max left, which caused general astonishment.*
(13) *Max left, which nobody expected.*

(14) *To everybody's surprise, Max left.*
(15) *Unexpectedly for all, Max left.*
(16) *Contrary to everyone's expectations, Max left.*

These sentences are not all perfectly synonymous: their propositional meanings differ slightly in some cases ('surprise' vs. 'shock', 'leave' vs. 'walk away', etc.), and so do their communicative organizations ('Max' as the Semantic Theme vs. 'everyone' vs. 'departure'); they are thus paraphrases in a broad sense (Ch. 10, *4*: 238).

The fact that a fairly simple meaning like this one can be expressed by so many sentences is a striking illustration of the paraphrastic potential of language (Ch. 1, *2.3*: 21).

2. A linguistic paraphrase of the sentence *The President of USA met his French counterpart in Washington yesterday*: (a) *The Presidents of the USA and France met in Washington yesterday*. One of its extralinguistic paraphrases: (b) *The President met Mr. Macron in the nation's capital yesterday*. The substitution [*his*] *French counterpart* (i.e., president) ~ *Mr. Macron* is based on the **referen**tial identity of the two expressions, and the substitution *Washington ~ the nation's capital* exploits a piece of encyclopedic knowledge (namely, that the city named Washington is the capital of the USA). Note that knowledge about speech act coordinates is also exploited for the production of sentence (b): for *the nation's capital* to be interpreted as situationally equivalent to *Washington*, sentence (b) has to be pronounced somewhere in the USA (rather than in France or any other country).

3. These paraphrases differ in all the three aspects of meaning (Ch. 3, *1.3*).

Their propositional meaning is different in that having an income (sentence (a)) does not necessarily mean earning one's living (sentence (b)): income can have other sources than employment, such as pensions or investments.

From the viewpoint of their communicative organization, they feature the inverse Rheme ~ Theme distribution, cf.:

(1) a. Q: What can Max do thanks to his comfortable income?
[*Max's comfortable income*]Tsem [*allows him to travel a lot*.]Rsem

b. Q: What do you say about Max's frequent travels?
[*It's easy for Max to travel around*]Tsem [*with the big bucks he's making*.]Rsem

Finally, the two paraphrases are different rhetorically, i.e., stylistically: (a) belongs to the standard, neutral style; (b), on the other hand, is colloquial and somewhat emotively charged.

4. To answer this question correctly, one must first make it more precise – by deciding which lexical unit each of the given lexical items represents. To do so, you have to supply an example of its use and assign it a distinctive lexicographic number.

REPROACH$_{(V)}$ (*What exactly are you reproaching him for?*)
`have/communicate an emotional attitude`
semantic predicate: `person` X reproaches `person` Y for `fact` Z(Y)

STAR$_{(N)}$
- *shooting* ⟨*falling*⟩ *star**I***
⌜`celestial body`⌝; semantic name
- *a movie* ⟨*pop*⟩ *star**II***
`characterized person`; semantic quasi-predicate: [`person` X being a] star in `domain` Y

⌜ROUND TABLE⌝ (*a round table on Brexit*)
`activity`; semantic predicate: ⌜round table⌝ organized by `person` X on `facts` Y

TYPEWRITER (*Typewriters are clacking.*)
`manufactured object`; quasi-predicate: typewriter used by `person` X

ELEGANT (*You are elegant tonight.*)
`characteristic`; semantic predicate: [X] elegant

SEA
- *Baltic* ⟨*North*⟩ *Sea**I***
⌜`body of water`⌝; semantic name
- *a sea**II** of people* ⟨*of brightly colored umbrellas*⟩
`quantity`; semantic predicate: sea of `entities` X

5. Some possible answers: (a) INVESTIGATION of `fact` Y by `person` X (*a police investigation into electoral fraud*); (b) END of `fact` X (*the end of a journey* ⟨*of an era*, *of a friendship*⟩); (c) HONESTY of `person` X (*Honesty is the best policy*.); (d) FRIENDSHIP between `person` X and `person` Y (*their life-long friendship*).

6. (a) 'walk' is simpler than 'limp', because 'limp' ≈ 'walk in a certain way'.

(b) It is not possible to say which semanteme is simpler because neither can be used in the decomposition of the other (cf. the definition of being semantically simpler, Ch. 3, *4.1.1*–90): 'walk' ≈ 'move on foot in such away as to always have one foot on the ground' vs. 'run' ≈ 'move on foot in such a way as to have at moments both feet off the ground'.

7. This is the definition of the verb COMPLAIN (*She complained to anyone who would listen that she never had any time for herself.*). Cf. the following Meaning-Text style definition of this verb:

person X complains to person Y about fact Z	
X communicates to Y	['I say']
X's unpleasant feeling	['I feel something bad']
caused**1** by an event or situation Z undesirable for X	['something bad is happening to me']
the goal of X's communication being	['I say this because …']
that X wants someone to know about Z	
and do something to cause**2** X to feel better.	

Chapter 4: Lexical Meaning, Lexical Item and Lexical Units

1. A lexical unit [LU] is monosemic (= has only one meaning) by definition. The expressions under analysis differ from one another in their meaning (as well as in their combinatorial properties); therefore, they must belong to different LUs.

(1) a. 'a young person'; a semantic name; N, countable [*three youths*]

b. 'the set of all young persons of the locality X'; a quasi-predicate; N, limitedly countable [*the youths of our two countries* ~ **many youths*]

c. 'a period of X's life when X is young'; a genuine predicate; N, limitedly countable [*/? *Their youths were very different*. ~ **five different youths*]

2. A semantically full LU has a semanteme as its signified; put differently, it is freely chosen by the Speaker to express a meaning. Examples: LEG, THIS, YELLOW, SLEEP, IF, UNDER, WOW! The signified of a semantically empty LU is not a semanteme (it is a syntactic indication or just empty), so it is not freely chosen by the Speaker to express a meaning; rather, the Speaker is forced (by his language) to use it in order to signal some syntactic or morphological relations between full LUs in a sentence. Examples: the subordinate conjunction THAT (seen in *I know **that** you are busy.*) or the substitute pronouns HE, SHE, IT, THEY, WHICH.

3. Synchronically simple LUs

- RELEGATE 'consign to an inferior rank or position' (*Modern historians relegate Huang Ti to legend*.) and REDIRECT**2** 'use for a different purpose' (*We will redirect these funds.*). The segment "**re**" does not correspond to the derivational prefix *re-* 'again' in either of the two cases: on the one hand, there is no verbal stem **legate*; on the other hand, the stem *direct**1*** 'cause to move in a particular direction' exists, but REDIRECT**2** is not compositionally constructed out of 'again' and 'direct**1**'.
- HONEYBEE 'type of bee that makes honey', HONEYCOMB 'structure made by bees, consisting of many six-sided cells in which honey is stored' and HONEYMOON 'holiday spent together by two people who have just got married'. These LUs are diachronic compounds turned morphological phrasemes (Ch. 4, footnote 4: 102). Note that morphological phrasemes lend themselves to the same type of classification as lexemic phrasemes (i.e., collocations and idioms). Thus:

HONEYBEE can be described as a weak idiom (its meaning includes the meanings of both components – 'honey' and 'bee', but none of these is in the position of the semantic pivot, which is 'type';

HONEYCOMB is a half-idiom (its meaning contains the component 'honey' but not in the position of the semantic pivot, and it does not contain 'comb');

HONEYMOON is a strong idiom (neither 'honey' nor 'moon' are part of its meaning).

Synchronically derived LUs

- REDIRECT**3** 'direct**3** again' (*But there were criticisms of the production as "the irrelevant Slavic pageantry," and the management took the extraordinary step of asking Gielgud to redirect the play.*) is a regular composition of *re-* 'again' and *direct**3*** 'organize a play, film, or television program by giving the actors instructions about what they should do'.

Synchronically compound LUs

Not present in the linguistic data supplied for this question.

English has few synchronic compounds; one of the most clear-cut cases are expressions of the type *Chinese-born*, *French-educated* or *Spanish-based*.

NB: Note that expressions of the type *war criminal*, *health service*, *air pressure*, *phraseme type*, etc. are not words, but phrases. Cf. Ger. *Krieg*+***s***+*verbrecher* 'war criminal', where a special marker (the interfix **-s-**) indicates the compound word status of this expression.

4. (2a) ⌜*red herring*⌝ 'a point of argument introduced in order to draw attention away from the main point' (*Bureaucracy is a red herring*; *how to deal with the oil crisis is the important issue today*.) is a strong idiom; *smoked herring* (*Would you like a piece of smoked herring?*) is a free phrase.

(2b) ⌜*drop the ball*⌝ 'perform poorly in a task' (*Western media has dropped the ball by failing to tell the real story.*) is a strong idiom. (A compositional interpretation – that is, as a free phrase, with the literal meaning – is also possible.) As for the expression *drop the course* 'stop attending the course' (*I was doing poorly in that course and decided to drop it.*), this is a collocation of COURSE$_{(N)}$**3** [standard LF: Liqu$_2$Real$_2$(COURSE$_{(N)}$**3**)].

(2c) *fat fingers*

- free phrase (*My guitar tutor is a guitar genius in spite of his short, fat fingers.*);
- the plural form of the strong idiom ⌜*fat finger*⌝ 'a typo produced by one stroke where the finger presses two keys instead of the intended one' [Urban Dictionary] (*Sorry about the first two posts, too many fat fingers.*).

sticky fingers

- free phrase (*Does anyone know how to clean sticky fingers?*);
- part of the strong idiom ⌜*have sticky fingers*⌝ 'have propensity to steal' (*Our cashier turned out to have sticky fingers.*).

5. (3a) ⌜business end⌝ 'part of a tool or weapon that does the work or causes the damage' (*Mr. McElroy met the business end of a really big gun.*): strong idiom; ⌜business park⌝ 'area where a number of companies or businesses have offices' (*The city council opened a business park on the edge of the city.*): half-idiom.

(3b) *family business* 'business run by members of the same family' (*Lewis ran a family business he had inherited from his father.*): non-standard collocation of BUSINESS**2**; ⌜*monkey business*⌝ 'dishonest acts or behavior' [via a connotation of MONKEY$_{(N)}$**1**, 'mischievous behavior'] (*In 1881, there was monkey business with the election: any chance the governor's council could, it tossed out what it called "disputed ballots".*): strong idiom.

(3c) *storm window* 'a second window placed on the outside of the first one for additional protection from bad weather' (*A storm window cannot do its job of protecting you from harsh weather if it is damaged.*): non-standard collocation of WINDOW**1**.

storm cloud

- 'a black cloud**1** signaling stormy weather' (*A few storm clouds can't keep our guys off the water.*): non-standard collocation of CLOUD$_{(N)}$**1**.
- ⌜*storm cloud*⌝ 'events signaling that serious problems in a particular domain are about to affect a locality or a group of people [⌜as if⌝ these events were black clouds**1** signaling a storm]' (*Economic storm clouds are gathering over India.*): strong idiom.

6.

Pragmateme P	Pragmatic component of P's meaning	P's lexical anchor(s)
BEST BEFORE [date]	**[on the packaging of a perishable food item]**	(perishable) FOOD, (food) PACKAGING, (grocery) STORE, …
NO TRESPASSING.	**[on a sign placed at the limits of a property]**	(private) PROPERTY, [to] TRESPASS, …

7. Since a proverb is a complete sentence, its lexicographic description is necessarily quite poor: a proverb has no "external" actants (no Government Pattern) and no semantic derivatives or lexical cooccurrents (no LFs). As a result, its description is limited to a definition (and maybe synonyms and antonyms). However, its definition is quite specific. Thus, both proverbs under consideration are clichés – set expressions that are compositional (while their meaning cannot be constructed in any other way or be expressed differently, they mean exactly what they say). A proverb of this type expresses a specific truth about the world, but it is used to convey a more general conceptual information (so-called "proverbial meaning"). Therefore, it is redundant to explicitly formulate the signified of such a proverb (although we do it for better clarity), but its "proverbial meaning" needs to be specified – in terms of Conceptual Representation. (For more on clichés and their lexicographic description, see Mel'čuk 2015b: 77*ff*).

proverbial meaning **literal meaning**

(4a) «Excessive threats are as a rule not carried out» ⇔ 'Barking dogs seldom bite' ⇔ *Barking dogs seldom bite.*

Lexical anchors: THREAT, EXCESSIVE, DANGER

(4b) «Excessive curiosity can be harmful» ⇔ 'Curiosity killed the cat' ⇔ *Curiosity killed the cat.*

Lexical anchors: CURIOSITY, EXCESSIVE, HARMFUL

8. The expression *since time immemorial* (*The Washington family have lived there since time immemorial.*) is a cliché: its meaning – 'since the time no one remembers' – is compositional and this meaning has to be expressed exactly in this way (cf. **since times immemorial*, **since immemorial time*, **since time beyond memory*, etc.).

The expression *Prince Charming* corresponds to two set phrases:

- as the name of a fictional character from fairy tales such as *Cinderella*, it is a nomineme (a non-compositional semantic-lexemic phraseme);
- in the meaning 'an ideal husband as imagined by a young woman' (*Is she still waiting for her Prince Charming?*), it is a strong idiom (a non-compositional lexical phraseme).

These expressions are flagged as being set phrases by the postposition of the adjective, which contravenes the "normal" rule of linear placement of English adjectives: within free phrases, adjectives having no nominal dependents are anteposed to nouns they modify.

9. The phrase type in the left lower square of *Table 4.1* [Ch. 4, *2.2.1*: 104] is characterized as impossible for the following reason: if the expression **AB** is non-compositional, then it is necessarily constrained (= the elements **A** and **B** are NOT freely chosen), i.e., it is used as a whole; otherwise, the expression in question would not be comprehensible to the Addressee.

Chapter 5: Lexicographic Definition

1. (a) FRIEND, ACQUAINTANCE, and COLLEAGUE (for examples, see below)

Each of these three lexemes corresponds to a relational quasi-predicate: a person who stands in a particular relationship with another person; therefore, two actantial slots must be provided for these. In the case of COLLEAGUE, there is a third actantial slot – namely, for the profession or the workplace shared by colleagues.

All three of these human relationships have an important property: they are symmetrical (if I am a friend of yours, then you are necessarily a friend of mine, etc.); this property is reflected in the syntactic patterns allowed by the lexemes in question: we can have both *X is Y's friend* and *X and Y are friends*, etc.

FRIEND *We are good ⟨close, best⟩ friends.* | *Jill is a mutual friend of ours.*| *A friend in need is a friend indeed.*

QSyn: informal *pal*, informal, Am. Eng *buddy*, informal, Br. Eng *mate*

person X, who is a friend of person Y:

'X is a person such that

- Y likes X very much and enjoys being in contact with X,
  - which is not because X is Y's sexual partner or relative,
- Y wants to share with X Y's feelings and thoughts,
- Y relies on Y and is ready to help X at all times,
- X feels and behaves in the same way towards Y'

The first peripheral component in the above definition is necessary to rule out personal relationships in some respects similar to friendship. The last component accounts for the fact that friendship is based on mutual liking and affection, something that the two other relationships, less personal, do not entail: you can like your colleagues and acquaintances, dislike them or be indifferent towards them (cf. Fr. ironic or humorous *Chers collègues et néanmoins amis,* [...] 'Dear colleagues and nevertheless friends, [...]').

The main difficulty with the lexical item FRIEND is the existence of two lexemes, FRIEND_1 and FRIEND_2, which seem deceptively close and are not very well distinguished in current usage. We describe here FRIEND_1, that is, 'close/intimate friend' – as opposed to FRIEND_2, seen, for instance, in *Little Bobby made dozens of new friends in the first three days*.

ACQUAINTANCE *The rest of the participants were friends, acquaintances and hangers on.* | *He described himself as a casual acquaintance of the local MP.* | *Would you make a remark like this to a mere acquaintance?* | *A close acquaintance of the family spoke with CW33 News Sunday.*

No readily available QSyn

QAnti: *stranger*

person X, who is an acquaintance of person Y:

'X is a person such that

- Y knows X to some extent,
- Y has occasional contacts with X,
- Y does not have a desire to spend more time with Y'

Acquaintances are people with whom we remain at a distance (even with a close acquaintance we share less than with a friend); this explains the presence of the last component in the definition.

COLLEAGUE *The salaries of industrial scientists with doctorate degrees far outpace those of their academic colleagues ⟨their colleagues in academia⟩.* | *She discussed the idea with some of her work ⟨Liberal Party⟩ colleagues.* | *Young investigators are less likely than their senior colleagues to have support staff.* | *Our colleagues in primary care and public health agree with this assessment.* | *I received more support from these psychologists than from my lawyer colleagues.* | *Conversations with my engineer colleagues are a daily source of enjoyment.*

QSyn: formal *confrère*; *co-worker*, *fellow-worker*

person X, who is a colleague of person Y (in profession or organization Z):
'X is a person such that
- X has the same profession Z or works in the same organization Z as X
- having a similar status or performing similar tasks as X'

The inclusive disjunction accounts for the fact that a colleague is someone with the same profession as you or someone who works with you in the same organization, or both of these things at the same time. The last component is necessary because you do not call *colleague* someone who is higher or lower in the hierarchy within the workplace (your boss or your secretary, for instance).

See the definitions of FRIEND and COLLEAGUE in Wierzbicka (1997: 32–125), where definitions of other related lexemes (from English, Russian and Polish) can also be found; for the ECD-style definition of Rus. DRUG 'friend', see Mel'čuk & Zholkovsky (1984[2016]: 211–213).

(b) informal ˹TAKE FOR A RIDE˺

The European Union must not let itself be taken for a ride. | *The European Union has been taking Ankara for a ride, allowing the Turkish side to believe that joining the EU was possible.* | *Her "well-meaning" advisor took her for a ride by making her speculate on the stock market under the guise of investing.* | *Others were taken for a ride by shops selling them on repairs they probably did not need.*

QSyn: informal ˹*lead up the garden path*˺; *cheat*; *trick*

This idiom describes a situation in which one person is trying to take advantage of another by doing something dishonest or telling something deceitful; therefore, three actantial slots must be foreseen:

X takes Y for a ride by Z:

[Presupposition-1]	Y wants an α that Y believes X can cause**2**,
[Presupposition-2]	Y expects X to try to cause**2** α,
[Presupposition-3]	X does not intend to try to cause**2** α,
[Presupposition-4]	it is in X's interest to make Y believe that X will try to cause**2** α,
[Assertion]	X tries to cause**2** Y to believe that X wants to cause**2** α by X's acts or words Z.

The unspecified variable α represents the participant of the situation that cannot be expressed as a direct dependent of the verb – that which Y wants caused**2** and X pretends to be willing to cause**2**.

The four presuppositions are necessary because their content stays affirmed in a sentence where ˹TAKE FOR A RIDE˺ is negated. Thus, *He did not take us for a ride when he said he had nothing to hide* can either mean 'he did not try to cause**2** us to believe that he had nothing to hide' or 'he tried and failed to cause**2** us to believe that he had nothing to hide'. That is, either trying to cause**2** Z, or effectively causing**2** Z is negated, but not the fact that Y wanted X to cause**2** something and believed that X could cause**2** it.

2. The OED gives an encyclopedic definition, i.e., a description of the **thing** called *spider*, not of the **word** SPIDER itself; it indicates the biological classification of spiders (*Order Araneae*, *class Arachnida*), and formulates the definition using technical terms (*arachnid*, *thorax*, *fangs*, etc.). Since this definition of the noun SPIDER contains the meaning of the noun WEB**1** and since the OED's definition of WEB**1** contains the component 'spider' – 'a network of fine threads constructed by a spider from fluids secreted by its spinnerets, used to catch its prey' – what results is circularity. (In passing, this definition of WEB**1** also features encyclopedic elements).

LDOCE's definition avoids encyclopedic information and is worded in everyday, layman's language. It avoids circularity as well, by using the component 'a fine network of sticky threads'; cf. the LDOCE's definition of WEB**2**: 'a net of thin threads made by a spider to catch insects'.

An ECD definition of the lexeme SPIDER would be very similar to the one proposed by LDOCE. We would, however, make two modifications:

- adding the component 'terrestrial' (in order to exclude crabs, etc.);
- changing the formulation of the component 'a fine network of sticky threads', which should be identical to the central component of WEB**2**, 'a net of thin threads'.

3. Here is a flagrant example of circularity found in the OED:

CHOOSE**1**: 'pick out (someone or something)
as being the best or most appropriate of two or more alternatives'.

PICK$_{(V)}$**2**: 'choose (someone or something) from a number of alternatives'.

The "culprit" is the definition of CHOOSE**1**, which should not have 'pick out' as the central component; with some other necessary changes, it should rather read like this:

X chooses Y_i from Ys according to property Z(Y) for W:

[Presupposition-1]	X has the possibility to take or to use a Y from a set of Ys for X's purpose W
[Presupposition -2]	X has considered all Ys from the viewpoint of property Z needed for W
[Assertion]	X has decided which Y he will take or has taken this Y

The definition of PICK$_{(V)}$**2** needs modifications, as well:

X picks Y_i from Ys according to property Z(Y) for W:

X picks Y_i from Ys according to property Z(Y) for W:

[Presupposition-1]	X has the possibility to take or to use a Y from a set of Ys for X's purpose W
[Presupposition -2]	X has considered all Ys from the viewpoint of property Z needed for W
[Assertion]	X has decided which Y he will take or has taken this Y

In point of fact, CHOOSE**1** and PICK$_{(V)}$**2** are (exact) synonyms, differing only as to register: CHOOSE**1** is more formal.

4. In each case the illustrated cooccurrence should help us tease out a specific component in the meaning (i.e., definition) of the base – the one that accepts intensification by the corresponding adjective(s). With STORM and ILLNESS, the intensification bears upon possible consequences of the corresponding states of affairs, and with FRIGHT, upon a possible reaction to the feeling.

REMARK. This is probably true for most LUs belonging to the corresponding semantic classes (Ch. 8, *1.2.2*: 191), in our case, `violent natural phenomena`, `illnesses` and `feelings`. This means that the definition templates (Ch. 8, *2.1.2.3*: 207) for the LUs of the first two classes should contain the component [possible consequences], and those of the third class, the component [possible reactions].

5. The verb [to] CLOUD$_{(V)}$ (1b) is metaphorically derived from the noun CLOUD$_{(N)}$**I** (1a): if something clouds the picture (issue, etc.), it prevents it from being clearly perceived, similarly to the clouds covering the sky. To account for this derivational link between the two lexemes, that is, provide a semantic bridge between them, we need to do two things: (1) include into the definition of CLOUD$_{(N)}$**I** the following component (underlined): '[accumulation of grayish white substance…] which (partially) covers the sky […]'; (2) include into the definition of CLOUD$_{(V)}$ the metaphor component (underlined): 'fact X prevents fact Y from being clearly perceived (by someone), ⌜as if⌝ X were clouds$_{(N)}$**I** covering the sky'. We thus see that derivational relations an LU L entertains with other LUs in the lexicon can help us find a component of L's definition, in much the same way as its collocation relations can.

As for the adjective (1c), it is derived from the verb and characterizes the second participant of the situation described by the verb; in terms of lexical functions (Ch. 7), this is A_2(CLOUD$_{(V)}$).

6. (a) The component 'salt' should figure in the definition of SEA**1** 'huge area of salty water that covers most of the Earth's surface'; it is linguistically relevant because we have the expressions *seawater* (vs. *fresh water*) and *sea salt* (vs. *regular salt*, *table salt*).
(b) The English language perceives foxes as cunning, as shown by the existence of the collocation *CUNNING as a fox*. However, this feature is not associated with the word *fox* but with its referent (i.e., the animal itself), given the fact that it is possible to say *What a naïve* ⟨*candid*⟩ *little fox!* without contradiction. Therefore, 'cunning' is not part of the definition of FOX `animal`, but rather a connotation of this lexeme.

REMARK. The same connotation provides a semantic bridge between FOX `animal` and another lexeme of the same vocable: FOX `characterized person` (*He was a sly old fox.*).

7. Here are four connotations of WIND**1** and some of the expressions (collocations and idioms) corroborating their existence.

Connotations	Linguistic evidence
'rapidity'	*run* ***like the wind*** 'very rapidly'
'changing orientation'	***Winds of change*** 'events resulting in change' *were sweeping the country*. *We will have to be flexible and adapt* ***to the shifting winds*** 'to the changing circumstances'. *Let's* ***see which way the wind blows*** 'understand how circumstances are changing' *before deciding.*
'moving force'	*Our friends are now* ***scattered to the (four) winds*** 'apart in different places'. *The President* ***has the wind at his back*** ⟨= ***has wind in his sails***⟩ 'is in a good position to succeed' *on this issue.*
'lacking substance'	*It's* ***all wind*** 'words without substance'.

These meanings are connotations, rather than components of the definition, of the lexeme WIND**1** because the negation of any one of these does not result in a contradiction. Thus, we can very well say *slow-moving wind*, *steady wind*, *sustained westerly wind*, *light/gentle wind*, etc.

Chapter 6: Lexical Relations

1. According to OED, the verb we see in the example sentence is DISMISS**2**; it is defined as follows: 'remove from employment or office, typically on the grounds of unsatisfactory performance'.

The OED lists four synonyms of DISMISS**2**: (i) informal FIRE$_{(V)}$**II**, (ii) informal SACK$_{(V)}$**I**, (iii) euphemistic ˹LET GO˺**I.1**, and (iv) American TERMINATE**I.3**; here are the definitions that this dictionary gives to these verbs:

(i) 'dismiss (an employee) from a job' (ii) 'dismiss from employment'
(iii) 'dismiss an employee (iv) 'end the employment of (someone); dismiss'

Thus, these lexemes are exact synonyms, presenting only stylistic differences (cf. the usage labels above). We believe that this treatment is correct, except for some details of the definition of DISMISS**2**, which should read as follows:

*X dismisses**2** Y from Z because of W(Y)*
'□X being the employer of Y,□
X stops employing Y at position Z^1 in organization Z^2
because of Y's behavior W'

Also, since the four other verbs are exact synonyms of DISMISS**2**, they should all receive exactly the same definition as the latter – by virtue of the *Lexical unit uniform treatment principle* (Ch. 8, *2.1.2.3*: 207).

REMARKS

1. The verb ˹LAY OFF˺ (*The company laid off 250 people in December.*), not listed in OED, is defined in LDOCE as 'stop employing someone because there is no work for them to do'. Although similar in meaning to the five verbs discussed above, it cannot be considered a near-synonym thereof (even though it is sometimes used as a dishonest euphemism for FIRE). That's because it is difficult to find a context allowing for substitutability: the reason for the termination of employment (employer's internal reasons in the case of ˹LAY OFF˺, vs. the employee's behavior in the case of the other verbs) is a specific difference too important to be disregarded. In an ECD, a vague synonymic relation like the one just described is indicated by the symbol "Cf." ('compare'); thus, in the entry of DISMISS**2**, we will note "Cf. ˹LAY OFF˺", and vice versa.

2. The notations Z^1 and Z^2 that we see in the above definition designate different values of a split variable. Such values are never expressed together with the same governor, since they represent different aspects of a single participant of the situation (described by the lexeme in question). Thus, we can say either *He was dismissed from* [*his position as football analyst*]$_{Z^1}$ or *He was dismissed from* [*the "Chronicle Herald"*]$_{Z^2}$. (In *He was dismissed from his position in the "Chronicle Herald"*, the underlined phrase depends on the noun *position*, rather than on the verb, so this example does not contradict our description.)

2. DAY ~ NIGHT: *Owls usually sleep by day**2** and hunt by night**1*** (the distinctive numbers are from LDOCE, definitions are ours).

DAY**2** : part of the day**1** when there is sunlight.
NIGHT**1**: part of the day**1** when there is no sunlight.
(DAY**1** : period of time between two sunrises.)

As these definitions show, DAY**2** and NIGHT**1** are exact antonyms. As for DAY**1** and NIGHT**1**, the meaning of the former is included in that of the latter; these lexemes are not related lexically, but rather conceptually – by the meronymy (part ~ whole) relation.

LAND ~ SEA: *After four weeks on the sea**I.1**, we sighted land**2*** (the definitions and distinctive numbers, slightly adapted, are from OED).

LAND**2**: part of the Earth's surface that is not covered by big bodies of water.
SEA**I.1**: vast area of salt water which covers most of the Earth's surface.

According to these definitions, LAND**2** and SEA**I.1** are approximate (intersecting) antonyms.

3. Antonymic adjectives.
(a) [negation antonyms] *obedient* '[X] that obeys Y' ~ *disobedient* '[X] that does not obey Y'; *flammable* '[X] that burns easily' ~ *nonflammable* '[X] that does not burn easily or at all'; *interesting* '[X] that interests Y' ~ *boring* '[X] that does not interest Y'; *beautiful* '[X] pleasant to look at' ~ *ugly* '[X] not pleasant to look at'; etc.
(b) [inverse antonyms] *fat* '[X] having more fat on X's body than is normal for Xs' ~ *thin* '[X] having less fat on X's body than is normal for Xs'; *long* '[X] whose length is greater than the normal length for Xs' ~ *short* '[X] whose length is smaller than the normal length for Xs'; *hot* '[X] whose temperature is higher than the normal temperature for Xs' ~ *cold* '[X] whose temperature is lower than the normal temperature for Xs'; etc.

4. Conversion
(a) Interlexical
X *chases* Y ~ Y *flees from* X:
A King Street man saw the police chase the suspect. ~
A King Street man saw the suspect flee from the police.
X, *ancestor of* Y ~ Y, *descendant of* X:
Gauls and Romans, among others, are the ancestors of French people. ~
French people are descendants of Gauls and Romans, among others.
[X] *astonishing for* Y ~ [Y] *astonished by* X (DSyntA **I** and **II** of [to] ASTONISH):
The proposal is astonishing to some but ... ~
Some are astonished by the proposal but ...
(b) Intralexical
(i) By Government Pattern alternation
The courts$_{X\Leftrightarrow \mathbf{I}}$ *punish people*$_{Y\Leftrightarrow \mathbf{II}}$ *for drug dealing*$_{Z\Leftrightarrow \mathbf{III}}$ *with heavy prison terms*$_{W\Leftrightarrow \mathbf{IV}}$. ~
The courts$_{X\Leftrightarrow \mathbf{I}}$ *punish drug dealers*$_{Y+Z\Leftrightarrow \mathbf{II}}$ *by imprisoning*$_{W\Leftrightarrow \mathbf{III}}$ *them for long terms.*
(ii) Inflectional
Eng., active ~ indirect passive:
The officers$_{X\Leftrightarrow \mathbf{I}}$ *in charge* ***told*** *passengers*$_{Z\Leftrightarrow \mathbf{III}}$ *to evacuate*$_{Y\Leftrightarrow \mathbf{II}}$ *the deck.* ~
Passengers$_{Z\Leftrightarrow \mathbf{I}}$ ***were told*** *by the officers*$_{X\Leftrightarrow \mathbf{III}}$ *in charge to evacuate*$_{Y\Leftrightarrow \mathbf{II}}$ *the deck.*
Fr., active ~ pronominal passive:
On$_{X\Leftrightarrow}$ ***boit*** *ce vin*$_{Y\Leftrightarrow \mathbf{II}}$ *bien refroidi* 'One drinks this wine well cooled'. ~
Ce vin$_{Y\Leftrightarrow \mathbf{I}}$ ***se boit*** *bien refroidi* lit. 'This wine drinks itself [= is drunk] well cooled'.

5. This is derivation: the nouns in the B column are derived from the verbs in the A column by means of the suffix ***-čak***/***-ček*** 'place [of action denoted by the verb]'. These are locative names (S_{Loc} in lexical-functional notation) derived in a completely regular fashion.

REMARK. The two forms of the suffix (***-čak***/***-ček***) are due to the phonological phenomenon of vowel harmony: in Finno-Ugric, Tungusic, Turkic and some other languages, all the vowels within a wordform must have the same quality (be low or high, etc.). Vowel harmony triggers corresponding alternations in the affixes (or, less frequently, in the radical).

Locative names in English are not derived regularly; i.e., there are no regular morphological means (affixes, conversion) to derive locative nouns. Examples: *boxing ~ (boxing) ring*; *skating ~ (skating) rink*; *war ~ ˹theater of war˺*, *battle ~ battleground*; etc.

6. (a) Metonymy: MIND**I.4** '**intelligent** person …' (*one of the finest minds of the country*), from MIND**I.3** '**intelligence** …' (*a child with an enquiring mind*); SALMON**1b** 'salmon**1 flesh**' (*a salmon steak*), from SALMON**1a** 'fish …' (*Atlantic salmon*).
(b) Metaphor: SEA**II** '**large number or quantity** of something' (*sea of faces*), from SEA**I.1** '**vast area** of salt water …'; MOUSE**II** 'small device … used to give instructions to a computer, whose shape **resembles** that of a **mouseI**' (*Click the left mouse button.*), from MOUSE**I** 'small **animal**…' (*a field mouse*).

7. (1) OVERLOOK

	Vocable OVERLOOK$_{(V)}$[1]	
Basic wordsense [ex. (1a)]	OVERLOOK$_{(V)}$[1]**I**	`person` X ~s fact Y: 'X does not notice fact Y'
Metaphoric wordsense [ex. (1c)]	OVERLOOK$_{(V)}$[1]**II**	`person` X ~s `characteristics/behavior` Y [of someone]: 'X considering some aspects of Y negative, X deliberately ignores these aspects – ˹as if˺ X overlooked$_{(V)}$[1]**I** Y.'
	Vocable OVERLOOK$_{(V)}$[2]	
[ex. (1b]	OVERLOOK$_{(V)}$[2]	`entity` X ~s `entity` Y: 'X's position is such that it allows someone who is at X to see Y from above'

(2) HAND$_{(N)}$

	Vocable HAND$_{(N)}$	
Basic wordsense [ex. (2b)]	HAND**I.1**	~s of `person` X: 'part of X's body – a flat part at the end of X's arm with five thin, long parts, which X uses to hold things'
Metonymic wordsense [ex. (2a)]	HAND**I.2**	~: 'person who does physical work – by essentially using his hands**I.1**'
metaphoric wordsense [ex. (2c)]	HAND**II**	~ of `device` X: 'part of X – a thin, long hard piece which points at symbols indicating values of parameters that device X measures – ˹as if˺ it were a hand**I.1** (of a person pointing at something)'

REMARK. We see HAND**I.2** in expressions like *farm ⟨ranch⟩ hands*, *a factory hand*. The expression *All hands on deck* [example (2a)] is an idiom, having the following two senses:
I. 'I order that all sailors come immediately to the deck'.
II. 'I signal that everyone's help is needed (in the situation in question) – ˹as if˺ I were saying ˹all hands on deck˺**I**'.

8. X's patience over/with Y

1.	*X's P. is ˹wearing thin˺*	'X's P. is becoming less and less'
2.	*X's P. snaps*	'X's P. suddenly ceases to exist'
3.	*X has P.*	'X has P.'
4.	*X loses P.*; *˹runs out˺ of P.*	'X stops having P.'
5.	*tax*, *test*, *try X's P.*	'Y affects X in a way that may cause X to stop having P.'
6.	*exhaust X's P.*	'Y affects X in a way that causes X to stop having P.'
7.	*great < endless*, *infinite*, *unlimited P. < P. of Job/of a saint*	'a huge amount of P.'
8.	*[X] full of P. < armed with P.*	'[X] such that X has a lot of P.'
9.	*[X is the] epitome of P.*	'[X is] a good example of someone who has a lot of P.'

Chapter 7: Lexical Functions

1.

LF	LF Keyword	LF value	Example of substitution LF keyword ~ LF value
Syn	OPHTHALMOLOGIST	colloq. *eye doctor*	*He was trained as an* ***ophthalmologist*** ⟨***eye doctor***⟩.
$Syn_{\supset}$	VEHICLE**1**	*car*	*Sir, please step out of the* ***vehicle*** ⟨***car***⟩.
Anti	OVERLOOK^{1}**1**	*notice*$_{(V)}$	*a detail that was* ***overlooked*** ⟨*that was* ***not noticed***⟩
$Anti_{\cap}$	COGNIZANT$_{[X]\sim of\ Y}$	*unaware*$_{[X]\sim of\ Y}$	*I am* ***cognizant*** ⟨***not unaware***⟩ *of the details of the situation.*
$Conv_{21}$	CONSIST $_{X\sim of\ Y}$	*compose* $_{Y\sim X}$	*My family* ***consists*** *of* ⟨***is composed*** *of*⟩ *four people.*
$Conv_{321}$	RENT$_{(V)}$**1** X ~ Y to Z for W during T	*rent*$_{(V)}$***2*** Z ~ Y from X for W during T	*They* ***rent*** *rooms to college students.* ⟨*College students* ***rent*** *rooms from them.*⟩
S_0	LIKELY$_{(ADJ)}$**1**	*likelihood*	*How* ***likely*** *is an asteroid to hit the Earth?* ⟨*What is the* ***likelihood*** *of an asteroid hitting the Earth?*⟩
S_1	THEORY**1**	*proponent*; *adherent*	*Few people support this* ***theory*** *today.* ⟨*This theory has few* ***proponents*** *today.*⟩
A_0	MOON$_{(N)}$**1**	*lunar*	*surface* ***of the Moon*** ⟨***lunar*** *surface*⟩
A_2	DISCUSSION X's ~ of Y with Z	*under* [~]	*A* ***discussion*** *of the matter is under way.* ⟨*The problem is* ***under discussion*** *right now.*⟩
Adv_0	ACCIDENTAL	⌜*by chance*⌝	*The discharge was* ***accidental*** ⟨*happened* ***by chance***⟩.
Adv_1	EXCLUDE**1**$_{X\sim Y}$	*to the exclusion* [*of* N_Y]	*What they wanted was pink and purple,* ***excluding*** ⟨***to the exclusion of***⟩ *all other colors.*
$Able_2$	DO$^{2}{}_{X\sim Y}$	*feasible*, colloq. *doable*	***Can*** *this* ***be done****?* ⟨*Is this* ***feasible***/***doable****?*⟩
$AntiAble_2$	DISPUTE$_{(V)}$**2**$_{X\sim Y}$	*indisputable*	*a decision* ***that cannot be disputed*** ⟨*an* ***indisputable*** *decision*⟩

2.

Magn(EVIDENCE): *clear*, *cogent*, *convincing*, *strong*, *unambiguous*; *critical* < *conclusive*, *irrefutable*

$Oper_1$(ECLIPSE$_{\sim of\ X}$) : *undergo* [ART ~]

$Fact_0$(CAMERA) : *roll*

Ver(MEASURE$_{(N)\ X's\sim Y\ concerning\ Z}$): *effective*

$Oper_1$(THREATS $_{X's\sim Z\ against\ Y}$): *utter* [~ *s*] | T. in the pl.

$Func_1$(RESPONSIBILITY$_{X's\sim for\ Y}$): *lies* [with N_X]

Bon(CONTRIBUTION) : *valuable*

$Fact_2$(AID$_{X's\sim to\ Y\ consisting\ in\ Z}$) : *reach* [$N_Y$]

$Oper_2$(OPERATION$_{\sim of\ Y\ by\ X}$): *undergo* [ART ~]

$Real_1$(HUNGER$_{X's\sim for\ Y}$) : *satisfy* [ART ~]

3.

	A	B
	`AntiMagn`	*weak* ARGUMENT, *loosely* RELATED, *low* RISK
	`AntiVer`	*invalid* ARGUMENT, *unsuccessful* ATTEMPT, *lame* EXCUSE
	`AntiBon`	*seedy*, *sleazy* HOTEL // ˹*flea bag*˺, *foul* SMELL$_{(N)}$, *rocky* START$_{(N)}$
	`IncepOper`$_1$	*incur* EXPENDITURE, *take* [*an*] INTEREST [*in* N_Y], *fall into* OBLIVION
	`CausOper`$_2$	*bring*, *call* [N_Y *to* N_X's] ATTENTION, *put* [N_Y *under* N_X's] CONTROL, ˹*bring up*˺ [N_Y] *for* DISCUSSION
	`LiquFunc`$_0$	*dissolve (an)* ASSEMBLY, *lift (a)* RESTRICTION, *wipe out* TRACES,

4. *What Is Life?*

Life is a *CHALLENGE*.	**Meet** it!	Life is a *SONG*.	**Sing** it!
Life is a *GIFT*.	**Accept** it!	Life is an *OPPORTUNITY*.	**Take** it!
Life is a *PLEASURE*.	**Enjoy** it!	Life is a *JOURNEY*.	**Complete** it!
Life is a *SORROW*.	**Overcome** it!	Life is a *PROMISE*.	**Keep** it!
Life is a *TRAGEDY*.	**Face** it!	Life is a *BEAUTY*.	**Admire** it!
Life is a *DUTY*.	**Perform** it!	Life is a *STRUGGLE*.	**Win** it!
Life is a *GAME*.	**Play** it!	Life is a *GOAL*.	**Achieve** it!
Life is a *MYSTERY*.	**Unveil** it!	Life is a *PUZZLE*.	**Solve** it!

5. This is an LF configuration, i.e., a complex of two LFs that both take TEARS as their keyword, are not syntactically linked and are expressed by a single element of value: ***burst*** *in tears* ≈ 'start to produce [= `IncepReal`$_1$] a lot of [= `Magn`] tears'.

6. X's patience over/with Y

	Collocation	Natural language gloss	LF notation
1.	*X's P. is* ˹*wearing thin*˺	'X's P. is becoming less and less'	`PredMinus` : *be* ˹*wearing thin*˺ | aspect(V) = progressive or: `ProxFinFunc`$_0$
2.	*X's P. snaps*	'X's P. suddenly ceases to exist'	`suddenly.FinFunc`$_0$: *snap*
3.	*X has P.*	'X has P.'	`Oper`$_1$: *have* [ART ~]
4.	*X loses P.*; ˹*runs out*˺ *of P.*	'X stops having P.'	`FinOper`$_1$: *lose* [ART ~], ˹*run out*˺ [*of* ART ~]
5.	*tax*, *test*, *try X's P.*	'Y affects X in a way that may cause X to stop having P.'	`probably Caus`$_2$`FinOper`$_1$: *tax*, *test*, *try* [N_X's ~]
6.	*exhaust X's P.*	'Y affects X in a way that causes X to stop having P.'	`Caus`$_2$`FinOper`$_1$: *exhaust* [N_X's ~]
7.	*great* < *infinite*, *endless*, *unlimited P.* < *P. of Job/of a saint*	'a huge amount of P.'	`Magn`^{I} : *great* `Magn`^{II} : *infinite*, *endless*, *unlimited*; < [~] *of Job* ⟨*of a saint*⟩
8.	*[X] full of P.* < *armed with P.*	'[X] such that X has a lot of P.'	`[Magn + A`$_1$`]` : *full* [*of* ART ~], *armed* [*with* ART ~]
9.	*[X is the] epitome of P.*	'[X is] a good example of someone who has a lot of P.'	`a good example of [Magn+S`$_1$`]`: *epitome* [*of* ART ~]

ADDITIONAL EXPLANATIONS FOR EXERCISES 6–8

1. The following LFs haven't been introduced so far:
   (a) simple LFs `Pred` 'predicate' [linking verb *to be*, "verbalizer" of adjectives], `Minus` 'less', `Plus` 'more', `Prox` 'be about to', `Perf` 'completed [action]', used only in combination with other LFs;
   (b) configurations of LFs [`Magn + A`$_i$](L) 'that is very L' and [`Magn + S`$_i$](L) 'someone/something that is very L'.
2. If a collocation cannot be fully described by a standard LF, "non-standard elements" – `suddenly`, `probably`, `try`, etc. – are used to account for additional meanings.
3. Superscripts `I` and `II` with the LF `Magn` indicate degrees of intensification; the superscript `quant` indicates that the intensification bears upon some discrete entities (i.e., that the number of L's referents is large).
4. A subscript in parentheses with the LF `Caus` (items 2 & 8, Exercise 8) indicates that the corresponding DSyntA of the keyword may – but need not – be the Causer (of the situation described by the collocation in question), this role being also possible for an external participant. Thus, you can build support (in some matter) for yourself (you yourself can cause that there is support for you), but someone else could do it for you, as well.
5. The same collocation can be described by two distinct LFs; cf. item 1, Exercise 6, and item 4, Exercise 8.

7. `person` X's appetite**1** for `food` Y

	Collocation	Description of the collocation in terms of LF	
1.	*good*, *healthy A.*	`Bon`	: *good*, *healthy*
2.	*poor A.*	`AntiBon`	: *poor*
3.	*big* < *enormous*, *huge A.*	`Magn`	: *big* < *enormous*, *huge*
4.	*small A.*	`AntiMagn`	: *small*
5.	*have an A.*	`Oper`$_1$	: *have* [ART ~]
6.	*lose one's A.*	`FinOper`$_1$	: *lose* [ART ~]
7.	*give A.*, *stimulate one's A.*	`CausOper`$_1$	: *give* [N$_X$ ~], *stimulate* [N$_X$'s ~]
8.	*spoil*, *ruin one's A.*	`LiquFunc`$_0$	: *spoil*, *ruin* [N$_X$'s ~]
9.	*loss of A.*	`S`$_0$`FinOper`$_1$	: *loss* [*of* ART]
10.	*lack of A.*	`S`$_0$`NonOper`$_1$	: *lack* [*of* ART]

REMARKS. 1. Two collocations of APPETITE**1** and one of APPETITE**2** not listed in LDOCE: *lack A.**1*** (`NonOper`$_1$), *satisfy one's A.**1*** (`Real`$_1$) and *fuel one's A.**2*** (`CausPredPlus`). 2. APPETITE**2** (*their appetite for travels*) shares most of the collocations with APPETITE**1**, but also has some of its own: *tremendous A.* (`Magn`) and *whet one's A.* (`CausOper`$_1$).

8.

	Collocation	Actantial structure of the collocation base	Description of the collocation in terms of LF	
1.	*took office*	X's office Y	`IncepOper`$_1$(OFFICE)	: *take* [~]
2.	*built support*	X's support for Y	`Caus`$_{(2)}$`Func`$_2$(SUPPORT)	: *build* [~ *for* N$_Y$]
3.	*(a) drop in violence*	X's violence against Y	`S`$_0$`PredMinus`(VIOLENCE)	: *drop* [*in* ~]
4.	*(homicide) rate plummeted*	rate Y of X	`PerfIncepPredMinus`(RATE) or: `PerfIncepAntiMagn`	: *plummet*
5.	*dizzying high*	X's high$_{(N)}$ Y	`Magn`^{II}(HIGH$_{(N)}$)	: *dizzying*
6.	*cast a shadow*	X's shadow over Y	`CausFunc`$_0$(SHADOW)	: *cast* [ART ~]
7.	*fuelled charges*	X's charges Z against Y	`CausPredMagn`^{quant}(CHARGE)	: *fuel* [~] | C. in the pl. by illegal and/or unethical means
8.	*entrench itself in power*	X's power over Y	`Caus`$_{(1)}$`ContOper`$_1$(POWER)	: *entrench* [N *in* ~]
9.	*seek a (second) term*	X's term of/in Y	`try.Caus`$_1$`Oper`$_1$(TERM)	: *seek* [ART ~]

Chapter 8: The Lexical Stock of a Language and the Dictionary

1. To demonstrate that a vocable is polysemic, we need to find at least two lexical items that share the corresponding signifier and have signifieds that are distinct but related through a semantic bridge.

The following examples suffice to prove that the vocable ACCOMPANY is polysemic:

(i) *I was invited to accompany* ['go together with'] *them to the Banff Mountains National Park.*
(ii) *I was invited to accompany* ['play a musical instrument together with'] *them on the piano.*

These two instances of *accompany* correspond to two distinct meanings; the component 'X does α together with Y' constitute a semantic bridge between them.

The vocable ACCOMPANY contains at least another three lexemes, cf.:

(iii) *Innumerable human crises accompany cutbacks in social services.*
(iv) *The disease is accompanied with fever and pain in the umbilical region.*
(v) *The application should be accompanied by two recent photos.*

These are state-denoting lexemes, sharing the component 'X is present along with Y', which is close enough to the common semantic core of the two action-denoting lexemes above.

2. The vocable COFFEE contains the following five lexemes:

I.1a	'a hot stimulant drink that is of brown color and has a bitter taste'	*I do not like coffee.*	(1a) & (1d)
I.1b	'quantity of coffee**I.1a** drunk at once'	*Three coffees,*	(1e)
I.2	'seeds of a tropical shrub which, roasted and ground, are used to make	*coffee beans/*	(1b)
I.3	'tropical shrub which yields coffee**I.2**'	*coffee tree*	(1c)
II	'a brown color – that of medium roasted coffee**I.2**'	*coffee color*	(1f)

The first four lexemes are linked via metonymy; the fifth is a metaphorical extension from COFFEE**I.2**. This is a case of chain polysemy (Ch. 6, *1.3.1*: 155).

3. (a) `conversations`: CHAT$_{(N)}$ (*a chat with friends*), EXCHANGE$_{(N)}$ (*a lively exchange on the state of the novel in the US*), DEBATE$_{(N)}$ (*an acrimonious debate between the two candidates*), DISCUSSION (*a discussion about a possible salary increase*), ˹SMALL TALK˺ (*Small talk is a great way to break the ice.*), etc.

A sketch of the definition template (any optional component, i.e., not necessarily appearing in the definitions of all LUs of the class, is put in parentheses):

Propositional form	$L_{\texttt{conversation}}$ *between* `person` *X and* `people` Y_i *about Z*:
Central component [CC]	Conversation
Characterization of the CC	(informal), (long)
Characterization of the actants	between X and Y_i (who know/do not know each other well) about (an important/not very important) Z
Peripheral component	(with the goal of […])

(b) `unpleasant sensations`: HUNGER (*hunger pangs in my stomach*), COLD$_{(N)}$ (*cold in my feet*), IRRITATION (*irritation of the skin*), PAIN$_{(N)}$ (*pain in the left arm*), TINGLING (*tingling in the toes*), CHILL$_{(N)}$ (*an icy chill up the spine*), etc. A sketch of the definition template:

Propositional form	`creature` *X's* $L_{\texttt{unpleasant sensation}}$ *(in* `body part/organ` *Y(X)):*
Central component [CC]	unpleasant sensation
Characterization of the CC	(strong), (localized in Y(X)),
Peripheral component 1	caused by […]
Peripheral component 2	(possibly resulting in […])

4. Example (2) illustrates five lexemes of the vocable THIRSTY:

[basic lexeme] **I.1a**	`experiencing a sensation`:	[`person or animal` X] ~ for water	Ex. (2e)
[non-figurative lexemes] **I.1b**	`being in a physiological state`:	[`plant` X] ~ for water	Ex. (2d)
I.2	`experiencing a desire`:	[`person` X] ~ for `beverage` Y	Ex. (2b)
[metaphoric lexemes] **II.1**	`being in a mental state`:	[`person` X] ~ for `fact` Y	Ex. (2c)
II.2	`being in a situation`:	[`organization` X] ~ for `entity` Y	Ex. (2a)

5. (a) As can be seen in the tables below, an LU can belong to several semantic fields, but no LU can belong to more than one semantic class. The tables also show that a semantic field, unlike a semantic class, can include LUs of different parts of speech.

(i)

Semantic field	LUs belonging to the semantic field
1. "TRAVEL"	COMMUTE, SCHOOLBUS, $TRAIN_{(N)}$, TRAVELER
2. "PUBLIC TRANSPORT"	COMMUTE, SCHOOLBUS, $TRAIN_{(N)}$, TRAVELER
3. "SCHOOL"/ "SCHOOLING"	$BOOK_{(N)}$, JANITOR, KINDERGARTEN, $SCHOOL_{(N)}$, SCHOOLBUS, STUDENT, $STUDY_{(V)}$, TEACH
4. "PRESS"	$BOOK_{(N)}$, PUBLISH
5. "LITERATURE"	$BOOK_{(N)}$
6. "MAINTENANCE"	JANITOR

(ii)

Semantic class	LUs belonging to the semantic class
1. `means of transportation`	SCHOOLBUS, $TRAIN_{(N)}$
2. `educational institution`	KINDERGARTEN, $SCHOOL_{(N)}$
3. `be engaged in an activity`	COMMUTE, PUBLISH, $STUDY_{(V)}$, TEACH
4. `text/text support`	$BOOK_{(N)}$
5. `individual engaged in an activity`	STUDENT, TRAVELER
6. `professions`	JANITOR

(b) The lexeme RIFLE (*cleaning an old rifle barrel*) belongs to the semantic class `firearm`, together with GUN, PISTOL, REVOLVER, etc.; it can be included in several semantic fields, for example, "WAR", "CRIME", "HUNTING", "SPORTS", and 'MANUFACTURING".

6. The sentence #*Max swallowed his coffee and his pride* is an instance of zeugma, resulting from the illicit "superposition" of two lexemes of the vocable SWALLOW, roughly defined as follows:

SWALLOW**I.1** 'X causes**2** ingested food or drink to go down X's throat'
SWALLOW**II** 'X prevents X's feeling Y from manifesting itself – ˹as if˺ X were swallowing**I.1** Y'.

Coordination of complements of the lexical item under analysis is used as a diagnostic tool in lexemization: if it leads to a zeugma, this may be an indication that splitting one presumed lexical item into two is in order. (See Criterion of unifying cooccurrence, Ch. 8, *2.3.1*: 217.)

7. First, these definitions transgress several rules for formulating definitions (Ch. 5, *2*: 121*ff*): 1. Propositional form rule; 2. Standardization rule ('thing', 'object' ⇒ 'object'; 'that you use when', 'used for', 'that you use for ' ⇒ 'designed for X to'); 3. Mutual substitutability rule (some necessary components are missing in some definitions, and some unnecessary ones are present; see modified definitions below).

Second, the *Lexical unit uniform treatment principle* (Ch. 8, *2.1.2.3*: 207) is violated. According to the definition of UTENSIL, the lexemes SPOON, KNIFE and FORK are instances thereof; therefore, each of these lexemes must have 'utensil' – or, better still, 'kitchen/eating utensil' – as the central component of its definition.

Modified definitions:

X's KITCHEN/EATING UTENSILS:
'objects designed for X to cook, serve and eat food'

X's $\text{SPOON}_{(N)}$**1**:
'X's kitchen/eating utensil – a bowl-shaped piece with a handle, designed for X to collect and bring liquid food to X's mouth'.

X's $\text{KNIFE}_{(N)}$**1**:
'X's kitchen/eating utensil – a metal blade with a handle, designed for X to cut food'.

X's $\text{FORK}_{(N)}$**1**:
'X's kitchen/eating utensil – four thin pointed parts with a handle, designed for X to pick up and bring solid food to X's mouth'.

REMARK. See Wierzbicka 2015, where an NSM-style definition of SPOON is proposed, along with the following definition template for "cultural kinds", such as 'cups' and 'spoons': (1) Functional category; (2) Size; (3) Material; (4) Parts (design); (5) Setting; (6) Use sequence; (7) Artifact status.

8.

$\text{BLAME}_{(V)}$

GP-1: `person` X ~s Y for `fact` Z(Y)

X ⇔ **I**	Y ⇔ **II**	Z ⇔ **III**
1. N	1. N **obligatory**	1. *for* N/V_{INF}

They blamed us ⟨our actions⟩ for the crisis.

GP-2: `person` X ~s `fact` Z on Y.

X ⇔ **I**	Z ⇔ **II**	Y ⇔ **III**
1. N	1. N **obligatory**	1. *on* N **obligatory**

The French blamed the crisis on us ⟨on our actions⟩.

CONVERSATION

GP-1: `person` X's ~ with `people` Y_i about Z

X ⇔ **I**	Y ⇔ **II**	Z ⇔ **III**
1. N's 2. A_{poss}(N)	1. *with* N	1. *about* N 2. *on* N

Alain's ⟨his⟩ conversation with us about linguistics

GP-2: `person` X's and `people` Y_i's ~ about Z

X + Y ⇔ **I**	Z ⇔ **II**
1. N's *and* N's 2. A_{poss}(N *and* N)	1. *about* N 2. *on* N

Alain's and Igor's ⟨their⟩ conversation on linguistics

DANGEROUS

GP: [X] ~ to Y

X ⇔ **I**	Y ⇔ **II**
– –	1. *to* N 2. *for* N

a dangerous situation | *a virus dangerous to humans* | *a slippery walk dangerous for old people*

9.

REVENGE, N, uncountable

Definition

X's revenge on Z for Y(Z): 'committing of an act by which X avenges Y(Z)'
Cf. *X avenges Y(Z)*: '[[Z having done a harmful Y to X]], X does something harmful to Z in return'

Semantic Label

committing of an act

Government Pattern

X ⇔ **I**	Z ⇔ **II**	Y ⇔ **III**
1. *of* N	1. *on* N	1. *for* N
2. N's	2. *against* N	2. *for* V_{GER}

revenge of the son, *the son's revenge* | *revenge on* ⟨*against*⟩ *the killer* | *revenge for the killing* ⟨*for having killed*⟩

Lexical Functions

QSyn	: *vengeance*; *retaliation*; *vendetta*
V_0	: liter. *avenge*$_{(V)}$
S_1	: *avenger*
$Able_1$	: *revengeful*
Sing	: *act* [*of* ~]
A_1Pred	: *revenge* [N] (*revenge attack* ⟨*killing*⟩)
try.$Oper_1$	: *seek* [~]
promise.$Oper_1$	: *vow* [~]
$Oper_1$	: *take*, liter. *exact* [ART ~]
[Magn + $Oper_1$]	: *wreak* [~]
$Real_1$	: *get*, *have*, *realize* [ART/A_{poss} ~]
Magn	: *awful, terrible*; *bloody*
«It is extremely pleasant for X to $Oper_1$ R.»	: *R. is sweet.*
«X should $Oper_1$ R. only when X's strong feelings about Y(Z) calm down»	: *R. is a dish best served cold.*

Examples

Incensed at this, the young fellow inwardly vowed revenge. | *Ten ways people got their revenge on cheating partners.* | *The attack on Thai Post was an act of revenge for their sustained criticism of Thaksin* […] | *Betrayed by his boss, he returns to exact his terrible revenge.*

Chapter 9: Sentential Meaning and Meaning Relations between Sentences

1. *Bright black rectangular circles scream silently* [a Chomsky-type absurd sentence]. | *The idea had only one leg both of which were left*. | *John calculated the biggest natural number* [there is no biggest natural number]. | *John was teleported from Alpha Centauri under algebra.* | *The pencil was breathing through interpretation.*

2. (a) Tautologies are always linguistically true; for instance:

100% of our clients buy our products:

'X's client' ≈ 'someone who buys X's products'; therefore, '100% of our clients buy our products' = '100% of people who **buy our product buy our products**'

free gift:

'[X] free**II** = '[X] that you receive without paying any money'; 'gift' ≈ 'something that you receive without paying any money'; therefore, 'free**II** gift' = 'something **that you receive without paying any money that you receive without paying any money**'

(b) Contradictions are always linguistically false; for instance:

The Devil, who does not exist, arranged all this. | *The wife of this bachelor is a PhD in economics*; cf. also the sentences in the answer to Question 1 for this Chapter (immediately above). Examples of contradictions that have become phrasemes: *deafening silence* 'very **loud** silence [**absence of sound**]'; or Lat. *Cum tacent, clamant* 'When [they] keep.silent, [they] scream'. ≈ 'Their silence speaks volumes'. Examples of artistic use of contradictions: *And faith unfaithful kept him falsely true* [Tennyson, *Idylls of the King*]; Fr. *Sa belle figure laide sourit tristement* 'His beautiful ugly face smiles sadly' [Alphonse Daudet, *Le Petit Chose*].

3. The literal meaning of the expression Lat. *Festina lente* 'make.haste slowly' is contradictory because the component 'quickly' in 'make haste' clashes with the component 'slowly'. However, it has a non-literal interpretation in which there is no contradiction: 'do things in an efficient manner [hurry] without rushing them through [slowly]'. Formally speaking, this saying (adopted as a motto by the Emperor Augustus, among others) is a weak idiom. A good English translation equivalent – *More haste, less speed* – contains no contradiction.

4. The French expression *Un sou est un sou* is a phraseme (more precisely, a weak idiom), formally based on a tautology 'X is X'. Its meaning is, roughly, 'even a small coin has its value'; today, the expression is used mostly ironically, to stigmatize avarice.

English does not have an exact equivalent of this expression, the closest ones being *Every penny counts* and *A penny saved is a penny earned*.

5. First, the meaning of the notice, 'it is forbidden to walk in climbing boots [inside the lodge]', is expressed in a clumsy way; an acceptable expression of this meaning would be, for instance, *Do not walk in your climbing boots in the lodge* or *No climbing boots inside*. Second, the meaning itself is not ideally constructed (for English). The appropriate meaning in this situation would be 'we ask you to take off your climbing boots [inside the lodge]', expressed as a polite request (rather than an interdiction): *Please take your climbing boots off*. Therefore, this notice is an example of a sentence ill-formed for linguistic reasons: the failure to use one of the existing English pragmatemes.

6. These sentences are approximate paraphrases; cf.:

(1) a. *X stabs Y to death (with Z)*: ≈ 'X wounds Y by piercing Y's body with a sharp instrument Z, this wound causing**1** Y's death'.

b. *X kills Y with a knife (= Z)*: ≈ 'X causes**2** Y's death by applying a knife (= Z) to Y's body.'

Thus, '[to] stab' is 'to wound in a particular way' ('by piercing with a sharp instrument'), that is, not necessarily causing death and not necessarily with a knife.

The first semantic difference between the two sentences is neutralized thanks to the presence of the prepositional phrase *to death* in sentence (1a). (This is a neutralization of semantic differences in a linguistic context.)

The second difference ('with a sharp instrument' vs. 'with a knife') can be ignored in a discursive context where factual precision is not essential (e.g., in an everyday conversation but not in a court of law) – because a knife is a typical instrument used to wound or kill. (This "neutralization" takes place in an extralinguistic context.)

7. (a) *A language learner* ⟨*Language learners*⟩ *makes* ⟨*make*⟩ *a lot of lexical errors*; the opposition "singular ~ plural" is neutralized in the generic context ('any X' ≈ 'all Xs'), which is a linguistic context type.

(b) *Since the beginning of the 20th century* ⟨*For a hundred years*⟩*, global temperatures have shown a sharp upward trend*. These sentences are mutual paraphrases provided that the second one is uttered/written around the year 2000, the moment of utterance being extralinguistic information.

8. A presupposed part of a sentence's meaning is not accessible for negation, i.e., it cannot be negated when the entire sentence is negated.

(2a) Presupposition: 'Someone is bringing a dessert'. Source: clefting of the sentence (*It is X that …*), which expresses the Focalization of the element corresponding to the semantic Rheme (here *Max*); cf. the underlying question *Who is the person bringing the dessert?*, to which our sentence can be an appropriate answer. (*No one is* would be an unexpected answer.)

(2b) Presupposition: 'Max was lied to'. Source: factivity of the verb '[to] realize'; a factive verb presupposes the truth of the logical proposition expressed by its (sentential) complement.

(2c) Presupposition 1: 'They are persecuting Max'. Source: A WH-question: the interrogation bears on reasons for the persecution, the fact itself being outside of its scope. Presupposition 2: 'They have authority over Max'. Source: the meaning of PERSECUTE 'X ~s Y for Z', i.e., its lexicographic definition, which specifies this particular relationship between the persecutor ('X') and his victim ('Y'); cf. presupposition-2 in the definition of FORBID (Ch. 9, *2.3*: 248).

9. Negating an implication of a sentence results in a contradiction.

(a) *Max got well* implies *Max is not sick* because #*Max got well but Max is sick* [= 'it is not the case that Max is not sick'] is a contradiction. (*Max is not sick* does not imply *Max got well*: in theory, Max might never have been sick in his life.)

In the same vein, *Max kissed Lea passionately* implies *Max kissed Lea* because of the contradictory character of #*Max kissed Lea passionately without kissing her*. (On the other hand, kissing Lea does not imply that it was done passionately.)

(b) (3a) *A strange noise awoke Max* implies *Max woke up* [by omission of the cause].

(3b) *The noise stopped* implies *there is no noise* [by omission of the phase].

10. (4a) Here is how Charles Hockett commented on his example (Hockett 1987: 32): "*Ship sails today* is indeterminately a condensation of *The ship sails today*, of *They ship the sails today* or of *The ship-sails are available today*." To this we can add the following possible reading: *Ship sails today!* 'I order you to ship the sails today'.

(4b) The text *Squad helps dog bite victim* can mean either 'Squad helped someone who was a victim of dog biting' (a normal interpretation) or 'Squad helped a dog to bite a victim' (an absurd interpretation).

Chapter 10: Semantic Representation

1. Here is one way, among several, to complete this SemR:

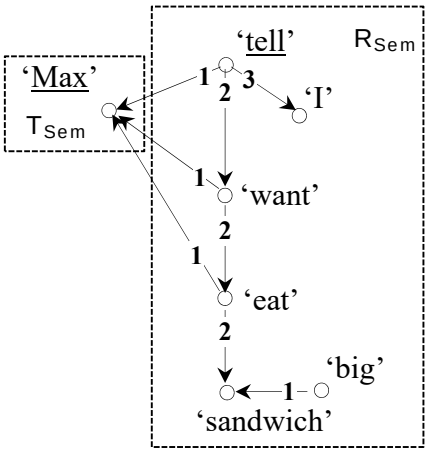

Figure Key.Ex.1: A fully labeled SemR

Some of its realizations: *Max told me ⟨said to me⟩ (that) he wanted ⟨wished, desired⟩ (to eat ⟨have⟩) a big ⟨sizeable, good-size⟩ sandwich*. | *Max told me ⟨said to me⟩ (that) he felt like eating ⟨having⟩ a big ⟨sizeable, good-size⟩ sandwich*.

2. This SemR has a huge number of realizations; not all the combinations of the LUs indicated below are stylistically acceptable, though, cf. the usage labels (indicated only for the first set of sentences).

The bike ⟨bicycle⟩ that the guy ⟨fellow, Br. Eng. *bloke*, Br. Eng. *chap*, Am. Eng. *dude*, *male*, *man*, *individual*, *person⟩ arrested ⟨caught*, *captured*, *taken into custody*, formal *apprehended⟩ by the police* ⟨informal. *cops*, Br. Eng., informal *coppers*, *police officers*, formal *law enforcement officers⟩ stole* ⟨Br. Eng., informal *nicked*, Br. Eng., informal *pinched*, formal or humorous *expropriated⟩ belongs to Max ⟨is Max's*, *is Max's property*, *is owned by Max⟩*.

The bike ⟨bicycle⟩ (that was/got) stolen ⟨nicked, *pinched*, *expropriated⟩ by the guy ⟨fellow, bloke*, *chap*, *dude*, *male*, *man*, *individual*, *person⟩ (who was/got) arrested ⟨caught*, *captured*, *took into custody*, *apprehended⟩ (by the police ⟨cops*, *coppers*, *police officers*, *law enforcement officers⟩) belongs to Max ⟨is Max's*, *is Max's property*, *is owned by Max⟩*.

REMARK. Our SemR does not specify explicitly the reason for the arrest (which could have happened for something other than the bicycle theft) and thus does not allow for the reading *The bike for the theft of which the guy was arrested (by the police) belongs to Max*. Pragmatically, however, this is exactly the reading that would be naturally assumed in the situation in question.

3. The verb [to] *change* that we see in the example sentence is an inchoative, i.e., change of state verb; the dominant component of its meaning is 'become' [= 'begin.to.be']. The verb has two SemAs: 'X', the entity or fact that is changing (in our case, 'city'), and 'Y', the aspect(s) in which X is changing (not expressed in the example sentence).

Further examples: *Over the years, Max has changed both in appearance and in character.* ≡ *Over the years, both Max's appearance and character have changed.* | *The hotel has changed in respect of its clientele:* […] ≡ *The hotel's clientele has changed:* […]. As we can see, the verb

[to] *change* admits two syntactic patterns: *X changes in Y* and *Y(X) changes*. We consider the first one as basic, insofar as both participants are expressed as direct dependents of the verb; therefore:

X changes in aspect Y(X): 'X becomes different**1** in X's aspect Y'.

Here is the SemS of the example sentence with the decomposition of the semanteme 'change' (for simplicity's sake, we omit the actantial slot 'Y', not saturated in the example sentence):

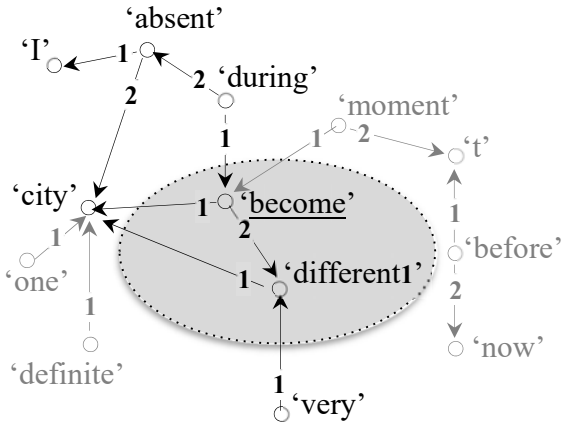

*Figure Key.Ex.2: A SemS featuring the decomposition of the semanteme 'change**1**'*

REMARK. The monoactantial semanteme 'X different**1** (at point in time $\mathbf{t_2}$ from X at point in time $\mathbf{t_1}$)' that figures in the above decompositions should not be confused with the tri-actantial semanteme 'X different**2** from Y with respect to Z' (*Charles is very different from Noam in his approach to linguistics.*). 'Different**1**' bears on the same entity/fact considered at different moments, while 'different**2**' concerns two distinct entities/facts.

This decomposition allows us to produce the sentence *The city became very different during my absence*; by varying lexicalizations of other elements of the SemS, we can get, for instance, *The city became a lot ⟨quite⟩ different while I was absent ⟨while I was away⟩ (from it)*.

4. (a)

(1) a. Q: What happened in 1492?

[*1492*]$_{\text{TSem}}$ [*saw the discovery of America*]$_{\text{RSem}}$.

b. Q: When was America discovered?

[*America was discovered*]$_{\text{TSem}}$ [*in 1492*]$_{\text{RSem}}$.

c. Q: Which continent was discovered in 1492?

[*It was America*]$_{\text{RSem, Focalized}}$ [*that was discovered in 1492*]$_{\text{TSem}}$.

(b)

(2) a. [It's -25 °C in downtown Halifax, -30 °C with wind chill]

[*These frigid temperatures*]$_{\text{TSem}}$ [*should not last*]$_{\text{RSem}}$.

b. [Is the movie any good?]

[*To my mind,*]$_{\text{Spec}_{\text{Sem}}}$ [*it*]$_{\text{TSem}}$ [*is very bad*]$_{\text{RSem}}$.

c. [I've decided to go.]

[*Max,*]$_{\text{TSem, Focalized}}$ [*he is still thinking about it*]$_{\text{RSem}}$.

d. [What is it?]

[*There is a gentleman looking for you*]$_{\text{RSem}}$.

(c) We have here a case of a fronted direct object (i.e., a DirO linearly positioned at the beginning of the sentence, and therefore, "in front of" the Main Verb) expressing an Emphatic Theme; below is a context in which such fronting is possible (an exchange of questions and answers):

A: *At what time is the concert?*
B: *9 p.m.*.
A: *Where?*
B: *At R. Cohn Auditorium*.
A: *Is Jane coming?*
B: [*That*$_{\text{TSem, Emphasized}}$ *I do not know*]$_{\text{RSem}}$.

REMARK. Emphasized (vs. Non-emphasized) is a value of the semantic-communicative opposition of Emphasis. This semantic-communicative opposition models the Speaker's emotional involvement in the situation in question; it has not been introduced in this book.

5. (a) Signalatives are linguistic items that express the Speaker's interior states or his rhetorical intentions in a form that does not allow for interrogation or negation (i.e., does not constitute a logical proposition): *Terrific!* | *You don't say!* | *Who knew?* | *Interestingly (enough)*, […] | *In conclusion,* […] In a SemR, a signalative is marked with the value Signaled of the semantic-communicative opposition of Locutionality (Ch. 10, *3.1.2.5*: 277), which specifies the mode in which the content of an utterance can be conveyed.

(b) Verbs used performatively (the distinctive numbers are from LDOCE): QUOTE**1** in (4a), but not in (4b); TELL**3** in (4c), but not TELL**1** in (4d); QUIT**1** in (4e), but not in (4f). Verbs that cannot be used performatively: TELL**1** in (4d) and DEFEND**3** in (4g). You do not need to enunciate *tell**1*** and *defend**3*** in order to be effectively telling and defending something.

6.

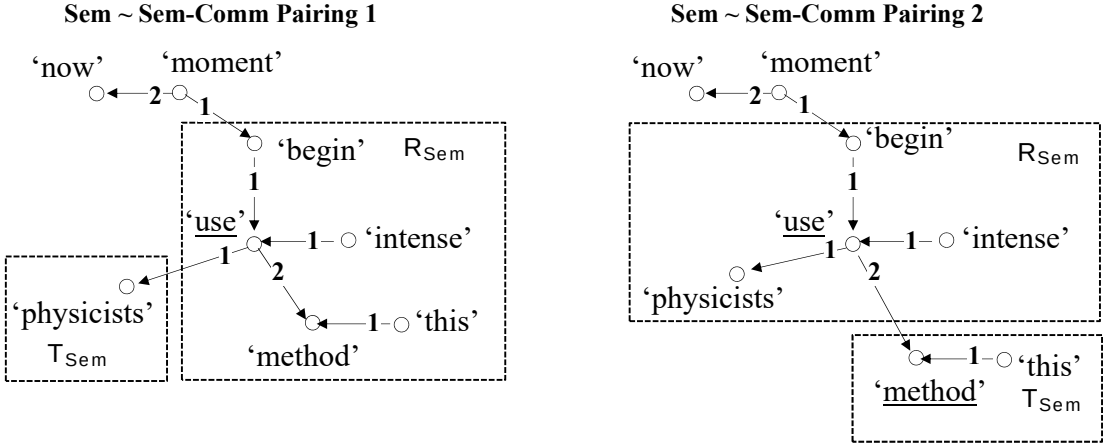

Figure Key.Ex.3: Two SemS ~ Sem-CommS pairings

Physicists are starting ⟨are beginning⟩ to use ⟨utilize⟩ this method extensively ⟨a lot⟩. | *Physicists are starting ⟨are beginning⟩ to make heavy use ⟨an extensive use⟩ of this method.*

This method is finding ⟨is getting⟩ widespread use with physicists. | *This method is beginning ⟨is starting, is getting⟩ to be heavily used by physicists.*

Sentences produced out of different SemS ~ Sem-CommS pairings are paraphrases in a broad sense (Ch. 10, *4.2*: 283); they are less readily mutually substitutable than paraphrases that have the same underlying SemS ~ Sem-CommS pairing. Nevertheless, there should be at least some common contexts for such paraphrases; in this particular case, paraphrases from both sets can be indiscriminately used if 'method' is the theme of the following sentence, for instance: *It* [= the method] *has become so popular that …*

7. Q: What is made possible through this program?
[*Thanks to this program,*]$_{T_{Sem}}$ [*young adults are able to travel*]$_{R_{Sem}}$

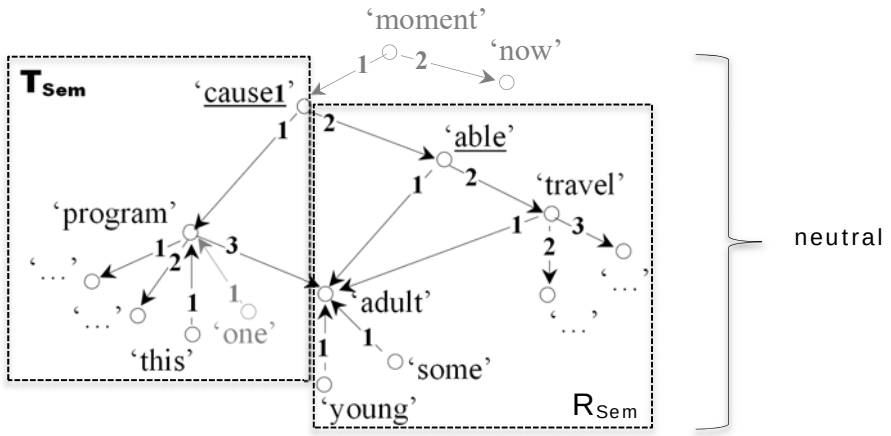

Figure Key.Ex.4: A SemS ~ Sem-CommS pairing

Because of this program, young adults can travel. | Owing to this program, young adults have the ability to travel. | This program gives young adults the ability to travel. | This program makes young adults able to travel.

Chapter 11: Deep-Syntactic Representation

1. DSyntS is necessary in semantics because it is the output, i.e., the result of the functioning, of the rules of the semantic module; without DSyntS, these rules cannot be described. (See Ch. 1, *2.3*: 19.)

2. (a) Only deep LUs can appear in a DSyntS, i.e., genuine deep lexemes and idioms [V, N, Adj, Adv, Claus], fictitious lexemes, and names of lexical functions.

For examples, see Ch. 11, *2.2*: 288*ff*).

(b) Semantic inflectional categories of English:

Syntactic Class of LUs	Inflectional category	Grammemes
N	NUMBER	{SG, PL}
	DETERMINATION	{DEFINITE, INDEFINITE, NON-DEFINITE}
ADJ	DEGREE OF COMPARISON	{POSITIVE, COMPARATIVE, SUPERLATIVE}
V	MOOD	{INDICATIVE, IMPERATIVE, CONDITIONAL, SUBJUNCTIVE, IRREALIS}
	VOICE	{ACTIVE, DIRECT PASSIVE, INDIRECT PASSIVE}
	TENSE	{PRESENT, PAST, FUTURE}
	ASPECT1	{PROGRESSIVE, NON-PROGRESSIVE}
	ASPECT2	{PERFECTIVE, NON-PERFECTIVE}

REMARK. English has the following syntactic inflectional categories: (1) FINITENESS {FINITE, NON-FINITE [INFINITIVE, PARTICIPLE, GERUND]}, (2) NUMBER OF THE SUBJECT {SG, PL} and PERSON OF THE SUBJECT {1, 2, 3} for the verb; (3) CASE {NOM, DAT, ACC} for personal pronouns; and (4) NUMBER {SG, PL} for demonstrative pronouns.

3. (a)

(1) a. *symbol←sequence* 'sequence of symbols'
b. *fast←access←memory* 'memory with access that is fast'
c. *a different←proposal from→this* Cf. *a proposal→different→from this*

(b) This graph cannot be a well-formed dependency tree because it has no top node and one of the nodes (node "e") receives two entering arcs. This can be a well-formed semantic network, as no network well-formedness conditions (connectedness, arc orientation, full arc and node labeling) are violated.

4. (a)

(2a) Asyndetic (i.e., conjunction-less) coordination, not formally marked.

(2b) Coordination by means of an affix.

(2c) Strong subordination; clitic pronouns function as verbs' actants (indirect and direct object, respectively), their syntactic roles being marked by cases.

(2d) Weak subordination; juxtaposition of a present participle and an imperative form without any segmental marking of their syntactic link.

(2e) Syndetic coordination expressing an actantial relation; semantically, this is subordination ('catch' is SemA **2** of 'try').

(b)

(3a) Circumstantial; the manner in which one sings is not an obligatory participant of the situation of singing.

(3b) Actant; the way one behaves is an obligatory participant of the situation in question, and most of the time it has to be expressed. If unexpressed, this actant is implied; cf. the following sentences, where *behave* necessarily means 'behave well/ properly': *From time to time*, *Max behaves.* | *You will behave or else…* | *How to teach your dog to behave*.

(3c) Actant; the adjective expresses SemA **1** of 'address by X on Y'; cf. *address by the President*.

(3d) Modifier; '[a look] that is typical of a president'.

(c) These are non-prototypical DSyntAs: unlike prototypical actants, they do not correspond to SemAs.

(4a) Ethical Dative; this is not a SemA of the verb [not an obligatory participant of the corresponding situation, not featured in the verb's Government Pattern], but becomes one of its DSyntAs in the Sem-to-DSynt transition because it behaves in the same way as genuine indirect objects.

(4b) Raised Possessor's Dative; the same as in the previous case.

(4c) This is a special type of object, called cognate object, which can only be expressed if qualified; cf. also *die a horrible death*, *live a long and happy life*, *fight a good fight*, etc. A cognate object corresponds to a modifier at the Sem level ('die in a horrible way', 'live a long time and in happy way', etc.), but is a regular DSyntA (DIE–**II**→DEATH, etc.).

5. (a)

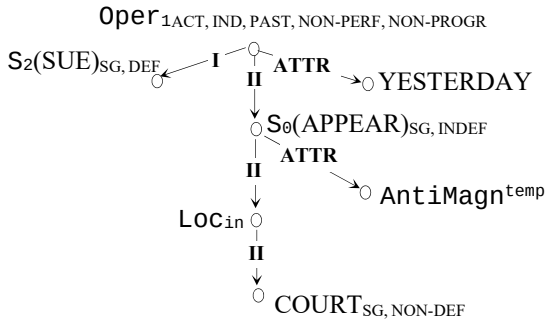

Figure Key.Ex.5: DSyntS of the sentence
The defendant made a brief court appearance yesterday

REMARK. $\texttt{AntiMagn}^{\texttt{temp}}$ is a lexical function meaning, roughly, '[L] short in time'; $\texttt{Loc}_{\texttt{in}}$ is also a lexical function, which means 'located inside of [L]'.

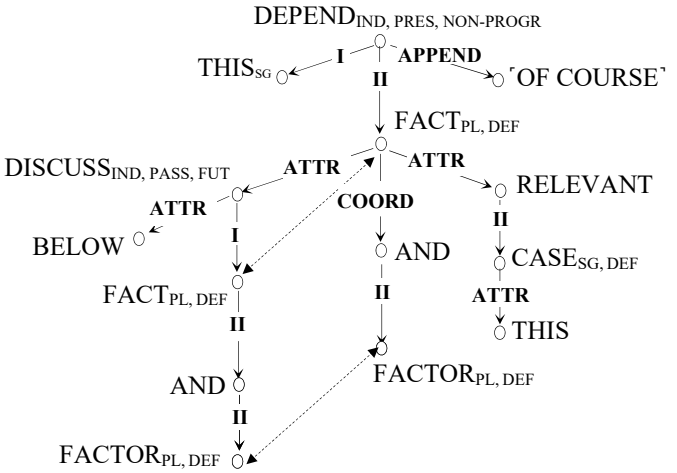

Figure Key.Ex.6: DSyntS of the sentence This, of course, depends on the facts and factors relevant for this case, which will be discussed below

(b)

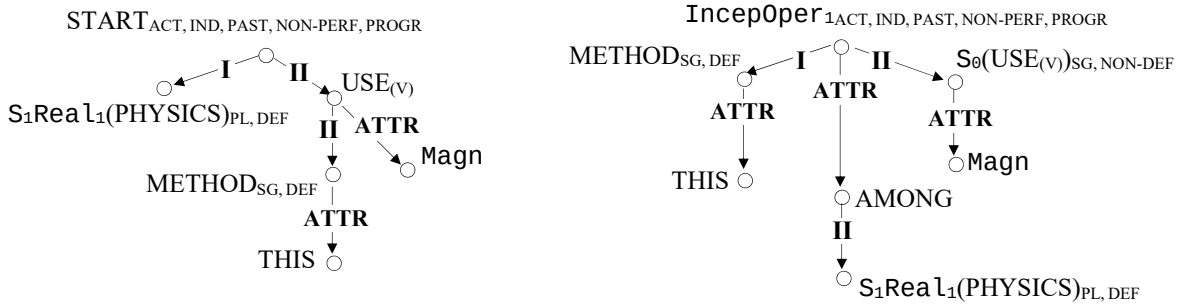

Figure Key.Ex.7: DSyntSs of two synonymous sentences

REMARK. $\texttt{S}_1\texttt{Real}_1$ is a complex LF meaning 'that who does with L what is supposed to be done with L'.

6. (a)

(7a) *We*←**I**–*dispense*[1]–**ATTR**→*with*–**II**→*accuracy* 'We give out [≈ DISPENSE[1], a transitive verb] (medication) accurately'; the prepositional phrase is a circumstantial of the verb, and the preposition WITH is semantically full. | *We*←**I**–*dispense*[2]–**II**→*accuracy* 'We disregard [≈ DISPENSE[2], a verb governing the preposition WITH] accuracy (when giving out medication)'; the prepositional phrase is an actant (the oblique object) of the verb, and the preposition WITH is semantically empty. These verbs are homonyms.

(7b) *Eye*←**II**–*drops*$_{(N)}$–**ATTR**→*'off* [the] *shelf'* 'Drops for eyes [sold] off the shelf' = '… ready-made'. | *Eye*←**I**–*drops*$_{(V)}$–**II**→*off*–**II**→*shelf* 'An eye falls from a shelf'.

(7c) *Children make* [= MAKE$_{(V)}$**3** 'to cook or prepare food or drink'] *delicious snacks* 'Children prepare delicious snacks'. | *Children make* [= MAKE$_{(V)}$**11** 'to have the qualities that are necessary for a particular job, use or purpose] *delicious snacks* 'Children are delicious as snacks'. Here the ambiguity is purely lexical, the syntactic structures of the two sentences being identical: *children* is DSyntA **I** of the Main Verb, *snacks* is its DSyntA **II**, and *delicious* is linked to *snacks* via the DSyntRel **ATTR**.

(b)

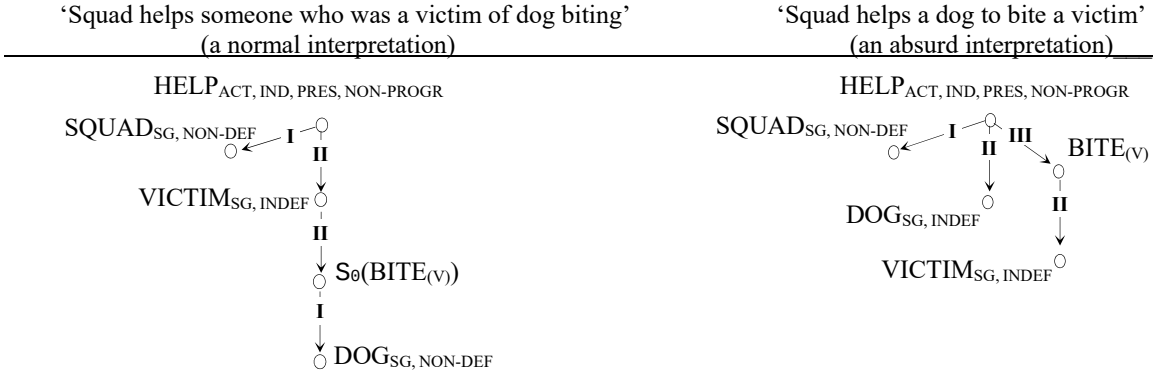

Figure Key.Ex.8: DSyntSs of two equinomous sentences

Chapter 12: Semantic Rules

1. Here is the common SemS of the sentences in (1) with an approximate decomposition of the semanteme ‘X expects Y (from Z) [shaded]’; inflectional meanings are not represented.

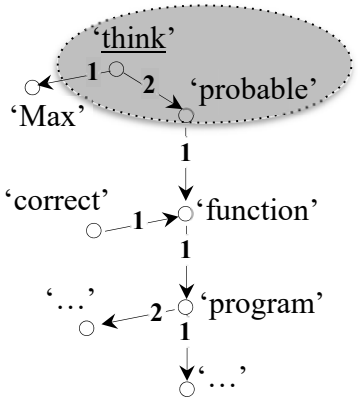

Figure Key.Ex.9: SSem underlying two synonymous sentences

REMARKS. 1. A full decomposition of ‘X expects Y (from Z)’ includes the semantic configuration ‘X is affected by Y’ (in our case, ‘Y’ is of course ‘correct functioning of the program’). 2. The semanteme ‘program [created] by X for [task] Y’ appearing in the example sentences refers to a computer program; it should not be confounded with the semanteme ‘program [created] by X for Z concerning Y(Z)’ appearing, for instance, in the sentence *Because of this program, young adults can travel* and its paraphrases (cf. Exercises for Ch. 10, question 7).

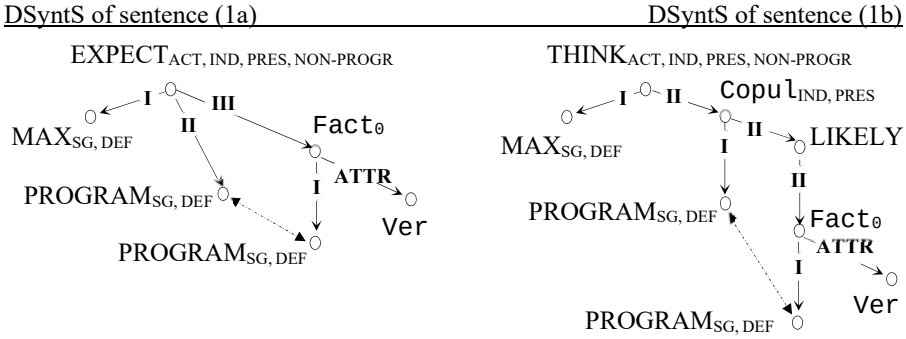

Figure Key.Ex.10: DSyntSs of two synonymous sentences

Lexicalization rules for both DSyntSs (all these rules are stated rather informally, without conditions):

LEXEMIC RULES: 1) ‘Max’ ⇔ MAX; 2) ‘program’ ⇔ PROGRAM.

LEXICAL-FUNCTIONAL RULES: 1) ‘function’[–**1**→‘program’] ⇔ `Fact0`[–**I**→PROGRAM];
2) ‘correct’[–**1**→‘function’] ⇔ [`Fact0`–**ATTR**→]`Ver`.

Lexicalization rules for DSyntS of (1a):

LEXEMIC RULE: 1) ‘think’–**2**→probable’ ⇔ EXPECT.

Lexicalization rules for DSyntS of (1b):

LEXEMIC RULES: 1) ‘think’ ⇔ THINK; 2) ‘probable’ ⇔ LIKELY.

REMARK. The verb `Copul` (which represents the verb *to be*) is introduced into the DSyntS of (1b) by an auxiliary structural rule whose task is to “verbalize” LUs lexicalized from a non-verbal node of the SSem (in our case, the adjective LIKELY, lexicalizing the semanteme ‘probable’). This auxiliary rule is similar to, but distinct from, the **Arborization Rule R$^{\text{ARBOR}}$ 3**, responsible for the verbalization of a non-verbal entry node of the SemS (Ch. 12, *1.3.1*: 322).

2. (a) This rule describes the construction of phrases of the type "N→ADJ", "V→ADV" and "ADJ/ADV→ADV", i.e., prototypical modification. (See *Figure 11.3*, Ch. 11, *2.4.1.2*: 296, illustrating the opposition "modification ~ actancy".)

'Y', the future syntactic modifier, semantically dominates '<u>X</u>', the future syntactic head of the corresponding phrase, via the SemRel **1**, while being communicatively dominated by it. This mismatch between the two types of dominance triggers the inversion of subordination in the Sem-to-DSynt transition, resulting in the construction of the DSyntRel **ATTR**. Examples: *interesting*$_{L('Y')}$ *person*$_{L('\underline{X}')}$ (constructed from the SemR 'interesting$_Y$–**1**→<u>person</u>$_X$') | *walk*$_{L('\underline{X}')}$ *quickly*$_{L('Y')}$ | *quite*$_{L('Y')}$ *interesting*$_{L('\underline{X}')}$ | *very*$_{L('Y')}$ *quickly*$_{L('\underline{X}')}$.

(b) This rule describes the construction of relative clauses where the relative pronoun (*who(m)*, *which*, *that*) functions as the object of the verb heading the clause; the entire clause modifies the noun "copied" by the relative pronoun. (In relative clauses constructed by the application of **Arborization Rule R^{ARBOR} 8**, Ch. 12, *1.3.2*: 326, the relative pronoun (*who*, *which*, *that*) functions as the subject of the verb heading the clause.) Examples: *the man*$_{L('\underline{Y}')}$ [*whom*$_{L('Y')}$, *we saw*$_{L('X')}$] (constructed from the SemR 'we←**1**–saw$_X$–**2**→<u>man</u>$_Y$') | *the flower*$_{L('\underline{Y}')}$ [*which*$_{L('Y')}$, *I picked*$_{L('X')}$] | *the song*$_{L('\underline{Y}')}$ [*that*$_{L('Y')}$, *Max remembered*$_{L('X')}$].

3. (2a): Lexical-syntactic paraphrases.

Lexicographic data: S_0(ATTACK$_{(V)}$) = ATTACK$_{(N)}$; $Func_0$(ATTACK$_{(N)}$) = ⌜*take place*⌝.

The corresponding lexical-syntactic equivalence rule is

$L_{(V)} \equiv Func_0$–**II**→$S_0(L_{(V)})$.

(2b): Semantic paraphrases.

The corresponding addition semantic quasi-equivalence rule is

'X does Y' ≅ 'X <u>is able to</u> do Y' | 'Y' is difficult.

(2c): Semantic paraphrases.

The corresponding expansion/reduction semantic equivalence rule is

'morph' ≡ 'an elementary segmental sign'.

(2d): Semantic paraphrases.

The corresponding inferential semantic quasi-equivalence rule is

'X likes doing Y' ≅ 'X does Y often'.

This rule "in prose": If X likes doing Y, then X will do Y whenever possible; however, the converse does not hold: doing something often does not entail liking it.

4. (a) $L_{(V)} \equiv Real_1$–**II**→$S_0(L_{(V)})$. *In the first half of 1990, the banks* ***controlled***$_{L_{(V)}}$ ⟨***exercised***$_{Real_1}$ ***control***$_{S_0(L_{(V)})}$ *over*⟩ *the increase in interest rates.* | *Boys do* ***cry***$_{L_{(V)}}$*: they admit they* ***shed***$_{Real_1}$ ***tears***$_{S_0(L_{(V)})}$ *over the pressure of sitting exams and getting good grades*.

(b) $L_{(V)} \equiv Oper_1$–**II**→$S_2(L_{(V)})$. *Then I* ***thought***$_{L_{(V)}}$ *this:* […] ⟨***had***$_{Oper_1}$ *the following* ***thought***$_{S_2(L_{(V)})}$*:* […]⟩. | *Last year, he* ***donated***$_{L_{(V)}}$ *1,000 dollars* ⟨***made***$_{Oper_1}$ *a 1,000 dollar* ***donation***$_{S_2(L_{(V)})}$⟩ *for cancer research*.

5. (3a) SMOKER means 'an individual who smokes habitually'. While smoking all one's life obviously counts as habitual smoking, smoking for a day does not. (Incidentally, this means that the expression *social smoker* is a weak idiom (Ch. 4, *2.2.2.1*: 109), meaning 'an individual who smokes [not 'a smoker'!] only during social events, where there are other people who also smoke'.)

(3b) Even though '[X's] daughter's husband' is the exact decomposition of '[X's] son-in-law', the corresponding expressions are not mutually substitutable in this particular context, where the noun DAUGHTER is modified; the substitution results in a sentence that is fully grammatical but not a paraphrase of the source sentence: the husband of my youngest daughter could actually be my oldest son-in-law. Technically speaking, this is an instance of violation of the ban on "synthetic" lexicalization (i.e., lexicalization by a single LU) of a semantic configuration 's' such that one of its nodes, which is not the communicatively dominant node, is "modified" from the outside (i.e., is an argument of a semanteme that does not belong to 's'): cf.:

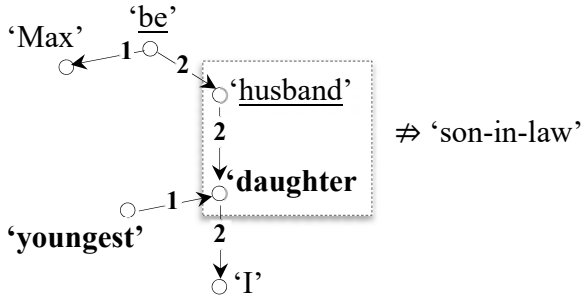

Figure Key.Ex.11: Synthetic realization of a semantic configuration constrained by presence of external modification

6. Paraphrases accounted for by rules cited in Ch. 12:

(4) *If found guilty, he faces some serious **prison** time.* ≡ *If found guilty, he faces some serious **jail** time.*
Lexicographic data: Syn(*prison*) = *jail*.
Paraphrasing rule : **R**$^{\text{EQ.LEX/SYNT}}$ **1**, synonymic substitution [simple].

(5) *Smoking **is prohibited** on campus.* ≡ *Smoking **is not allowed** on campus.*
Lexicographic data: Anti(*prohibit*) = *allow*.
Paraphrasing rule : **R**$^{\text{EQ.LEX/SYNT}}$ **4**, antonymic substitution [with negation fission].

(6) *The Stone Age **precedes** the Bronze Age.* ≡ *The Bronze Age **follows** the Stone Age.*
Lexicographic data: Conv_{21}(*precede*) = *follow*.
Paraphrasing rule : **R**$^{\text{EQ.LEX/SYNT}}$ **6**, conversive substitution.

(7) *What are you supposed to **prepare** for the literature course?* ≡ *What **preparations** are you supposed **make** for the literature course?*
Lexicographic data: S_0(*prepare*$_{(\text{V})}$) = *preparation*$_{(\text{N})}$; Oper_1(*preparation*$_{(\text{N})}$) = *make* [ART ~].
Paraphrasing rule : **R**$^{\text{EQ.LEX/SYNT}}$ **2**, synonymic substitution [with light verb fission].

(10) *Mr. Smith **teaches** us Linguistics 101.* ≡ *Mr. Smith **is** our Linguistics 101 **teacher**.*
Lexicographic data: S_1(*teach*) = *teacher*; Oper_1(L$_{(\text{ADJ})}$) = *be* [ART ~].
Paraphrasing rule : **R**$^{\text{EQ.LEX/SYNT}}$ **3**, synonymic substitution [with light verb fission].

For the remaining seven pairs of paraphrases, the following lexicographic data and paraphrasing rules are needed:

(8) *Such is the nature **of cats**.* ≡ *Such is **feline** nature.*
Lexicographic data: A_0(*cat*) = *feline*$_{(\text{ADJ})}$.

Paraphrasing rule: $L_{(N)1}$–**I**→$L_{(N)2}$ ≡ $L_{(N)1}$–**ATTR**→$A_0(L_{(N)2})$, a transposition rule. Other examples of its application: *energy* ***of the wind*** ⟨***of the Sun***⟩ ≡ ***eolian*** ⟨***solar***⟩ *energy*; *speech* ***of the president*** ≡ ***presidential*** *speech*.

(9) *The Dry Dock* ***experienced*** *heavy* ***use*** *during the world wars.* ≡ *The Dry Dock* ***was*** *heavily* ***used*** *during the world wars.*

Lexicographic data: $V_0(use_{(N)})$ = $use_{(V)}$; $Oper_2(use_{(N)})$ = *experience* [ART ~];
$Magn(use_{(N)})$ = *heavy*; $S_0(use_{(V)})$ = $use_{(N)}$; $Magn(use_{(V)})$ = *heavily*.

Paraphrasing rule : $L_{(V)PASS}$ ≡ $Oper_2$–**II**→$S_0(L_{(V)PASS})$, a synonymic substitution involving, on the one hand, a verb in the passive voice and, on the other, the verb's nominalization in the construction with the light verb $Oper_2$. Here, the rule is applied from right to left.

REMARK. An auxiliary structural rule that transfers the intensifier Magn, with the corresponding branch, from the noun to the verb is also needed; this rule will not be cited.

(11) *We* ***bought*** *our car for 5,000 dollars.* ≡ *The* ***price*** *of our car* ***was*** *5,000 dollars*.

Lexicographic data: $S_4(buy)$ = *price*; $Func_2(price)$ = *be* [~]; DSyntA **I** ('buyer') cannot be expressed as a direct dependent of PRICE.

Paraphrasing rule : $L_{(V)}$ ≡ $Func_2$–**II**→$S_4(L_{(V)})$, a conversive substitution.

(12) *Did you* ***know*** *this?* ≡ ***Were*** *you* ***aware*** *of this?*

Lexicographic data: $A_1(know)$ = *aware* [*of* N_Y]; $Oper_1(L_{(ADJ)})$ = *be* [~].

Paraphrasing rule : $L_{(V)}$ ≡ $Oper_1$–**II**→$A_1(L_{(V)})$, a synonymic substitution involving a verb and the adjective characterizing the DSyntA **I** of this verb; Cf. the rule $\mathbf{R}^{\text{EQ.LEX/SYNT}}$ *7*, a conversive substitution involving A_2 (Ch. 12, *2.2.1.3*: 340).

(13) *The Alberta crop crisis* ***caused1*** *a* *sharp* ***increase*** *in wheat prices.* ≡ *Wheat prices* ***increased*** *sharply* ***in the wake of*** *the Alberta crop crisis.*

Lexicographic data: $Adv_2(cause1_{(V)})$ = *in the wake* [*of* N_Y]; $S_0(increase1_{(V,\ intr)})$ = $increase_{(N)}$; $Magn(increase1_{(V,\ intr)})$ = *sharply*; $Magn(increase1_{(N)})$ = *sharp*.

Paraphrasing rule : L_1–**II**→L_2 ≡ L_2'–**ATTR**→$Adv_2(L_1)$, a derivative substitution involving Adv_2 and triggering the inversion of subordination; cf. a similar rule with Adv_1, Ch. 12, *2.2.1*: 341. (Plus the auxiliary rule mentioned in (9) above, for the transfer of Magn.)

(14) *This idea* ***terrifies*** *me.* ≡ *This idea is* ***terrifying*** *to me*.

Lexicographic data: $Able_1(terrify)$ = *terrifying* [*to* N_Y]; $Oper_1(L_{(ADJ)})$ = *be* [~].

Paraphrasing rule : $L_{(V)}$ ≡ $Oper_1$–**II**→$Able_1(L_{(V)})$, a synonymic substitution involving a verb and the adjective characterizing the potential DSyntA **I** of this verb.

(15) *Can one* ***trust*** *him?* ≡ *Is he* ***trustworthy****?*

Lexicographic data: $Able_2(trust_{(V)})$ = *trustworthy*; $Oper_1(L_{(ADJ)})$ = *be* [~].

Paraphrasing rule : $L_{(V)}$ ≡ $Oper_1$–**II**→$Able_2(L_{(V)})$, a conversive substitution involving a verb and the adjective characterizing the potential DSyntA **II** of this verb; cf. the rule cited immediately above, involving $Able_1$.

References

Hockett, Charles. 1987. *Refurbishing Our Foundations: Elementary Linguistics from an Advanced Point of View*. Amsterdam/Philadelphia: John Benjamins.

Mel'čuk, Igor. 2015b. Clichés: An Understudied Subclass of Phrasemes. *Yearbook of Phraseology*, 6: 55–86.

Mel'čuk, Igor & Žolkovskij, Aleksandr. 1984. *Tolkovo-kombinatornyj slovar' russkogo jazyka. Opyty semantiko-sintaksičeskogo opisanija russkoj leksiki [Explanatory Combinatorial Dictionary of Russian. Essays in Semantic and Syntactic Description of Russian Lexicon]*. Vienna: Wiener Slawistischer Almanach. [Reprinted in 2016, Moskva: Global Kom.]

Wierzbicka, Anna. 1997. Lexicon As a Key to Ethno-Sociology and Cultural Psychology: Patterns of "Friendship" across Cultures. In Wierzbicka, A., *Understanding Cultures through Their Key Words*, Oxford/New York: Oxford University Press, 31–125.

Wierzbicka, Anna. 2015. The Idea of a 'Spoon': Semantics, Prehistory, and Cultural Logic. *Language Science*, 47: 66–83.