

Cross-level synonymy

The word “synonymy” is used here in a very broad and untraditional sense; it is not restricted to lexical linguistic signs, i.e., words, but covers also relations of equivalence between units below the word level, i.e., morphemes and non-phonemic signs. For instance, the ending *-en* in *oxen* can be regarded as synonymous with the standard ending *-s* in *cows*. In my view, semantic description could gain from such a redefined and enlarged concept of synonymy.

In this article I will try to show that the relation of synonymy (in this broad sense) can obtain across the borderline separating the word level and the “sub-word” level. I have chosen to base the presentation mainly on examples in my mother tongue, Swedish, but to some extent also draw on Russian. However, material from any language would do, since we are dealing here with universal linguistic phenomena.

Traditionally, as already mentioned, synonymy can only hold between words, and, more precisely, between words belonging to the same part of speech, for example:

- (1) enorm ‘enormous’ — ofantlig ‘huge’; glo ‘gaze’ — stirra ‘stare’

This is the classic form of synonymy, covered by, for instance, synonym dictionaries.

Now to more untraditional types of synonymy. The first type that comes to mind is so-called “syntactic derivation”,¹ including, among other things, the formation of abstract nouns, for instance:

- (2) ankomma ‘arrive’ — ankomst ‘arrival’; god ‘good’ — godhet ‘goodness’

Such a relationship is also sometimes regarded as a case of synonymy. Not everyone acknowledges, however, that there is no semantic distinction between an abstract noun and the verb or adjective it is derived from. Those who are reluctant to accept this view think, evidently, that there can be no full synonymy between words belonging to different parts of speech.² I do not adhere to this point of view: I think it is possible to ascribe the differences between *arrive* and *arrival* exclusively to syntactic properties.

Now, the scope can be widened on the word level to include pairs containing a preposition and a verb, like *in* — *contain*, *around* — *surround*. Such pairs are not normally considered synonymous, but if we do so it may be a way of accounting for paraphrases like

- (3) Det finns fel i boken. ‘There are errors in the book.’

- (4) Boken innehåller fel. ‘The book contains errors.’

¹ This term can be traced back to J. Kurylowicz (1937).

² For instance, the large “Russian semantic dictionary” project, headed by N. Ju. Shvedova (1998), takes as its main *principium divisionis* the parts of speech as such, with no restriction to primary syntactic functions.

(5) Runt huset finns det skog. ‘There are woods around the house.’

(6) Huset omges av skog. ‘The house is surrounded by woods.’

The same kind of equivalence relation holds between the preposition *med* ‘with’ and the verb *använda* ‘use’ in paraphrases like

(7) Han öppnade dörren med en mejsel. ‘He opened the door with a chisel.’

(8) Han använde en mejsel till att öppna dörren. ‘He used a chisel to open the door.’

It is true that there was a discussion long ago among generativesemanticists³ about the paraphrasability of the sentence pair *Seymour cuts the salami with a knife* and *Seymour uses a knife to cut the salami*. But if we accept that there is some kind of equivalence here it is reasonable to assume that *med* in (7) has the same valency properties as *använda* in (8), that it is a two-place predicate which takes the agent as its first argument and the instrument as its second.

However, *med*, like many other prepositions, has several meanings and functions. In the sentence

(9) Han diskuterade problemet med sin vän. ‘He discussed the problem with his friend.’

the preposition has no verb synonym. The reason is that the prepositional phrase here is an argument of the verb *diskutera*, which is a three-place predicate. These two examples — *öppna dörren med en mejsel* and *diskutera problemet med sin vän* illustrate the distinction between what I like to call semantic and syntactic function. In the first case there are two (semantic) predicates, the verb *öppna* and the preposition *med*, and in the second case there is only one predicate, the verb *diskutera*.

Paraphrasability we also find in pairs containing a conjunction and a noun, like *in order to* — *aim*, *because* — *reason*, as we see in the following examples:

(10) Han reste dit för att knyta kontakter. ‘He went there in order to establish contacts.’

(11) Syftet med hans resa var att knyta kontakter. ‘The aim of his trip was to establish contacts.’

(12) Jag teg eftersom jag inte visste. ‘I was silent because I did not know.’

(13) Skälet till min tystnad var att jag inte visste. ‘The reason for my silence was that I did not know.’

It is evident that the conjunctions in (10) and (12) have semantic function, which is, by the way, the typical function of conjunctions.

One further step is to accept what I call cross-level synonymy. In particular, I have in mind here synonymy between free and bound units, i.e., between words and morphemes. This is transparent in case languages. As is well-known, what is expressed by a word in one language can be expressed by a case ending in another; cf., for example, Swedish *i skogen* ‘in the wood’ and Finnish *metsässä*. But also within one language this kind of synonymy can be observed. For instance, in

³ See, for instance, G. Lakoff (1968).

Russian the meaning ‘like, similar to’ can be expressed either by the instrumental case ending, as in the sentence

(14) *On voet volkom.* ‘He howls like a wolf.’

or by the conjunction *kak*, as in *On voet, kak volk*. The semantic instrumental case ending in Russian can also be synonymous with the verb *pol’zovat’sja* (or *ispol’zovat*) ‘use’, as in

(15) *Ivan rezhnet xleb nozhom.* ‘Ivan cuts the bread with a knife.’

which is equivalent to the already mentioned synonymy between *use* and *with* in English or *använda* and *med* in Swedish.

Contrary to the ending in the word-forms *volkom* and *nozhom*, the same Russian case ending in

(16) *On komanduet polkom.* ‘He commands the regiment.’

is syntactic. *Polk* is the second argument, i.e., the complement, of the predicate *komandovat*, and no other predicate connects these units.

The same functional opposition can be observed between different uses of the genitive ending in Swedish. For instance, the genitive ending in

(17) *Pelles klocka* ‘Pelle’s watch’

is semantic, being synonymous with *tillhöra* ‘belong to’; cf., the paraphrase *klockan tillhörande Pelle* ‘the watch belonging to Pelle’. Similarly, in

(18) *mammas köttbullar* ‘mom’s meatballs’

the genitive ending is synonymous with *laga* ‘make, prepare’; cf., the paraphrase *köttbullar lagade av mamma* ‘meatballs made by mom’. Contrary to this, the same case ending in

(19) *pappas ankomst* ‘dad’s arrival’

is syntactic. Transformationally, this expression can, of course, be traced back to the sentence *Pappa anlände* ‘Dad arrived’, where *pappa* is the first argument, i.e., the subject, of *anlända*, and there is no other predicate connecting these two units.

When there is no case morphology, synonymy can nevertheless be established between words and non-phonological or totally implicit “case markers”. For instance, in the sentences

(20) *Han sov i två timmar. // Han sov två timmar.* ‘He slept for two hours.’

there is at least near synonymy between the preposition *i* in the first phrase and the mere juxtaposition in the second. Both linguistic signs must be considered semantic, since the verb *sova*, being a one-place predicate, cannot take a second argument. This means that here we have to do with adjuncts, not complements. The preposition *i* as well as its synonym, the juxtaposition, constitute two-place predicates, taking *sova* as their first argument and *två timmar* as the second.

But of course, like many prepositions and case endings, juxtaposition can also have a double function. For instance, in

(21) *Hon dansade en sommar.* ‘She danced for one summer.’

(with no preposition in Swedish, the example alluding to a well-known movie from the fifties) the juxtaposition is semantic, whereas in

(22) *Hon mindes en sommar.* ‘She remembered a summer.’

it is syntactic.

We have so far been dealing with synonymy between semantic units. But as a matter of fact there can also be “synonymy”, if I may call it so, between syntactic units. The English sentence *He tries to persuade me* can be translated into Swedish either with or without *att* ‘to’:

(23) Han försöker (att) övertala mig.

Let’s say that *att* and mere juxtaposition are synonymous, that they have the same function, namely to connect the verb *försöka* ‘try’ with its second argument, the verb *övertala* ‘persuade’. Similarly, in

(24) Han tänker på situationen. ‘He thinks about the situation.’

and the near paraphrase

(25) Han begrundar situationen. ‘He ponders over the situation.’

there is synonymy between a preposition and juxtaposition. Synonymy between a conjunction and juxtaposition we find in sentences like

(26) Han tycker (att) du är söt. ‘He thinks (that) you are pretty’,

with or without the syntactic conjunction.

Linguistic signs differ considerably as to the distribution between semantic and syntactic uses. For juxtaposition, or more generally, valency-marking word order, the syntactic function is, of course, the most typical: in a non-case language, word order is the standard manner of specifying arguments. In case languages, the distribution is different for different cases. In Russian, for example, the nominative and the accusative are predominantly syntactic (or structural, as some would have it), whereas for instance in the instrumental it is the semantic function that prevails. When we turn to the word level, we can observe that parts of speech differ considerably. Many prepositions can have both functions. As already mentioned, amongst conjunctions the semantic function prevails. However, there are two very important exceptions: the most frequent conjunction, *att* ‘that’, is always syntactic, as is also *om* ‘if’ in interrogative subordinate clauses.

Much more surprisingly, also words belonging to such typically semantic parts of speech as verbs and nouns can, occasionally, have syntactic function. I do not have in mind here the empty pro-verb *göra* ‘do’ in sentences like

(27) Vann gjorde Ludmila Engquist. (lit.) ‘Won did Ludmila Engquist.’

but rather the fact that the relation holding between a subject and its predicate, which is normally expressed by means of a case ending or non-phonologically, by word order, can be expressed by so-called delexicalized verbs.⁴ For instance, verbs like *utföra*, *genomföra* ‘carry out’, *förverkliga* ‘realize’, *utöva* ‘exert’, *underkasta* ‘submit to’ can function as empty connectors between certain two-place predicates and their first argument. This may result in cross-level synonymy; cf., paraphrases like

(28) operera ‘operate’ — utföra en operation ‘carry out an operation’

⁴ For this term, cf., for instance, Apresjan (1967:140-147). The introduction of delexicalized items corresponding to predicate-argument relationships remotely resembles a kind of reversed grammaticalization. Admittedly, however, this term usually applies to quite different phenomena; cf., Lehmann (1995, esp. 16 ff.).

or in English *influence* — *exert influence*. Syntactically, these empty verbs take the first argument as their subject and the predicate as their direct, or, with the verb *underkasta*, indirect object. The second argument is also expressible, most typically as a prepositional phrase within the nominal phrase of the predicate, for example:

(29) utföra en ombyggnad av villan ‘carry out a reconstruction of the villa’

or, in the case of *underkasta*, as the direct object, for example:

(30) underkasta fången ett förhör ‘put the prisoner through an interrogation’

As can be seen from these examples, the predicates are expressed by means of syntactic derivatives. However, there is one important exception: with the empty verb *göra* ‘do’ the predicate is expressed by a pronoun; cf.:

(31) Vad gör du? ‘What are you doing?’ — Det gör jag också. ‘I do so too.’

Observe, incidentally, that *göra* can also be semantic; this double function becomes evident if we compare two possible answers to the question in (31):

(32) — Vad gör du? — En omelett. ‘— What are you doing? — An omelet.’

(33) — Vad gör du? — Röker. ‘— What are you doing? — Smoking.’

There are also verbs serving as connectors between the predicate and its second argument, or, in the case of a one-place predicate, between this predicate and its only argument, for example, *åtnjuta* ‘enjoy’, *undergå* ‘undergo’; cf.:

(34) Vera är populär. ‘Vera is popular.’

(35) Vera åtnjuter popularitet. ‘Vera enjoys popularity.’

Also here we sometimes find ways to express the argument partner; cf., *Vera enjoys popularity among her friends*.

It is also possible for one predicate to be served by two empty verbs (although not simultaneously), one connecting it to its first argument and the other to its second; cf.:

(36) hysa omtanke ‘have consideration’ — åtnjuta omtanke ‘enjoy consideration’,

in English *carry out an operation* — *have an operation*, the latter expression being paraphrasable as *be operated upon*, i.e., the verb *operate* in the passive voice.

The predicate can also be expressible as a prepositional phrase, for example:

(37) vara under inflytande av ‘be under the influence of’

where both the copula and the preposition can be regarded as syntactic, connecting the predicate with its second argument. The copula is even more syntactic than the preposition, since it can be omitted under certain structural conditions.

Finally, there also exist sentences where the predicate occupies the syntactic position of the subject, with the complement of the empty verb expressing the second argument, for example:

(38) Valet föll på Ivan. (lit.) ‘The choice fell upon Ivan.’

The first argument is expressible as an attribute within the NP of the predicate: *Hans val föll på Ivan* ‘His choice fell upon Ivan’. Typical empty verbs within this category are *hända*, *inträffa* ‘happen’, *försiggå*, *pågå* ‘go on’; cf.:

(39) Man krigade i fem år. ‘They fought for five years.’

(40) Kriget pågick fem år. ‘The war went on for five years.’

Even nouns can be empty connectors. Consider nominal phrases like *föremålet för hans längtan* ‘the object of his yearning’, *offret för bedrägeriet* ‘the victim of the deceit’. Here the nouns *föremål* and *offer* are not empty: they denote the second argument in a very abstract manner. However, these nouns become empty when put into a predicative relation, i.e., a relation expressed by the copula *vara* ‘be’; cf.:

- (41) Hon var föremålet för hans längtan. ‘She was the object of his yearning.’
(42) Offret för bedrägeriet var min bror. ‘The victim of the deceit was my brother.’

We can look upon this as a kind of argument reduplication. The emptiness of the nouns mentioned is evident when we compare these sentences with sentences containing the simple verbs *längta* ‘long for’ and *bedra* ‘deceive’; cf., for instance, the paraphrase in

- (43) Det var min bror som blev bedragen. ‘It was my brother who was deceived.’

There are, of course, interesting aspects of reference and communicative structure involved in this kind of paraphrase, but I will not go into this problem here.

Not only the second argument, but also more peripheral arguments can be expressed by empty nouns, as we see in

- (44) Han reste till Moskva. ‘He went to Moscow.’
(45) Målet för hans resa var Moskva. ‘The goal of his trip was Moscow.’

It is also possible to find certain empty nouns connecting predicates expressed by syntactic derivatives to their first argument. Such examples in Swedish are *upphovsman* and *den skyldige* lit. ‘one giving rise to, one guilty of’; cf.:

- (46) Den skyldige till bedrägeriet var min granne. ‘The man responsible for the deceit was my neighbour.’

There is, in fact, an alternative way to express the predicate: it can be morphologically incorporated in the empty noun indicating the first or second argument. In such cases there are, of course, no syntactic derivatives. If we take the more complicated paraphrase as our point of departure this time, we can, so to speak, extract the predicate and form the partner of the cross-level synonymy. Cf., for instance, the paraphrases

- (47) Han var författaren till brevet. ‘He was the author of the letter.’
(48) Han författade brevet. ‘He wrote the letter.’

Note that there is no morphological incorporation in the corresponding English noun *author*. However, we may say that, at least in this example, the predicate *write* is implicit in this noun.

Sometimes a predicate can be extracted either from the noun expressing the first or from that expressing the second argument, as we see in the following examples:

- (49) Edison är uppfinnaren av den elektriska glödlampan. ‘Edison is the inventor of the electric light bulb.’
(50) Den elektriska glödlampan är Edisons uppfinning. ‘The electric light bulb is Edison’s invention.’

As mentioned above, constructions resulting from argument reduplication contain the empty copula. Also verbs like *become* and, in Swedish at least, *falla* ‘fall’ can fulfil this function; cf.:

(51) Han blev bedragen. ‘He was deceived.’

(52) Han föll offer för ett bedrägeri. ‘He became the victim of a deceit.’

I would like to conclude by showing a similar, but more complicated example from Russian:

(53) [Ona znala, chto] ne emu prinadlezhit avtorstvo ètoj formulirovki. (lit.)

‘[She knew that] not to him belonged the authorship of that formulation.’

It takes more than one step to trace this sentence back to the simple paraphrase

(54) Ne on èto sformuliroval. ‘It was not he who formulated this.’

The real predicate, *formulirovat* ‘formulate’, we find incorporated in the noun denoting the second argument of that very predicate, namely *formulirovka* ‘formulation’. The empty first argument noun *avtor* ‘author’ is incorporated in a kind of subsidiary predicate, *avtorstvo* ‘authorship’, which denotes the property of being the first argument. However, the valency frame of this predicate also includes a slot for the second argument, the main predicate. To its first argument the predicate *avtorstvo* is connected by means of the empty verb *prinadlezhat* ‘belong’. The sentence (53) is formed via the intermediate paraphrase

(55) Ne on avtor ètoj formulirovki. ‘It is not he who was the author of this formulation.’

which has a structure familiar to us from earlier examples. (55), in turn, is a result of reduplication of the first argument of the predicate *formulirovat*. However, before that happens the second argument of this predicate, *èto*, undergoes a reduplication, through which (54) is transformed into

(56) Èto ne ego formulirovka. (or: Ne ego èto formulirovka.) ‘That is not his formulation.’

The result of this second argument reduplication is partly erased through the subsequent first argument reduplication; in (55) the demonstrative pronoun can no longer be regarded as an argument of *formulirovat*.

It remains to note that the approach to semantic description demonstrated in this article has been greatly inspired by the Meaning—Text Model, created in the sixties by the Russian linguist Igor Mel’chuk (Mel’chuk 1974). A characteristic feature of this model is its stratificational structure. For several years I have been trying to implement similar ideas on a large amount of Russian material (for a presentation, see Lönngren 1998).

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