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A cognitive semantic account of semantic change

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Abstract

In this paper, it will be described how cognitive semantics explains the phenomenon of semantic change. Lakoff presented an account of how our knowledge of the world is structured by what he calls 'Idealised Cognitive Models'. This concept is used in Sweetser's analysis of perception verbs. Based on Sweetser's analysis, it will be shown how these cognitive models can be applied to diachronic semantic change. It is argued that although Sweetser's path for semantic change from concrete source domain to abstract target domain seems to be right, it may be extended in order to account for some further meaning developments. She also raises the question of whether this approach is cross-linguistic; in order to verify this, which she only addressed for English, some other examples, from Spanish and Basque, will be presented.

1 Cognitive semantics

Cognitive Semantics is a new approach to the study of semantics that emerged in the mid-1970's. The main difference with previous approaches lies in the fact that languages are seen as based on *human cognition*, i.e. human perception and understanding of the world.

As a consequence, when accounting for the widely accepted context dependency of meaning, Cognitive Semantics will not agree with the classical explanation that sees language as internal, i.e. based on syntagmatic and paradigmatic relations, but will state that meaning is explained by cognitive structures which are embedded in patterns of human knowledge and belief.

These semantic structures are not isolated, but appear in the context of certain cognitive configurations, which Lakoff (1987) calls *Idealised Cognitive Models* (ICMs).

2 How we organise our knowledge: Lakoff's ICMs

The main function of the ICMs[1] is to give structure to mental spaces, as described by Fauconnier (1985). A mental space is a medium for conceptualisation and thought. This

[1] In the literature, ICMs can be compared to schemas, frames, script, encyclopedic entry (Sperber & Wilson 1986).

concept can be illustrated with an example. Consider the word *Monday*. If we are asked to give a definition for this word, most probably we will say "it is a day of the week". But here, again, how can we define *week*? *Week* is an ICM, an imaginative creation of the mind to explain the concept of TIME, the mental space:[2]

$$\begin{tikzcd}
\text{word} \arrow[r] \arrow[d] & \text{ICM} \arrow[r] \arrow[d] & \text{Mental Space} \arrow[d] \\
\text{`Monday'} & \text{`Week'} & \text{TIME}
\end{tikzcd}$$

In some cases, lexical items cannot be defined by one ICM: they need the characterisation of several ICMs simultaneously. The concept of MOTHER, for instance, can be defined by the "birth" ICM (Lakoff 1987:74) as 'the person who gives birth to a child'. However, this definition is not enough to describe *mother*; the characterisation of another ICM, the "nurturance model" is needed, as for being a mother it is not necessary to give birth to a child; *mother* is also said of the person who nurtures and raises a child. The conjunction of all the models is what gives meaning to the concept of MOTHER and they are called *cluster models* by Lakoff.[3]

ICMs can be of five different types: propositional, image-schematic, metaphorical, metonymic and symbolic. But metaphorical models, i.e. metaphorical mappings involving a source domain and a target domain, are the ones that are relevant at this point, as they will be used in Sweetser's analysis of English perception verbs.

3 Sweetser's analysis of perception verbs

Following the cognitive semantic approach, Sweetser states that our experience and knowledge of the world model how we understand language and thought, how we express ourselves. She establishes three ways in which our linguistic expressions are modelled; these three ways lead to three different domains:

a.	As a description (model of the world)	Real world domain
b.	As an action (an act in the world being described)	Speech-act domain
c.	As an epistemic or logical entity (premise or conclusion in our world of reasoning)	Epistemic domain

These domains are not independent, they are linked by our *cognitive system*, and this link is carried out by *metaphor*.

Adopting this idea of a systematic metaphorical structuring of one domain in terms of another, Sweetser claims that the paths of semantic change are unidirectional, from

[2]For further discussion on ICM and mental spaces, see Langacker (1987) and Taylor (1989) for an overview.

[3]These two models are only two of the five models that Lakoff (1987:74) establishes for the characterisation of MOTHER. These are: the birth, genetic, nurturance, marital, and genealogical models.

concrete source domain to an abstract target domain; from the external (sociophysical) domain to our internal (emotional, psychological) domain.

In the case of perception verbs, these metaphorical mappings take place between the vocabulary of physical perception (external source domain) and the vocabulary of internal self and sensations (internal target domain).

From this point of view, Sweetser analyses these perception verbs and establishes the following correlations:

VISION $\longrightarrow$ KNOWLEDGE
HEARING $\longrightarrow$ HEED $\longrightarrow$ OBEY
TASTE $\longrightarrow$ LIKES/DISLIKES
TOUCH $\longrightarrow$ FEELINGS
SMELL $\longrightarrow$ DISLIKEABLE FEELINGS

4 Examples

The analysis that Sweetser carried out was done in English. However, it seems that these metaphorical connections between the physical self and the mental state in perception verbs are not specific to English. This is precisely our objective, to see whether these mappings could be applied to other languages. The languages chosen for this analysis are English, Spanish (both Indo-European languages) and Basque (a non-Indo-European language isolate).

For example we have:

HEAR $\longrightarrow$ OBEY

(1) English:

a. *I've heard a noise* ("hear")

b. *I've told you a million times to listen to what your mum has to say* ("obey")

(2) Spanish:

a. *He oído un ruido ("hear")*
Have.PRES hear.PERF a noise
'I've heard a noise'

b. *Te he dicho un millón de veces que oigas lo que*
you.OBJ have.PRES tell.PERF a million of times that hear.PRES.SUBJ what
tu madre tiene que decir
your mum have.PRES that say.INF
'I've told you a million times to listen to what your mum has to say'

(3) Basque:

a. *Hots bat <u>entzun</u> dut ("hear")*
Noise a hear.PERF TRANS.PRES
'I've heard a noise'

b. *Milaka aldiz esan dizut zure amari <u>entzuteko</u> ("obey")*
Million times tell.PERF DITRANS.PRES your mum hear-to
'I've told you a million times to listen to your mum'

TOUCH⟶FEELINGS

(4) English:

a. *Don't <u>touch</u> that book* ("touch")

b. *He <u>touched</u> my heart* ("feelings")

(5) Spanish:

a. *No <u>toques</u> ese libro ("touch")*
not touch.IMPER that book
'Don't touch that book'

b. *Me <u>tocó</u> en el corazón ("feelings")*
me touch.PAST in the heart
'He touched my heart'

(6) Basque:

a. *Ez <u>ikutu</u> liburu hori ("touch")*
not touch.INF book that
'Don't touch that book'

b. *Bihotzean <u>ikutu</u> ninduen ("feelings")*
Heart-in touch.PERF TRANS.PAST
'He touched my heart'

Sweetser takes the verb *see* as having two different meanings: "physical vision" and "knowledge". Sweetser states that in this example the sense of vision is not only connected with the general experience or perception but also with the *mental* experience.

In Spanish this duality also exists: *ver.*

(7) a. *Veo la calle*
see.PRES the street
'I see the street'

b. *Ya veo lo que me quieres decir*
already see.PRES what me want.PRES say.INF
'I see what you mean'

c. *Me veo en la calle*
myself see.PRES in the street
'I see myself in the street'

As it can be seen, this verb in Spanish (as well as in English) takes a further step. In sentence (7a) we have what Sweetser would call the sense of vision connected to general experience; in sentence (7b), the sense connected with the mental experience, but what is it that we have in (7c)?

In (7c) the verb *ver* used is in a metaphorical way, the sense of vision as it is in (7a) meaning "physical vision", but not connected with something physical as example (7a), but with some mental experience. In these examples, the meaning that *ver* seems to acquire is metaphorical because you are not actually seeing yourself in the street, but it is not the same kind of abstraction as in the case of (7b). This meaning here could be said to be similar to "foresee": imagine something in the future; you are seeing this not in the real world, the one in front of your eyes, but in your mind.

If we follow Sweetser's ideas in this case, we conclude that the senses of *ver* have two connections: one with the general (real-world) experience — (7a) — and another with the mental experience — (7b), (7c). As we have seen before, these senses are linked in our cognitive system through metaphor. Then, we can conclude that (7b) and (7c) are metaphorical extensions of the original[4] (diachronically first) real-world sense.

However, it seems that these (7b) and (7c) senses are different kinds of metaphorical extensions (or perhaps different levels of metaphorical extensions). In the first case, (7b), the connection between the physical vision and the mental experience, that of understanding, is not as clear as in the second case, (7c), where the metaphorical relationship can be straightfowardly seen. This difference between (7b) and (7c) needs to be explained.

A possible solution could be Traugott's approach to semantic change. Traugott sees the shift from propositional to textual to expressive meanings as part of a general process in semantic change; a process that involves an increase in subjectivization and description of the speaker's point of view. She identifies three tendencies:

- *Tendency I*: Meanings based in the external described situation > meanings based in the internal (evaluative perceptual / cognitive) described situation. (1989:34)

- *Tendency II*: Meanings based in the external or internal described situation > meanings based in the textual and metalinguistic situation. (1989:36)

[4]If we accept the direction of the change as being from concrete to abstract, then *ver* in (7a) is the original meaning.

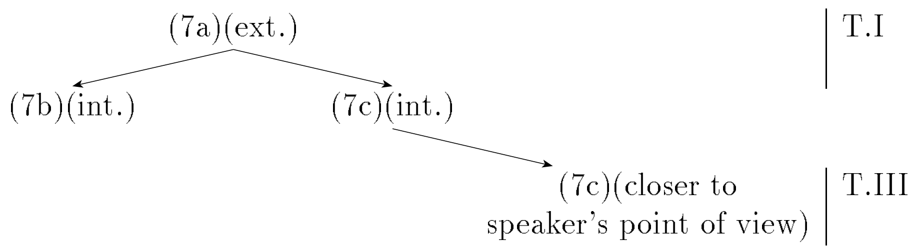

Figure 1: *Traugott's tendencies, applied to the verb* see.

- *Tendency III*: Meanings tend to become increasingly based in the speaker's subjective belief state / attitude towards the proposition. (1989:35)

These tendencies are very closely related, the first of which can feed the second and either of which can feed the third.

If these tendencies are applied to our previous example, the following conclusions can be drawn:

- Tendency I is true for the shift from (7a) to (7b) and (7c).
- Tendency III is true for the shift from (7a) to (7c), but it is not true in the shift from (7a) to (7b).

This could be represented as in Figure 1.

It seems that if Traugott's schema is applied, (7b) and (7c) can be distinguished: the difference seems to lie in the fact that (7c) is closer to the speaker's point of view. It is not a quantitative difference: both, (7b) and (7c) belong, or have shifted from, a concrete to an abstract meaning; but it is rather a qualitative difference, that of the speaker's point of view.

This same process can be seen in Basque:

(8) a. *Kalea* *ikusten* *dut* (*"vision"*)
street-the see.IMPERF TRANS.PRES
'I see the street'

b. *Esaten* *duzuna* *ikusten* *dut* (*"knowledge"*)
say.IMPERF TRANS.PRES-what see.IMPERF TRANS.PRES
'I see what you mean'

c. *Nere burua kalean* *ikusten* *dut* (*"metaphorical vision"*)
my head street-the-in see.IMPERF TRANS.PRES
'I see myself in the street'

In the meaning of (8c), there is a sense of "foreseeing", of seeing in the future that can be also observed in English and Spanish.

5 Conclusions

Finally, based on the results of these examples, the following conclusions can be drawn:

- The path for semantic change proposed by Sweetser from a concrete source domain to an abstract target domain seems to be right, but it is felt to be insufficient when accounting for some further meaning developments.
- A possible solution would be to apply Traugott's tendencies for semantic change, which are directed to the speaker's point of view.

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