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13

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Cognitive aspects of semantic change and polysemy: the semantic space HAVE/BE

Peter Koch

1. The semantic space HAVE/BE

At least since Lyons's famous (1967) article, linguists have been interested in the interlacements of possessive, existential, and locative predicates from a cross-linguistic perspective. Localist and/or generative approaches, accounting for the relevant interlacements in terms of a unitary underlying structure,¹ have been challenged by typological and/or cognitive approaches which, while acknowledging the lexical diversity of natural languages, nevertheless make cautious semantic generalizations, where cross-linguistic insights enable us to do so (cf. Bickerton 1981; Wilson 1983; Hengeveld 1992; Heine 1997; Feuillet 1998). The point I want to stress here is the importance of the diachronic evidence from semantic change and – indirectly – from polysemy,² which allows us to formulate cognitively valid generalizations even in lexical semantics.

In the area HAVE/BE, as I term it for the sake of convenience, Bickerton (1981: 244-246) proposes a kind of "semantic space" like Figure 1 in order to account for the joint lexicalization of different semantic categories on the bases of adjacency:

OWNERSHIP	LOCATION
POSSESSION	EXISTENCE

Figure 1. The semantic space HAVE/BE (after Bickerton 1981: 245)

In the meantime, this fourfold schema has turned out to be neither sufficient nor fully adequate for providing all the adjacencies we need (cf., e.g., Wilson 1983). Furthermore, the theoretical basis of 'adjacency' itself is not quite clear. Is it a relation of adjacent storage in our mind (whatever that may mean)? Is it a relation between categories of the same conceptual taxonomy (so that from a diachronic perspective we could really speak of "extension" from one category to the other)? Is it a relation of elements of the same conceptual frame (so that we could speak of conceptual "contiguity": cf. Note 8)? Above all, does it always represent the same kinds of relationship (so that OWNERSHIP : POSSESSION = OWNERSHIP : LOCATION etc.)?

In Koch 1993, I proposed a refined onomasiological grid (Figure 2) for the semantic space HAVE/BE. First of all, I distinguish four conceptual categories, which, albeit in varying combinations and constellations and with differences in terminology, regularly occur in publications on central conceptual distinctions in verbal and predicate semantics (cf. Lyons 1967; Pottier 1974: 109-116; Clark 1978; Bickerton 1981: 245; Koch 1981: 260-276; Hagège 1982: 46; Wilson 1983; Hengeveld 1992: 73-126; Heine 1997; Feuillet 1998: 670-673):³

- with only one participant *x*:
 1. ASCRIPTION, as in example (1);
 2. EXISTENCE; as in example (2);
- each with two participants *x* and *y*:
 3. possession, as in example (3); *x* = the possessed;
y = the possessor;
 4. location, as in example (4): *x* = the located; *y* = the locality.

- | | | |
|-----|---|------------|
| (1) | Engl. <i>John_x IS ill.</i> | ASCRIPTION |
| (2) | Engl. <i>THERE ARE many unhappy people_x.</i> | EXISTENCE |
| (3) | Engl. <i>John_y HAS a book_x.</i> | POSSESSION |
| (4) | Engl. <i>The book_x WAS on the table_y.</i> | LOCATION |

I would like to stress that the (partly displaced) "adjacency" of these four categories in Figure 2 is only a matter of graphic representation. The actual semantic relationships between the four domains (or parts of them) have to be specified on the conceptual level, as we will see in sections 2-5.

On the basis of cross-linguistically observable lexical facts, there are two further conceptual distinctions to be made, which cut across the four main categories represented in Figure 2:

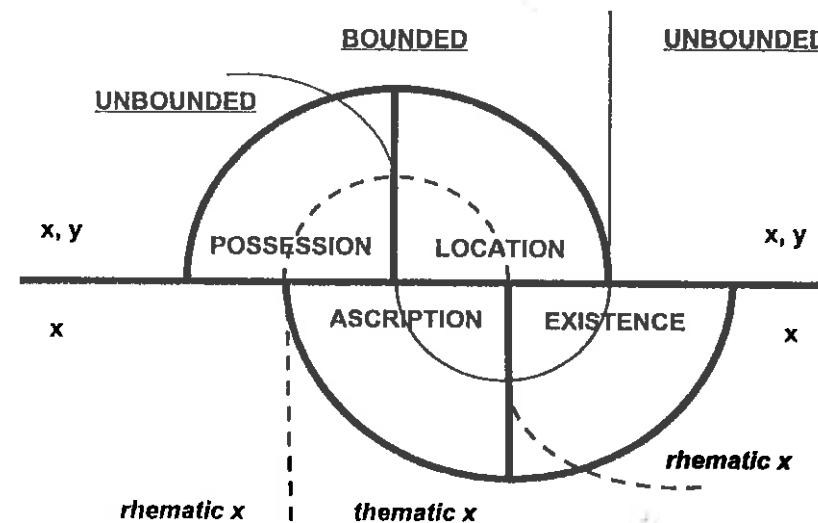


Figure 2. The semantic space HAVE/BE (according to Koch 1993)

First, there is the distinction between the (inherent) *thematicity* and the *rheticity* of participant *x*. Thus, for LOCATION we can distinguish, with respect to participant *x*, THEMATIC LOCATION from RHETIC LOCATION.

- | | | | |
|-----|----|---|---|
| (4) | a. | Engl. <i>The book_x WAS on the table_y.</i> | THEMATIC LOCATION
(<i>x</i> = thematic) |
|-----|----|---|---|

- b. Engl. *THERE WAS a book_x on the table_y*. RHEMATIC LOCATION
(x = rhematic)

But as illustrated by Figure 2, this distinction applies to POSSESSION and to EXISTENCE as well.⁴

At first glance, the connection between thematicity/rhematicity and certain predicative concepts instead of sentences seems a bit misleading, because we are used to assigning degrees of thematicity or rhematicity rather to elements of a sentence (e.g. subject, direct object etc.). Nevertheless, inherent degrees of thematicity or rhematicity attributed to participant slots are essential for differentiating between semantically similar verbs and for relating them to each other (cf. Koch 1981: 93-95, 341-342, 352-356, 1991: 297-301; Oesterreicher 1991). This is conclusively demonstrated, for instance, by Sp. *estar* (THEMATIC LOCATION) as opposed to *haber* (RHEMATIC LOCATION):

- (5) a. Sp. *El libro_x ESTABA sobre la mesa_y*. THEMATIC LOCATION
'The book was on the table.' (x = thematic)
b. Sp. *HABIA un libro_x sobre la mesa_y*. RHEMATIC LOCATION
'There was a book on the table.' (x = rhematic)

In the final analysis, the synchronic situations in Spanish (5a/b) and in English (4a/b) are not so different. In my view, English has nowadays two distinct verbal expressions *is*, i.e., *to be* (THEMATIC LOCATION) and *there is/there are* (RHEMATIC LOCATION), even if the second has developed diachronically from the first (cf. also section 5).

Obviously, the inherent thematicity-rhematicity reliefs of verbs are only valid for unmarked usage. Marked departures from the rule are always possible (cf. [5c]), but this does not impair the inherent thematicity-rhematicity relief of the verb in question:

- (5) c. Sp. *Libros_x, no HABIA sobre la mesa_y*. (x ≠ rhematic !)
'Books were not on the table.'

The second distinction I want to introduce concerns the *boundedness* vs. the *unboundedness* of the predication, i.e. its limitation in a spatial or temporal respect:⁵

- (2) a. Engl. *THERE ARE many lions_x in Africa*.
BOUNDED EXISTENCE
b. Engl. *THERE ARE many unhappy people_x*.
UNBOUNDED EXISTENCE
(3) a. Engl. *John_y has a book_x in his hand*. BOUNDED POSSESSION
b. Engl. *John_y has a book_x*. UNBOUNDED POSSESSION
(6) a. Sp. *Alberto_x está pálido*.
'Albert has a pale complexion.' BOUNDED ASCRIPTION
b. Sp. *Alberto_x es pálido*.
'Albert is (being) pale.' UNBOUNDED ASCRIPTION

The conceptual distinctions represented in Figure 2 provide us with a cognitive map⁶ of the semantic space HAVE/BE, that allows us to retrace characteristic paths of semantic change recurring polygenetically – that is, independently of each other – in different languages of the world and in different epochs of linguistic history. I will allude here to several recurrent patterns and paths (sections 2 and 3) and then later focus on some of them (sections 4 and 5).

2. From LOCATION via BOUNDED POSSESSION to POSSESSION

We can take as our first example a path that is extremely well-known to language typologists. It leads from RHEMATIC LOCATION to BOUNDED POSSESSION and then to POSSESSION in general (cf., e.g., Lyons 1967: 394; Clark 1978: 114; Hagege 1982: 48; Heine 1997: 50-53; for the examples cf. Freeze 1992: 576-577):⁷

- (7) a. Russ. *На столе_y БЫЛА книга_x*.
'There was a book on the table.' RHEMATIC LOCATION

- b. Russ. У меня, была книга_x.
'I had a book.' POSSESSION
- (8) a. Finn. Pöydällä ON kynä_x.
'There is a pencil on the table.' RHEMATIC LOCATION
- b. Finn. Liisalla ON mies_x.
'Lisa has a husband.' POSSESSION
- (9) a. Hindi Kamree-mēēy aadmī_x HAI.
'There is a man in the room.' RHEMATIC LOCATION
- b. Hindi Larkee-keey paas kuttā_x HAI.
'The boy has a dog.' POSSESSION
- (10) a. Tagalog MAY gera_x sa Ewropa_y.
'There is a war in Europe.' RHEM. LOCATION/EXISTENCE
- b. Tagalog MAY relos_x a naanai_y.
'Mom has a watch.' POSSESSION

A relationship of BOUNDED POSSESSION (x, y) is prototypically linked, i.e., is contiguous, to one of LOCATION (x, y) within the same frame (what I have with me, is, e.g., in my hands, in my pocket etc.). So, the first step of change must be a *metonymical*⁸ one. Via a figure-ground effect we slip from RHEMATIC LOCATION to RHEMATIC BOUNDED POSSESSION (p. 291, Figure 3: arrow ①).⁹ The second step, then, is an *extension* of meaning¹⁰ from RHEMATIC BOUNDED POSSESSION to RHEMATIC POSSESSION in general (arrow ②).

This last step of extension of meaning, necessary for reaching the target concept in the examples (7b) – (10b), is part of a more general phenomenon of extension from BOUNDED POSSESSION to POSSESSION in general. To name just one further, well attested type of examples: a very special, but surely prototypical kind of BOUNDED POSSESSION is HOLDING SOMETHING IN ONE'S HAND. There are numerous cases of extension of meaning from this prototype to the whole category of POSSESSION (cf. Buck 1988: s.v. 11.11 HAVE; Koch 1991: 291-292; 1995: 30-31):¹¹

- (11) (IE. **kap-* 'to grasp, to seize' >) Goth. *haban* 'to hold' > 'to have' (cf. Engl. *have*; Germ. *haben*)

- (12) (IE. **ghabh-* 'to grasp, to seize' >) Lat. *habere* 'to hold' > 'to have'
- (13) Lat. *tenere* 'to hold' > Sp. *tener*, Sard. *tènnere*, Southern It. *tenere* 'to have'
- (14) Fr. *tenir* 'to hold' > Quad.Creole (*ti*)*ni* 'to have'
- (15) ChSl. *jęti* 'to take' in relation to *im-ęti* 'to have'

3. POSSESSION, EXISTENCE and LOCATION

A very widespread change consists of transforming verbs of POSSESSION into verbs of EXISTENCE and further on into verbs of (RHEMATIC) LOCATION. We find the most famous example of this change in the evolution of Latin into the Romance languages. Take, for instance, the meaning 'to have' = RHEMATIC POSSESSION of Lat. *habere* (cf. also [12]):

- (16) a. Lat. *Marcusy librum_x HABET.*
'Marcus has a book.' RHEMATIC POSSESSION

In preclassical and postclassical Latin, we have several attestations of lat. *habere* as an impersonal expression of RHEMATIC BOUNDED EXISTENCE, as for example in (16b), and of RHEMATIC LOCATION, as in (16c) (cf. also ThLL: s.v. *habere*, III C 2, p. 2461, 78 – 2462, 5):

- (16) b. OLat. *Animae paucillum_x in me_y HABET.* (Naevius, before 200 B.C., cit. Manoliu Manea 1985: 111)
'There is very little life in me.'
RHEMATIC BOUNDED EXISTENCE
- c. VulgLat. *Misi tibe ... chiloma. Entroy HABET collyram_x Ī ...*
(2nd Century A.D., cit. Cugusi 1981: 724)
'I sent you a box [...]. There is a loaf of bread in it [...].'
RHEMATIC LOCATION

It is well known that many Romance languages have continued to maintain these senses of *habere*. Sp. *haber* (which, by the way, totally abandoned the original possessive sense) may serve as an example:

- (17) a. Sp. *En el pueblo HABLA muchas casas_x*.
 'In the village, there were many houses.'
 RHEMATIC BOUNDED EXISTENCE
 b. = (5 b) RHEMATIC LOCATION

Another instance is Fr. *il y a* (examples (18a) and (18b)), which has a somewhat more complicated history (cf. Kawaguchi 1991: 134-177):

- (18) a. Fr. *Dans le village, IL Y AVAIT beaucoup de maisons*.
 'In the village, there were many houses.'
 RHEMATIC BOUNDED EXISTENCE
 b. Fr. *IL Y AVAIT un livre_x sur la table_y*.
 'There was a book on the table.' RHEMATIC LOCATION

In Romance languages yet another sense developed, based on the Latin innovation, namely RHEMATIC UNBOUNDED EXISTENCE:

- (17) c. Sp. *HAY mucha gente_x infeliz*.
 'There are many unhappy people.'
 RHEMATIC UNBOUNDED EXISTENCE
 (18) c. Fr. *IL Y A beaucoup de gens_x malheureux*.
 'There are many unhappy people.'
 RHEMATIC UNBOUNDED EXISTENCE

There is overwhelming evidence that all these semantic changes are not idiosyncratic facts of Latin-Romance lexical history. We may compare other completely independent instances of analogous changes in different languages (cf. Clark 1978; Bickerton 1981: 66-

67; Buchholz 1989; Hengeveld 1992: 159-160; Heine 1997: 95, 137-138):

- (19) a. Mod.Gr. (coll.) *Ο Σπύρος_x ΕΧΕΙ ένα γλήγορο αυτοκίνητο_x*.
 'Spiros has a fast car.' RHEMATIC POSSESSION
 b. Mod.Gr. (coll.) *Σ' αυτό τό σπίτι_y ΕΧΕΙ τρεχούμενο νερό_x*.
 (lit. 'in this the house it-has running water')
 'In this house there is running water.'
 RHEMATIC BOUNDED EXISTENCE
 c. Mod.Gr. (coll.) *Στήν βαλίτσα_y ΕΧΕΙ παντελόνια και παπούτσια_x*.
 (lit. 'in the suitcase it-has trousers and shoes')
 'There are trousers and shoes in the suitcase.'
 RHEMATIC LOCATION
 (20) a. Pg. *João_y tinha uma máquina de escrever_x*.
 'João had a typewriter.' RHEMATIC POSSESSION
 b. Braz.Pg. *Um dia não tinha mais ratos_x*.
 'One day, there were no more mice.'
 RHEMATIC BOUNDED EXISTENCE
 (21) a. Germ. *Martin_y hat eine Schreibmaschine_x*.
 'Martin has a typewriter.' RHEMATIC POSSESSION
 b. Southern Germ. *Es hat kein Brot_x mehr*.
 'There is no more bread.' RHEMATIC BOUNDED EXISTENCE
 (ex. 22-26 cf. Bickerton 1981: 66-67)
 (22) Guy.Creole *Dem get₁ wan uman_{x1} we get₂ gyal-pikni_{x2}*.
 (23) Haw.Creole *Get₁ wan wahini_{x1} shi get₂ wan data_{x2}*.
 (24) Hait.Creole *Gé₁ you fâm_{x1} ki gé₂ you pitit-fi_{x2}*.
 (25) Papiamentu *Tin₁ u muhe_{x1} cu tin₂ un yiu-muhe_{x2}*.
 (26) São Tomé Creole *Te₁ ua mwala_{x1} ku te₂ ua mina-mosa_{x2}*.
 'There is a woman who has a daughter.'
 Verb₁: RHEMATIC EXISTENCE
 Verb₂: RHEMATIC (INALIENABLE) POSSESSION

- (27) Quad.Creole *Ni₁ sa_{x1} ki ni₂, ni₁ sa_{x1} ki pa ni₂*.
 (Pouillet et al. 1984: s.v. *ni*)
 'There are those who have got something and those who
 haven't got anything.'
ni₁: RHEMATIC UNBOUNDED EXISTENCE
ni₂: RHEMATIC POSSESSION
- (28) a. Bulg. *ИМАМ_(y) една ливада_x голама*.
 'I have a large meadow.' RHEMATIC POSSESSION
- b. Bulg. *През лятото_y има много плодове_x*.
 (Buchholz 1989: 333)
 'In the summertime there are many fruits.'
 RHEM. BOUNDED EXISTENCE
- c. Bulg. *Само Огнянова_x нямаше там*.
 (Buchholz 1989: 334)
 'Only Ognjanov was not there.' RHEMATIC LOCATION
- (29) a. Nubi *áána_y fií ma ya lá_x tinín*. (Heine 1997: 137)
 'I have two children.' RHEMATIC POSSESSION
- b. Nubi *ákil_x fií náa?* (Heine 1997: 137)
 'Is there food?' RHEMATIC BOUNDED EXISTENCE

I think that by taking a cognitive perspective we can try to retrace and understand the different conceptual steps involved in these semantic changes.

4. From bounded possession to bounded existence

Even if we take into account the rather well attested Latin material in ex. (16b) and (16c), several questions arise. Besides other problems that I do not consider insurmountable,¹² it is not entirely clear which was the first sense to develop from an initially possessive sense of *habere*: RHEMATIC EXISTENCE or RHEMATIC LOCATION? Our oldest attestation of the impersonal Latin verb *habere* (16b) rather expresses RHEMATIC BOUNDED EXISTENCE. The second oldest attestation (16c) clearly expresses RHEMATIC LOCATION.

Let's suppose that the passage from RHEMATIC POSSESSION to RHEMATIC BOUNDED EXISTENCE was actually the first step of semantic change (Figure 3: arrow ③). An argument for this hypothesis could be that verbs like *have* are the simplest and most typical verbs which serve to introduce entities as existing in the universe of discourse (e.g. *Once upon a time, there was a king who had three daughters. They all lived in an old castle in the forest. ...*).

In this context, note the Modern Greek personal variant (19d) of (19b):

- (19) d. ModGr. *Αυτό τό σπίτι_y έχει τρεχούμενο νερό_x*.
 lit. 'This house has running water.' BOUNDED EXISTENCE

In Latin, we can hypothesize an analogous sentence like (16e) as opposed to the "traditional" version (16d)(cf. Bassols de Climent 1948; García Hernández 1992: 167):

- (16) d. Lat. *Domi est multum vinum_x*.
 'In the house there is much wine.'
 RHEMATIC BOUNDED EXISTENCE
- e. Lat. *Domus habet multum vinum_x*.
 lit. 'The house has much wine.'
 RHEMATIC BOUNDED EXISTENCE

How could we explain that in (16e) an expression for POSSESSION like *habere* directly replaced an expression of EXISTENCE like *esse* in (16d)? Perhaps it would be easier to relate (16e) to (16f):

- (16) f. Lat. *Dominus habet multum vinum_x*.
 'The master has much wine.' RHEMATIC POSSESSION

The step from (16f) to (16e) can easily be accounted for as a case of metonymy. In a given frame, comprising MASTER, HOUSE and WINE, we observe a figure-ground effect from MASTER-WINE to HOUSE-WINE (cf. Note 8). But at this point (16e) could have been

reinterpreted as a *metaphor*¹³ replacing (16d), i.e. as a metaphor that conceptualizes BOUNDED EXISTENCE in terms of BOUNDED POSSESSION. When a given object exists in a given PLACE, the PLACE can be regarded as a CONTAINER that is similar to the POSSESSOR of the object.

Metaphor always involves a conceptual leap, but interpreting PLACES as POSSESSORS is a very bold leap, and syntactically, expressions of PLACES, such as participant *y* in (19d) and in (16e) are non-prototypical subjects of transitive verbs. The same problem can be observed in well-known English examples like (31) with respect to (30):

(30) Engl. *John_y HAS money_x in his pocket.*

RHEMATIC BOUNDED POSSESSION

(31) Engl. *The tree_(y) HAS a nest_x in it_y.*

RHEMATIC BOUNDED EXISTENCE

The metaphorical and syntactic “shock” provoked by sentences like (19d) or (16e) can be attenuated by also indicating, within the same clause, the fact of LOCATIVE BOUNDEDNESS of the EXISTENCE of *x*. The locative phrase may be co-referential with the subject (31).

But the locative phrase also may be introduced by switching from a personal construction such as (19d) or (16e) (where the subject participant *y* still has the form of a POSSESSOR) to an impersonal construction like (19b) (where the subject participant *y* has simply “evaporated”¹⁴ in favour of a new participant *y* that again expresses the LOCATIVE BOUNDEDNESS of the EXISTENCE of *x*). In Latin, we arrive at a construction like (16g) that virtually can have arisen from a blend of types (16d) and (16e):¹⁵

(16) g. Lat. *Domi habet multum vinum_x.*

‘In the house there is much wine.’

RHEMATIC BOUNDED EXISTENCE

According to solutions such as (19b) or (16g), the PLACE-POSSESSOR metaphor frequently and polygenetically provides for impersonal expressions of EXISTENCE (Figure 3: arrow ③, corresponding to ex. [19b], [20b], [21b], [22]-[26], [27], [28b], and [29b]). It remains to be seen whether or not the reinterpretation of a metonymy as a metaphor like in (16e), followed by a blend with a construction like (16d), is a factor in analogous processes in other languages, too, or if a direct – and very bold – metaphor from RHEMATIC POSSESSION to BOUNDED EXISTENCE is the ordinary way.

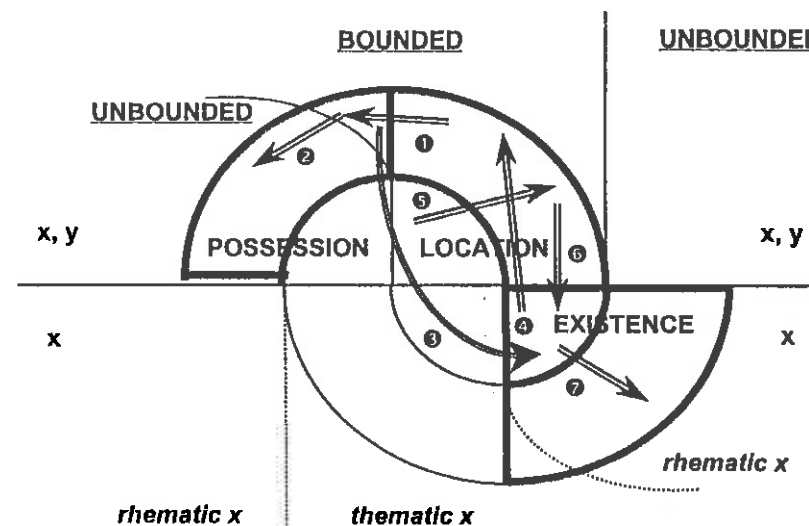


Figure 3. Recurrent paths of semantic change in the space HAVE/BE

5. From EXISTENCE to LOCATION and vice versa

Many languages lexicalize RHEMATIC LOCATION as opposed to THEMATIC LOCATION. French is one of these languages:

- (18) b. (see above) RHEMATIC LOCATION
 c. Fr. *Le livre_x ÉTAIT sur la table_y.*
 'The book was on the table.' THEMATIC LOCATION

On the other hand, it is striking how many of these languages have identical expressions for RHEMATIC EXISTENCE and for RHEMATIC LOCATION (cf., e.g., [2] and [4b], [17a] and [17b], [18a] and [18b], [19b] and [19c]). We could doubt if it is possible at all to distinguish these two categories (cf. Feuillet 1998: 706-707). In my opinion, the close proximity of the concepts of RHEMATIC LOCATION and RHEMATIC EXISTENCE, which is supported by psychological, philosophical, and linguistic observations (cf. also Lyons 1967: 390-391; Bolinger 1977: 99; Holenstein 1980: 32; Bogacki 1988: 24-25), can, and must, be interpreted in terms of contiguity.

As we have already seen, the BOUNDEDNESS of EXISTENCE prototypically, though not always, is due to a LOCATIVE limitation. In such a prototypical frame of BOUNDEDNESS of EXISTENCE, there necessarily is a strong contiguity between EXISTENCE and LOCATION. Thus, if you have at your disposal an expression for BOUNDED EXISTENCE like Lat. *habere* in (16b/g), it easily slips via a figure-ground effect into an expression of LOCATION (16c). This is a metonymical effect (Figure 3: arrow ④) (cf. Note 8). But in order to grasp this effect, we have to distinguish between two figure-ground constellations: figure = RHEMATIC LOCATION/ground = RHEMATIC EXISTENCE on the one hand, and figure = RHEMATIC EXISTENCE/ground = RHEMATIC LOCATION on the other.

This twofold perspectivization is confirmed by several further linguistic observations (cf. Koch 1993: 181-183 for the first and second points):

First, there are languages such as Spanish, that use largely the same lexical unit for RHEMATIC LOCATION and RHEMATIC EXISTENCE (Sp. *haber*), but that in some specific cases use the same lexical unit for THEMATIC and RHEMATIC LOCATION (Sp. *estar*), completely excluding the latter verb, however, from the realm of RHEMATIC EXISTENCE:

- (3) c. Sp. *Delante del edificio_y ESTABAN el cura y dos monaguillos_x.*
 (Koch 1993: 182)
 'In front of the building, the priest and two choirboys were standing.' RHEMATIC LOCATION

In such a case, the distinction between RHEMATIC LOCATION and RHEMATIC EXISTENCE is of undeniable importance.

Secondly, there seem to be languages, like German, that in a very clear-cut way, i.e., by using different lexical units, mark the distinction between RHEMATIC (and THEMATIC!) LOCATION (Germ. *sein/liegen* etc.: [33a] and [33b]) and EXISTENCE (Germ. *es gibt*: [33c]):

- (32) a. Germ. *Auf dem Tisch_y WAR/LAG ein Buch_x.*
 'There was a book on the table.' RHEMATIC LOCATION
 b. Germ. *Das Buch_x WAR/LAG auf dem Tisch_y.*
 'The book was on the table.' THEMATIC LOCATION
 c. Germ. *In Afrika_y GIBT ES Löwen_x.*
 'There are lions in Africa.' RHEM. BOUNDED EXISTENCE

In such a case, the distinction between RHEMATIC LOCATION and RHEMATIC EXISTENCE is of crucial importance.

Thirdly, the contiguity between EXISTENCE and LOCATION seems to be so strong that we not only observe metonymies from RHEMATIC EXISTENCE to RHEMATIC LOCATION (as described above), but also metonymies in the opposite direction, as, e.g., in English and Italian. How does this come about? First of all, these two languages developed particular expressions for RHEMATIC LOCATION by integrating into the verb for THEMATIC LOCATION an originally deictic element, that is co-referential with the thematic locative participant *y* (Figure 3: arrow ⑤). Compare for Italian *esserci* (33b) in relation to *essere* (33a):

- (33) a. It. *Il libro_x ERA sul tavolo_y.*
 'The book was on the table.' THEMATIC LOCATION

b. It. *C'ERA un libro_x sul tavolo_y*.

'There was a book on the table.' RHEMATIC LOCATION

Compare for English: *there is* (4b) in relation to *to be* (4a) (cf. section 1).

Compared with the originally neutral verb of LOCATION ((4a), (33a)), the new verbal expression ((4b), (33b)), integrating Engl. *there/It. ci* by a phraseological device, designates a restricted type of LOCATION, namely RHEMATIC LOCATION, whereas the verb Engl. *to be/It. essere* restricts its meaning to THEMATIC LOCATION. Now, on diachronic grounds it is obviously the novel RHEMATIC LOCATIVE expression that by way of metonymy also became an expression of BOUNDED EXISTENCE in these languages (Figure 3: arrow ⑥) and not vice versa:

(33) c. It. *In Africa_y CI SONO molti leoni_x*.

'There are many lions in Africa.' BOUNDED EXISTENCE

Compare for English: *there is/are* (2a).

If we did not distinguish in principle RHEMATIC EXISTENCE and RHEMATIC LOCATION, we would not be able to adequately retrace the opposite diachronic paths in this semantic space:

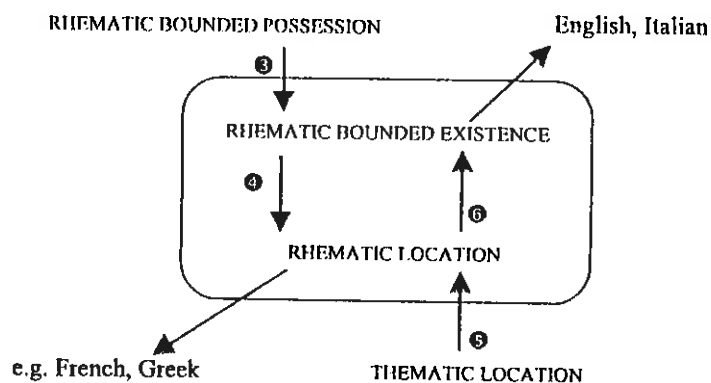


Figure 4. From RHEM. BOUNDED EXISTENCE to RHEM. LOCATION and vice versa

Let us now consider BOUNDED EXISTENCE. This is a special, but prototypical case of EXISTENCE in general. Often speakers, relying heavily on the context, do not even make the boundedness of EXISTENCE explicit (cf. Hengeveld 1992: 97). Thus, (20b)/(21b) could, according to the context, mean that 'there were/is no more mice/bread in the house, in the village, in the country, on earth etc.' Put the other way around, *any* EXISTENCE is bounded in a certain sense. Even UNBOUNDED EXISTENCE is BOUNDED by the universe of discourse (cf. Bolinger 1977: 99). So it is not surprising, that by extension of meaning, expressions for BOUNDED EXISTENCE – whatever their origin may be (cf. Figure 4) – are extended to EXISTENCE in general (Figure 3: arrow ⑦):

(19) e. ModGr. *ΕΧΕΙ πολλούς δυστυχημένους*

ανθρώπους_x.

(cf. [19b])

(lit. 'it-has many unhappy people')

'There are many unhappy people.'

RHEMATIC EXISTENCE

(28) d. Bulg. *ИМА чудновати хора_x*.

(Buchholz 1989: 332)

(cf. [28b])

'There are strange people.'

RHEMATIC EXISTENCE

(32) d. Germ. *ES GIBT viele unglückliche Menschen_x*.

(cf. [32c])

'There are many unhappy people.'

RHEMATIC EXISTENCE

(33) d. It. *C'È molta gente_x infelice*.

(cf. [33c])

'There are many unhappy people.'

RHEMATIC EXISTENCE

cf. also: (2b) in relation to (2a) for English;
(17c) in relation to (17a) for Spanish;
(18c) in relation to (18a) for French;
(27): for Guadeloupe Creole (*ni₁*).

6. Final observations

Lexical change within the semantic space HAVE/BE is not arbitrary. We have demonstrated this partly by referring to ample cross-linguistic evidences elaborated by others (esp. Heine 1997) and partly by carrying out a detailed analysis of apparently recurrent processes of change in this area, giving us insight into the nature of "semantic space". It would certainly be interesting to collect more cross-linguistic data that would corroborate the recurrent nature of the metaphors, metonymies, and extensions of meaning interrelating the concepts of POSSESSION, EXISTENCE and LOCATION.

In a rather conventional way, we followed *grosso modo* the diachronic succession of changes, asking ourselves "in which direction" a given semantic class of lexical units moved. This may have been a convenient mode of presentation, but we have to realize that it is totally artificial in relation to what really happens in language change. Speakers do not intend to change anything in language (cf. Coseriu 1958), so lexical items are not "directed" anywhere. On the contrary, speakers use lexical units to communicate in the most efficient and successful manner possible that which they want to express. If speakers affect semantic change (and they do), they affect it not by providing existing words with novel meanings (semasiological perspective), but instead indirectly by expressing things through other and/or new words (onomasiological perspective).

So if there really are regularities and "invisible-hand processes" (cf. Keller 1994) in semantic change and if they are, at least to a large extent, by-products of the speakers' activities, then we have to read the results of our investigation "backwards" in order to give them methodological significance (cf. Koch 1997 and in press a). Very tentatively, then, we can make the following statements based on our material:¹⁶

A new expression for EXISTENCE in general is created with more than random probability by extension of meaning from an expression for BOUNDED EXISTENCE (Figure 3: arrow 7).

A new expression for (RHEMATIC) BOUNDED EXISTENCE is created with more than random probability either by metonymy from an expression for RHEMATIC LOCATION (arrow 6) or by metonymy, re-interpreted as metaphor, from an expression for RHEMATIC POSSESSION (arrow 5).

A new expression for RHEMATIC LOCATION is created with more than random probability either by metonymy from an expression for BOUNDED EXISTENCE (arrow 4) or by a phraseological device involving restriction from an expression for LOCATION (arrow 3).

A new expression for RHEMATIC POSSESSION is created with more than random probability by extension of meaning from an expression for RHEMATIC BOUNDED POSSESSION (arrow 2).

A new expression for RHEMATIC BOUNDED POSSESSION is created with more than random probability by metonymy from an expression for RHEMATIC LOCATION (arrow 1).

It would perhaps be possible to demonstrate that these paths of semantic change (that *must* not be used at all) reappear polygenetically in the history of different languages and should be explained by certain cognitive universals underlying our conceptualization of POSSESSION, EXISTENCE and LOCATION.

In any case, the activation or non-activation of these types of semantic change and the resulting interlinguistic differences in the articulation of the semantic space HAVE/BE constitute features highly relevant to language comparison. These features contribute to what I would like to call 'lexical typology' (cf. Koch, in press b).

Notes

1. Cf. Lyons (1967); Langacker (1968); Clark (1978); Foley/Van Valin (1984: 47-53); Kawaguchi (1991); Freeze (1992); Kayne (1993: 4-7). See the critical survey in Heine (1997: 214-222).
2. At least since the seminal work of Bréal (1921: 143-144) we know that with respect to semantic change polysemy is only the other (synchronic) side of the coin. Consequently, the old and the new meaning of a lexical, or grammatical, unit can coexist for a while, but at some moment in

diachrony the old meaning (or sometimes the new meaning) can be abandoned (cf. Koch 1991: 293, 1994a: 203-209; Blank 1997: 114-130). Even though Cognitive Semantics and Grammaticalization Theory have "rediscovered" these fundamental facts (Wilkins 1996: 267-270; Heine 1997: 82-83), many linguists still seem perplexed when faced with phenomena of this kind.

3. I do not take into consideration here a possible, and probably necessary, additional category EQUATION (e.g. *Athens is the capital of Greece*), because it will not be relevant for the processes I want to analyze. – I am also aware of the internal, possibly prototypical, structure of a large category of POSSESSION, including PHYSICAL POSSESSION, INANALIENABLE POSSESSION, etc. (cf. Taylor 1995: 202-203; Heine 1997: 33-41; cf. also Koch 1981: 314-317, 359). For the present purpose, I can exclude all kinds of INANALIENABLE POSSESSION, the only relevant sub-category being what I call BOUNDED POSSESSION (as exemplified by ex. [3a] and [30] and as represented in Figure 2). – I do not go into details concerning the verbal or non-verbal character of the predication in cases where the categories of the semantic space HAVE/BE are expressed by copulas or by zero (cf. Hengeveld 1992: 26-30; on the other hand Feuillet 1991, 1998: 664).
4. For the category of ASCRIPTION, inherent thematicity of participant *x* seems to be generalized (cf. example [1]), which does not exclude marked uses of ASCRIPTION predicates as in Engl. *Stupid he isn't*. – Until now, the thematicity-rhematicity conditions have not been accounted for systematically in studies concerning the semantic space HAVE/BE. However they are often indirectly involved in the description of single categories or parts of this area. Thus, corresponding to THEMATIC vs. RHEMATIC POSSESSION we find: "prédicat d'appartenance" vs. "prédicat de possession" (Benveniste 1960: 196-197); "possess₂" vs. "possess₁" (Clark 1978); "ownership" vs. "possession" (Bickerton 1981: 245); "non-presentative possessive" vs. "presentative possessive" (Hengeveld 1992: 125-126); "'belong'-constructions" vs. "'have'-constructions" (Heine 1997: 29-33). Corresponding to THEMATIC vs. RHEMATIC EXISTENCE we find: "modèle *Cogito, ergo sum*" vs. "modèle *il y a + GN*" (Feuillet 1998: 730-707; cf. also Koch 1993: 180-181). Corresponding to THEMATIC vs. RHEMATIC LOCATION, we find "non-presentative locative" vs. "presentative locative" (Hengeveld 1992: 125-126, with a clear-cut distinction from "existential"), or "locative/situative" vs. "existential" (Clark 1978; Hagège 1982: 46, 49; Freeze 1992: 553). Note that in the latter, very current, terminology the distinction between RHEMATIC LOCATION and EXISTENCE proper – as in (2) – fades away unduly (cf. section 5 for more details).
5. For the category of LOCATION, inherent boundedness of the predication is logically necessary (cf. ex. [4]). – Until now, the inherent boundedness of

the predication has not been accounted for systematically in studies concerning the semantic space HAVE/BE. However they are often indirectly involved in the description of single categories or parts of this area. Thus, corresponding to BOUNDED vs. UNBOUNDED EXISTENCE we find: "presentative locative" vs. "existential" (Hengeveld 1992: 97, 125f.). Roughly corresponding to BOUNDED vs. UNBOUNDED POSSESSION we find: "physical possession" vs. other types of "possession" (Heine 1997: 34; cf. above n. 3). Corresponding to BOUNDED vs. UNBOUNDED ASCRIPTION, we find: "énoncé [à localisation temporelle et modale] et situé par rapport au locuteur" vs. "énoncé hors de toute localisation temporelle et modale et hors de la subjectivité du locuteur" (Benveniste 1960: 160, cf. also 167); "attribut" vs. "essence" (Hagège 1982: 48-49); "qualification incidentielle" vs. "qualification essentielle" (cf. Feuillet 1998: 725; cf. 711-725).

6. For the principle of semantic or cognitive maps, cf. Anderson (1982); Bybee (1985: 195-196); Croft et al. (1987); Haspelmath (1997: 59-62). Cf. however the critical remarks above concerning the interpretability of "adjacencies".
7. In Heine's 100 language sample, this designation type for POSSESSION covers 20.9% (cf. Heine 1997: 75).
8. As for this understanding of metonymy and contiguity in relation to prototypicality and figure-ground effects, cf. Koch (1995: 40-41, 1999); Blank (1997: 235-243). (What Traugott and König [e.g. 1991] call "pragmatic strengthening" or "conventionalization of a conversational implicature" is a kind of metonymy.) Note that the notion of prototypicality that we have to apply here is an onomasiological one (cf. Koch 1996). In this sense, contiguity is an external relation between distinct categories. So, it would not be legitimate to denominate a metonymical process, like the one described, as a "metonymical extension" of the category RHEMATIC LOCATION.
9. Just as I use "RHEMATIC LOCATION" for "LOCATION with a rhematic participant *x*", so also "RHEMATIC BOUNDED POSSESSION" for "BOUNDED POSSESSION with a rhematic participant *x*" etc.
10. As for this understanding of (true) extension to a whole category, a process that is virtually, but not necessarily, in relation to prototypicality, cf. Koch (1995: 30-31); Blank (1997: 200-206).
11. According to Heine (1997: 75), the so called "'action'-type" for the designation of POSSESSION covers 13.6% of the 100-language sample. The term "action", however is misleading in this context, because the immediate conceptual basis of these designations for POSSESSION is HOLDING IN ONE'S HAND. (The designation for HOLDING IN ONE'S HAND may in turn go back to a word designating the action of GRASPING/TAKING; but for some languages, as far as we know, this is not at all certain: cf. L. *tenere* 'hold'

- as antecedent in ex. [13]-[14]. Anyway, it is not the concept of ACTION as such that motivates new designations for POSSESSION, but the – in my view prototypical – case of BOUNDED POSSESSION).
12. First of all, Greek influence as been invoked (cf. Svennung 1932: 84; Luque Moreno 1978: 138-140; García Hernández 1992: 166-167). If this should be correct, we would have to count the Greek and the Romance attestations of the POSSESSION → EXISTENCE pattern as only one occurrence. But this would not detract from the broad polygenetic evidence for this pattern. Secondly, a different meaning of L. *habere* has been considered the source of the existential meaning, namely 'to be in a state' (with possible Greek parallels in this case as well). This explanation cannot be excluded *a priori* on lexicological grounds, so that it would be possible to interpret the syntactically ambiguous noun phrase *animae pauxillum*, in (16b) not as the object of an impersonal verb *habet*, but as the subject of a personal form *habet* (cf. Luque Moreno 1978: 138-146; García Hernández 1992: 170; Manoliu Manea 1985: 111; indeed, *habet* is also attested with unambiguous subject participants *x*: cf. ThLL: s.v. *habeo*, III C 2, p. 2461, 65-77). But even on this assumption, one has to postulate that the impersonal type *domi, habet multum vinum*_{x-DO}, lit. 'in the house it-has much wine', is the result of a contamination between the personal type *domi, habet multum vinum*_{x-S}, lit. 'in the house is much wine', and the personal type *domus, habet multum vinum*_{x-DO}, lit. 'the house has much wine' (Luque Moreno 1978: 145). Thus, it seems impossible to totally disregard the role of the latter, metonymical/metaphorical type on a clearly possessive basis that is much closer to the etymological meaning of *habere* (cf. ex. [12]) and fits perfectly into the polygenetic pattern illustrated by ex. (19) ff.
 13. For the understanding of metaphor cf. Lakoff/Johnson (1980); Lieber (1992: 14-82); Koch (1994a, 1995: 39-40); Blank (1997: 157-171). Since metaphor always involves a conceptual leap, the (presumed) similarity is an external relation between distinct categories. So, it would not be legitimate to denominate a metaphorical process, like the one described, as a "metaphorical extension" of the category POSSESSION. – As for reinterpreting metonymies as metaphors, cf. Taylor (1995: 138); Koch (1997: 234).
 14. For the "evaporation" of highly thematic subject participants in the genesis of impersonal verbal expressions cf. Koch (1994b).
 15. Interestingly, our example (16c), although it goes one step further (and expresses RHEMATIC LOCATION), is ambiguous with respect to types (16e)/(31) and (16g), since the participant *y* is anaphorical and therefore implicit.
 16. It would be more accurate to begin each statement conditionally: "If a new expression X is created ...".

References

- Anderson, Lloyd
1982 The 'Perfect' as a universal and as a language particular category. In: Paul Hopper (ed.), *Tense and Aspect: Between Semantics and Pragmatics*, 227-264. (Typological Studies in Language 1.) Amsterdam / Philadelphia: Benjamins.
- Benveniste, Emile
1960 "Etre" et "avoir" dans leurs fonctions linguistiques. In: Emile Benveniste, *Problèmes de linguistique générale*. Volume 1, 187-207. Paris: Gallimard.
- Bickerton, Derek
1981 *Roots of Language*. Ann Arbor: Karoma.
- Blank, Andreas
1997 *Prinzipien des lexikalischen Bedeutungswandels am Beispiel der romanischen Sprachen*. (Beihefte zur Zeitschrift für Romanische Philologie, 285.) Tübingen: Niemeyer.
- Bogacki, Christophe
1988 Les verbes à argument incorporé. *Langages* 89: 7-26.
- Bolinger, Dwight
1977 *Meaning and Form*. (English Language Series 11.) London / New York: Longman.
- Bassols de Climent, Mariano
1948 Origen de la construcción impersonal del verbo *habere*. *Revista de estudios clásicos* 3: 215-225.
- Bréal, Michel
⁵1921 *Essai de sémantique (Science des significations)*. Paris: Hachette.
- Buchholz, Oda
1989 Zu Konstruktionen mit unpersönlich gebrauchtem 'haben' in den Balkansprachen. *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 42: 329-338.
- Buck, Carl D.
³1988 *A Dictionary of Selected Synonyms in the Principal Indo-European Languages*. Chicago / London: University of Chicago Press.
- Bybee, Joan L.
1985 *Morphology: A Study of the Relation Between Meaning and Form*. (Typological Studies in Language 9.) Amsterdam / Philadelphia: Benjamins.

- Clark, Eve V.
1978 Locationals: existential, locative, and possessive constructions. In: Joseph H. Greenberg (ed.), *Universals of Human Language*. Volume 4. *Syntax*, 85-126. Stanford: Stanford University Press.
- Coseriu, Eugenio
1958 *Sincronia, diacronia e historia. El problema del cambio lingüístico*. Montevideo: Universidad de Montevideo.
- Croft, William, Hava Bat-Zeev Shyldkrot and Suzanne Kemmer
1987 Diachronic semantic processes in the middle voice. In: Anna Giacalone-Pomat, Onofrio Carruba and Giuliano Bernini (eds.), *Papers from the 7th International Conference on Historical Linguistics, 179-192*. (Current Issues in Linguistic Theory 48.) Amsterdam / Philadelphia: Benjamins.
- Cugusi, Paolo
1981 Gli ostraka latini dello Wâdi Fawâkhir. Per la storia del latino. In: *Literature comparate. Problemi e metodi. Studi in onore di Ettore Paratore*, II, 719-753. Bologna: Pàtron.
- Feuillet, Jack
1991 Phrases nominales et phrases à verbe "être". *EUROTYP Working Papers* n° 1.
1998 Typologie de "être" et phrases essives. In: Jack Feuillet (ed.), *Actance et Valence dans les Langues de l'Europe*, 663-767. (Empirical Approaches to Language Typology. EUROTYP 20-2.) Berlin / New York.
- Foley, William and Robert D. Van Valin jr.
1984 *Functional Syntax and Universal Grammar*. (Cambridge Studies in Linguistics 38.) Cambridge: Cambridge University Press.
- Freeze, Ray
1992 Existentials and other locatives. *Language* 68: 553-595.
- García Hernández, Benjamín
1992 Nuevos verbos impersonales en latín tardío e influencia griega. In: Maria Iliescu and Werner Marxgut (eds.), *Latin vulgare – latin tardif III*, 159-172. Tübingen: Niemeyer.
- Hagège, Claude
1982 *La structure des langues*. (Que sais-je? 2006.) Paris: Presses Universitaires de France.
- Haspelmath, Martin
1997 *Indefinite Pronouns*. Oxford: Clarendon.
- Heine, Bernd
1997 *Possession. Cognitive Sources, Forces and Grammaticalization*. (Cambridge Studies in Linguistics 83.) Cambridge: Cambridge University Press.
- Hengeveld, Kees
1992 *Non-verbal Predication. Theory, Typology, Diachrony*. (Functional Grammar Series 15.) Berlin/New York: Mouton de Gruyter.
- Hölenstein, Elmar
1980 *Von der Hintergebarkeit der Sprache*. (suhrkamp taschenbuch wissenschaft 316) Frankfurt/M.: Suhrkamp.
- Kawaguchi, Junji
1991 *AVOIR et les problèmes de la localisation en français*. Tokyo: France Tosho.
- Kayne, Richard S.
1993 Towards a modular theory of auxiliary selection. *Studia Linguistica* 47: 3-31
- Keller, Rudi
1994 *Sprachwandel. Von der unsichtbaren Hand in der Sprache*. (Uni-Taschenbücher 1567.) Tübingen / Basel: Francke.
- Koch, Peter
1981 *Verb – Valenz – Verfügung. Zur Satzsemantik und Valenz französischer Verben am Beispiel der Verfügungsverben*. (Reihe Siegen 32.) Heidelberg: Winter.
1991 Semantische Valenz, Polysemie und Bedeutungswandel bei romanischen Verben. In: Koch and Krefeld (eds.), 279-306.
1993 HABEN und SEIN im romanisch-deutschen und im innerromanischen Sprachvergleich. In: Giovanni Rovere and Gerd Wotjak (eds.), *Studien zum romanisch-deutschen Sprachvergleich*, 177-189. (Linguistische Arbeiten 297.) Tübingen: Niemeyer.
1994a Gedanken zur Metapher – und zu ihrer Alltäglichkeit. In: Annette Sabban and Christian Schmitt (eds.), *Sprachlicher Alltag. Linguistik – Rhetorik – Literaturwissenschaft. Festschrift für Wolf-Dieter Stempel*, 201-225. Tübingen: Niemeyer.
1994b Dépersonnalisation (et repersonnalisation). *L'information grammaticale* 62: 9-11.
1995 Der Beitrag der Prototypentheorie zur Historischen Semantik: eine kritische Bestandsaufnahme. *Romanistisches Jahrbuch* 46: 27-46.
1996 La sémantique du prototype: sémasiologie et onomasiologie? *Zeitschrift für französische Sprache und Literatur* 106: 223-240.
1997 La diacronia quale campo empirico della semantica cognitiva. In: Marco Carapezza, Daniele Gambarara and Franco Lo Piparo (eds.), *Linguaggio e cognizione*, 225-246. (Società di Linguistica Italiana 37.) Roma: Bulzoni.
1999 Frame and contiguity. On the cognitive bases of metonymy and certain types of word formation. In: Klaus-Uwe Panther and Günter

- Radden (eds.), *Metonymy in Language and Thought*, 139-167 (Human Cognitive Processing) Amsterdam / Philadelphia: Benjamins.
- in press a TREE and FRUIT: A cognitive-onomasiological approach. *Studi Italiani di Linguistica Teorica ed Applicata*.
- in press b Lexical typology. In: Martin Haspelmath, Ekkehard König, Wulf Oesterreicher and Wolfgang Raible (eds.), *Typology and Universals. An International Handbook*. Berlin / New York: de Gruyter.
- Koch, Peter and Thomas Krefeld (eds.)
1991 *Connexiones Romanicae. Dependenz und Valenz in romanischen Sprachen*. (Linguistische Arbeiten 268.) Tübingen: Niemeyer.
- Lakoff, George and Mark Johnson
1980 *Metaphors We Live By*. Chicago: University of Chicago Press.
- Langacker, Ronald W.
1968 Observations on French possessives. *Language* 44: 51-75.
- Liebert, Wolf-Andreas
1992 *Metaphernbereiche der deutschen Alltagssprache. Kognitive Linguistik und die Perspektiven einer Kognitiven Lexikographie*. (Europäische Hochschulschriften I, 1355.) Frankfurt/M.: Lang.
- Luque Moreno, Jesús
1978 En torno al sintagma "haber impersonal + sustantivo" y sus orígenes latinos. *Revista española de lingüística* 8: 125-147.
- Lyons, John
1967 A note on possessive, existential and locative sentences. *Foundations of Language* 3: 390-396.
- Manoliu-Manea, Maria
1985 *Tipología e historia. Elementos de sintaxis comparada románica*. (Biblioteca románica hispánica II, 337.) Madrid: Gredos.
- Oesterreicher, Wulf
1991 Verbvalenz und Informationsstruktur. In: Koch and Krefeld (eds.), 349-384.
- Pottier, Bernard
1985 *Linguistique générale. Théorie et description*. (Initiation à la linguistique B, 3.) Paris: Klincksieck.
- Poullet, Hector, Sylviane Telchid and Danièle Montbrand
1984 *Dictionnaire des expressions du créole guadeloupéen*. Fort-de-France: Hatier.
- Raible, Wolfgang
1981 Von der Allgegenwart des Gegensinns (und einiger anderer Relationen). *Zeitschrift für Romanische Philologie* 97: 1-40.

- Svennung, Josef
1932 *Wortstudien zu den spätlateinischen Oribasiusrezensionen*. Uppsala: Almqvist & Wiksell.
- Taylor, John R.
1995 *Linguistic Categorization. Prototypes in Linguistic Theory*. Oxford: Clarendon.
- ThLL =
Thesaurus linguae Latinae. 8 vol. Leipzig: Teubner, 1936-66.
- Traugott, Elizabeth C. and Ekkehard König
1991 The semantics-pragmatics of grammaticalization. In: Elizabeth C. Traugott and Bernd Heine (eds.), *Approaches to Grammaticalization*, I, 189-218. (Typological Studies in Language 19.) Amsterdam / Philadelphia: Benjamins.
- Wilkins, David P.
1996 Natural tendencies of semantic change and the search for cognates. In: Mark Durie and Malcolm Ross (eds.), *The Comparative Method Reviewed*, 264-304. Oxford: Oxford University Press.
- Wilson, Bob
1983 An examination of cross-linguistic constraints on the lexicalization of predications of ownership, possession, location and existence. *University of Hawaii Working Papers in Linguistics* 15/2: 1-18.