Why do new meanings occur? A cognitive typology of the motivations for lexical semantic change

Andreas Blank

1. Language change and the speaker's mind

1.1. Three levels of motivation

One of the central topics of linguistics is the problem of language change. It is especially intriguing to structuralists: why should well-balanced linguistic systems change and thus put the stability of the system at risk?

The challenge to structural linguistics – and linguistics in general – presented by language change was formulated and discussed some forty years ago by Eugenio Coseriu (1958). He states that language is, rather than a product (*ergon*), a process (*energeia*) that exists virtually in the speaker's mind as a mere potentiality (*dynamis*) and finds reality only in concrete utterances. While communicating, we reify what is in our mind and thereby reinvent language every time we speak. Speaking – and writing, of course – is the only way to introduce innovations that might be adopted by other speakers and thus become new language rules (Coseriu 1958: 44-46). It is the dynamic view of language as something that is reified every time someone speaks that bridges the "aparente aporía del cambio lingüístico" [the apparent aporia of linguistic change] (1958: 7).

The differenciation between innovation and adoption by other speakers leads us to a first typology of motivations: there is, on one side, the motivation a speaker has while he is innovating and, on the other side, the motivations other speakers feel to adopt this innovation, e.g. the prestige of the innovating speaker, or the adequacy or

persuasive character of the innovation itself (cf. Blank 1997: 374-375). Adoption thus shows a sociolinguistic facet, which we cannot investigate here (cf. e.g. Labov 1972), a pragmatic and a cognitive side: when speakers decide to accept an innovation because it is convincing to any extent, this is a pragmatic decision mainly based on the innovation's good cognitive performance. If, for example, we find that *to trash* is a good expression for 'erasing files or e-mails from the computer', speakers decide to use it for that purpose because it is "convincing"; the persuasive power of this metaphor lies in the clear-shaped similarity between the concept THROWING WASTE INTO THE GARBARGE CAN and TO ERASE DATA. As a consequence of adoption, the semantic innovation becomes lexicalized (cf. Blank, in press, section 2).

On the cognitive level, lexicalization "confirms" that the innovating speaker has made a good choice. If we want to explore the cognitive aspect of semantic change, we may therefore safely concentrate on the motivations for semantic innovation and examine lexicalized material. As to the reasons why speakers innovate, Coseriu (1958: 37-38) differenciates between three levels of causes or motivations:[1]

- the general motivation for language change, which, according to Coseriu, is the "finalidad expresiva (y comunicativa) de los hablantes" [the speakers' expressive and communicative purpose] (Coseriu 1958: 116),
- the general conditions for language change, and
- the specific motivation for a concrete innovation.

On the level of specific motivations, we have to reveal the concrete conditions behind an innovation: when the American inventor of the 'self-propelled submarine explosive' baptized it *torpedo* after the Latin name for the *electric ray*, the very reason why he did it was his need for a name for the new weapon. He probably called it *torpedo*, because he thought that this was a pretty convincing metaphor.[2] The specific motivation was, therefore, the need for a new name in a concrete situation, and the general motivation for the inno-

vator's choice was the wish to give it a somewhat suggestive and hence successful name. Only by combining the individual and the general aspects can we provide satisfying explanations for semantic innovations.[3] Typologies of the motivations for semantic change do not always distinguish clearly between these two levels, but mainly focus on the specific motivations in order to find regularities. By this process of abstraction, we can empirically group individual motivations into "types of motivations", that correspond to a certain extent to Coseriu's second level, insofar as they constitute the sufficient conditions for change in the part of language that interests us.[4] In section 2 and 3 we shall mainly concentrate on these typical motivations for semantic innovations.

1.2. The general motivation for language change, expressivity and efficiency

The general motivation for language change is widely accepted and was summed up as early as 1949 in a rather unpretentiously and slightly behaviouristic manner by George K. Zipf: "Man talks in order to get something." (1949: 19). According to Zipf, the main motivation for speaking is to achieve success. This hypothesis implies that language change is a mere side-effect of the speakers' pragmatic goals. In Rudi Keller's adaption of Adam Smith to linguistics (Keller 1994, esp. ch. 4) natural languages are defined a "phenomenon of the third kind", a product of social interaction, created through a series of "invisible-hand processes" by speakers whose main purpose was to "get something". Thus, language change is not inherent in language itself, although it occurs at any time in any language, nor are there certain tendencies (e.g. "simplification") inherent in language. Rather, language change is a consequence of inherent characteristics of man's mind and human social interaction.

The pragmatic view of language implies that speakers want to communicate successfully and that they produce innovations any time they judge it to be the most successful strategy. Innovations can be produced with regard to the speaker him- or herself or with regard

to the interlocutor (cf. also Geeraerts 1997: 116-119).[5] Speaker-oriented strategies aim at reducing linguistic effort by shortening words, integrating "orphaned words" into the lexicon (cf. section 3.5.2.), making use of analogies etc.; in short: they aim to render speaking more efficient. In certain communicative situations speaker-oriented efficiency can also be increased by using the word for the prototype instead of the category (and vice versa) or by creating a metonymy or a metaphor, because the underlying concepts are more salient and thus allow easier access to the corresponding words (cf. section 3 for details).

Such strategies enable speakers to maximize the communicative relevance of their discourse (cf. Sperber/Wilson 1986, esp. 157-159). Enhancing relevance is already a hearer-oriented strategy to the extent that a particularly relevant communication seems to be more convincing.[6] Hearer-oriented strategies generally aim at assuring the correct understanding of what the speaker wants to express and at influencing the hearer in favour of the speaker. Typical lexical strategies are to avoid ambiguity ("disturbing" homonymy or polysemy) or to use more explicit complex words, to create expressive or euphemistic metaphors, metonymies etc.

While speaker-oriented strategies are more or less used to increase communicative efficiency, hearer-oriented strategies seem, furthermore, to be oriented towards the communicative principle of expressivity. Dirk Geeraerts (1983, 1997: 104-106) sees expressivity at work, when speakers verbalize newly introduced or differently perceived concepts or give a new stylistic use to an already existing word (esp. by creating euphemisms). While in Geeraerts (1983) the distinction between "expressive factors" and "efficiency principles" is rather strict, both conceptions are later defined as being "complementary sides of the same coin" (1997: 108): expressivity playing the role of the *force créatrice* behind language and linguistic innovation and efficiency being used for optimizing what has been created by means of expressivity, following the well-known principle of least effort (cf. also Geeraerts, this volume).

Geeraerts uses the term "expressivity" in a rather wide sense (cf. Geeraerts 1997: 92), and, in this wide sense, we can surely admit

that expressivity and efficiency can be treated on the same level as complementary conceptions. Expressivity, however, is usually understood as an aspect of certain speech acts by which speakers express real or faked emotions (cf. Bally 1965: 75; Fiehler 1990: 222-223; Mair 1992: 32-61). I therefore consider Geeraerts twofold typology of the general motivations for language change problematic, especially since his wide use of the two terms may lead into an impasse, as new creations can be efficient without being strictly expressive at all:

(1) OFr. *panser* 'to care for a wounded person' > 'to bandage a person's wounds'
(2) Engl. *glass* 'a hard, transparent substance' > 'drinking container made out of glass' > 'glassful'

In my opinion, efficiency and expressivity are not directly comparable or complementary on the same level. If we bear in mind that speakers don't want to change their language, and that their principal goal is to communicate as successfully as possible and to reach this communicative goal with minimal linguistic effort, then communicative success is efficient in a rather abstract sense. I would like to call this the *efficiency of communication*: it is, in other words, the general purpose of communication and the general motivation behind language change.

It is true, of course, that avoiding paraphrases or complex words and creating metaphors, metonymies or ellipses instead is efficient too, but, in this case, the efficiency operates on a more concrete level, and it is indeed a *linguistic strategy* speakers adopt more or less willingly. On the same level, expressivity is also a strategy that speakers can adopt for optimizing their communicative success when they want to impress their interlocutors, treat him or her gently, manifest emotions, show things under a different light etc.; in short, when they want to come out on top. Both strategies then contribute in their specific manner to the general efficiency of communication and of language change.[7]

To conclude this section, we can say that efficient communication is to maximize success by either reducing or increasing linguistic effort.[8] Thus, a study of the motivations for lexical semantic change must be concerned with both developments, gather individual motivations for particular changes into types and try to identify the cognitive basis for these types. This will be the main issue of section 3. Section 2 will look back into the history of semantics and discuss some of the problems raised by traditional typologies of the motivations for lexical semantic change.

2. Traditional approaches to the motivations for semantic change

2.1. Stephen Ullmann's typology

The essentials of the 19th and early 20th centuries' reflections on lexical semantic change are summarized in Stephen Ullmann's two books *Principles of Semantics* (1957) and *Semantics* (1962). In the latter, Ullmann distinguishes three aspects of semantic change: its "causes", "nature" and "consequences" (cf. the critique in Geeraerts 1983, 1997: 85-92; Blank 1997: 34-44). This has been for decades the most popular and important theory in this domain. As to the *causes of semantic change*, Ullmann gives a list of six types (1962: 197-210), which integrates other, less comprehensive typologies, as e.g. those of Meillet ([1905] 1965) and Sperber ([1923] 1965).

A closer look at Ullmann's typology in the light of what has been said in section 1 is rather deceiving: Ullmann's list lacks both a cognitive and an empirical background and is merely an eclectic collection of motivations, necessary conditions and accessory elements.[9] From his six types only two are relatively unproblematic, i.e. the "social causes" and the "psychological causes". The first type concerns words that are often used by a group of speakers in a restricted context and, as a result, become semantically restricted to the actual sense they have in this context:

(3) Lat. *cubare* 'to lie' > Fr. *couver* 'to breed'

Vice versa, the meaning of a word can become generalized when this word is used outside its usual context:

(4) Engl. *lure* 'decoy' > 'anything that attracts'

The theory of the psychological grounding of semantic change was introduced by Hans Sperber (1965). According to him, emotionally marked concepts can serve as an onomasiological "center of attraction" for other words to verbalize the "attractive" concepts and, vice versa, serve as a cognitive basis, as a semasiological "center of expansion" for verbalizing other concepts (cf. also Blank 1998a: 15-17). Concepts within emotionally marked fields (cf. section 3.7.) are frequently akin to new verbalization, be it in an expressive, "exaggerating" way, as in ex. (5), or in the manner of euphemistic "understatement", as in ex. (6):

(5) MHGerm. *sēre* 'wounded, sore' > 'very'
(6) VulgLat. *male habitus* 'in a bad state' > Fr. *malade*, It. *malato* 'ill'

While the relevance of these two types is convincing, this is not the case for the remaining four. According to Ullmann, a semantic change can be due to newly developed objects or ideas (*need for a new name*, cf. ex. 7), to technical, scientific, political or sociocultural developments which influence our conception of things, people, ideas etc. (*historical causes*, cf. ex. 8), as well as to changes that have already occurred in one language and that are subsequently copied in another (*foreign influence*, cf. ex. 9). Finally, change can happen when two words are habitually collocated in speech and the sense of one word is transferred to the other (*linguistic causes*, cf. ex. 10):

(7) Engl. *torpedo* 'electric ray' > 'self-propelled submarine explosive'

(8) Fr. *plume* 'goose feather for writing' > 'pen with metal nib'
(9) OGr. *aggelos* 'messenger' > 'angel', copying the polysemy of Hebr. *ml'k* 'messenger', 'angel'
(10) Fr. *pas* 'step' > 'not' (⇦ *ne ... pas*, lit. 'not (a) step')

First of all, I believe that Ullmann's *historical causes* and *need for a new name* are facets of one and the same type, insofar as in both cases there are new concepts – the submarine bomb, the modern pen – that need to be expressed.[10] The same holds true for *foreign influence*, where it is not the adstrat situation itself that is the cause for semantic change, but the need to verbalize a new concept. Semantic loan is only a rather smart device adopted for that purpose, because it imitates a polysemy that seems to function well in another language and which thus promises to be successful.

As to Ullmann's example for *linguistic causes*, it must be observed that in fact the sense of the whole collocation is transferred to the simple word and not only the sense of the part that is omitted. Lexical ellipsis, therefore, must be defined in a different way than it is interpreted by Ullmann (cf. Blank 1997: 288-292). In our context it is important that the collocation of French *ne* and *pas* is not the motivation for the semantic change which *pas* has undergone, but a necessary condition that makes a change possible. If it was the motivation, all collocations (and complex lexemes in general) would necessarily become elliptic, which is clearly not the case.

2.2. *Other causes of semantic change*

We can thus reduce Ullmann's six types to three. Furhtermore, we find that his typology lacks traditional causes such as "irony" or what Nyrop called "connexion entre les choses" [relation between the things] (1913: 80). To my knowledge, Nyrop was the first to state that concepts in our mind are interconnected and that one concept can evoke those concepts related to it.[11] Strong conceptual relations seem to induce semantic change, as happened in the following example:[12]

(11) Lat. *focus* 'fireplace' > 'fire'

Another traditional cause for semantic change that does not appear on Ullmann's list is homonymic clash:

(12) Lat. *vicarius* 'village mayor' > Gasc. *bigey* 'rooster'
(⇦ Lat. *gallus* 'rooster' > Gasc. **gat*; LateLat. *cattus* 'cat' > Gascon *gat*)

The traditional interpretation, which goes back to Gilliéron and Roques (1912), sees the semantic change of *vicarius* motivated by the homonymy of Latin *gallus* and *gattus* in Gascon, caused by the parallel sound change of intervocalic *-ll-* > *-t-* and *-tt-* > *-t-*. In a medieval rural society this homonymy could indeed have given rise to confusion. The question is whether the metaphor for *vicarius* was only created when the homonymic clash had already occured. In agreement with Wartburg (1971), I would rather say that the already existing expressive "Trabantenwörter" [satellite words] *vicarius/bigey* were used more and more as the normal names for the 'rooster' when the homonymy arose, while the original word *gat* was falling into disuse. Thus, the homonymy of *gat* is not the motivation for the metaphor *bigey* but the cause of its status as the normal word for 'rooster' in Gascon. We can conclude that the avoidance of misunderstandings due to homonymy (as well as to polysemy) is situated on the level of motivations for *adoptions of innovations*, while the creation of the metaphor of Gascon *bigey* 'rooster' was due to expressivity, viz. "psychological causes" (for details cf. Blank 1997: 354-359).

3. A new typology of the motivations for lexical semantic change

3.1. An empirical approach based on cognitive foundations

Traditional historical semantics have not succeeded in conceiving a consistent theory of the motivations for semantic change, but rather they provide a mix of mechanisms, such as metaphor, necessary (but not sufficient) conditions, such as collocations, and actual causes.[13] Furthermore, rarely any consideration is given to the different levels of motivations introduced in section 1.1. Considering the eclecticism of a typology like Ullmann's, which until the 1990s was reputed to represent the "state-of-the art" in historical semantics, one should favour an empirical approach to this matter in order to reduce the risk of omitting types that are less striking than others. Such a typology should concentrate mainly on the motivations for semantic innovation.[14] It is self-evident that recent developments in pragmatics and semantics (esp. cognitive semantics) should be integrated whenever they support classifying concrete examples and further theorizing in this domain of historical semantics.

A corpus of more than 600 particular semantic changes taken essentially from Romance languages and completed by examples from German and English as well as from some other languages was compiled and classified by Blank (1997: 497-533). The items were mainly collected in view of a classification of the mechanisms for lexical semantic change and not with regard to its motivations. This assures a certain randomness and objectivity of the corpus with respect to the motivations for semantic innovation.

For each example, I tried to find the most plausible reason for its creation, and then similar cases were grouped together. I have to admit that some examples simply refuse classification, as the specific conditions and motivations for their creation have not yet been established.[15] The great majority, however, fits into six main categories, some of which show subdivisions, which I would like to call linguistic (section 3.6.) or cognitive constellations (sections 3.5., 3.7.) favouring semantic change. The six main types of motivations

are established empirically, but show significant correlations to theoretical frameworks of cognitive semantics, viz. prototype theory, basic-level theory and frames-and-scenes semantics. Furthermore, all six types are consistent with the general motivation for language change, insofar as their common denominator is to enhance communicative efficiency.

3.2. New concept (need for a new name)

Our first type has already been discussed in section 2. New concepts arise when we change the world around us or our way of conceiving it (ex. 13 and 14), but also when we leave our "habitat" and enter a new one (ex. 15 and 16). New concepts can of course be verbalized by paraphrase, but it is more efficient, and in most cases more pervasive, to express them by semantic change. The common background of all four examples is the confrontation with a new referent or concept:

(13) Lat. *pecunia* 'cattle (used as a currency)' > 'money'
(14) Engl. *mouse* 'small rodent' > 'small, hand-guided electronic device for executing commands in computer programs'
(15) EurSp. *léon* 'lion' > AmerSp. 'puma'
(16) Fr. *lézard* 'lizard' > Creole (Réunion) 'gecko'

3.3. Abstract concepts, distant and usually invisible referents

The second type of motivations concerns conceptual domains whose referents are either abstract or usually distant or hard to see and thus rather difficult for us to seize intellectually. Abstraction explains the usual metaphorical verbalization of e.g. TIME, UNDERSTANDING, SENSE-PERCEPTION or EMOTIONS (cf. Sweetser 1990: 32-37; Blank 1998b: 19-23). Verbalizing abstract concepts by metonymy occurs more rarely:

(17) Lat. *luna* 'moon' > Rum. *lună* 'month'

It can happen that, with time, metaphors (or metonymies) lose their concrete sense and become opaque, as happened in ex. (18):

(18) It. *capire* 'to understand' (< Lat. *capere* 'to catch')

In this case, the cognitive perception of the mental process by means of physical grasping is no longer possible. Here indeed, Italian speakers were quick to create and adopt a new metaphor that renews the old conceptual link between UNDERSTANDING and GRASPING:

(19) It. *afferare* 'to grip, to grasp' > 'to understand'

Concretely seizable but distant concepts and things that are difficult to see can be brought "closer" into our view by metaphor, as in ex. (20) and (21):

(20) Fr. *gorge* 'throat' > 'gorge, canyon'
(21) Lat. *pupilla* 'little girl or doll' > 'pupil (of the eye)'

This type of motivation once more illustrates the difficulty of applying the labels "expressivity" and "efficiency" on the level of lexical semantics: verbalizing an abstract or somehow difficult notion by metaphor certainly is an expressive issue that makes communication more convincing, but it is also – and mainly through its expressivity – a very efficient tool of lexical enrichment.

3.4. Sociocultural change

Changes in our conception of the world can also lead to the transformation of an already existing complex conceptual system by the loss of one or more concepts, by shifting concepts or by introducing new ones. For example, a change in the legal system made the Latin dis-

tinction between relatives on one's mother's side (*avunculus/matertera*) and relatives on one's father's side (*patruus/amita*) obsolete. This led, among other things, to the extensions of meaning in ex. (22) and (23), which are a part of a greater restructuration in the semantics of Latin kinship terms (cf. Coseriu 1978: 136-138):

(22) Lat. *avunculus* 'uncle on one's mother's side' > Fr. *oncle*, Rum. *unchiu* 'uncle'
(23) Lat. *amita* 'aunt on one's father's side' > OFr. *ante*, ModFr. *tante*, Occ. *tanto*, Engd. *amda*, Rum. *mătuşă* 'aunt'

Fascinating examples which demonstrate the multiple reorganisation of a lexical structure due to sociocultural change are the French denominations for the different meals of the day: until the 16th century people used to have the main meal (*disner/desgeüner*, both from VulgLat. **disjejunare* 'to defast') in the middle of the morning and a second, lighter meal (*souper*) in the afternoon. Changes in lifestyle of the noble society and in the (imitating) urban bourgeoisie shifted the main meal of the day to noon. The long gap between getting up and eating made it necessary to introduce a breakfast in the morning and led to the semantic differenciation of *déjeuner* 'breakfast' and *dîner* 'main meal'; *souper* now meant 'evening meal'. In the 19th century, it appeared more suitable to the members of urban professional societies to have the main meal in the evening, which made *dîner* to acquire the sense of 'dinner' and *déjeuner* 'lunch'. For 'breakfast', a new complex lexeme was created (*petit déjeuner*) and *souper* now serves to designate a late-evening meal. The binary system of the Middle Ages thus developed through a ternary to a fourpartite structure shifting the words along the temporal contiguity of meals (cf. DHLF, ss.vv.):

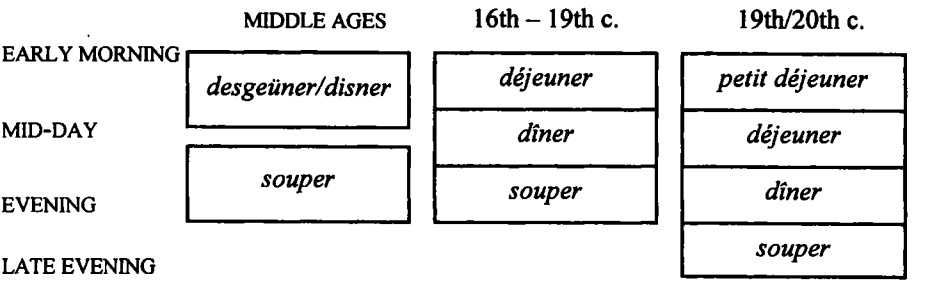

Figure 1. The diachrony of French words for MEALS

3.5. Close conceptual or factual relation

When we speak, it can happen that we use a word in a sense that is different from its usual one. Normally, our interlocutor understands what we mean because the context may help and because the word we have chosen usually refers to a concept that is somehow closely linked to the concept we have made it refer to in this concrete speech act. Close links between concepts make name transfers possible and, when they are considered to be efficient, they might become lexicalized, and the word that has undergone semantic change becomes polysemous. According to the nature of this conceptual relation, three types of cognitive constellations can be distinguished:

1. *Frame relation*: A strong and habitual relation between two concepts within a frame makes speakers express them by using only one word: the frame relation is "highlighted" (cf. Croft 1993: 348; Koch, in press b). This was the type of motivation Nyrop called "connexion entre les choses" (cf. section 2.2.). The examples of this type are mainly metonymies (24), but frame relations may also lead to autoconverse change, as in ex. (25):

(24) Lat. *testimonium* 'testimony, witness' > Fr. *témoin* 'witnesser'
(25) It. *noleggiare* 'to lend' > 'to borrow'

Completely different frames led Latin *plicare* 'to fold' to take opposite semantic directions in Ibero-Romance and Rumanian, producing a kind of "interlinguistic antonymy":

(26) Lat. *plicare* 'to fold' > Rum. *a pleca* 'to leave'
(27) Lat. *plicare* 'to fold' > Sp. *llegar*, Pg. *chegar* 'to arrive'

The reason for this curious development is probably the following: in the shepherd society of Rumania folding the tents was associated with leaving, while in the marine society of Spain folding the sails was associated with arrival.[16]

2. *Prototypical change*: In contrast with Geeraerts (1983), I would like to restrict "prototypical change" to the following cases:

In the first case, a word is constantly used to refer to the prototype of the usually designated category (cf. also Rastier, in this volume). This gives rise to restrictions of meaning, as in ex. (28) and (29), which rely on the fact that in France WHEAT is the prototypical CEREAL, and in patriarchal societies the prototypical HUMAN BEING is the MAN:

(28) Lat. *frumentum* 'cereal' > Fr. *froment* 'wheat' > 'special type of wheat', Fr. *blé* 'cereal' > 'wheat'
(29) Lat. *homo* 'human being' > VulgLat. 'male human being'

The opposite happens when the word which usually designates the prototype of a category is extended to refer to the whole category, as in the following examples:

(30) VulgLat. *hostis* 'opposed, hostile [!] army' > OIt. *oste*, OFr. *ost* 'army' (> MEngl. *(h)ost*)
(31) Lat. *tenere* 'to hold' > Sp. *tener*, Sard. *teniri* 'to have'

Here we can say that TO HOLD (IN THE HANDS) is the clearest and most typical instance of POSSESSION mirroring an anthropologically motivated salience (cf. Koch 1991: 31, this volume), while the OP-

POSED ARMY forms a kind of "moral prototype" because of its elementary threat. Note that the prototypical structure of a category is only a necessary condition. The sufficient condition that triggers this type of change seems to be the speakers' strong emotional or factual fixation on the prototype. In the first case, they then use the word usually linked to the whole category in a specific context where only prototypical instances can be referred to (ex. 28 and 29), e.g. in a public discourse when the orator addresses the whole community, but indeed speaks to an entirely male assembly. In the second case, the word for the prototype is expressively taken to refer, in fact, to another member of the category or the category itself (ex. 31). Both "abuses" will probably lead to a higher frequency of use of the semantically extended or restricted word which makes their new senses even more attractive.

The question is why in one case we have semantic restriction and in another semantic extension. In my opinion, this depends essentially on what's on the left of the arrow: if this is a word whose referential class is prototypically structurable (like CEREALS or HUMAN BEINGS), then we can only have restriction to the prototype; if, on the other hand, the referential class of the word we examine shows no prototypical structure, but is itself a prototypical instance, then it can only be extended to the whole category. We must keep in mind that in both cases the fixation on the prototype triggers the semantic change.[17]

Sometimes we find extensions or restrictions of meaning which are difficult to be explained by fixation on a prototype, as ex. (32) and (33), where at first sight it is hard to imagine that one of the two referential classes involved could be a prototypical instance of the other:

(32) MEngl. *hound* 'dog' > 'dog trained to pursue game'
(33) VulgLat. *adripare* 'to get on shore' > 'to arrive'

In these cases, it helps to see if the transfer could have happened inside a specific frame, and, in fact, the typical dog in the frame

"HUNTING" is the HOUND, and in the frame "SEAFARING" the prototypical arrival is GETTING TO SHORE.

3. *Blurred concepts*: So far, we have discussed cases where a name transfer is considered to be efficient. In some cases, however, speakers make transfers without being aware of it, because their knowledge about the limits of these concepts and the respective categories is momentarily or permanently blurred. Confusions of this kind happen every day to almost everybody. If, however, the confusion between two concepts is a widespread matter of fact in a speech community, this can lead to a co-hyponymous transfer. A conceptual field where changes of this kind have happened several times in the history of Romance languages is constituted by RATS, MICE and similar small animals (cf. for details Blank 1998c):

(34) LateLat. *talpus* 'mole' > It. *topo*, Sard. *topi* 'mouse'
(35) Lat. *sorex* 'shrew-mouse' > It. *sorcio*, Fr. *souris*, Rum. *şoarece* 'mouse'
(36) ? **ratt-* 'rat' > Pg. *rato*, Fr. *rat*, It. (dial.) *rat*, *rät* 'mouse'

3.6. Complexity and irregularity in the lexicon

A fundamental speaker-oriented strategy is to communicate at the "lowest possible costs". Consequently, speakers reduce irregularities or superfluous complexity in the lexicon, most of the time without being aware of it. Irregularity may, in fact, be a consequence of "expressive factors" and the efficiency principle pushing speakers to linguistic optimization (cf. Geeraerts 1997: 108), but for the following situations this is not necessarily the background. In any case, like in other instances of semantic change, "good" innovations are subsequently adopted by the community. Four different lexical constellations can be distinguished:

1. *Lexical complexity*: The more frequently a word is used, the more speakers tend to reduce its signifiant ("Zipfs law"; cf. Zipf 1945:

142-144). If the word in question is a compound or a syntagmatic construction (e.g. *mother-in-law*, *matter of fact*), the reduction may concern one part of the complex lexeme. This process is usually called "lexical ellipsis". Semantically, a simple lexeme also receives the meaning of a complex word of which it is formally a part, so that "absorption" or "incorporation" (of the meaning of the complex lexeme) would be more appropriate terms (cf. Koch 1991: 287; Blank 1997: 291):

(37) It. *portatile* 'portable' > 'notebook-computer' (⇦ *computer portatile*)
(38) Lat. *separare* 'to separate' > Fr. *sevrer* 'to wean' (⇦ MFr. *sevrer de la mamele*)

The causal relation between lexical complexity, high frequency of use and the semantic process of ellipsis is extraordinarily strong, but it is not the exclusive motivation for ellipsis (e.g. *to drink* 'to drink alcohol' is probably due to decency; cf. section 3.7.).

2. *"Orphaned word"*: Here we have, in a certain manner, the opposite scenario to the one presented in the last paragraph: a lexically isolated word, which is the unique member of its derivational class and rather restricted in use, is interpreted by speakers as belonging to another derivational class and, therefore, becomes formally and semantically integrated into this class. This process of lexical integration is usually called "popular etymology" or "reinterpretation" (cf. Blank 1993, 1997: 303-308). Popular etymology can be restricted to the phonetic or graphetic level (MEngl. *soverein* > *sovereign*, under the influence of MEngl. *reign*). Where it occurs with semantic change, the formal similarity is backed up by a conceptual relation (usually contiguity), as in the following examples:

(39) Fr. *forain* 'non-resident' > 'belonging to the fair' (⇦ Fr. *foire* 'fair, market')
(40) OGr. *nekromanteia* 'art of divination through communication with the dead, necromancy' > ClassLat. *necromantia* >

LateLat. *nigromantia* 'black art', 'magic' (⇦ Lat. *niger* 'black')

While ex. (40) shows the fate of a loan word, which by definition is lexically isolated, French *forain* (from VulgLat. *foranus*) was previously "orphaned" in the French lexicon, because it didn't participate in the sound change of its lexical root (Lat. *foris* 'outside' > Fr. *hors*). Through lexical reinterpretation it became "adopted" by the family of *foire* (from Lat. *feria*) in which it synchronically serves as an adjective (*foire – forain* following the scheme of *gloire – glorieux*).

3. *"Lexical gap"*: A lexical gap, in my understanding, is caused by an asymmetric lexical structure. Such an asymmetry existed in Classical Latin with *eques*, meaning 'cavalryman' and, metonymically, 'knight' as a member of the social class that formed the cavalry in the Roman army. One of the co-hyponyms of *eques* in the military sense was *pedes* 'infantryman'. The lexical disproportion between the polysemic *eques* and the monosemic *pedes* incited speakers to create an analogous metonymy for *pedes* which then meant also 'plebeian', although at least two other words for this social class (*plebs*, *plebeius*) already existed.

Analogous semantic change induced by an already current polysemy is esp. frequent in slang and other linguistic substandards, where the phenomenon is known under the name of "synonymic derivation" (cf. Klein 1997: 35-36, citing earlier studies from Meillet and Kroesch): synonyms or co-hyponyms of a word having a slang sense develop the same or a similar slang sense. Synonymy or co-hyponymy make the innovations easier to understand for the hearer and thus reduce communicative risks, while guaranteeing at the same time the specific cryptic character of slang. An example from Meillet (cited in Klein 1997: 36):

(41) Fr. *polir* 'to polish', 'to steal' ⇨ *fourbir* 'to polish' > 'to steal', *nettoyer* 'to clean' > 'to steal', etc.

4. *Untypical meaning/untypical argument structure*: The last lexical constellation that can motivate semantic change concerns words whose meaning is somewhat untypical for the word class they belong to. There is a general tendency to give more prototypical senses to such words. For example, nouns expressing results or places are more prototypical than *nomina actionis* (cf. Hopper/Thompson 1985: 152-154); the latter thus show a tendency to develop resultant, static or local meanings:

(42) Lat. *prehensio* 'act of seizing so.' > Fr. *prison* 'captivity' > 'prison'

Prototypical transitive verbs place the most active argument in the subject position (cf. Hopper/Thompson 1980: 252). This offers an explanation for auto-converse changes, as in ex. (42), where the CAUSATIVE argument shifts into the subject position, or in ex. (43), in which an agentive argument structure has developed:

(43) Pg. *aborrecer* 'to hate sth./so.' > 'to vex so. (= to cause hatred)'
(44) Lat. *lucere* 'to be visible' > Cat. *llucar* 'to see'

3.7. Emotionally marked concepts

Some conceptual domains are emotionally marked, as e.g. EATING and DRINKING, SEX, DEATH, FEAR, ANGER, BEAUTY, HOPE, GREAT QUANTITY/INTENSITY, THE FUTURE, ORIENTATION in TIME, SPACE and DISCOURSE (cf. for details Koch/Oesterreicher 1996: 79-87). A certain number of these domains are additionally marked with taboo. What's tabooed in a speech community is partially culture-specific, but certainly contains a supracultural, if not universal core.

When it comes to a tabooed topic, successful communication does not totally but largely depends on the context of the speech act. One can address a taboo directly, e.g. by saying "the princess died in a car accident", but often this is not the recommended strategy, as

speaking of DEATH is principally a "face-threatening act" (cf. Brown/ Levinson 1978: 70-72) and one risks jeopardizing communicative success by offending the interlocutor's feelings. To avoid this "loss of face" speakers can adopt a *euphemistic* strategy by saying e.g. "the princess passed away, expired, etc." It is important to see that a semantic euphemism does not avoid the problematic topic, but allows a different approach to it: the cognitive ratification of the semantic relation between PASSING AWAY and DYING is essential for the euphemism to work. That is to say that a good semantic euphemism has to be veiling and explicit at the same time, if we want it to be communicatively efficient. If that is the case, it can become lexicalized.

Euphemisms are often created via metonymy (ex. 45) and metaphor (ex. 46), but also through semantic restriction (ex. 47), ellipsis (cf. section 3.6., no. 1) or ironic antiphrasis (ex. 48 and 49):

(45) Lat. *infirmus* 'weak' > 'ill (euphemistic)' > OFr. *enferm*, Sp. *enfermo* 'ill', Lat. *languidus* 'feeble' > Rum. *lînced* 'ill (euph.)' > 'ill'
(46) Fr. *tuer* 'to extinguish (fire)' > 'to kill'
(47) It. *casino* 'little house' > 'brothel'
(48) OF. *oste* 'guest' > 'hostage (euph.)'
(49) Sard. *masetu* 'gentle, good-natured' > 'irascible'

A completely different way of treating tabooed concepts is to verbalize them by *dysphemism*, i.e. by an offensive, explicitely face-threatening strategy (cf. Allan/Burridge 1991: 26), e.g. by saying "the princess kicked the bucket". Dysphemisms are esp. vivacious among members of social groups where expressive and drastic speech is considered to be "tough" or signifies "coolness". Under these specific conditions, dysphemisms are used with the same intention as euphemisms: they guarantee and enhance communicative success. Dysphemisms are usually located on diastratically or diaphasically low marked levels of speech, but can be cited by "normal" speakers as a special expressive effect.

Expressive verbalization does also occur with emotionally marked but not tabooed conceptual domains, like MONEY, WORK, PLANS AND GOALS, QUANTITY etc. Here, instead of being cautious and discreet, we must exaggerate and say things in a *drastic* or *hyperbolic* manner, if we want to convince our interlocutor and make him or her share our point of view (Stempel 1983: 89-90). Thus, expressivity is not a motivation for semantic change, but a communicative strategy (cf. section 1.2.). The typical mechanisms are again metaphor and metonymy (ex. 50 and 51), but extension of meaning (ex. 52), co-hyponymous transfer (ex. 53) or contrast-based semantic change (ex. 54) is also found:

(50) VulgLat. ***tripalium*** 'torture' > MFr. *travail* 'work (expr.)' > ModFr. 'work'
(51) Fr. *bordel*, It. *bordello* 'brothel' > 'disorder, brawl'
(52) Lat. *caballus* 'bad horse, jade' > VulgLat. 'horse (expr.)' > Cat. *cavall*, Engd. *kaval*, Fr. *cheval*, It. *cavallo*, Pg. *cavallo*, Sard. *kaḍḍu*, Rum. *cal*, Sp. *caballo* 'horse'
(53) Sp., Pg. *aborrecer* 'to vex so.' > 'to bore so. (expr.) > 'to bore so.'
(54) Engl. *bad* 'not good' > Engl. (slang) 'good, excellent'

Euphemistic and expressive words are subject to a general tendency: their veiling or drastic-hyperbolic power weakens the more frequently they are used. As most of the examples above show, the expressivity or the euphemistic character totally wears away and new euphemisms or expressive words have to be created.

4. Conclusion

The aim of this paper was to give a typology of the motivations for semantic innovation that integrates what we have learned about language and its function since the times of Ullmann. I am convinced that by drawing upon the background of pragmatic and cognitivist

models a deeper insight into the reasons why speakers change their lexicon has been gained.

The corpus analysis confirmed the general assumptions made in section 1 and the tripartite typology of motivations elaborated by Coseriu. There is, on one side, a particular, situative motivation for an individual to risk a semantic innovation; on the other side, innovation is generally motivated by the wish to communicate as efficiently as possible, i.e. to influence the interlocutor in the desired manner and to do this at the least possible expense. Finally, one finds that the individual motivations can be grouped into six types of general motivations or sufficient conditions for semantic innovation, as presented in section 3. These conditions derive either from our perception of the world and our way of structuring our concepts or from the structure and form of one language's lexicon. The several subtypes are to be understood as more specific frameworks that trigger specific mechanisms of semantic change.

Notes

1. Instead of "causes", I prefer the term "motivation", because it emphasizes that semantic innovations (like any linguistic innovation) are speaker-based; they occur because speakers have a motive that makes them innovate.
2. I emphasize that the metaphor itself is not, on any level, the cause of the change, but only the mechanism or "procedure" the speaker uses (cf. Blank 1997, ch. 5). As Geeraerts puts it, metaphors, metonymies etc. "indicate the associative mechanisms that define and delimit the set of *possible* (or plausible) semantic changes" (1997: 103).
3. Coseriu uses the following comparison to underline this necessity: "Dar sólo una explicación genérica de un cambio históricamente determinado es como decir que una casa se ha incendiado 'porque el fuego quema la madera', lo qual es cierto desde el punto de vista genérico ..., pero no nos dice nada acerca de la *causa histórica* (particular) del incendio." (1958, 104-106) [To give a general explanation of a historically occured change is like saying that a house caught fire 'because wood burns', which is correct from a general point of view, but doesn't tell us anything about the *historical (particular) reason* for the fire].

4. The existence of an individual motivation and a sufficient condition does not necessarily lead to a semantic innovation. Speakers can also take another pathway of verbalization, as e.g. word formation or borrowing.
5. It is self-evident that the interlocutor doesn't need to be a concrete person, but can also be a fictive hearer/reader imagined by the author.
6. This central hypothesis of Sperber/Wilson (1986) is not unanimously accepted; cf. e.g. Horn (1989, 194-195); Keller (1995, 211-213).
7. The efficiency of language change has not necessarily to be of panchronic validity; it suffices that a group of speakers is convinced that the innovation serves their communicative goals to make it appear efficient. A lexicalized innovation can turn out later to be inefficient, as e.g. in the case of homonymic clash as a consequence of – probably efficient – phonetic change or in the case of "polysemic clash" as a consequence of – certainly efficient – semantic change. This happened e.g. to the polysemous OSp. *pregon* 'message', 'messenger': the latter sense was later expressed by the derivation *pregonero*. Cf. Koch (in press a: section 6.3).
8. Maybe the distinction between expressivity and efficiency is also misled because when linguists say "language change" they often *mean* "sound change" or, at the most, "morphological change". It is obvious that by investigating the diachrony of the lexicon one gets different results.
9. For a detailed discussion cf. Blank (1997: 347-354).
10. The difference is that in the case of *torpedo* we have an entirely new object and, consequently, a new word, while in the case of *pen* there already existed a word to designate a former stage of development. Obviously, the word is maintained by what could be called "linguistic conservatism" (Ullmann 1957: 211-212), but, to begin with, writing instruments with a metal nib must have been classified as being similar to traditional pens. To that extent, the metal-nibbed pen was once a new object in search of a name.
11. Cf. Nyrop (1913, 80): "Quand on dit: *j'attends le courrier*, on pense moins à l'homme qui apporte les lettres, qu'à ces lettres elles-mêmes, et *courrier* prend ainsi le sens de 'lettres': *tout le courrier est pour vous*." [When one says: *I'm waiting for the 'courrier'* (lit. *courier*), rather than thinking of the man who brings the letters, one thinks of these letters themselves, and thus *courrier* acquires the meaning 'letters': *all the 'courrier' is for you.*]
12. Nyrop's "connexion entre les choses" is the type of motivation that often stands behind the tendencies of semantic change detected by Elizabeth Traugott (cf. e.g. 1989, 1990, this volume), which usually run under the label of "subjectification".
13. This critique includes the theories of semanticists not mentioned in section 2, as e.g. de la Grasserie (1908), Stern (1931), Gamillscheg (1951), Kron-

asser (1952), Ducháček (1967) and even the otherwise very rich and exemplary study by Nyrop (1913).

14. The reader may notice that this objective is in slight contradiction to the heading of the present section: if we keep the title "motivations for semantic change" this is mainly due to tradition. But as we have already noticed in section 1.1., linguists usually only touch upon successful innovations, i.e. those that have led to semantic change.
15. One example: Lat. *collocare* 'to dispose' was restricted to Fr. *coucher*, It. *coricare* 'to lay down' and to Sp., Pg. *colgar* 'to hang'. Both ways of restriction seem to be likewise fortuitous.
16. Cf. Rohlfs (1971: 138); Tagliavini (1973: 123-124). A different interpretation is given by Klein (1997: 239-240).
17. For other diachronic aspects of prototypes cf. Koch (1995, 39-41).

References

Allan, Keith and Kate Burridge

1991 *Euphemism and Dysphemism. Language Used as a Shield and a Weapon.* New York etc.: Oxford University Press.

Bally, Charles

[4]1965 *Linguistique générale et linguistique française.* Bern: Francke.

Blank, Andreas

1993 Das verwaiste Wort. Zum Bedeutungswandel durch Volksetymologie. In: Foltys, Christian and Thomas Kotschi (eds.), *Berliner Romanistische Arbeiten. Für Horst Ochse*, 43-61. Berlin: Freie Universität.

1997 *Prinzipien des lexikalischen Bedeutungswandels am Beispiel der romanischen Sprachen.* Tübingen: Niemeyer.

1998a Der Kopf in der Romania und anderswo – Ein metaphorisches (und metonymisches) Expansions- und Attraktionszentrum. In: Gil, Alberto and Christian Schmitt (eds.), *Kognitive und kommunikative Dimensionen der Metaphorik in den romanischen Sprachen*, 11-32. Bonn: Romanistischer Verlag.

1998b Les adjectifs temporels du type *long/court* dans les langues romanes: un cas de 'métaphoricité étroite'. In: Dupuy-Engelhardt, Hiltraud and Marie-Jeanne Montibus (eds.), *L'organisation lexicale et cognitive des dimensions spatiale et temporelle. Actes d'EUROSEM 96*, 15-37. Reims: Presses Universitaires.

1998c *Topo et al.* – Onomasiologie, Semasiologie und Kognition am Beispiel der Bezeichnungen von MAUS, RATTE und MAULWURF in der Italoromania. *Zeitschrift für romanische Philologie* 114: 505-531.

in press Pathways of lexicalization. In: Haspelmath, Martin, Ekkehard König, Wulf Oesterreicher and Wolfgang Raible (eds.), *Language Typology and Language Universals. An International Handbook.* Berlin / New York: De Gruyter.

Brown, Penelope and Stephen Levinson

1978 Universals in language use: politeness phenomena. In: Goody, Esther N. (ed.), *Questions and Politeness. Strategies in Social Interaction*, 56-289, 295-310. Cambridge: Cambridge University Press.

Coseriu, Eugenio

1958 *Sincronía, diacronía e historia. El problema del cambio lingüístico.* Montevideo: Universidad de la República.

1978 Für eine strukturelle diachrone Semantik. In: Geckeler, Horst (ed.), *Strukturelle Bedeutungslehre*, 90-163. Darmstadt: Wissenschaftliche Buchgesellschaft.

Croft, William

1993 The role of domains in the interpretation of metaphors and metonymies. *Cognitive Linguistics* 4: 335-370.

DHLF

1992 *Dictionnaire historique de la langue française.* Paris: Robert.

Ducháček, Otto

1967 *Précis de sémantique française.* Bŕno: University J.E. Purkyně.

Fiehler, Reinhard

1990 *Kommunikation und Emotion. Theoretische und empirische Untersuchungen zur Rolle von Emotionen in der verbalen Interaktion.* Berlin / New York: De Gruyter.

Gamillscheg, Ernst

1951 *Französische Bedeutungslehre.* Tübingen: Niemeyer.

Geeraerts, Dirk

1983 Reclassifying semantic change. *Quaderni di semantica* 4: 217-240.

1997 *Diachronic Prototype Semantics. A Contribution to Historical Lexicology.* Oxford: Clarendon.

Gilliéron, Jules and Mario Roques

1912 *Études de géographie linguistique d'après l'Atlas Linguistique de la France.* Paris: Champion.

Grasserie, Raoul de la

1908 *Essai d'une sémantique intégrale.* 2 volumes. Paris: Leroux.

Hopper, Paul J. and Sandra A. Thompson
1980 Transitivity in grammar and discourse. *Language* 56: 251-299.
1985 The iconicity of the universal categories 'noun' and 'verbs'. In: Haiman, John (ed.), *Iconicity in Syntax*, 151-183. Amsterdam: Benjamins.

Horn, Laurence R.
1989 *A Natural History of Negation.* Chicago: University of Chicago Press.

Keller, Rudi
²1994 *Sprachwandel. Von der unsichtbaren Hand in der Sprache.* Tübingen: Francke.
1995 *Zeichentheorie. Zu einer Theorie semiotischen Wissens.* Tübingen: Francke.

Klein, Franz-Josef
1997 *Bedeutungswandel und Sprachendifferenzierung. Die Entstehung der romanischen Sprachen aus wortsemantischer Sicht.* Tübingen: Niemeyer.

Koch, Peter
1991 Semantische Valenz, Polysemie und Bedeutungswandel bei romanischen Verben. In: Koch, Peter and Thomas Krefeld (eds.), *Connexiones Romanicae. Dependenz und Valenz in romanischen Sprachen*, 279-306. Tübingen: Niemeyer.
1995 Der Beitrag der Prototypentheorie zur Historische Semantik: Eine kritische Bestandsaufnahme. *Romanistisches Jahrbuch* 46: 27-46.
in press a Ein Blick auf die unsichtbare Hand: Kognitive Universalien und historische romanische Lexikologie. In: Stehl, Thomas (ed.), *Unsichtbare Hand und Sprecherwahl. Typologie und Prozesse des Sprachwandels in der Romania.* Tübingen: Narr.
in press b Frame and contiguity. On the cognitive basis of metonymy and certain types of word formation. In: Radden, Günter and Klaus-Uwe Panther (eds.), *The Metonymy in Thought and Language.* Amsterdam: Benjamins.

Koch, Peter and Wulf Oesterreicher
1996 Sprachwandel und expressive Mündlichkeit. *Zeitschrift für Literaturwissenschaft und Linguistik* 26: 64-96.

Kronasser, Heinz
1952 *Handbuch der Semasiologie.* Heidelberg: Winter.

Labov, William
1972 *Sociolinguistic Patterns.* Philadelphia: University of Pennsylvania Press.

Mair, Walter N.
1992 *Expressivität und Sprachwandel. Studien zur Rolle der Subjektivität in der Entwicklung der romanischen Sprachen.* Frankfurt: Lang.
Meillet, Antoine
1965 *Linguistique historique et linguistique générale.* Paris: Champion.
Nyrop, Kristoffer
1913 *Grammaire historique de la langue française*, Volume 4. Copenhague: Gyldendal.
Rohlfs, Gerhard
1971 *Romanische Sprachgeographie.* München: Beck.
Sperber, Dan and Deirdre Wilson
1986 *Relevance. Communication and Cognition.* Oxford: Blackwell.
Sperber, Hans
[2]1965 *Einführung in die Bedeutungslehre.* Bonn: Schroeder.
Stempel, Wolf-Dieter
1983 'Ich vergesse alles'. Bemerkungen zur Hyperbolik in der Alltagssprache. In: M. Faust (ed.), *Allgemeine Sprachwissenschaft, Sprachtypologie und Textlinguistik. Festschrift für Peter Hartmann*, 87-98. Tübingen: Niemeyer.
Stern, Gustaf
1931 *Meaning and Change of Meaning.* Bloomington, Ind.: Indiana University Press.
Sweetser, Eve E.
1990 *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure.* Cambridge: Cambridge University Press.
Tagliavini, Carlo
1973 *Einführung in die romanische Philologie.* München: Beck.
Traugott, Elizabeth C.
1989 On the rise of epistemic meaning in English: an example of subjectification. *Language* 65: 31-55.
1990 From less to more situated in language: the unidirectionality of semantic change. In: Adamson, Silvia, Vivien Law, Nigel Vincent and Susan Wright (eds.), *Papers from the Fifth International Conference on English Historical Linguistics*, 496-517. Amsterdam: Benjamins.
Ullmann, Stephen
[2]1957 *Principles of Semantics.* Oxford: Blackwell.
1962 *Semantics. An Introduction to the Science of Meaning.* Oxford: Blackwell.
Wartburg, Walther v.
[3]1971 *Einführung in die Problematik und Methodik der Sprachwissenschaft.* Tübingen: Niemeyer.

Zipf, George K.

1945 The repetition of words, time-perspective, and semantic balance. *The Journal of General Psychology* 32: 127-148.

1949 *Human Behaviour and the Principle of Least Effort.* Cambridge, Ma.: Addison-Wesley.