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The pervasiveness of contiguity and metonymy in semantic change

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Abstract

This article sets out to demonstrate the importance and omnipresence of the cognitive relation of contiguity in semantic and lexical change. Metonymy is a central issue in this context, but the scope of contiguity goes beyond metonymy, and this is discussed in detail.

Thanks to phenomenological philosophy and to modern frame semantics, it is possible to endow the notion of 'contiguity' with a definition that is comprehensive and yet sufficiently distinctive with respect to other cognitive relations. This constitutes a good basis for a definition of metonymy in terms of figure-ground effects (highlighting, perspectivization) within conceptual frames, an approach that enables us to discuss the internal conceptual and referential typology of metonymy, to reconstruct its unity, and to delimit its range, especially in contrast to other types of lexical semantic change. The processes of 'subjectification' and 'delocutive' change further illustrate the wide range of metonymy; the distinction between speaker- vs. hearer-induced metonymies enriches its pragmatic typology. A look at the metonymic bases of the emergence of discourse markers, and of grammatical reanalysis and grammaticalization, further completes the picture. A section of the article is dedicated to different aspects of word-formation, at the interface of the lexicon and morphology. In this domain metonymy is prominent in (folk-etymological) remotivation and in the semantic change of word-formation devices. Contiguity (not only metonymy) reveals itself to be pervasive across the whole variety of formal devices of lexical innovation (including semantic change, conversion, suffixation, prefixation, composition, etc.), in a quantitative as well as in a qualitative respect. The omnipresence of contiguity is explained by its cognitively fundamental and extremely simple character, in comparison especially to the taxonomic and the metaphorical principle, and, hence, by its extraordinary semantic and pragmatic flexibility.

1. Contiguity

1.1. Contiguity and frame

In his book *De memoria et reminiscencia* (451b, 18–22), Aristotle introduced the three basic associative relations, "similarity", "contrast" and

“contiguity”, to occidental thought. It is mainly the latter, contiguity, as relatedness with something close, which has shaped the history of philosophy and associationist psychology (cf. Amin 1973: 19–94). Rid of its mechanistic inheritance, it reappears in phenomenological philosophy (see below) and in the context of gestaltist laws (cf. Wertheimer 1922/23: esp. 4, 304–311; Holenstein 1972: 307; Amin 1973: 97–202; cf. also Raible 1981: 5f.). By intersecting the strictly linguistic theory of the two axes by de Saussure with the rhetorical tradition, Jakobson rediscovers the cognitive dimension of similarity, the basis of metaphor, and of contiguity, the basis of metonymy (see 2.1.)¹.

In the course of the reception history of associative relations, it is the relation of contiguity which imposes itself the most immediately (it even tends to be sometimes identified erroneously with “association” *tout court*). Therefore, the notion of contiguity is often considered to be imprecise: “la contiguità è concetto abbastanza sfumato” [‘contiguity’ is a wishy-washy notion] (Eco 1984: 147). It is probably widely admitted that the notion of contiguity goes beyond the etymological meaning of “spatial proximity”,² but once it also recovers temporal succession, the relation of cause and effect, the relation of a part to a whole (and the other way round), the relation of container to content (and the other way round), etc., it is legitimate to ask the question of where to stop. The present article addresses questions of this kind and considers the central importance of contiguity in semantic change. In the framework of cognitive linguistics the notion of contiguity appears only marginally – always in the context of metonymy³ – in competition with other notions which are a lot more central to this approach, such as: “domain”, ICM = (*idealized*) *cognitive model*, “scene”, “scenario”, “script” and “frame” (cf. e.g. Taylor 1995: 90, 125f.; Croft 1993: 348; Ungerer and Schmid 1996: 128; Radden and Kövecses 1999: 21). This is certainly the right track, but the terminology must be clarified, since all these notions have been subjected, in the course of time, to considerable terminological inflation. Since the terms

“domain” and ICM prove to be too seriously ambiguous⁴, we will stick to a natural, but clearly restrictive interpretation of the term *frame*:

A semantic frame [...] is a coherent structure of related concepts where the relations have to do with the way the concepts co-occur in real world situations (Geeraerts 2006: 16).

“Real world situations” is to be understood here in the sense of “real world situations as human beings perceive them”. In this sense the term “frame”⁵ has the advantage of expressing a notion perfectly compatible with the notion of contiguity. As represented in Figure 1, it can be said that there is contiguity between the elements of a frame, but also between the frame as a whole and each one of its elements.

In order to render this conception more precise, it is useful to go back to phenomenological philosophy. According to Husserl, who discovered the transcendental role of so-called associative relations for the constitution of any object (*Gegenständlichkeit*) in passive genesis (cf. Husserl 1973: 111–114; Holenstein 1972: 19–22; see also Koch 2007: 12–15), it is necessary to distinguish between what is perceived in the strict sense and a *surplus* which is not perceived, but is nevertheless accessible in some sense. So, every perception unites “presented” components and “appresented” components, not really perceived, but integrated in perception. And it is the latter components that open a “horizon” of contiguities (cf. Husserl

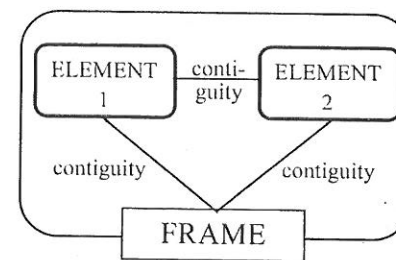


Figure 1. Frame and elements

1. For a more nuanced interpretation of this problem, see Happ 1985; Koch 1999a: 143; Koch 2005a: 162f.
2. Lat. *contingere* ‘to touch’ (which implies spatial proximity) → Lat. *contiguus* ‘touching together’ > Fr. *contigu* ‘adjoining, adjacent’ → E. (now obsolete) *contigue* ‘adjoining, adjacent’ → E. *contiguous*.
3. Cf. e.g. Taylor 1995: 122; Croft 1993: 347; Ungerer and Schmid 1996: 115f.; Radden and Kövecses 1999: 19. Slightly more explicitly stated observations may be found e.g. in Feyaerts 2000: 63–65; cf. also Dirven 1993: 14.

4. For ‘domain’ cf. Koch 1999a: 152f.; Feyaerts 2000: 62f.; see also Croft and Cruse 2004: 261 n. 1. For ICM cf. Koch 2005: 167 n. 13 (see also below n. 11).
5. Cf. e.g. Fillmore 1977; 1985; Barsalou 1992; Taylor 1995: 87–92; Ungerer and Schmid 1996: 205–217; Croft and Cruse 2004: 7–14.

1950/52, I: 58–60; 1973: 150f.; Holenstein 1972: 41–43, 317f.). From this perspective, a frame constitutes a horizon of contiguities, i.e. our “encyclopedic” expectations which are grounded on the contiguities that connect concepts or constituents of more complex concepts, especially types of situations (cf. Koch 2007: 15f.: 18–20).

1.2. Contiguity and other cognitive relations

For the sake of terminological symmetry, let us call the principle of frames *engynomy* (cf. Koch 2001a: 216f.).⁶ Engynomy differs substantially from the other great existing principle of conceptual organization, i.e. *taxonomy* (cf. also the distinction between E-relations and C-relation made by Seto 1999). In conceptual taxonomies we have to distinguish two types of relations, namely taxonomic sub-/superordination (inclusion) and taxonomic similarity. If (1)(a) holds between two concepts P and Q and if, consequently, (1)(b) holds between the respective categories (C) defined by P and Q, then C_Q is *taxonomically subordinated* to C_P , or, vice versa, C_P is *taxonomically superordinated* to C_Q (cf. e.g. Lyons 1977, I: 291; Cruse 1986: 136–156). This can be exemplified by (2)(a) and (b).

- (1) (a) Qs are Ps, but Ps are not necessarily Qs.
 (b) $C_Q \subset C_P$:
 i.e. C_P includes C_Q / C_Q is *taxonomically subordinated* to C_P /
 C_P is *taxonomically superordinated* to C_Q
- (2) (a) DOGS are ANIMALS, but ANIMALS are not necessarily DOGS.
 (b) $C_{\text{DOG}} \subset C_{\text{ANIMAL}}$:
 i.e. the category of ANIMALS includes the category of DOGS / the
 category of DOGS is *taxonomically subordinated* to the category
 of ANIMALS / the category of ANIMALS is *taxonomically
 superordinated* to the category of DOGS.

According to the insights of prototype theory (cf. e.g. Rosch 1973; Taylor 1995: 38–46; Evans and Green 2006: 248–279), the rules in (1) are to be understood in a rather flexible way, in order to cope with prototypicality effects, as e.g. with P = BIRD and Q = PENGUIN: Qs are more or less Ps, but Ps are not necessarily Qs; and: C_Q is more or less a subcategory of

6. The term ‘engynomy’ is derived from Ancient Greek *engy’s* ‘near, close’ and evokes Aristotle’s term *τὸ σὺνενγὺς* ‘the contiguous (thing)’ (Aristotle, *De memoria et reminiscencia*, 451b: 18–22).

C_P . Furthermore, individuals and even categories cannot be assigned to objectively or logically preexisting taxonomic (superordinated) categories. Category assignment, though not totally arbitrary, is rather a matter of relevance. For instance the category FLOWER can be taxonomically subordinated to different superordinated categories: PLANT, GIFT, DECORATION, etc.

The last point also applies to the other cognitive relation present in taxonomies, namely similarity, which always means “relevant similarities”. If C_Q and C_R are subcategories of C_P , then a relation of *taxonomic similarity* holds between instances of C_Q and C_R (3). This can be illustrated by (4).

- (3) If C_Q and C_R are taxonomically subordinated to C_P (cf. (1)(b)), then Qs and Rs are *taxonomically similar* to each other.
- (4) DOGS and HORSES are ANIMALS, but ANIMALS are not necessarily DOGS nor necessarily HORSES. Consequently DOGS and HORSES are *taxonomically similar* to each other.

In contrast to this, the engynomic principle – to take up Husserl’s felicitous terminology – is based on the relation between “presented” and “appresented” conceptual/perceptual knowledge, i.e. on contiguity within frames (cf. 1.1). This excludes from the outset that there be a relation of taxonomic sub- or superordination between two contiguous concepts P and Q (5)(a). The statements (5)(b) on the one hand and the positive counterpart of (5)(c) or (d) on the other are conceptually incompatible, which is exemplified in (6). This incompatibility is due to the fact that contiguity is an *interconceptual* relation, while taxonomic sub-/superordination is an *intraconceptual* one (cf. Klix 1984: 18–23). Engynomy is not a problem of categorization, like taxonomy, but a problem of the co-presence of concepts. This does not prevent us, however, from taking into consideration the classes of referents of contiguous concepts (see 2.2.3).

- (5) (a) If P and Q are *contiguous* concepts, then neither a relation of taxonomic subordination nor a relation of taxonomic superordination holds between P and Q. (cf. (1)(a))
 (b) P and Q are *contiguous*.
 (c) C_P is *not included in/not taxonomically subordinated* to C_Q . (cf. (1)(b))
 (d) C_Q is *not included in/not taxonomically subordinated* to C_P . (cf. (1)(b))

- (6) (a) If WINTER and SNOWFLAKE are *contiguous* concepts, then neither a relation of taxonomic superordination nor a relation of taxonomic subordination holds between them.
- (b) WINTER and SNOWFLAKE are *contiguous*.
- (c) C_{WINTER} is *not included in/not taxonomically subordinated to* $C_{\text{SNOWFLAKE}}$.
- (d) $C_{\text{SNOWFLAKE}}$ is *not included in/not taxonomically subordinated to* C_{WINTER} .

Note that, just like the above taxonomic relations, contiguities are not objectively or logically given relations, but a matter of relevance (cf. Sperber and Wilson 1995). In fact, the "existence" (or not) of a contiguity relation depends on anthropological, social, cultural, and other parameters of relevance. Thus, the contiguity between DIAPHRAGM and MIND is typical of ancient Greek thinking; even the contiguity relation used in example (6) is not necessarily universal. Contiguity depends on what is called "construal" in Cognitive Semantics (cf. Dirven 1993).

Since the second taxonomic relation, i.e. similarity, exemplified in (3) and (4), is an *extraconceptual* relation, it is not always conceptually incompatible with contiguity, even though in certain cases it is extremely difficult to imagine both relations for a given couple of concepts (7). In other cases we may hesitate, and in some rare cases contiguity and similarity are equally well applicable to a given couple of concepts. Thus, we can see CHAIR and TABLE as contiguous elements within a frame DINING ROOM (8)(a), but we can also see them as similar within the taxonomy PIECE OF FURNITURE (8)(b). Nevertheless, even if both relations are conceptually compatible in this case, they are incompatible in two other respects. First, they exclude each other logically, because they simply do not constitute the same way of linking the two concepts. Second, they exclude each other from the point of view of relevance, which compels us to choose either a construal related to the frame DINING ROOM (8)(a) or a construal related to the taxonomy PIECE OF FURNITURE (8)(b).

- (7) (a) KITCHEN and (TO) COOK are (seen as) *contiguous*. (cf. (5))
- (b) *KITCHEN and (TO) COOK are (seen as) *taxonomically similar*. (cf. (3))
- (8) (a) CHAIR and TABLE are (seen as) *contiguous*. (cf. (5))
- (b) CHAIR and TABLE are (seen as) *taxonomically similar*. (cf. (3))

All in all, the two major principles of conceptual organization, engnomy and taxonomy, are clearly incompatible with each other. Taxonomic sub-/superordination is conceptually incompatible with contiguity ((5), (6)). (Taxonomic) similarity and contiguity, whether conceptually incompatible (7) or not, are always incompatible from the point of view of logic and relevance (8).

It may be useful to recall that neither the taxonomic nor the engnomic principle as such has a strictly *prognostic* value, because they are a matter of construal. When starting from a given concept P, we cannot necessarily predict to which concept Q taxonomic sub-/superordination or similarity will lead us, and even less so for contiguity. As Taylor puts it (using the term "domain": cf. below 2.2.2):

[...] it would be an error to suppose that domains constitute strictly separated configurations of knowledge; typically domains overlap and interact in numerous and complex ways (Taylor 2002: 196f.).

Nevertheless, once we know that people establish a relation between P and Q, we can perfectly specify the relevant relation, because, as shown in this section, taxonomic and engnomic relations are incompatible, and hence, clearly distinguishable. (The *diagnostic* value of metonymies is discussed in 2.2.2; for metaphor see 2.2.4).

2. Metonymic lexical change

The engnomic principle proves to be particularly simple from a cognitive point of view. It allows us to produce efficient conceptual effects, but at a low cost. A central question in this article is whether such a simple cognitive principle as contiguity within a frame should not have a considerable impact on language change. Let us start with the most common case: metonymic lexical change.

2.1. The standard case: rhetoric and historical semantics

It is well known that the classical rhetoric doctrine defines the trope of metonymy by proximity or contiguity.

- (9) Denominatio est, quae ab rebus *propinquis* et *finitimis* trahit orationem, qua posit intellegi res, quae non suo vocabulo sit appellata (*Rhetorica ad Herennium* 4, 32, 43; my italics).
 'Metonymy is a trope that takes its expression from *near* and *close things* and by which we can comprehend a thing that is not denominated by its proper word.'

The historical semantics of the 19th century (Reisig, Bréal, Paul, Darmesteter, Nyrop, etc.) essentially uses traditional rhetorical bases to construct, among others, a category of metonymic change (cf. Nerlich 1992; Blank 1997: 7–18; Geeraerts 2010: 27f., 31–33). It was Roudet (1921), Ullmann (1957: 231–234) and Jakobson (1971; see section 1) who definitely renewed the associationist tradition in order to bring back metonymy to the cognitive relation of contiguity. If Jakobson's approach is rather focused on the rhetorical and literary trope of metonymy, Roudet and Ullmann target lexical metonymic change.

The traditional examples already show that the interpretation of the notion of contiguity goes beyond purely spatial or even temporal relations right from the beginning, including for instance CAUSE–EFFECT relations:

- (10) [...] *frigus* 'pigrum', quia pigros efficit (*Rhetorica ad Herennium* 4, 32, 43).
'a <lazy> cold, since it makes (people) lazy'

Even though the doctrine of traditional rhetoric is mainly concerned with metonymy as a trope in discourse, it also introduces the notion of "catachresis" based on metonymy (or other tropes), which prefigures in a certain way the modern notion of a completed metonymic lexical change:⁷

- (11) I. CATACHRÈSE DE MÉTONYMIE [...]
3° Ces *metonymies du contenant*: La *Cour*, pour Les courtisans; [...]
(Fontanier 1977: 214)
'I. METONYMIC CATACHRISIS [...]
3° Those *metonymies of the container*: The *Court*, for The courtiers;
[...]

In the last fifteen years Cognitive Semantics has been discovering the fundamental importance and the impressive range of metonymy (cf. e.g. Nunberg 1995; Panther and Radden 1999; Panther and Thornburg 2003; 2007). A very influential definition of metonymy that has been proposed in this context is the following:

Metonymy is a cognitive process in which one conceptual entity [...] provides mental access to another conceptual entity [...] within the same cognitive model (Radden and Kövecses 1999: 21).

7. For the successive steps of lexicalization of ad hoc metonymies (as well as other ad hoc tropes in discourse) cf. Koch 2004: 15–19.

If we understand "cognitive model" in the sense of "frame" defined in section 1, we get close to the following definition that brings contiguity into play:

Metonymy is a semantic link between two readings of a lexical item that is based on a relationship of contiguity between the referents of the expression in each of those readings (Geeraerts 1997: 96).

The fundamental effect, which turns out to be indispensable for a dynamic approach to metonymy, is what Cognitive Semantics calls *highlighting* or *perspectivization* with relation to a conceptual domain (matrix) or, as we prefer to say in the following, to a frame (cf. Taylor 1995: 90, 107f.; 125f.; Croft 1993: 348; Panther and Thornburg 2007: 242). Metonymy can be regarded as a figure-ground effect between two elements E1 and E2 of a given frame (Figures 2a and 2b) or between the frame as a whole and one of its elements E1 (Figures 3a and 3b), and vice versa.

The above traditional examples illustrate this very clearly. To call the cold ((10): Lat. *frigus*) 'lazy' (*pigrum*), because it makes people lazy, is a metonymy that presupposes a frame which involves a natural force, the cold in that case, and a human patient who is subject to this force: thus,

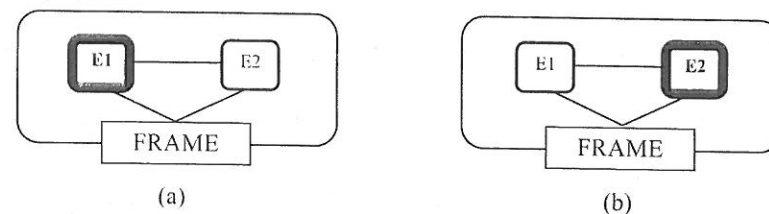


Figure 2. Figure-ground effect between two elements of a frame

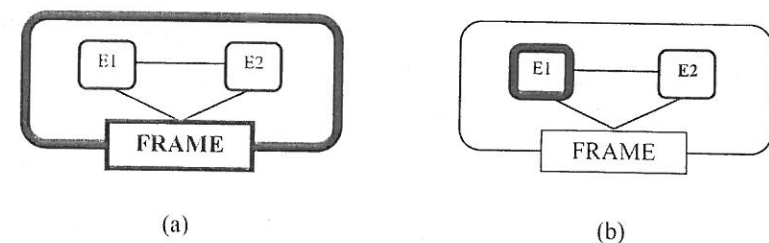


Figure 3. Figure-ground effect between a frame (a) and one of its elements (b)

from LAZY, as the STATE of the patient (= E1), we shift – by a figure-ground effect, according to the schemas of Figure 2 – towards INACTIVATING, as a QUALITY of the natural force (= E2).

As to Fontanier's example of a metonymic "catachresis", i.e. of a completed metonymic lexical change, we can say that in the case of the French word *cour*, we can identify a metonymic change based on the fact that the COURTIERS (= E1) constitute the essential element of the frame COURT (= FRAME), as in the schemas in Figure 3. The OED entry for English *court* shows the same development (senses 5. and 7a.). A shift has taken place, through a figure-ground effect, from the entire FRAME of the COURT – from the CONTAINER, if you will – to an element of the frame (or to the CONTENT), indeed the COURTIERS (= E1). This metonymy has been lexicalized and fixed in the polysemy of the French word *cour* (and similarly of E. *court*).

2.2. Metonymy: internal typology – unity – range

Up to now several already traditional problems have been discussed with respect to metonymy:

- <1> There are different subtypes of metonymy. What is its internal variety and typology? (2.2.1, 2.2.3, 2.5)
- <2> Is metonymy a unitary phenomenon despite its internal variety? How can its internal unity be accounted for? (2.2.2)
- <3> What are the external limits of the phenomenon of metonymy? What is the range of this notion? (2.2.4)

As we will see, these three problems are closely interrelated. The internal variety of metonymy <1> comprises different dimensions, which are treated separately here: a "conceptual" (2.2.1), a "referential" (2.2.3) and a "pragmatic" (2.5) dimension of the typology of metonymies.

2.2.1. The internal conceptual typology of metonymy

As for the internal "conceptual" variety of metonymies <1>, inventories of different subtypes can be found already in traditional rhetoric (cf. Lausberg 1973: §§ 565–568; e.g. Fontanier 1977: 79–86) and, further on, from traditional historical semantics of the 19th century up until Cognitive Semantics (cf. Geeraerts 2010: 31–33; Peirsman and Geeraerts 2006a: 275–277; Radden and Kövecses 1999: 29–44). Well-known subtypes are (frequently in both directions):

LOCATION–LOCATED, e.g., possibly, (11)

CONTAINER–CONTAINED, e.g., again, possibly, (11)

CAUSE–EFFECT, e.g. (10)

ACTION–ACTOR, e.g. (27)

PROPERTY–PERSON, e.g. (24)

PART–WHOLE (for the problematic of this "synecdochic" type see 2.2.4).

In order to go beyond a mere listing of subtypes, efforts have been made to group together the different subtypes according to particular criteria. A binary, very general grouping of metonymies is reflected in our Figures 2 and 3: ELEMENT–ELEMENT relations within a frame vs. FRAME–ELEMENT relations (in a somewhat different terminology Radden and Kövecses 1999: 30–43). The PART–WHOLE type, if it is incorporated into metonymy (see below 2.2.4), is only one particular subtype of the FRAME–ELEMENT schema. CONTAINER–CONTAINED and possibly also LOCATION–LOCATED are other subtypes; cf. (11). Another binary, very general grouping in time-related terms has been proposed by Blank (1999): co-presence (e.g. (11), (23), (24), (27)) vs. succession (10). A typology in terms of spatial vs. temporal vs. abstract domains is suggested by Seto (1999: 98).

Keen to go beyond unidimensional typologies, Peirsman and Geeraerts (2006a) put forward a prototypical definition of contiguity along three dimensions:

- strength of contact: part-whole containment – direct contact – mere adjacency
- boundedness – unboundedness
- domain: SPACE VS. TIME VS. ACTION/EVENT/PROCESS/STATE VS. ASSEMBLIES/COLLECTIONS

For example, (10) Lat. *pigrum* LAZY → INACTIVATING would be a case of direct contact, unbounded elements, and state (quality); (11) Fr. *cour*/E. *court* COURT → COURTIERS would be a case of part-whole containment, bounded whole/bounded part, and space; and so forth. In this way, we get a whole universe of types of contiguities and, hence, of conceptual types of metonymy, with part-whole containment, boundedness, and SPACE representing the prototypical instance of contiguity and metonymy. What is at stake here is not prototypicality as a psychological principle acting in the object language, but the – often undeniable – prototypicality of

metalinguistic notions.⁸ So we will have to examine how far the range of the prototypical category of contiguity goes in this case (2.2.4).

2.2.2. The unity of metonymy

Peirsman and Geeraerts' prototype-based approach to metonymy (2006a) is an interesting attempt to reconcile at the same time internal diversity and unity of metonymy (cf. beginning of section 2.2, <2>). In his criticism, Croft (2006: 320) underlines that the notions of "association", "domain highlighting", and "shift of reference" are more powerful (the last point will be taken up in section 2.2.3).

"Association", as we have seen in section 1.1, is certainly too broad a term, because it traditionally comprises "similarity", "contrast", and "contiguity". So "contiguity", if anything, would be much more precise.

As for "domain", this term is not free from imprecisions either, as underlined by Croft and Cruse themselves (2004: 216 n. 1). In practice it often assumes the character of a rag-bag. If it was really identified with "frame" (cf. Croft and Cruse 2004: 15; Croft 2006: 320), this would amount in the last resort to the frame approach sketched in section 1.

The notion of "highlighting" (or of perspectivization) is precious and central to a unitary definition of metonymy, as already demonstrated in section 2.1. As shown there, it would be possible to bring together the contiguity approach and the highlighting approach, because in fact they "are not necessarily incompatible" (Peirsman and Geeraerts 2006b: 334). Note that "frame" and "highlighting" are not coextensive notions. First of all, "frame" (or "domain" = "frame") characterizes the type of structure and "contiguity" the type of relation underlying metonymy, whereas "highlighting" (i.e. the figure-ground effect) insists on the type of process involved in metonymy. Furthermore, metonymic highlighting presupposes contiguity, but contiguity does not necessarily trigger highlighting (see 2.2.3 and 5.3).

Another problem is the explanatory power of contiguity for specific metonymies (and for the impossibility of others; cf. Croft 2006: 319). In 1.2 we had to acknowledge that the engynomic principle of frames and contiguities does not have a strictly prognostic value, because it is a matter

of construal. This holds not only in general, but also for contiguities as a basis of metonymies. In fact, change of meaning with respect to a given signifier is mainly unpredictable. Peirsman and Geeraerts (2006a: 271) cite the striking example of Latin *Monēta* 'Iuno' (12)(a), where a whole chain of contiguities (activated in part through metonymies) is involved on its way to (12)(b): IUNO → IUNO'S TEMPLE → MINT (located in the temple) → COIN.

- (12) (a) Lat. (*Iuno*) *Monēta* 'goddess Iuno';
attested since the 1st century BC
(surname derived from *monēre* 'admonish', because Iuno is said to have given several good admonitions to the Romans – another, previous contiguity effect; cf. *ALDH*, *Monēta*, I, B).
- (b) Lat. *monēta* 'coin';
attested since the end of the 1st century BC
(*ALDH*, *Monēta*, II, B, 1)
[= etymon of It. *moneta* 'coin', of Fr. *monnaie* 'small change', and via French also of E. *money*]

As a rule, we identify contiguities "after the fact only" (Peirsman and Geeraerts 2006b: 333), i.e. after metonymic change or another type of contiguity-based change has taken place. In fact, the same holds for other types of semantic and/or lexical change and their relevant cognitive relations (2.2.4). But once the change has taken place, a frame-and-contiguity model like the one sketched in 1.2 is a powerful means to unify different subtypes of metonymy and to sharply distinguish them from other types of semantic change, such as specialization, generalization, metaphor, etc., which are based on other cognitive relations. This way, we can identify and understand different cognitive paths of change – an important goal in diachronic semantics.

If contiguities and frames do not have a strictly prognostic value, metonymies (and other contiguity-based changes) have nevertheless a diagnostic value, because they tell us which contiguities were relevant for the people who "invented" the innovation (and which were not).

2.2.3. The internal referential typology of metonymy

In section 1.2 we noted that a contiguity relation between two concepts P and Q is conceptually incompatible with plain taxonomic subordination of P to Q or vice versa, i.e. in the case of contiguity the referent class of P is neither a subset of the referent class of Q nor vice versa ((5), (6)). This

8. Cf. Peirsman and Geeraerts' reply (2006b: 329f.) to Croft's (2006: 319) criticism, which appeals for psychological evidence underpinning the prototypicality of the phenomenon of contiguity. As to the prototypicality and non-prototypicality of metalinguistic notions, cf. Koch 1998: 291–303.

does not mean however that referential considerations are completely out of place in the context of metonymy. In particular, metonymy has been straightforwardly characterized, in addition to domain highlighting, by shift of reference (cf. Nunberg 1995; Croft 1993; 2006: 320). In fact, in many metonymies the referent classes of the two concepts are completely disjunct (13), as for instance, with respect to (12): IUNO → IUNO'S TEMPLE OR MINT → COIN.

- (13) (a) *P and Q are contiguous.*
 (b) $C_P \cap C_Q = \emptyset$ (referent-sensitive metonymy)

We can denominate the metonymies for which (13) holds as “referent-sensitive”, because they involve a complete shift of reference (cf. Koch 2001a: 219–224; 2004: 21–23). On closer inspection we even notice that in many cases the contiguity relation between P and Q only holds for a prototypical subset of C_P and/or for a prototypical subset of C_Q (cf. Geeraerts 1997: 68–75; Koch 1999a: 149–151; 2004: 23). During the lexicalisation process these restrictions to prototypical subsets often get lost so that, in the end, the metonymy holds for the total classes of referents of C_P and C_Q (“inductive generalization” according to Dik 1977).

The possible dependence of metonymy on prototypicality effects goes far beyond these cases and may even have repercussions on referent-sensitivity. The referent classes of the two readings of English *child* (14)(a)/(b) are not identical, because not every OFFSPRING (Q) of another person is a YOUNG PERSON (P) and not every YOUNG PERSON (P) is considered in its quality of OFFSPRING (Q).

- (14) (a) *child* ‘young person below the age of puberty’;
 first attestation: *Cunae, cild cladas*
 (*Corpus glossary*, 623; cit. OED, *clothes*, n.pl., sense 1.b., a800).
 (b) *child* ‘offspring’;
 first attestation: *Riche men . . . þe habbed . . . feire wifes . and feire children*
 (*Lambeth homilies*, 49; cit. OED, *child*, n., B., sense II.8.a., c1175)

But the referent classes P and Q are not disjunct either, since there is a substantial subset of C_P as well as of C_Q for which P as well as Q applies ($C_P \cap C_Q$). This is exactly the prototypical subset for which the contiguity of P and Q is relevant and which underlies the metonymy of *child* (cf. Koch 2001a: 223f.; 2004: 23–25; an example of a possible bridging

context can be found in OED, *flint*, n., sense III.8.a., c1175). For such “non-referent-sensitive” metonymies we must state, differently from (13):

- (15) (a) *P and Q are contiguous.*
 (b) $C_P \cap C_Q \neq \emptyset$ (non-referent-sensitive metonymy)

Note that in these cases non-referent-sensitivity holds only for the innovative phase based on a bridging context. During lexicalization the new reading C_Q is extended, by inductive generalization to referents to which the old reading C_P clearly does not apply, as in (14)(b).

Since it would be absurd to disregard the metonymic figure-ground effect that produced cases like this one, complete reference shift can no longer be considered a necessary condition of metonymy. Consequently the referential typology of metonymy comprises two fundamentally different subtypes: referent-sensitive (e.g. (11)) and non-referent-sensitive ((14); another example will be (24)).

In the discussions of lexical semantics there is another referential problem that seems to be related to contiguity. The examples in (16) illustrate the phenomenon of “facets” (cf. Cruse 2000: 114–117; Croft and Cruse 2004: 116–125; Kleiber 1999: 87–101). The English word *book* can be understood either in the sense of TOME (16)(a) or in the sense of TEXT (16)(b). In (16)(c), however, both facets are present.

- (16) (a) *This book weighs ten pounds.* [TOME]
 (b) *This book is a history of Great Britain.* [TEXT]
 (c) *This book, which is a history of Great Britain, weighs ten pounds.*
 [TOME + TEXT]
 (d) *I like books.* [?]

It is interesting to note that the facets TOME and TEXT are contiguous elements of the frame BOOK. However, the relation between the two sense effects (a) and (b) does not correspond to the non-referent-sensitive type of metonymy (15) and even less to the referent-sensitive type (14). The referential problem does not even arise, because the referent classes of BOOK AS A TOME and BOOK AS A TEXT are identical (17).

- (17) (a) *P and Q are contiguous.*
 (b) $C_P = C_Q$ (facets)

This explains why co-presence of the two facets (16)(c) as well as indeterminacy (16)(d), i.e. a lack of any figure-ground profile, is possible in

completely ordinary contexts. In contrast to this, truly metonymically related readings of a given lexical item involve, as we have seen above, totally or partially disjunct referent classes and, hence, a clear figure-ground profile in most contexts. Moreover, facets do not seem to be very sensitive to lexical change.⁹ All this indicates that the phenomenon of facets has to be excluded from the category of metonymy (cf. Croft 1993: 349f.), although it is based on contiguity.

2.2.4. *The range of metonymy*

The conclusions above lead us directly to the question of the range of metonymy and of its external limits (cf. beginning of section 2.2, <3>).

Even in traditional rhetoric a controversial point is the relation between metonymy and synecdoche, which is often considered a trope of its own (cf. Lausberg 1973: §§ 572–577). On closer inspection synecdoche turns out to be a rather heterogeneous category (cf. the comprehensive survey in Koch and Winter-Froemel 2009). Among other things there are PART-WHOLE synecdoches on the one hand and SPECIES-GENUS synecdoches on the other.

To begin with the first of these patterns, English *bar* displays a shift from PART (a) to WHOLE (b). (The well attested opposite process is WHOLE to PART, which we do not exemplify here in order to save space.)

- (18) (a) *bar* ‘counter in a public house’;
 first attestation: *He was acquainted with one of the seruants . . . of whom he could haue two pennyworth of Rose-water for a peny . . . wherefore he would step to the barre vnto him*
 (Robert Greene, *Art of conny catching* = *Notable discovery*, III. 20; cit. OED, *bar*, n.¹, sense III.28.a., 1592).
- (b) *bar* ‘public house’;
 first attestation: *He sees the girl in the bar*
 (Frederick Marryat, *Jacob Faithful*, xii; cit. OED, *bar*, n.¹, sense III.28.a., 1835).

In diachronic studies metonymy and synecdoche sometimes continue to be kept apart (cf. Hock 1991: 285f.; Campbell 2006: 257–260), but many

9. Note however that they may be subject to profound cultural change. Thus, the facet cluster BOOK = TOME + TEXT did not exist at the epoch of scrolls and may disappear with the diffusion of electronic books.

theorists include the PART-WHOLE pattern in metonymy.¹⁰ In a very radical way Ruiz de Mendoza Ibáñez (2000: 115f.) even chooses the solution of reducing *all* metonymies to PART-WHOLE processes. A little less radically, Peirsman and Geeraerts (2006a: 278f.) conceive (spatial bounded) PART-WHOLE relations as the prototypical core of contiguities underlying metonymies (cf. 2.2.1). Still more cautiously, we may confine ourselves to observing that the PART-WHOLE pattern is only a special case of the FRAME-ELEMENT schema (cf. Figures 2 and 3 in 2.1 and once more 2.2.1). This is a strong argument for not separating the PART-WHOLE subtype from the other instances of FRAME-ELEMENT (such as CONTAINER-CONTENT, PERSON-PROPERTY, etc.). An additional argument relies upon the fact that the border-line between PART-WHOLE and other contiguity patterns is sometimes blurred. Thus, in our example (18) the COUNTER could also be conceived as the LOCATED and the PUBLIC HOUSE as the LOCATION.

Once we include the PART-WHOLE pattern in metonymy, the question arises where we want to place the most important remaining type of synecdoche, the SPECIES-GENUS (i.e. MEMBER-CATEGORY) pattern. Let us underline at once that the cognitive relation underlying this pattern corresponds exactly to what we treated in 1.2 as taxonomic sub-/superordination. Thus, the new reading (20)(b) of English *hound*, CANIS USED FOR HUNTING, stands in a relation of taxonomic subordination to the original reading (20)(a), CANIS. This type of semantic change is called semantic *specialization* or ‘narrowing’. (The well attested opposite process is *generalization*, or ‘broadening’, which we do not exemplify here in order to save space.)

- (20) (a) *hound* ‘quadruped of the genus *Canis*’;
 first attestation: *Dumbe hundas ne magon beorcan*
 (K. Ælfred, *Gregory’s pastoral care* tr., xv. 89; cit. OED, *hound*, n.¹, sense 1., c897)
 [last authentic attestation of this original reading according to OED: 1508].

10. Cf. e.g. Ullmann 1957: 89, 203, 204, 222, 232, 234; 1964: 212; Jakobson 1971: 90f. (E. *hut-thatch*); Le Guern 1973: 29–38; Lakoff and Johnson 1980: 36; Croft 1993: 350; Blank 1997: 253–255; Koch 1999a: 153f.; 2001a: 216f.; Nerlich and Clarke 1999: 197–203; Radden and Kövecses 1999: 30–36; Seto 1999; Panther and Thornburg 2007: 238. – As for other solutions in the relevant literature, cf. Koch and Winter-Froemel 2009: col. 361–364.

- (b) *E. hound* 'quadruped of the genus *Canis* used for hunting'; first attestation: *Hundes and hauekes, and alle do þing de zeu hier gladien mai* (*Vices and Virtues*, 69; cit. OED, *hound*, n.¹, sense 2., c1200) [ordinary reading in Modern English].

For those who include the PART-WHOLE pattern in metonymy, there are two possible strategies with respect to the SPECIES-GENUS residue of former "synecdoche". Either the SPECIES-GENUS pattern is considered to be close to the PART-WHOLE pattern and therefore incorporated into metonymy as well ("incorporation strategy"), or a rigorous split is introduced between the (henceforth metonymical) PART-WHOLE pattern and the taxonomic SPECIES-GENUS pattern ("split strategy").

The "incorporation strategy" is visible in Lakoff 1987 (77–90, 287)¹¹ and in Radden and Kövecses 1999 (34f.). It is discussed with an explicit proviso by Peirsman and Geeraerts (2006a: 307f.), who assign to the SPECIES-GENUS pattern at best a marginal position within the prototypical category of metonymy, and underline the possibility of an alternative interpretation in terms of specialization and generalization.

As already noted above, the SPECIES-GENUS pattern is based by definition on the relation of sub-/superordination of categories, i.e. on the taxonomic principle. In contrast to this, the PART-WHOLE pattern explained above is based on the relation ELEMENT-FRAME, i.e. it corresponds to one aspect of the engynomic principle (cf. section 1.2). It is undeniable that there are interesting interfaces between the PART-WHOLE and the SPECIES-GENUS pattern in ontogenesis, with respect to semantic change in individual lexical items, and on the level of visual representation.¹² The PART-WHOLE pattern may even be interpreted as a metaphor for the SPECIES-GENUS pattern (Radden and Kövecses 1999: 34). However, the passage

11. It is based, however, on an insufficient definition of 'metonymy' (due among other things to an ambiguous definition of ICM: see above 4): "one element of [an] ICM, *B*, may stand for another element *A* [sc. of the ICM]." This is just the reason why everything becomes possible, even the application of the notion of 'metonymy' to taxonomies.
12. For the building up of logical classes out of collections of contiguous objects in ontogenesis cf. Inhelder and Piaget 1970. For the passage from the engynomic to the taxonomic point of view in the change of individual lexical items designating collections, cf. Peirsman and Geeraerts 2006a: 304–307; Mihatsch 2006: 98–114. From the point of view of visual representation it is interesting that taxonomic classes and their inclusion are often designed in the form of Euler diagrams, i.e. in terms of wholes and parts.

from PART-WHOLE, understood as a case of engynomy, to SPECIES-GENUS taxonomy is not a simple shift, but rather a switch from something basic to something cognitively different and more complex. In fact, as we have seen in 1.2, (5) and (6), contiguity and taxonomic sub-/superordination, as such, are conceptually incompatible (hence the term "switch"). So we are entitled to settle upon the split strategy and to keep apart metonymic change, including PART-WHOLE, on the one hand and specialization/generalization, based on SPECIES-GENUS sub-/superordination, on the other hand. Interestingly, this decision concerning the internal diachrony of single lexical items is confirmed by an analogous split in the realm of synchronic relations between distinct lexical items, namely the distinction between "taxonomy" and "meronymy" (cf. Cruse 1986: 136–180; Croft and Cruse 2004: 141–163).

So the traditional notion of synecdoche blows up.¹³ With regard to semantic change, we will henceforth distinguish the engynomic process of metonymy, including PART-WHOLE processes, from the taxonomic processes of specialization and generalization.

Furthermore, we have to distinguish metonymy, as contiguity-based, from similarity-based types of semantic change. For example, a rather rare type of semantic change that is based on taxonomic similarity is "co-hyponymic transfer" (cf. Blank 1997: 207–217). Its difference from metonymy follows from the incompatibility between contiguity and taxonomic similarity demonstrated in section 1.2, (3), (5), (7), (8).

A very frequent similarity-based type of semantic change is metaphor (cf. Black 1954; Lakoff and Johnson 1980; Croft 1993; Koch 2005: 171–174; Grady 2007). Metaphor is based on the interaction (Black) or mapping (Lakoff and Johnson) between two similar¹⁴ concepts *P* and *Q* that belong to two different frames and/or to two different taxonomies. So, what we can call "metaphorical similarity" (21)(a) is not compatible with contiguity (21)(b) nor with taxonomic sub-/superordination or taxonomic

13. As for the term 'synecdoche', it may be dispensed with or be restricted either to PART-WHOLE processes within metonymy (cf. Le Guern 1973: 36; Waltereit 1998) or to taxonomic SPECIES-GENUS processes (cf. Nerlich and Clarke 1999; Seto 1999: 113–116).

14. Like the other cognitive relations (cf. Chapter 1.2), metaphorical similarities are not ontological, preexisting links, but a matter of construal. They are "discovered" in the metaphorical process (cf. the criticism in Lakoff and Johnson 1980: 112–114). With this proviso in mind and differently from Lakoff and Johnson, we do not hesitate here to use the term 'similarity'.

similarity (21)(c). The negation of contiguity (21)(b) is a definitional element of the notion of "metaphor". Taxonomic similarity (21)(c), even where it accidentally arises, does not account for the essence of metaphor.

- (21) (a) P and Q are *metaphorically similar*.
 (b) P and Q are *not contiguous* (are not part of the same frame). (5)
 (c) P and Q do *not* stand in a *taxonomic* relation (sub-/superordination (1), taxonomic similarity (3)).

This can be illustrated by example (22). The concepts BAG and BELLY (BODY PART) emerge as metaphorically similar. They belong to two different frames (21)(b). There is no relation of taxonomic sub-/superordination between them (21)(c). Taxonomic similarity (21)(c) is not relevant either, because the fact that both BAGS and BELLIES (BODY-PART) are PHYSICAL OBJECTS does not help us at all to grasp the metaphor.

- (22) (a) Old English *baelg* 'bag, purse';
 first attestation: *And wilnade gefylle womb his of bean-baelgum*
 (*Lindisfarne gospels*, Luke xv. 16; cit. OED, *belly*, n., sense I.1., c950)
 [reading attested only in Old English].
 (b) *belly* 'body part between the breast and the thighs';
 first attestation: *Be brest with þe bely*
 (Richard Rolle of Hampole, *The pricke of conscience (Stimulus conscientie)*; a *Northumbrian poem*, 679; cit. OED, *belly*, n., sense II.3.a., 1340)
 [ordinary reading in Modern English].

All in all, including the extremely rare contrast-based types of change, we get the following *inventory of types of lexical semantic change*, which can be clearly delimited from each other (cf. Blank 1997: 157–281; 2000; Koch 2005: 165–183; Gévaudan 2007: 77–113):

- metonymic change, including PART-WHOLE processes.
- specialization (cf. ex. (20) and generalization (contrary of specialization).
- co-hyponymic transfer (so above) – rather rare.
- metaphorical change (cf. ex. (22)
- contrast-based changes: antiphrasis, auto-antonymy (cf. Blank 1997: 217–229) – extremely rare.

To sum up, the range of metonymic change can be delimited in different ways. From the conceptual point of view, it stands against the other types

of lexical semantic change listed above. From the referential point of view, it is opposed to another contiguity-based phenomenon, namely facets, discussed above in 2.2.3. As we will finally see in section 5.3, within the lexicon it has to be differentiated from and situated with respect to other contiguity-based, but formally different processes of change.

In order to measure the whole extent of metonymy, the following sections 2.3–2.5 examine a certain number of subtypes that are particularly frequent and/or spectacular. Our conception of the cognitive relation of "contiguity", being both precise and powerful, as well as the just as precise and powerful notion of "frame" (section 1) will allow us to equally and effectively bring back much less banal types of examples to the metonymic model.

2.3. Subjectification

One notion in diachronic semantics which has been very successful in the last two decades is the notion of "subjectification", a term used by Langacker as well as by Traugott. Although both use the same term, there are undeniable differences between the two authors concerning their notions of subjectification (underlined especially in Traugott 1999: 187–190, less so in Langacker 1999: 149–156; cf. also De Smet and Verstraete 2006). One important divergence can be stated with respect to the distinction between the level of the description of an event in the extralinguistic world (propositional meaning: conceptualized described event) and the level of the communicative event (textual or expressive meaning: conceptualized speech event).

In Traugott, "objectivity" (if we may call it this) corresponds to the conceptualized described event, "subjectivity" to the conceptualized speech event. The semantic change of the English word *observe* is a case of subjectification according to Traugott. The starting point is the description of an event in the extralinguistic world (conceptualized described event: NOTICE, PERCEIVE; first attestation in the OED: *observe*, v., sense 8., 1560). From there, the concept expressed shifts to the level of a communicative event (conceptualized speech event: STATE): (23).

- (23) *observe* 'say by way of remark, state';
 first attestation: *Your Majesty doth excellently well observe, that witchcraft is the height of idolatry*
 (Francis Bacon, *Of the advancement of learning*, ii. xxv. §24;
 cit. OED, *observe*, v., sense 10., 1605).

In fact, our experience tells us that we often utter remarks that are based on perception of the world surrounding us. Consequently, a figure-ground

effect within a frame of COMMUNICATIVE ACTIVITY (= FRAME in Figure 2) makes us shift from the concept NOTICE, PERCEIVE (= E1) to the contiguous concept STATE (= E2). So, then, this type of subjectification is a type of metonymy.

For Langacker, the difference between described event and conceptualized speech event is not crucial as such. "Objectivity" and "subjectivity" may belong to the same level and, thus, remain for instance on the level of the described event. What really counts is the perspectivisation process, whose starting point is the objective construal of an onstage object of conception (comprising however already an element of additional subjective construal by the conceptualizer) and which brings about the total fading away of the objective construal and a reduction to the element of subjective construal. The semantic change of the English word *boor*, for example, is a case of subjectification according to Langacker (1999: 150) in the sense that a change of perspective makes the objective construal progressively fade away. From PEASANT (attestations in OED, *boor*, sense 1, going from 1430 to 1798), the concept expressed successively passed to RUSTIC (24)(a) and to RUDE FELLOW (24)(b), where only the subjective construal survives.¹⁵

- (24) (a) E. *boor* 'rustic, country clown';
first attestation: *I dull-sprighted fat Boetian Boore*
(John Marston *The metamorphosis of Pygmalions image, and certaine satyres*, ii. 142; cit. OED, *boor*, sense 3.[a.], 1598).
- (b) E. *boor* 'rude, ill-bred fellow, clown';
first attestation: *Grossolano, a lubber, a clown, a boore, a rude fellow*
(John Florio, *A worlde of wordes, or most copious and exact dictionarie in Italian and English*; cit. OED, *boor*, sense 3.b., 1598).

In fact, everyday experience told people of the 16th century that farmers/countrymen were prototypically rude and ill-bred. Consequently, a figure-ground effect made them shift from the concept FARMER (= FRAME in Figure 3) to the contiguous concept RUDE (FELLOW) as one element of the frame (= E1). This type of subjectification is therefore a type of metonymy, too.

As our analyses of (23) and (24) have shown, the processes of subjectification, be it in Traugott's or be it in Langacker's sense, are clearly

15. From the point of view of attestation the two senses corresponding to (24)(a) and (b) are simultaneous, but from the logical point of view (b), of course, presupposes (a).

metonymical in nature (cf. also Traugott and Dasher 2002: 29; Marchello-Nizia 2006: 100).). The converse relation, however, does not hold. I have cited and will cite other examples of metonymy without subjectification in one of the two senses ((10), (11), (12), (14), (27), (30)). The unidirectionality, typical of subjectification, does not necessarily apply to other metonymies. There are even typically bidirectional metonymies (cf. Koch 2008: 123–125).

2.4. Delocutive change

Let us take an additional look at a particular type of subjectification à la Traugott, which was discussed originally in a completely different theoretical context. Generalizing the notion of "delocutivity" by Benveniste (1966), Anscombe shows the relevance of the phenomenon, not only for Speech Act Theory, but also for diachronic semantics (cf. Anscombe et al. 1987). An interesting example is English *encore*:

- (25) *encore* 'again, once more (used by spectators/auditors of artists' performance)';
first attestation and explanation: *Whenever any Gentlemen are particularly pleased with a Song, at their crying out Encore . . . the Performer is so obliging as to sing it over again*
(Sir Richard Steele, *The spectator*, No. 314 39; cit. OED, *encore*, int. and n., A. int., 1712).

In accordance with Anscombe's analyses, we could reconstruct the following semantic change for this word:

- (26) Delocutive semantic change of English *encore*
- I. existence of an English lexeme *encore* 'once more' (borrowed from French *encore*¹⁶);
 - II. frequent use of English *encore* 'once more' in a speech act {DEMAND THE REPETITION OF AN ARTIST'S PERFORMANCE};
 - III. lexicalization of a new performative reading of *encore* that corresponds to the speech act accomplished in II.;
 - IV. reanalysis of the usage of English *encore* in II., in conformity to the new performative reading resulting from III (for reanalysis cf. section 2.5.).

16. According to DHLF, *encore*, and OED, *encore*, Fr. *encore* has never been used in the sense exemplified in (25). So it must have come into English in the sense of 'again, once more' that existed and still exists in French. – It is

In my view, this “delocutive” change is undeniably metonymic in nature. The starting point is a speech act (SA), in this case {DEMAND THE REPETITION OF AN ARTIST’S PERFORMANCE}, constituting a frame that contains, among others, the following two elements: a concept C, corresponding to a contextual element that is indispensable for the conceptualization of the speech act SA (in this case: the nonverbal reaction of the hearer, the repetition, to be specific), and a verbal formula F that expresses C (or an aspect of C) and that, consequently, forms a frequent element and is thereby prototypical for the realization of the speech act SA (cf. Koch 1993: 268–272):

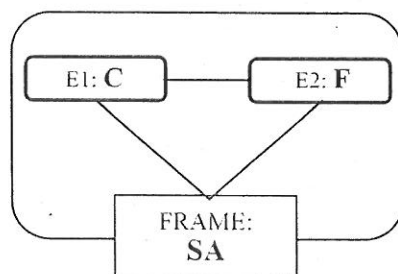


Figure 4. Delocutive frame

This triple contiguity of SA, C and F easily triggers a figure-ground effect which makes the main word of the formula F (whose meaning corresponds to C or to an aspect of C) shift towards a meaning which corresponds to the sense of the contiguous speech act SA (cf. (26), I. → III.). Following Anscombe, we can reconstruct, in the same way, the type of semantic change that generates many speech act verbs (cf. Koch 2001a: 209f.; Blank 1997: 256–258).

Delocutive changes are certainly lexical changes, but they import metonymical effects based mainly on the contiguities between a lexical meaning and pragmatic elements, such as the sense of a speech act SA and the verbal formula F used for performing SA. It is not pure chance that Traugott

not impossible that the sense shown in (25) has been prefigured by E. *ancora* (borrowed from I. *ancora* ‘again, once more’), which has developed – but once more only in English (cf. GDLI, *ancora*) – the same sense, attested already in 1712, but nowadays obsolete (cf. OED, *ancora*); cf. also the hybrid form E. *encora* (OED, *encore*, Etymology and A., 1781).

and Dasher (2002) dedicate a whole chapter to the genesis of performative verbs and constructions. The delocutive genesis of a performative verb actually corresponds to a process of subjectification following the formula “conceptualized described event → conceptualized speech event” (see 2.3).

2.5. Speaker-induced metonymy vs. hearer-induced metonymy (reanalysis): the internal pragmatic typology of metonymy

In 2.2.1 we discussed important dimensions of the typology of metonymy. The pragmatic dimension has been postponed there in order to be broached in this section, because it corresponds to the most fundamental divide within the field of metonymy.

In traditional rhetoric it seems to go without saying that the trope of metonymy – like all the tropes – is triggered by a speaker’s choice. Nothing but the term that describes metonymy in the *Rhetorica ad Herennium* (cf. (9): “denominatio”) presupposes the speaker’s perspective (cf. also “trahit orationem”, “sit appellata”; the hearer’s receptive role is represented by “possit intellegi res”). From this perspective it is hence necessary to conceive the creation and the subsequent adoption of a semantic innovation as follows:

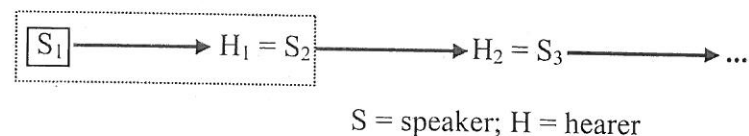


Figure 5. Innovation triggered by the speaker

If we apply this schema to metonymy, it can be said that it is the speaker S_1 who creates a figure-ground effect in a frame. The hearer H_1 takes note of this innovation and, as a speaker S_2 in a subsequent communicative act, uses the same metonymy, etc. This is consequently a case of “speaker-induced” metonymy.

This schema can actually be applied to all changes based on tropes (metaphors, SPECIES-GENUS synecdoches, etc.) and, thus, certainly also to a great number of metonymies, if not to the majority of them ((10), (11), (23), (24), 4.2., *go*-future). There is however one type of metonymy whose genesis is characterized by a quite different pragmatic “punctuation”. This may be illustrated by example (27). In Old English the word *witnes* had the two readings, ‘testimony’ and ‘person giving testimony’, which have survived in Modern English *witness*:

- (27) (a) *witness* 'testimony';
 first attestation: *Falsa testimonia, leasa witnessa*
 (*Lindisfarne gospels*, Matt. xv. 19; cit. OED, *witness*, n.,
 sense 2.a., c950).
- (b) *witness* 'person giving testimony';
 first attestation: *Falsi testes, leuse vel lycce witnessa*
 (*Lindisfarne gospels*, Matt. xxvi. 60; cit. OED, *witness*, n.,
 sense 4.a., c950).

With respect to the underlying word-formation, OE. *wit-nes* is clearly a *nomen abstractum*, meaning originally 'knowledge, wisdom' and hence 'testimony' (cf. also OED, *witness*, n., Etymology and 1.). Consequently, even if the – very early – first attestations of the two readings (27)(a) and (b) are simultaneous, the reading 'person giving testimony' must be due to a semantic change on the basis of 'testimony'.¹⁷

Obviously the change described for *witness* is metonymic in nature. According to Figure 2, it is a figure-ground effect from TESTIMONY (= E1 to PERSON GIVING TESTIMONY (= E2), which belong both to a common FRAME, say, TRIAL (cf. Blank 1997: 246, 383f.). From the perspective of the speaker S_1 (Figure 5) it would not be very natural to trigger such a metonymy. Expressing her/himself in the technical context of a trial, s/he would be rather inclined to differentiate linguistically the two distinct, though related, elements TESTIMONY and PERSON GIVING TESTIMONY of the relevant frame. So, in order to understand the pragmatic rationale of this change, it is more promising to take the hearer's perspective and to start from utterances like – in modernized version – *Let's hear the next witness!*, which could be realized in the context of a trial. If we situate such an utterance in its communicative context, the global pragmatic meaning of the utterance could be, for instance, 'The trial hearing is going to continue'. If speaker S_1 (e.g. a judge) uses *witnes* to express this, it certainly occurs through the concept TESTIMONY (= E1), because it corresponds to the conventional meaning of this word. The hearer H_1 is mainly interested in the global pragmatic interpretation of the utterance. Communication is successful, even if her/his personal reconstruction of the conceptual meaning of the linguistic elements used partly deviates from the construction of

the meaning by S_1 . In the present case the global pragmatic interpretation 'The trial hearing is going to continue' would be compatible as well with the contiguous concept PERSON GIVING TESTIMONY (= E2) – *salva veritate*, so to speak: listening to a testimony implies listening to a person who gives the testimony. From the moment onwards when a hearer H_1 conceives a (personal) conceptual analysis containing E2 instead of E1, a "hearer-induced" metonymy comes into being (cf. Koch 2001a: 225–228; 2004: 42–45; Gévaudan 2007: 57f.).



Figure 6. Innovation triggered by the hearer

Utterances like *Let's hear the next witness!*, performed in a typical situation (a trial in the present case), represent what Heine (2002: 86–92) calls a "bridging context", a notion that is useful, as we are seeing here, for both grammatical and lexical change. As shown in Figure 6, the speaker S_1 uses the word in question according to traditional rules, without wanting to suggest any innovation whatsoever. It is hearer H_1 who accomplishes a figure-ground effect within the relevant frame. The effect, however, remains entirely compatible with the global pragmatic meaning of the utterance. As a speaker S_2 of a subsequent communicative act, s/he then actively transmits her/his innovation to a hearer H_2 etc. etc.

The course of this change corresponds exactly to what Detges and Waltereit (2002) identified as the mechanism of reanalysis. They showed that reanalysis presupposes two cognitive principles: the "principle of reference" and the "principle of transparency". As far as the principle of reference is concerned, it must be the case that the "personal" conceptual interpretation of hearer H_1 is compatible with the reference of the utterance at the moment of its being uttered. The – possibly extralinguistic – reaction through hearer H_1 makes speaker S_1 understand that H_1 has grasped the global pragmatic meaning of the utterance, independently of the fact that H_1 has given a "deviant" conceptual analysis to this utterance. With respect to the principle of transparency, it is, in this case, the described contiguity between TESTIMONY and PERSON GIVING TESTIMONY which guarantees a semantic motivation.

17. A similar, diachronically better documented change took place from ClassLat. *tēstimōnium* 'testimony' to OFr. *tesmoïn* 'testimony; person giving testimony' (cf. DHLEF, *témoïn*). Note that, differently from ModE. *witness*, Mod.Fr. *témoïn* has lost the sense 'testimony'.

Refusing a conviction which is firmly anchored in certain linguistic milieux, Detges and Waltereit (2002) underline that reanalysis is in the first place a semantic process which operates on a given chain of speech (but which can also have repercussions on the grammatical level: see 4.1). There are only two semantic relations that lexical reanalysis can exploit without violating the principle of reference: firstly, taxonomic subordination, since it is always possible to assign a more precise concept to a referent in the taxonomic hierarchy¹⁸; and secondly, contiguity, since as we have seen a shift towards a contiguous concept does not necessarily jeopardize the global reference of the utterance. The majority of reanalyses seems to be of metonymical nature (cf. Detges and Waltereit 2002: 165; also Waltereit 1999). Given the extremely elementary character of the figure-ground effect between contiguous elements (cf. 1), this is not at all surprising.

It could be asked how it is possible to distinguish hearer-induced and speaker-induced metonymies, in general and above all a posteriori. We must bear in mind the importance of the bridging context and of the principle of reference for reanalysis and, hence, for hearer-induced metonymies. As we have seen, the conceptual figure-ground effect is pragmatically indifferent within the bridging context. This does not hold for speaker-induced metonymies, as intentional rhetorical tropes, which are pragmatically highly relevant within the bridging context. Thus, it makes a considerable difference, both conceptually and pragmatically, whether I use *hoor* (24) to express simply PEASANT or to express mainly COUNTRY CLOWN, RUSTIC. Some speaker-induced metonymies do not even involve any bridging context (cf. (10) Lat. *frigus pigrum* 'lazy cold' with respect to *puer piger* 'lazy boy'). It is up to further research to pin down this difference between hearer-induced and speaker-induced metonymies more exactly.

The distinction between speaker-induced and hearer-induced metonymies adds an additional dimension to our classification. A closer look will reveal the impact of hearer-induced metonymy: step IV. of delocutive changes (2.4., (26)) is nothing else than a metonymical reanalysis on the hearer's side, following the reasoning: If S₁ uses the English lexeme *encore* to express the speech act SA {DEMAND THE REPETITION OF AN ARTIST'S PERFORMANCE}, this verb must express the concept DEMAND THE REPETITION OF AN ARTIST'S PERFORMANCE. As we will see, popular etymology,

18. Cf. Gévaudan 2007: 103; Koch 2004: 45 n. 31.

too, will not be understood without going back to a reanalysis on the hearer's side (5.1).

3. Discourse markers

The diachronic processes considered in section 2 concern not only the lexicon, but also other levels of linguistic analysis. As we saw especially in section 2.5, pragmatics is of paramount interest to the production of metonymies. So it is not surprising to find metonymic effects that are not only triggered by discourse pragmatics, but are also relevant to its innermost functioning.

The emergence of discourse markers has been drawn near to the processes of grammaticalization as well as lexicalization; some prefer to rather speak of "pragmaticalization". Without wanting to bring this discussion to a close here¹⁹, I want to underline that, in publications about diachronic evolutions within this field²⁰, it is very difficult to find a case of change that is *not* metonymic in nature (even if that is not always made obvious by the authors).

The example of the English discourse marker *look you*, analysed following Waltereit (2002), is helpful here.²¹ Originally, it is the imperative singular of the verb *look*, followed by the personal pronoun of the 2nd person singular, which simply expresses a REQUEST to the hearer TO DIRECT HIS/HER SIGHT to s.th., facing some important thing or event visible in the situation (a horsetrick in (28)):

- (28) *Look you, here's your worship's horsetrick, sir. (Gives a spring.)*
(P. Massinger et al., *The excellent comedy called The old law . . .*, III. ii; cit. OED, *horse*, n., IV.27.b., 1599).

This REQUEST to the hearer TO DIRECT HIS/HER SIGHT to s.th. (= E1 in Figure 2a) implies, within the same pragmatic frame, an APPEAL TO THE

19. Cf. the discussion in Erman and Kotsinas 1993; Dostie 2004: 22–33; Brinton and Traugott 2005: 136–140.

20. Cf. Brinton 1996; Hansen 1998; Waltereit 2002; Dostie 2004.

21. Waltereit (2002) analyzes the close Italian equivalent *guarda*. His approach is somewhat different from the one presented in Brinton 2001 and Brinton and Traugott 2005: 138f. with n. 28. Nevertheless the reliance on metonymy (in the form of subjectification according to Brinton and Traugott) is a common point.

ATTENTION of the hearer (= E2). If E2 passes, by a figure-ground effect, to the foreground (Figure 2b), *look you* can transform into a discourse marker, more exactly: an opening marker, expressing an appeal to listen, without any reference to a thing or an event visible in the situation:²²

- (29) *Look you, she loved her kinsman Tybalt dearly, [And so did I*
(William Shakespeare, *Romeo and Juliet*, III. iv. 3–4 [1594–96];
cit. Brinton 2001: 184).

Obviously, this metonymic step is at the same time a process of subjectification in Traugott's sense following the formula "conceptualized described event → conceptualized speech/audition event" (see section 2.3).

4. Metonymic grammatical change

Up until now we have only considered examples of metonymies which were of purely lexical nature (section 2) or which generated pragmatically relevant elements. Grammar itself is not our main concern here, but we will nevertheless hint at two types of grammatical phenomena frequently involving metonymic change: grammatical reanalysis and grammaticalization.

4.1. Grammatical reanalysis (hearer-induced metonymy)

It is in the context of grammar that investigation into reanalysis started by paying special attention to the aspects of syntactic *rebracketing* and morphological recategorization.²³ In recent years it has been shown that reanalysis is a pragmatically and semantically motivated phenomenon and that it may – and indeed very often does – involve semantic change. This not only holds for lexical reanalysis (section 2.5), but also for grammatical reanalysis. As on the lexical level, the majority of grammatical reanalyses seems to be metonymic in nature (examples in Detges and

22. The "literal" example (28) is slightly posterior to the metonymic one (29), but for our purpose it is sufficient to see that they are roughly simultaneous, and that a use like in (28) must have existed as a base for a use like in (29). – The development into ModE. *look'ee* (cf. Brinton 2001: 185; Brinton and Traugott 2005: 138) is a further step, not only from the formal, but also from the pragmatic point of view, because it conveys the speaker's impatience – another metonymic shift, by the way.

23. Cf. Langacker 1977; overviews in Hopper and Traugott 2003: 50–63; Lang and Neumann-Holzschuh 1999a: 1–18; Marchello-Nizia 2006: 43–46.

Waltereit 2002: 165–168; cf. also Waltereit 1999). Thus, the psych verb Old English *lician*/Middle English *like(n)* originally displayed the construction (30)(a) with respect to its two participants: EXPERIENCED = nominative subject (Nom/S); EXPERIENCER = dative indirect object (Dat/IO). From the point of view of information structure *sēo ziefu* is thematic and *þam eorlam* rhematic. (30)(b) represents a most frequent informational variant of (a), the EXPERIENCER (*þam eorlum*) being thematic and the EXPERIENCED (*sēo ziefu*) being rhematic. As shown in (c), during the Middle English period the original Dat/IO of the thematic EXPERIENCER (*þe erles*) has been reanalysed, probably via a kind of dative subject (Dat/S), as an ordinary subject (S), which is the only possible interpretation in Modern English ((d): *the nobles*), whereas the rhematic EXPERIENCED (*þe zift*) has been reanalysed as a direct object (DO), which is the only possible interpretation in Modern English ((d): *the gift*) (cf. Jespersen 1949, III: 208–210; Seeffranz-Montag 1983: 104–144; Allen 1995).

- (30) (a) Old English *Sēo ziefu licode þam eorlam*
Nom/S Dat/IO
(for the construction cf. Allen 1995: 146, (103),
245, (169)).
- (b) Old English *þam eorlum licode sēo ziefu.*
Dat/IO Nom/S
(for the construction cf. Seeffranz-Montag 1983: 114)
- (c) Middle English *þe erles likede þe zift.*
Dat/IO Nom/S
→ Dat/S (?)
→ (Nom/S) DO
(for the construction cf. *ibid.* and Allen 1995)
- (d) Modern English *The nobles liked the gift.*
S DO

Verbs surrounded by their participants are an almost ideal example for the linguistic expression of frames (cf. e.g. Fillmore 1977). Now, the change illustrated in (30) is not merely a transformation of syntactic coding of the same frame. Since the constructions in (30)(a) and in (30)(d) correspond to two different perspectivizations of the same frame, the shift from (a) to (d) is metonymic in nature. In (a) the foregrounded element is the EXPERIENCED, in (d) the EXPERIENCER of the psych frame (cf. Koch 2001b: 73–77; also Waltereit 1998: 79–83). The specific informa-

tional arrangement of (c) constitutes a "bridging context", typical of reanalysis (2.5).²⁴ Sentence type (b/c), though being a variant of construction (a), which intrinsically foregrounds the EXPERIENCED, is analysed as an instance of a construction that intrinsically foregrounds the EXPERIENCER (later on (d)). This semantic reperspectivization formally manifests itself in the interpretation of the Dat/IO *be erles* as a Dat/S and furtheron as an S and of the Nom/S *be zift* as a DO. The semantic and formal process of reanalysis with respect to (c) satisfies both the principle of reference, since the frame and its informational profile remain intact, and the principle of transparency. Indeed, since English is evolving towards a strict SVO language, it seems more adequate to express the first participant as an S.

4.2. Grammaticalization

As for the process of grammaticalization, it is no longer necessary to underline its importance for grammatical change. Quite rightly, there has been insistence upon the differences between the notions of "reanalysis" and "grammaticalization" in recent years. These two notions must not be put on a par with each other (cf. Hopper and Traugott 2003: 58ff.; Haspelmath 1998; Lang and Neumann-Holzschuh 1999a; Detges and Waltereit 2002; Marchello-Nizia 2006: 45ff.), since they do not belong to the same level of abstraction. Grammaticalization is a process with several stages which can involve steps of reanalysis. Grammaticalization is unidirectional, reanalysis as such is not.

Reanalysis is triggered by the hearer (cf. 2.5 and 4.1) guided by the *discreet* character of contiguities, hence of metonymy. By contrast, the starting point of a long grammaticalization process is a choice made by a speaker, who uses an expressive "rhetorical" strategy which allows him to solve difficult but frequent communicative situations (cf. especially Detges 1999; 2003). A particularly frequent rhetorical strategy chosen in these cases is, metonymy, because the speaker takes advantage of the *concrete* and seemingly objective character of contiguities.

A classical example is the *go*-future, which can be observed in English (e.g. *I am going to help him*) and a great number of other languages (cf. Bybee et al. 1994: 243–280). In this case the speaker who triggered the innovation relied on an ACTION frame, containing among others the elements MOVEMENT, INTENTION, and IMMINENCE. A succession of two

24. Both participants being in the singular, no problem of congruence arises. This is certainly another important precondition for this type of reanalysis.

figure-ground effects is used to suggest to the hearer that he virtually has proof of the truth of an affirmation about a future action. The speaker's current MOVEMENT towards a place, where the ACTION in question (*help him*) will take place, reveals the sincere INTENTION of the speaker to accomplish this same ACTION; furthermore, the INTENTION reveals the IMMINENCE of the ACTION (cf. Detges 1999).

5. Word-formation and semantic change

After having examined the semantic effects which intervene on the lexical and grammatical levels, we will take a look at an area that belongs at the same time to the lexicon and to morphology, namely word-formation. This area is of course an object of synchronic research, concerning especially internal relations within the lexicon, lexical motivation, morphological and semantic regularities in the lexicon, etc. We will distinguish in this respect the "base" (e.g. English *teach-*), the "device" (e.g. suffixation of *-er* leading from ACTION to AGENT), and the "product" (e.g. *teach-er*). Word-formation is also an object of diachronic research in several respects:

- i. The most obvious application of the diachronic perspective to word-formation concerns the production of new words in time. Any nonce application of a given device of word-formation to a new base can be the starting point for the lexicalization of the resulting word-formation product as a new word in the lexicon of the language. Thus, *teacher* was a new formation in the 14th century, replacing the former *larpeow*, *lorde(a)u*, *lár(é)ow*, etc. (cf. OED, *lorthew*, *lurew*; *teacher*, sense 2.a.). Word-formation products as a diachronic issue will be addressed in section 5.3.
- ii. From the synchronic perspective a word-formation product is a motivated word of the lexicon. But lexical motivation is subject to language change as well and may, for instance, fade away in diachrony (e.g. ModE. *dairy* < ME. *deie* 'dairy-maid' + *-erie* (place); cf. OED, *dairy*, n.). Conversely – and this is more important for metonymic innovation – language users may search for motivation in words that have been demotivated or never were motivated at all. Remotivation as a diachronic issue will be addressed in 5.1.
- iii. It is not only products of word-formation that are subject to language change, but also the devices underlying them. We know for instance that ModE. *-hood* goes back to a noun OE. *hād*, able to form compounds with other nouns (31) and progressively transformed into a derivational suffix (cf. e.g. Marchand 1969: 293; Faiß 1978).

- (31) OE. *sácerd* 'priest' + *háð* 'state, condition, ...' → *sácerdháð* 'condition of being a priest' (cf. below (33)); etc.

It is mainly for the sake of completeness that we mention this problem of the emergence of new word-formation devices as a diachronic issue.²⁵

- iv. Given that word-formation devices are subject to language change, we also have to take into account the semantic change of already existing devices. We will treat this kind of problem under the heading "semantic change of existing word-formation devices as a diachronic issue" in section 5.2.

5.1. Remotivation as a diachronic issue: folk-etymological semantic change and contiguity

Part of the synchronic linguistic consciousness of speaker-hearers is the desire to "motivate" lexical signs wherever this seems possible (cf. Radden and Panther 2004). Sometimes language users even try to motivate words that are either opaque (and have always been so etymologically) or seem to be opaque, because their status as products of word-formation has been obscured. This is what is called "folk-etymology" or "popular etymology" (cf. Ullmann 1957: 91f., 1964: 101–105; Hock 1991: 202f.; Campbell 2006: 114–116). Folk-etymology may or may not involve semantic change. We are concerned here only with folk-etymological semantic change. Blank (1997: 303–317; 2000: 70) has shown expertly that this kind of process is not only based on a similarity of the signifiers (cf. Ullmann 1957: 234–238; 1964: 211), but also on a cognitive relation which corresponds to contiguity, with only a few exceptions.

To take a well-known example of folk-etymological semantic change (cf. Ullmann 1964: 221), the English noun *boon*¹ and adjective *boon*² were etymologically unrelated homonyms. The noun ultimately went back to ON. *bón* 'prayer' and successively developed readings as 'matter/thing prayed for' and 'favour' (32)(a). The adjective came from OF. *bon* 'good' and, among others, developed the reading 'advantageous' (32)(b). The noun *boon*¹ (32)(a), which expressed the concept FAVOUR, clearly was

25. This has recently been discussed under different labels, including 'grammaticalization' (Chapter 4.2), 'reanalysis' (Chapter 2.5, Chapter 4.1) or even 'lexicalization': cf. Blank 2001: 1602 and the discussion in Brinton and Traugott 2005: 62–110.

lacking any lexical-morphological motivation. Nevertheless, language users had two reasons to bring this noun together with the adjective *boon*² (32)(b). Formally, the two words were homonymous, and semantically, the adjective expressed a contiguous concept in the same frame, namely ADVANTAGEOUS, since in general a favour or a gift graciously bestowed is advantageous for the receiver. Within the limits of the part of speech "noun" the most contiguous concept would be ADVANTAGE = ADVANTAGEOUS THING. So it was not surprising that for the noun *boon*¹ language-users shifted from the concept FAVOUR (= E1 in Figure 2a) to the contiguous concept ADVANTAGE (= E2 in Figure 2b): (32)(a → c). In fact this is nothing but a metonymic figure-ground effect with respect to *boon*¹, which was facilitated by the semantic contiguity of *boon*² and *boon*¹ seemingly reflected in their formal identity, a process that has been reinterpreted as a conversion adjective → noun.

- (32) (a) *boon*¹ 'favour, gift, thing freely or graciously bestowed';
first attestation: *Send us, lord, this blissid bone*
(*The towneley mysteries*, 282; cit. OED, *boon*, n.¹, sense 4., c1460)
[according to OED archaic reading in Modern English].
(b) *boon*² 'advantageous, fortunate, favourable, prosperous';²⁶
I may wish boone fortune to thy iourney
(Robert Greene, *Greenes neuer too late*; cit. OED, *boon*, a., sense 2., 1590)
[according to OED, obsolete reading in Modern English].
(c) *boon*¹ 'blessing, advantage, thing to be thankful for' [without the notion of asking or giving];
first attestation: *The charter of Massachusetts was not so great a boon*
(Thomas Hutchinson, *The history of the Province of Massachusetts Bay (1628–1750)*, i; cit. OED, *boon*, n.¹, sense 5., 1767).

Let us call the lexical units exemplified in (32)(a), (b), and (c) "Source Unit", "Backing Unit", and "Target Unit" respectively. This material is well suited to show that we certainly cannot speak of "folk-etymology" without formal similarity of the signifiers of the Source and the Backing Unit, but that the formal aspect is insufficient to capture folk-etymology, whose very essence is a semantic improvement of the lexical motivation of the Source Unit. In the case of folk-etymological semantic change this

26. The most frequent collocation is *boon voyage* (since 1494, cf. OED, *boon*, a., sense 2.), clearly influenced by Fr. *bon voyage*.

improvement is, firstly, backed up by accidental formal similarity,²⁷ hand in hand with accidental semantic relatedness, mostly by contiguity, of the Source and the Backing Unit ((32)(a–b)), and it comes about, secondly, by the semantic change from the Source to the Target Unit, which is metonymic in nature in most cases ((32)(a → c)). Note that contiguity comes into play, in our example and many others, at several points: between the Source and the Backing Unit (“discovering” a new motivation), between the Backing and the Target Unit (bridging motivation and semantic change), and finally between the Source and the Target Unit (realizing, in fact, a metonymic change).

One may wonder how it comes about that speakers who know their mother tongue well can trigger something as drastic as a folk-etymological semantic change by remotivating the Source Unit and by reinterpreting it into the Target Unit. Once more, it is useful to take the hearer’s perspective to understand the pragmatic rationale of this kind of process. Folk-etymological semantic change is nothing more than a particular type of lexical reanalysis, triggered by the hearer (see 2.4.; cf. Blank 2001: 1600f.; Detges and Waltereit 2002: 160, 163; Gévaudan 2007: 158–162). A speaker S_1 uses the Source Unit according to traditional rules, without wanting to suggest any innovation. It is a hearer H_1 who “discovers” the Backing Unit and innovates into the Target Unit. As a speaker S_2 of a subsequent communicative act, s/he then actively transmits her/his innovation to a hearer H_2 etc. etc. (cf. Figure 6).

As for the principle of reference characterizing reanalysis, the “personal” conceptual reinterpretation of the Source into the Target Unit by hearer H_1 is compatible with the reference and the global pragmatic meaning of the utterance at the moment of its being uttered (within a so-called “bridging context”). As we already saw in 2.5, this is particularly easy with contiguity-based “deviations”, i.e. with metonymies like (32)(a → c).

The principle of transparency characterizing reanalysis assumes particular importance in the case of folk-etymology, because motivation is improved by remotivation of the Source Unit through the Backing Unit and ratified by semantic change from the Source to the Target Unit. After the change, only the motivation of the Source Unit through the Backing Unit as well as the innovative Target Unit, though representing a fallacy

27. In some cases formal similarity is improved by slight phonetic adaptations, as e.g. from OE. *wilcuma* (containing *will*) to ME./ModE. *welcome* (related to *well*); cf. Ullmann 1957: 91; OED, *welcome*, n.¹, etymology.

from the scientific point of view, are real in the synchronic linguistic consciousness of the speaker-hearers of the community.

5.2. Semantic change of existing word-formation devices as a diachronic issue: metonymy

Once a given word-formation device has come into being (section 5, iii), it may be subject to change (5, iv). Formation devices can undergo the main types of semantic change we already know from the diachrony of lexical words (2.2.4): mainly metaphorical, taxonomic and, of course, metonymic changes (cf. Mutz 2000: 243f.; Rainer 2005: 422–428).

To go back to example (31), i.e. the transformation of *-hād* into something like a suffixoid and hence into a suffix (a process that must have begun rather early: see n. 28), let us consider the further development of this word-formation device (cf. Marchand 1969: 293; Faiß 1992: 60). From the outset the word-formation products containing *-hād* represent *nomina qualitatis*, which, according to the etymological background of the suffix(oid), designate the QUALITY OF BEING X (31). Qualities can be either time-stable, like being human, a woman, a brother, an animal, normally also a priest, etc., or more or less transitory, like being young, a child, a widow, a nation, etc. For the latter type, the frame of the constitution of a person or a thing implies a strong contiguity between the QUALITY OF BEING X (= E1 in Figure 2a) and the PERIOD OF BEING X (= E2 in Figure 2b). So language users easily slip through a metonymic figure-ground effect from E1 to E2. Among the earliest attestations of *-hād* in Old English there are examples that clearly designate time-stable qualities, such as *sacerdhād* ‘priesthood’ (33). In fact, the etymological background (31) tells us that the QUALITY reading of *-hād*/*-hood* must have been prior in diachrony, surviving nevertheless in Middle English and Modern English for time-stable qualities (cf. e.g. OED, *manhood*, sense 1.a., *a1225*; *personhood*, 1959). The PERIOD reading, which is particular natural for transitory qualities, is already present very early as well, e.g. *cildhad* = *childhood* (34).²⁸

(33) OE. *sacerdhād* ‘priesthood’ (from *sacerd* ‘priest’); first attestation: *Dyles ænig unclænsod dorste on swa micelne haligdom fon ðære clænan ðegnenga ðæs sacerdhades* (K. Ælfred, *Gregory’s pastoral care* tr., vii. 51; cit. OED, *uncleansed*, ppl. a., *c897*).

28. As it were, this early semantic change seems to presuppose that the transformation of the noun *-hād* into a suffix(oid) was already under way in Old English.

- (34) E. *childhood* 'time during which one is a child';
first attestation of *childhood*: *Sod he cwæð from cildhad*
(*Lindisfarne gospels*, Mark ix. 21; cit. OED, *childhood*, sense 1.,
c950).
- (35) OE. *giogudhade* 'state of being young/time during which one is
young' (from *giogud* 'youth');
one of the first attestations: *Blīðsa, cniht, on ðinum giogudhade*
(K. Ælfred, *Gregory's pastoral care* tr., xlix. 385; cit. OED, *bliss*, v.,
sense 1.a., c897).

Example (35), displaying the transitory quality YOUTH, shows a possible bridging context, where the original QUALITY reading as well as the new PERIOD reading is possible. This suggests that in the beginning, when only the QUALITY reading of *-hād* existed, a reanalysis must have come about (cf. Figure 6). Without any intention of innovating, a noun, which contained *-hād* and by chance expressed a transitory quality was used by a speaker S₁ according to traditional rules, i.e. with the QUALITY reading. A hearer H₁ accomplished a figure-ground effect within the relevant frame, shifting from the QUALITY to the PERIOD reading, an effect that remained entirely compatible with the global meaning of the utterance, because the transitory quality expressed constituted an ideal bridging context. As a speaker S₂ of a subsequent communicative act, the former H₁ then actively transmitted her/his innovation to a hearer H₂ etc. etc.

We therefore have to take into account metonymic reanalysis as a process of semantic change in word-formation devices. But things go much further than that. In a systematic examination of different types of semantic change in word-formation devices, undertaken by Rainer (2005), metonymy is omnipresent, though not exclusive. As for reanalysis ("reinterpretation") that represents one of the central processes of change in this domain, Rainer states: "The most important type of lexical change giving rise to reinterpretation, according to my sources, is metonymy [...]" (2005: 423).

5.3. Word-formation products as a diachronic issue ... and much more: contiguity within a three-dimensional grid of lexical diachrony

Now let us come to the most obvious application of the diachronic perspective to word-formation, namely the emergence of new word-formation products as part of lexical diachrony (section 5 (i)). To begin with, we will consider the origin of expressions for the concept TREE WHICH PRODUCES PEACHES in three different languages: English, French, and Russian. English and French display products of word-formation in this domain.

In Middle English a compound designating the FRUIT OF THE PEACH-TREE came into being (36), which combined the already existing nouns *peach* and *tree* (according to the OED, first attested in ?a1366 and c825 respectively). In Old French a derivative is attested (37), whose base was *pesche* (FRUIT OF THE PEACH-TREE: cf. DHLF, *pêche* [= ModFr. form]).

- (36) E. *peach-tree* 'tree which produces peaches'
(first attestation: OED, *peach-tree*, c1400).
- (37) OFr. *pesch(i)er* 'tree which produces peaches' (> ModFr. *pêcher*)
(first attestation in the form *peskier*: 1150; cf. DHLF, *pêche*).

At first sight, the situation is quite different in Russian, where the designation for TREE WHICH PRODUCES PEACHES (38)(b) is the product of a metonymic change that the word for FRUIT OF THE PEACH-TREE, i.e. *pérsik* ((38)(a)) has undergone.²⁹

- (38) (a) Russ. *pérsik* 'fruit of the peach-tree'.
(b) Russ. *pérsik* 'tree which produces peaches'.

Since the concept FRUIT OF THE PEACH-TREE is an element of the frame TREE WHICH PRODUCES PEACHES, this change is based on a figure-ground effect from the element (= E1 in Figure 3b) to the contiguous frame (= FRAME in Figure 3a).³⁰

In fact, the formal relationship between (38)(a) and (b), i.e. mere identity, is completely different from the one visible in (36), i.e. integration into a composition, or the one shown in (37), i.e. suffixation. Nevertheless, on the semantic level a common denominator is visible for all the three examples: the contiguity relation between the element FRUIT and the frame TREE. We have to conclude that one and the same contiguity relation may not only connect the source and the target concepts of processes of semantic change (38), but also the source and the target concepts of word-formation processes ((36), (37); cf. Koch 1999a: 158f.; 1999b: 340–342; 2001a: 231–

29. The etymological background suggests the posteriority of the TREE-reading. Russ. *pérsik* 'peach' goes back to either AncGr. (*mélon*) *persikón* or Lat. (*mālum*) *Persicum* borrowed from Greek, both designating the fruit (cf. REW, *népcuk*; SEW, *pérsik*). Furthermore, parallel metonymies in the same direction exist for other fruit concepts: *grúša* 'pear' → 'pear-tree'; *čeréšn'a* 'cherry' → 'cherry-tree', etc.

30. Note that even in English a TREE-reading as a result of a metonymic change of *pear* is available (cf. OED, *pear*, n., sense 2.). But in English this solution has remained marginal, whereas it has been generalized in Russian.

233). I would not speak of “metonymy” nor of “figure-ground effect” in the case of word-formation, because metonymy as a trope based on a figure-ground effect presupposes a constant on the expression side, i.e. identity of the signifier and its grammatical form. But the principle of contiguity transcends the formal differences between lexical devices, such as semantic change, suffixation, composition, or others.

Conversion, which constitutes a particularly important device in English (cf. Marchand 1969; Faiß 1992), may involve cognitive contiguity relations as well, as shown by example (39), where the source concept is *snow* (cf. OED, *snow*, n.¹, sense 1.1.a.) and the target concept of a conversion (*the*) *snow* → (*to*) *snow* corresponds to the whole frame of the situation of SNOWING:

- (39) (a) E. *snow* ‘fall down (snow)’;
(first attestation: OED, *snow*, v., sense 1., a13..).

Consequently, contiguity is a cognitive relation underlying a wide range of diachronic lexical devices comprising different types of word-formation as well as semantic change with respect to the constant signifier of a given word.

Yet, the possibility to transcend the boundaries between semantic change and word-formation is by no means a privilege of the relation of contiguity. It also holds for other cognitive relations, as e.g. for taxonomic subordination, as shown by the examples (20) and (40), which is a compound based on English *dog* (first attestation: OED, *dog*, n.¹, 1., sense 1., c1050).

- (40) *hunting(-)dog* ‘quadruped of the genus *Canis* used for hunting game’
(first attestation: (OED, *hunting dog*, sense 1., 1863).

The reading (20)(b) of *hound*, which is the result of a process of semantic specialization, stands in a relation of taxonomic subordination to the original reading (20)(a). In a similar way, though by completely different formal means, the compound *hunting(-)dog* (40) is taxonomically subordinated to its base *dog* (40).

All in all, cognitive relations and lexical devices do not simply constitute two different paths, but two *dimensions* of lexical change (cf. Koch 2000: 81–84; Blank 2003; Gévaudan 2007: 58–61, 165–177; Gévaudan and Koch 2010: 113–117). In principle, as shown in Figure 7, we can “multiply” with each other the different cognitive-relational categories (= dimension ①; cf. 2.2.4) and the devices of lexical change (= dimension ②).

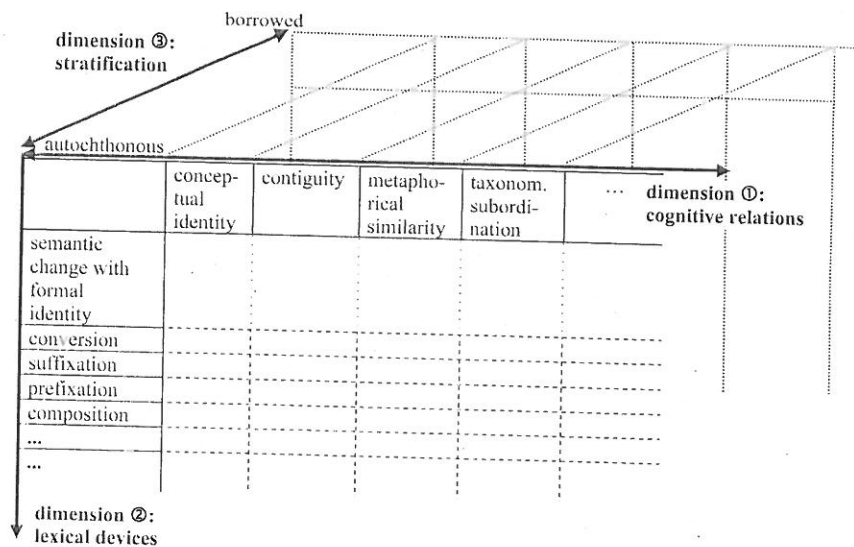


Figure 7. Three-dimensional grid for lexical diachrony

Furthermore, both dimension ① and ② may interact with processes of borrowing. Spanish *sombrero* ‘hat’ specialized its meaning when borrowed into English (41). With respect to English *handy* (cf. OED, *handy*, a., sense 2.a.) the borrowing German *Handy* (42) is the result of a conversion (dimension ②), which expresses a contiguous concept (dimension ①: READY TO HAND → MOBILE PHONE).

- (41) English *sombrero* ‘broad-brimmed hat of a type common in Spain and Spanish America’;
first attestation: *A brown cap or silk net, with a large flatted hat called a sombrero over it*
(*The Gentleman’s Magazine*, XL. 530; cit. OED, *sombrero*, sense 2., 1770).
- (42) German *Handy* ‘mobile (phone)’ (Gévaudan 2007: 180).

So, then, the aspect of lexical stratification (autochthonous vs. borrowed) constitutes a *third dimension* of lexical change (= ③). As shown in Figure 7 and by the examples (37)–(42), the values of the dimensions ①, ②, and

(3) can be combined with each other in a systematic way³¹ (cf. Koch 2000: 81–89; Blank 2003; Gévaudan 2007: 61–63, 177–183; Gévaudan and Koch 2010: 113–119).

From the quantitative point of view, it would be interesting to know what is the total impact of contiguity on lexical change all over the three dimensions represented in Figure 7. This has been tested on a sample of 179 concepts out of the so-called “Swadesh list” (cf. Swadesh 1955) for five Romance languages, considering, for every concept, the last step of change leading to its modern lexical expression (cf. Koch, in press). By far the most frequent cognitive relation overall is contiguity, whose rate varies around two fifth: French 45%, Spanish 40%, Italian 39%, Romanian 43%, Logudorese Sardinian 40%.

From a qualitative point of view, it is important to realize that the three-dimensional grid shown in Figure 7 is, first of all, a heuristic treatment. Every theoretically possible combination of values of dimensions (1), (2), and (3) does not necessarily occur in the reality of lexical change. However, no empirical limitation seems to exist for the cognitive relation of contiguity. Two large-scale investigations in lexical diachrony, one of them systematic (Gévaudan 2007) and one of them empirical in nature (Steinberg 2010) indicate that contiguity (1) is combinable with *any* kind of lexical device (2) and of course with autochthonous change as well as with borrowing (3). This multi-task profile does not apply to other cognitive relations (2.2.4).

To sum up, the three-dimensional perspective of the lexicological grid of Figure 7 clearly underpins the omnipresence of contiguity in lexical change.

6. Conclusion and further perspectives

We have seen that the relation of contiguity constitutes a fundamental cognitive principle that reappears everywhere in human language, typically but not only in the form of metonymy. The omnipresence of contiguity in language (see also Schifko 1979), has been illustrated here in the area of linguistic units endowed with meaning, and, more specifically, for their diachronic evolution. On the level of lexical-semantic change, we have encountered, besides the standard examples of metonymy (section

31. As far as they are concerned here, the examples (36)–(40) are all ‘autochthonous’ with respect to dimension (3).

2.1), lexical subjectification (2.3), delocutive change (2.4), and the phenomenon of hearer-metonymy which translates into lexical reanalysis (2.5). Concerning the genesis of discourse markers (3), it seems almost inconceivable to find here anything but metonymies. We could only allude in passing to grammatical-semantic change and to its frequently metonymic bases (cf. section 4). By including word-formation in our considerations, we discovered not only further metonymic effects (5.2), but also a wide range of types of lexical change involving contiguity (5.1 and 5.3). No doubt one can really speak of an omnipresence of metonymy and/or contiguity.

Indeed, in comparison to the more complex taxonomic relations (1.2) and to the highly complex trope of metaphor, which brings together distant concepts belonging to different frames (2.2.4), contiguity and the metonymic figure-ground effect within frames represent particularly simple principles that are extraordinarily flexible from the semantic and the pragmatic point of view. In order to complete this picture, research would have to be continued in two directions that the editorial limitations do not permit us to develop here. On the one hand, it would be useful to compare the semantic and pragmatic productiveness of metonymy with that of other types of semantic change (especially metaphor, generalization and specialization). It would appear that it is only metonymy which comprises speaker and hearer perspective at the same time, alongside efficiency and imprecision, expressivity, euphemism and dysphemism, etc. (cf. Koch 2004: 48ff.). On the other hand, the area of diachrony would have to be left in order to measure the impact of the relation of contiguity in the entire field of the lexicon, including synchronic motivation (cf. Koch 2001c: 1156–1168; Koch and Marzo 2007, esp. 279–281). No doubt: it will become even clearer that the relation of contiguity, in its fundamental nature and in its pragmatic flexibility, is decidedly a “Jack of all trades... master of some”.

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