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THE INTERACTION OF METAPHOR AND METONYMY IN COMPOSITE EXPRESSIONS

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Abstract

Idioms and compounds have similar semantic characteristics: both types of expressions are semantically composite, in the sense that their meaning is (at least in principle) composed of elementary building blocks, i.e. the constituent parts of the expressions. The present paper takes a closer look at the semantics of such composite expressions: it describes the interaction between the syntagmatic and the paradigmatic axes in the meaning of idioms and compounds, and then charts the various ways in which metaphor and metonymy can interact along these axes. Within the broad field of metaphor and metonymy research, the most direct point of comparison for the present analysis is the notion of 'metaphonymy' introduced by Louis Goossens. It will be argued that metaphonymy is part of a more encompassing 'prismatic' model for the semantics of composite expressions.

1. Metaphor and metonymy in compounds and idioms

The semantic architecture of idioms and compounds is identical: in both types of expressions, meaning is compositional to the extent that it is built up out of the constituent parts of the expression; at the same time, this compositional meaning is usually but a first semantic step, to the extent that processes of meaning extension produce a figurative reading from the compositional one. This paper will explore the various ways in which metaphor and metonymy may interact in expressions with this type of semantic architecture. The first part of the paper describes the architectural characteristics, i.e. the paradigmatic and the syntagmatic axes of composite

expressions and the way in which they interact. This part of the paper reproduces the major part of Geeraerts (1995). The phenomena in question will be introduced with regard to idioms in particular, but the extrapolation to the semantics of compounds is a straightforward one. The second part of the paper charts the various ways in which metaphor and metonymy combine and interact within the structure defined by the syntagmatic and paradigmatic axes. In particular, it will be shown that metaphor and metonymy may occur either in a consecutive or in a parallel sequence. This part of the paper is loosely based on Geeraerts & Bakema (1993). All the examples illustrating the argument are taken from Dutch.

2. The prismatic architecture of composite expressions

2.1 Isomorphism and motivation

The paradigmatic and the syntagmatic dimension¹ of idioms are both twofold, in the sense that both can be considered with regard to the original, literal meaning of the idiom, and with regard to the derived, figurative meaning. The *paradigmatic* dimension of idioms primarily involves the relationship between the original meaning of the idiomatic expression as a whole and its derived meaning. Secondly, it involves the relationship between the original, literal meaning of the constituent parts of the idiomatic expression, and the interpretation that those parts receive within the derived reading of the expression as a whole. The *syntagmatic* dimension of idiomatic expressions involves the relationship between the interpretation of the constituent parts of the expression on the one hand, and the interpretation of the expression as a whole on the other, but clearly, this syntagmatic dimension can be envisaged both with regard to the original meaning and with regard to the derived meaning. Systematically, then, the semantic relations in idioms might be charted by means of a prismatic structure as in Figure 1. (The figure is intended to serve purposes of clarification and reference only; it is obviously not a formal representation as envisaged in formal grammar. To keep matters simple, the expression is assumed to contain only two lexical items.)

- Figure 1 -

- 1 Expression as a whole in its literal reading
- 2 First constituent item in its literal reading

- 3 Second constituent item in its literal reading
- 4 Expression as a whole in its derived,
idiomatic reading
- 5 First constituent item in its derived reading
- 6 Second constituent item in its derived
reading

In addition, the notion of compositionality may either receive a dynamic or a static interpretation. Within the dynamic interpretation, compositionality is thought of as a syntagmatic derivational process in the course of which the meaning of a compound expression is computed on the basis of the meanings of the constituent parts of the expression². In contrast with this dynamic, bottom-up conception, a static interpretation can be envisaged that merely notes that a one-to-one correspondence between the parts of the semantic value of the expression as a whole and the meanings of the constituent parts of the expression can be detected, regardless of the question whether this correspondence has come about through a process of bottom-up derivation or through a top-down interpretative process. Examples of such interpretative processes will be given later on; at this point, it suffices to see that a 'non-directional' conception of compositionality is not excluded. Now, because the term *compositionality*, through its processual connotation, strongly calls up the idea of bottom-up derivation, a different term might be helpful for the neutral, non-directional interpretation. I propose to use the term *isomorphism* here: what is ultimately at stake, is a one-to-one correspondence between the formal structure of the expression and the structure of its semantic interpretation, in the sense that there exists a systematic correlation between the parts of the semantic value of the expression as a whole and the constituent parts of that expression.

A third preparatory step can be made by refining the notion of derivation. Although statements to the effect that idiomatic meanings are not compositional, that they are specialised, and that they cannot be derived straightforwardly would seem to be interchangeable, it should now be clear that we have to distinguish in principle between the syntagmatic underivability of the meaning of an expression (which is, of course, its non-compositionality), and its paradigmatic non-derivability. The latter involves the transparency of the semantic extension that leads from the original meaning of an expression to its transferred reading. It is illustrated by the

interpretative difficulty that we noted with regard to (3): along the top line of the prism in Figure 1, the transition from the literal meaning of *iemand iets op de mouw spelden* to its idiomatic meaning is opaque. The latter cannot be derived on the basis of the former, because the motivating image is lost. I propose to call this type of derivability *motivation* (in contrast with dynamic compositionality as a syntagmatic kind of derivability).

To round off the preparations, let us note that isomorphism and motivation as defined here³ share a common characteristic: both involve the transparency of some of the links indicated in Figure 1. More specifically, isomorphism coincides with syntagmatic transparency, whereas motivation can be defined as paradigmatic transparency.

2.2 Combinations of isomorphism and motivation

We can now arrive at a basic classification of the specialised nature of idioms when we consider the various combinations that isomorphism and motivation can occur in. Isomorphism and motivation can, of course, each be considered at two points in the relational structure sketched in Figure 1. On the one hand, motivation may refer both to the paradigmatic top line of the prism and to the two paradigmatic bottom lines. On the other hand, syntagmatic isomorphism may involve the front triangle or the back triangle of the figure. Because the entity that we are primarily interested in is the idiomatic meaning of the expression as a whole (the top backside corner of the figure), we will for now only consider motivation and isomorphism as they directly relate to that part of the structure, i.e., we shall consider isomorphism within the figurative plane, and motivation on the global level. Extensions towards other parts of the structure will follow in the next sections. Consider, then, the following expressions.

- (1) *De koe bij de horens vatten* 'To take the cow by the horns > to take the bull by the horns, to grasp the nettle'
 Aan de weg timmeren 'To practice carpentry at the roadside, to work in public > to attract attention by one's activities, to be in the limelight'

- (2) *Met spek schieten* 'To shoot with bacon > to tell a tall story, to boast'
Een wit voetje bij iemand hebben 'To have a white small foot with someone > to be in someone's good books, enjoy someone's favours'.
- (3) *Met de handen in het haar zitten* 'To sit with one's hands in one's hair > to be at one's wit's end, to be in trouble'
Dat heeft niet veel om het lijf 'That does not have much around the body > there's nothing to it, it does not mean very much'
- (4) *De kat de bel aanbinden* 'To tie the bell to the cat > to bell the cat, to take the lead in a dangerous activity'
Als puntje bij paaltje komt 'when point reaches pole > when it comes to the crunch, when all is said and done, when you get down to the nitty-gritty'

Systematically, the idiomatic readings in (1) are both isomorphic and motivated. Those in (2) are isomorphic but not motivated, those in (3) motivated but not isomorphic, and those in (4) neither isomorphic nor motivated. The isomorphic nature of *de koe bij de horens vatten* follows from the fact that a consistent one-to-one mapping can be defined between the elements of the global meaning and the meanings of the constituent parts of the expression. If we paraphrase the idiomatic meaning as 'to tackle a problem or a difficulty at the central, most dangerous or difficult point', it becomes clear that the cow maps onto the problem in its entirety, while the horns represent the most tricky part of it; taking hold of the horns further symbolizes tackling the core of the problematic situation. Similarly, *met spek schieten* is isomorphic because the tall tales that are told can be seen to correspond with *spek*, while the telling of the tales corresponds with *schieten*. Conversely, it is difficult to identify those aspects within a situation of being at one's wit's end that could map isomorphically onto the various aspects of the situation described by *met de handen in het haar zitten*: what would be the hands, and what would be the hair, for instance? As far as motivation is concerned, however, it can be readily appreciated that *met de handen in het haar zitten* is a metonymic expression for a situation of being in trouble; taking one's head between one's hands and pondering the situation is precisely what one does in the circumstances. In the same vein, it is easy to see that the literal situation described by *de koe bij de horens vatten* is a metaphorical image

for tackling a problem at its most difficult spot. But it is unclear why shooting with bacon should come to indicate boasting, or why a point reaching a pole should have anything to do with things becoming serious.

For further clarification of this basic classification, four remarks have to be made. In the first place, the isomorphic relations identified above should not be confused with the question whether the isomorphically mapped readings of the constituent elements of the idiomatic expressions are themselves motivated. For instance, while the lexical item *koe* in *de koe bij de horens vatten* maps onto the 'problem' part of the global figurative reading 'tackle a problem by its most difficult aspect', there is no independent motivation for extending the semantic range of *koe* towards the meaning 'problem'; a semantic shift from 'cow' to 'problem' is not a conventional aspect of the meaning of *koe*, nor is there a readily conceivable independent metaphor that leads from 'cow' to 'problem'. In other words, the bottom paradigmatic lines in Figure 1 are not present in the case of *de koe bij de horens vatten*⁴. It should now also be clearer why I suggested to take into account isomorphism as a non-directional concept of compositionality. Although *de koe bij de horens vatten* exhibits isomorphism, the idiomatic meaning 'tackle the problem by its most difficult aspect' could never be arrived at by means of a bottom-up compositional process, because the building blocks for that process (for instance, an interpretation 'problem' for *koe*) cannot be reached independently. For lack of an independent paradigmatic motivation at the bottom of the prism, the input for a possible compositional process can only be retrieved when the output of the process (the global figurative meaning of the idiom as a whole) is already available.

In the second place, motivation and isomorphism may be partial. Given a paraphrase 'to give the orders' of *de lakens uitdelen* (mentioned under (5) below), it is isomorphically possible to map *lakens* onto 'orders' and *uitdelen* onto 'give'. At the same time, it is possible to imagine a situation in which the person responsible for distributing the sheets is generally in charge; as such, the idiomatic meaning is motivated. But the motivational link is weak: distributing sheets is not the kind of situation that is typically associated with being in charge (or at least, not any more: apparently, the image derives from the dominant position of the lady of the house, whose control over housekeeping is symbolized by her control over the linen-cupboard). In *de kogel is door de kerk*, an event (such as the making of a decision)

whose coming about has been delayed or hindered by some kind of obstacle, has finally occurred. The general picture is fairly clear: a material obstacle (the church) obstructs and slows down the movement of the bullet, in the same way that various difficulties obstruct and slow down the materialization of the long-awaited event. But why a church and a bullet ? Again, the transparency of the motivating image is only partial.

- (5) *De lakens uitdelen* 'To hand out the sheets > to run the show, be the boss, play the first fiddle'
De kogel is door de kerk 'The bullet has gone through the church > the dice has been cast, a decision has been reached, things have taken a final turn'
- (6) *Met spek schieten* 'To shoot with bacon > to tell a tall story, to boast'
Abraham gezien hebben 'To have seen Abraham > to be over fifty'
Als puntje bij paaltje komt 'When point reaches pole > when it comes to the crunch, when all is said and done, when you get down to the nitty-gritty'
- (7) *Uit de bol gaan* 'To go out of one's head > to blow one's top, to go out of one's mind with excitement'
Het hoofd verliezen 'To loose one's head'
Niet goed bij z'n hoofd zijn 'Not to be well in the head > to be soft in the head'
Het hoofd loopt mij om 'My head is going round'
Z'n hoofd ergens bijhouden 'To keep one's head to something > to remain attentive, to keep one's mind on something'
Buiten zichzelf zijn, 'To be beside oneself'
Uit z'n vel springen 'To jump out of one's skin > to be beside oneself (with rage)'
Uitbarsten 'To burst out, explode'
Exploderen/ontploffen 'To explode'
In de wolken zijn 'To be in the clouds > to be overjoyed'
In de zevende hemel zijn 'To be in the seventh heaven > to be on cloud nine'

In de put zitten 'To sit in the pit > to be downhearted, be in the dumps, feel down'

Door een dal gaan 'To go through a valley > to go through an abyss, to suffer a depression'

Erbovenop zijn 'To be on top of it > to have overcome one's troubles'

In the third place, loss or weakening of motivation often results from cultural changes. More often than not, the background image that motivates the figurative shift is an aspect of the material or the immaterial culture of a language community - and when the culture changes, the imagistic motivation may lose its force. A clear example is *met spek schieten* (repeated under (6)). Apparently, enemy ships were shot at with bacon (and similar fat substances) to facilitate setting them afire; the interpretation 'to boast' can then be reached through the intermediary of an interpretation 'to subject someone to verbal aggression, to overpower someone verbally'. In this case, the relevant knowledge belongs to the material culture of old-time warfare at sea. In *Abraham gezien hebben*, the relevant piece of knowledge belongs to the realm of the immaterial rather than the material culture. Because a meaning 'to be no longer young or inexperienced' can be derived to the extent that the idiom is interpreted as a hyperbolic expression with the reading 'to have seen someone from a long time ago', the motivation is only partial: why is the borderline set at 50 ? In fact, it takes a good knowledge of the Bible to recognize the background of the expression, which derives from the gospel of John 8:57. It should also be clear by now, that the motivated nature of an expression is subject to considerable individual variation (depending, among other things, on individual differences in one's familiarity with the historically motivating context). This is not to say, however, that a vast encyclopaedic knowledge will always suffice to recover the motivation behind an expression. The latter may indeed be near to irretrievable, which is typically the case when professional etymologists disagree on the origin of an expression. In *als puntje bij paaltje komt*, for instance, some think of a transformation of an older expression *als putje bij paaltje komt* 'when the pit comes to the pole, when it comes to putting the pole into the pit', while others think of a variation on *de puntjes op de i zetten* 'to dot the i > to be meticulous about the details'.

In the fourth place, the motivating image need not be specific for the expression in question; moreover, the motivating image may be complex. At this point, we can link

up with the generalised metaphor research in the line of Lakoff & Johnson (1980). Without going too deep into the matter, consider *uit de bol gaan* in (7). The expression seems to be motivated by a combination of at least three images that are each generalized ones, in the sense that they provide a general motivation for various specific expressions. First, THE HEAD IS THE LOCUS OF ONE'S SELF-CONTROL underlies *het hoofd verliezen, niet goed bij z'n hoofd zijn, het hoofd loopt mij om, z'n hoofd ergens bijhouden*. Second, LOSING ONE'S SELF-CONTROL IS LEAVING THE BODY is to be found in *buiten zichzelf zijn, uit z'n vel springen, uitbarsten, exploderen, and ontploffen*. And third, UP IS POSITIVE / DOWN IS NEGATIVE is present in *in de wolken zijn, in de zevende hemel zijn, in de put zitten, door een dal gaan, erbovenop zijn*.

2.3 Local motivation and absence of literal isomorphism

In the previous section, only part of the original representation in Figure 1 was envisaged. Enlarging our perspective to Figure 1 as a whole, there are two additional phenomena to be dealt with. On the one hand, the global motivation of an expression can be contrasted with the 'local' motivation of each of the elements in the expression, i.e., motivation along the top paradigmatic line of the prism has to be supplemented with motivation along the bottom line. On the other hand, isomorphism at the figurative back of the prism can be contrasted with isomorphism at the literal front of the prismatic representation.

Parels voor de zwijnen in (8) below is an example of an idiom in which Figure 1 is fully realized. The global image is motivated (it is easy to appreciate what it means to throw valuable things at the feet of unworthy beings), and the figurative meaning is isomorphic (*parels* maps onto the valuable things that feature in the idiomatic meaning, and *zwijnen* maps onto the lowly beings that they are surrendered to). At the same time (and this a major contrast with the *de koe bij de horens vatten*-example that we discussed earlier), both the transition from *parel* to 'valuable thing' and from *zwijn* to 'unworthy person' is motivated on the basis of an evaluative metaphor. Up to a certain point, the metaphorical transition may even be said to be lexicalized (in the sense of being conventional): *zwijn* is a regular term of invective in the same way that *pig* is, and *een pareltje* is a term of praise in the same way that *a gem, a jewel, a pearl* are. (This is not to say, however, that the metaphorically motivated readings of *parel* and *zwijn* in the idiom coincide exactly with the lexicalized metaphorical meanings.

For instance, as a term of abuse, *zwijn* normally implies that the person in question lives an immoral life, whereas no such implication need be present in *parels voor de zwijnen*. The important point to see is that the lexicalized existence of *zwijn* in a reading like 'unworthy person, specifically because of his immoral behavior' strengthens the motivated nature of the related reading that the word receives in the context of the idiom.)

- (8) *Parels voor de zwijnen gooien* 'To cast pearls before swine'
- (9) *Iemand de loef afsteken* 'To take the wind out of someone's sails > to get the better of someone, to deprive someone of an advantage'
Tegen heug en meug 'Against *heug* and *meug* > against one's will, reluctantly'
Van hot noch haar weten 'To know neither *hot* nor *haar* > to be totally ignorant'
- (10) *Iets aan de kaak stellen* 'To put something at the jaw > to expose, denounce something'
Iets op touw zetten 'To put something on the rope > to organize, plan, start, launch something'

Given this analysis of *parels voor de zwijnen* as a fully motivated and fully isomorphic idiom, two additional remarks can be made. To begin with, it will be appreciated that the figurative reading of fully motivated and fully isomorphic idioms can be arrived at along two interpretative routes: either the global literal meaning is derived first and then transferred into the figurative realm, or the shift from the literal meaning of the individual words to their transferred meaning is effectuated first, to be followed by their compositional combination into the idiomatic meaning of the expression as a whole. In terms of Figure 1, the interpretation can go from the bottom to the top first, and then to the back, or it can go to the back along the bottom first, and then move up. Or, in still other words, either the syntagmatic dimension is gone through first, or the paradigmatic one takes precedence (starting, each time, at the lower front of the prism). Which of both interpretative paths is psychologically real (or merely preponderant) is another matter, but it is important to see that both are at least in principle possible.

Further, the 'local', lexical motivation may be partial, i.e., it need not involve all the items constituting the expression. When *iemand de loef afsteken* is interpreted as 'to deprive someone of an advantage (like an initial superior position)', *loef* maps onto 'the advantage', while *afsteken* can be associated with the notion of deprivation. In the latter case, the association is motivated: the metaphorical transfer from the literal meaning 'to cut off' of *afsteken* to 'to deprive' is a transparent one. In contrast, no such motivating link is possible in the case of *loef*, because the latter does not have a literal meaning for the average speaker of Dutch. Notice also that there are gradations in the degree of motivation⁵. Conventionalized shifts of meaning like the ones we mentioned in the case of *parel* and *zwijn* are stronger than the shift from 'to cut off' to 'to deprive' in the case of *afsteken*: the latter extension is possible and perhaps even plausible, but it is not a conventional one.

Together with *iemand de loef afsteken*, the other expressions under (9) illustrate the second major extension of the basic classification presented in section 3. Because *loef*, *heug*, *meug*, *hot*, and *haar* are cranberry morphs, they illustrate the case in which there is no isomorphism on the literal level: a global literal meaning cannot be computed because one or more of the lexical building blocks lacks a meaning of its own. (Incidentally, the earlier discussion of *de loef afsteken* has made clear that the absence of isomorphism on the literal level can co-occur with isomorphism on the figurative level.) In addition, it may be useful to mention the existence of 'hidden cranberry morphs' such as *kaak* and *touw* in (10). In the context that motivates the idiom, the words have their older meanings 'pillory' and 'loom' respectively; at present, these meanings are no longer common usage. The homonyms *kaak* 'jaw' and *touw* 'rope', on the other hand, are high-frequency words. The expressions *aan de kaak stellen* and *op touw zetten*, then, can receive an interpretation incorporating the readings 'jaw' and 'rope' (as suggested in (10)), but this is obviously not the kind of literal reading that could motivate (on the level of the expression as a whole) the figurative interpretation of the idiom. To the extent that *kaak* 'pillory' and *touw* 'loom' survive only in the expressions *aan de kaak stellen* and *op touw zetten*, they are like ordinary cranberry morphs; to the extent, however, that they formally coincide with the homonyms *kaak* 'jaw' and *touw* 'rope', they can be called 'hidden cranberry morphs'.

It appears, in short, that the associative links presented in Figure 1 may be present in various combinations. A full-fledged investigation into the semantics of idioms, then, will have to include an overview of the various ways in which the model sketched here may be partially realized. (See Geeraerts and Bakema 1993 for an example of what such an overview may look like.)

2.4 Reinterpretation processes

The examples of isomorphism on the figurative level that were mentioned in section 2.2 yield secondary, non-original interpretations for the items involved in the process. For instance, the isomorphic association between *lakens* and 'orders' in *de lakens uitdelen* yields a contextually determined interpretation for *lakens*, but because the transition from *laken* 'sheet' to *laken* 'order' is neither conventional nor motivated (in the sense that the latter reading is a plausible and transparent semantic extension of the former), the contextually isomorphic interpretation of *laken* as 'order' is not likely to acquire much structural weight in the lexicon. The process of contextual reinterpretation within the idiom is not always, however, without structural importance⁶.

- (11) *Spekverkoper* 'Person who sells bacon > person who boasts'
 Van heinde en verre 'From far and wide, from everywhere'
 Met zijn talenten woekeren 'To make the most of one's talents > to exploit one's gifts'

In fact, the reinterpretation process can be shown to be real when the item in question (in its secondary reading) comes to be used in isolation from its original idiomatic context. This has happened with *spek* in *met spek schieten*, which has led to the compound *spekverkoper*, as in (11) below. The formation of the compound noun can only be explained if it is accepted that *spek* in its idiomatically contextual reading 'boasting speech, tall tale' has been isolated from the original idiom. *Spekverkoper* as such cannot be directly explained as an original metaphor of its own: there is no way in which selling bacon can be associated with boasting except through the intermediary of *met spek schieten*. This type of 'semantic back-formation' is also quite visible in the case of cranberry morphs. When people are asked for an interpretation of *heinde* in *van heinde en verre*, it appears that a majority understands the item as a synonym or near-synonym of *verre* (more or less like the relationship between *far*

and *wide* in the English counterpart of the expression). Etymologically speaking, however, *heinde* and *verre* are antonyms rather than synonyms; *heinde* is related to *hand* and basically means 'what is near, what is at hand, what can be found in the immediate neighborhood'. When the etymological relationship with *hand* and the semantic relationship with nearness is lost, however, the overall meaning 'from everywhere' of the idiomatic expression enables *heinde* to be reinterpreted as a synonym of *verre*. *Met zijn talenten woekeren* is an even clearer case. Whereas *talent* in its original biblical context referred to a particular coin, the reading 'personal ability, capacity, aptitude' that it received in the figurative interpretation of the expression is now the major one; it occurs freely in separation from the original expression.

From a very general perspective, reinterpretation processes such as these⁷ indicate that a search for isomorphism (defined as syntagmatic transparency) is an active force in the mind of the language user. Apparently, isomorphism on the figurative level of the idioms is not just real when it is given on the basis of the literal meanings of the constituent elements of the expression, but it is also real in the sense of being sought for when it is not given. If this can be accepted, it also means that interpretation processes are not always bottom-up, but that they can also be top-down: the overall meaning of *met zijn talenten woekeren* determines the specific meaning of *talent* that has become the item's major meaning.

- (12) *Uilen naar Athene dragen* 'Carry owls to Athens/Athena > do something irrelevant, useless, superfluous'
 De kat de bel aanbinden 'Tie the bell to the cat > bring something out into the open, make something public, ring a bell about something'

Similarly, evidence can be found that the search for paradigmatic motivation too is a real one. Of course, the search for motivation is quite outspoken when etymological researchers disagree on the actual motivation of an expression, as in *uilen naar Athene dragen*, which is usually interpreted in terms of the owl as the symbol of the goddess Athena and the city Athens, but which some see as being motivated by the simple fact that there were many owls in Athens. But etymologists are professional searchers for motivation, so their interpretative creativity does not tell us too much about the spontaneous occurrence of such interpretative activities when ordinary

language users use idioms. More important in this respect are, first, psycholinguistic investigations of the type reported on in Gibbs (1990) and later work, which show that motivating images for idioms are psychologically real. And second, evidence for actual reinterpretations along the paradigmatic axis may be found, i.e. evidence for new meanings coming about through the search for motivation. For instance, the older idiomatic meaning of *de kat de bel aanbinden* (viz. 'to bell the cat, to take the lead in a dangerous activity') refers to the old fable of the cat and the rats. Nowadays, however, it seems to be shifting towards the interpretation 'to bring something into the open, to make something public, to ring a bell about something': on the one hand, the older association with taking the responsibility in a dangerous action (in favor of other people) disappears into the background; on the other hand, the notion of drawing the public attention to something (in particular, something scandalous or negative) is foregrounded. Given that *de kat de bel aanbinden* is largely unmotivated for most speakers, the association between the bell referred to in the expression and the notion of making something public (of making it heard, that is) enhances the motivated character of the idiom. The search for greater motivation leads to a shift in the interpretation.

2.5 *Summing up*

What I have tried to indicate in the previous pages can be summarized in three points. First, an adequate description of the various forms of semantic specialization that occur in composite expressions requires that a number of distinctions are taken into account: the distinction between the syntagmatic and the paradigmatic aspects of meaning (which can both be found on the level of the literal meaning and on that of the figurative meaning of the idiom), and the distinction between bottom-up and top-down semantic processes. Specifically, the concepts of *isomorphism* (defined as syntagmatic transparency) and *motivation* (defined as paradigmatic transparency) are of primary importance for describing the semantics of composite expressions.

Second, semantic specialization is a matter of degree. More specifically, the classificatory framework defined on the basis of the conceptual distinctions just mentioned allows for a ranking of the degree of specialization involved. Least specialized are fully isomorphic and fully motivated cases like *parels voor de zwijnen gooien*. Somewhat less specialized are cases like *de koe bij de horens grijpen* and *met*

de handen in het haar zitten, which may not be derivable on a word-per-word basis, but which are entirely transparent along the upper side of the prismatic structure. Still further down the line, we find cases like *met spek schieten* and *de kat de bel aanbinden*, that lack the global motivation of the previous examples. Most specialized, finally, are cases where the literal meaning of the expression cannot even be recovered, such as *iemand de loef afsteken* and other idioms containing cranberry morphs. In each of these cases, matters are further nuanced by the existence of degrees of motivation.

And third, semantic interpretation is not just a question of bottom-up compositionality or literal-to-figurative transfer. The *reinterpretation processes* that can be observed point to the existence of top-down and figurative-to-literal interpretations. It is not just the case that literal meanings determine figurative ones; figurative meanings also determine literal ones. And it is not just the case that the meaning of the parts determines the meaning of the whole; the meaning of the whole also determines the meaning of the parts.

3. Interactions between metaphor and metonymy in composite expressions

3.1 The metaphor/metonymy continuum

If there is a continuum between metonymy and metaphor, this implies that there are in-between cases between expressions that are fully metonymical and expressions that are fully metaphorical. Composite expressions as well can be fully metaphorical or fully metonymical, when the motivational links that are present within the semantic architecture of the expression are only metonymical or only metaphorical. *Parels voor de zwijnen gooien*, as discussed above, is fully metaphorical: the top level shift from 'to throw pearls at swine' to 'to present unworthy people with valuable things' is a metaphorical one, and so are the bottom level shifts from *parel* 'pearl' to 'valuable thing'⁸, and from *zwijn* 'pig' to 'unworthy person'. Conversely, compounds of the bahuvrihi type, like *roodhuid* 'redskin', are well-known cases of metonymical compounds: the link between the initial, compositional meaning ('red skin') and the derived reading ('Indian, seen as one with a red skin') is metonymical link of the possessed/possessor type. In the *roodhuid*-case, to be sure, motivational links at the bottom level fail, because the derived reading 'redskin' cannot be considered isomorphic.

So, given that composite expressions can be either metaphorical or metonymical, how can we chart the in-between cases ? How do metaphor and metonymy occur in mutual combination in compounds and idioms ? I will argue that there are three basic cases to be distinguished: cases in which metaphor and metonymy occur consecutively, cases in which they occur in parallel, and cases in which they occur interchangeably. In the following sections, each of these cases is presented separately. (More, and more intricate, examples of the interaction between metaphor and metonymy in expressions may be found in Gevaert 1994 and Feyaerts 1997.)

3.2 Consecutive interaction of metaphor and metonymy

A consecutive interaction between metaphor and metonymy occurs when one of the motivational links in the semantics of the composite expression involves a sequence of two semantic extensions. A first example is presented in Figure 2, which contains an analysis of the compound *schapenkop*. Literally, the word means 'sheep's head' (and the word could actually be used in this sense, in contrast with some of the other compounds that we will analyze presently, in which the literal reading is not conventionalized). The derived reading of *schapenkop* is 'dumb person', and this reading seems to involve two steps: first, 'sheep's head' is metaphorically extended towards the reading 'a (human) head like that of a sheep, a stupid head', and second, a metonymical step leads to 'a person with a head like that of a sheep, a stupid person'. (The representation⁹ in Figure 2 can be completed on the bottom level of the prism, but that is a step that will be taken in section 3.3.)

- Figure 2 -

- 1 Sheep's head
- 2 Sheep
- 3 Head
- 4 (Human) head like that of a sheep
- 5 Stupid person

A similar consecutive combination occurs in an idiomatic expression such as *groen achter de oren zien*. Literally, the reading is 'to be green behind the ears', which is then metaphorically interpreted as 'to be young' (as if people are like fruit that have a green color in the first stage of their existence, before they reach maturity). As with

so many other expressions indicating young age, the expression next receives a further extension to the reading 'inexperienced, naïve'.

We may also note that the consecutive sequence need not always involve an alternation of metaphor and metonymy. In an example like *hanglip*, for instance, two consecutive metonymical steps may be identified. The literal reading is composed of the noun *lip* 'lip', and the verbal stem *hang* 'to hang'; the literal reading can therefore be paraphrased as 'hanging lip'. A first metonymical extension (involving the metonymical relationship between a specific feature and the bearer of that feature) leads to 'a person with a hanging or protruding (lower) lip'. A second metonymical extension (involving the metonymical relationship between a typical effect and the usual cause of that effect) leads to 'an unhappy, sulky, pouting person'.

3.3 *Parallel presence of metaphor and metonymy*

A parallel presence between metaphor and metonymy occurs when there is a difference in type among the different motivational links that occur in the semantics of a composite expression. If, for instance, the motivational link at the top level of the prismatic structure is metaphorical and one of the links at the lower level is a metonymical one, metaphor and metonymy work in parallel to produce the derived reading of the expression, or at least, both a metaphorical and a metonymical path could be reconstructed to arrive at the derived reading.

As an initial step, let us complete the picture for *schapenkop*. At the bottom level of the prismatic structure, the intermediate reading 'a (human) head like that of a sheep, a stupid head' can be considered isomorphic: the *kop*-part does not undergo a semantic change, and the 'sheep-like' reading is related by metaphorical similarity to the original reading of *schaap* 'sheep'. The ultimate reading 'stupid person' maintains the isomorphism: there is a metaphorical link from 'sheep-like' to 'stupid', and there is a conventional part/whole-metonymy linking 'head' to 'person'. (For instance, *de koppen tellen* 'to count the heads' is a conventional expression for 'counting the individuals in a group'.)

- Figure 3 -

- 1 Sheep's head
- 2 Sheep
- 3 Head
- 4 Sheep-like
- 5 Head
- 6 (Human) head like that of a sheep
- 7 Stupid
- 8 Person
- 9 Stupid person

The example shows that the motivating links at the bottom level of the prismatic structure need not be the same as the ones at the top level: the identity link is absent at the upper level. In some cases, then, we get an alternation between metaphorical and metonymical links. A case in point is the expression *in de stront zitten*, which may be analyzed as in Figure 4.

- Figure 4 -

- 1 To sit in the shit
- 2 To sit (in)
- 3 Shit
- 4 To be in great trouble
- 5 To be situated (in), to be characterized (by)
- 6 Trouble, unpleasant things

The top level shift is a metonymical one of the cause/effect-type: if you are literally surrounded by excrements, you are typically in an unpleasant, troublesome situation. At the bottom level, however, the motivational links are of a metaphorical type. *Zitten* 'to sit' is a conventional metaphor for 'to be characterized by, to experience': *dat zit goed* 'that sits well' means as much as 'that is okay', and *in moeilijkheden zitten* 'to sit in difficulties' equals 'to have, to experience difficulties'. *Stront* is likewise a conventional expression for anything extremely nasty.

As a slightly more complicated example, let us consider *droogkloot* 'boring person, bore', which can be analyzed as in Figure 5.

- Figure 5 -

- 1 Dry testicle
- 2 Dry
- 3 Testicle
- 4 Person with dry testicles
- 5 Boring person
- 6 Lifeless, dull
- 7 Unworthy man

The compositional literal reading 'dry testicle' is the basis for a *roodhuid*-type extension, yielding the possessive compound 'person with dry testicles'. This reading, however, is itself the input for a further metaphorical extension, leading to the 'boring person' sense. At the same time, the derived reading is isomorphic: the aspect 'boring' correlates with the 'adjective *droog*, and the aspect 'man, person' correlates with the noun *kloot*. Such an isomorphic analysis is further supported by the motivational link between the initial and the derived readings of the constituent parts. *Droog* is in fact conventionalized in the reading 'boring, dull, dreary' (*een droge klaas* is 'a tedious fellow', where *klaas* is originally a proper name), and *kloot* is a conventional derogatory expression for 'man'.

3.4 Interchangeability of metaphor/metonymy analyses

The prismatic model¹⁰ implies that the meaning of composite expressions may sometimes be construed in two different ways: from bottom to top and then from front to back at top level (which is undoubtedly the standard pathway) or conversely from front to back at bottom level, and then from bottom to top. The "non-uniqueness of semantic solutions" (to borrow the words introduced by Nunberg 1979 in a slightly different context) goes even further, if we can show that different prismatic analyses may - with equal or near-equal plausibility - be construed for one and the same expression. To the extent that such alternatives involve different configurations of metaphorical and metonymical motivational links, we shall say that we have interchangeable metaphor/metonymy.

Compounds pointing in this direction are the following. *Badmuts* literally means 'swimming cap' but is also used jocularly for a bald person. The shift can be analyzed

in two ways. Either 'swimming cap' leads metonymically to 'a person with a swimming cap' and from there by metaphorical similarity to 'a person who looks as if he was wearing a swimming cap, a bald person'. Or 'swimming cap' is directly metaphorized as 'a head that looks as if it is covered by a swimming cap, a bald head' and from there metonymically to 'a bald-headed person'. The reconstruction of the semantic process can go either way, and there is no principled way to favor one analysis over the other.

An example with an idiom rather than a compound is *over de rooie gaan* 'to go over the red one', in which 'the red one' is a red mark on a gauge indicating the point of maximal pressure. The derived reading 'to explode with anger' may be arrived at in either of the following ways. To go beyond the point of maximal pressure is the metonymical cause of a material, literal explosion (as when a boiler explodes), and the literal explosion can then be metaphorically used to conceptualize an emotional outburst. Conversely, the notion of crossing the point of maximal pressure may be directly metaphorized into the psychological domain ('go beyond the point of maximal emotional strain'), and this event may then causally (i.e. metonymically) lead to an outburst.

It should be clear that the alternatives need not always involve different sequences of metaphors and metonymies. It may also be the case, for instance, that two metonymies occur in alternative orders. *Zultkop* provides us with an example. Literally, it means 'head filled with or made from brawn'; the derived reading is again 'stupid person'. The consecutive steps could be from the literal reading to 'stupid head' via a metonymical link (the presence of brawn rather than brain is the cause of the idiocy), and from there to 'stupid person' via another metonymical link of the part/whole-type. Or the sequence might involve an initial part/whole-metonymy producing 'a person with a head full of brawn' and hence to 'stupid person' through the intermediary of the effect/cause-metonymy.

4. Metaphtonymy and prismatic semantics

Within the context of recent metonymy studies, there is an obvious link between the phenomena described above and the notion of metaphtonymy introduced by Louis Goossens in 1990*. The two types of metaphtonymy (i.e. interaction between metaphor and metonymy) distinguished by Goossens resemble the two basic

interaction types identified above: what Goossens calls *metaphor from metonymy* refers to a sequential operation of the two mechanisms that can be linked to the consecutive type described in section 3.2, and what Goossens calls *metonymy within metaphor / metaphor within metonymy* can be associated with the simultaneous, parallel type of interaction described in section 3.3 of the present article. But how far exactly does the correspondence go ?

Goossens introduces metaphor from metonymy by referring to the polysemy of *giggle*. The verb initially means 'to laugh in a nervous way', but this meaning can be used metonymically in a context like “*Oh dear*”, *she giggled*, “*I’d quite forgotten*”, in which *giggle* comes to mean 'say while giggling'. A further extension towards 'to say as if giggling' then constitutes the 'metaphor from metonymy' reading. Whereas the consecutive operation of a metonymical and a metaphorical shift links up with the cases discussed in section 3.2, it will also be clear that the approach in the present paper has a wider scope than Goossens's. We have identified not just successions of metonymies followed by metaphors, but we have illustrated a larger variety of sequences: metaphors followed by metonymies, metonymies followed by metonymies, etc. From a broader point of view, it is important to realize that neither our 'consecutive interaction of metaphor and metonymy' nor Goossens's 'metaphor from metonymy' can be considered real innovations in the context of lexical semantics. The recognition that mechanisms of semantic extension such as metaphor and metonymy may operate in succession (and in fact, in series with multiple steps) is a natural and time-honored one in diachronic semantics (cp. Geeraerts 1997). What is being added to that idea in the prismatic model described above, is precisely the importance of a second dimension for an adequate description of composite expressions.

As to Goossens's 'metonymy within metaphor', it involves cases like *catch someone's ear* 'ensure someone's attention'. Such examples (which invariably involve idiomatic expressions rather than single lexemes) receive a straightforward interpretation in the context of the model sketched in the present paper, as can be gathered from the analysis in Figure 6.

- Figure 6 -

- 1 Take hold of someone's organ of hearing
- 2 Take hold of, capture
- 3 Organ of hearing
- 4 Force to listen, obtain the attention
- 5 Attain, obtain
- 6 Attention

The literal meaning 'take hold of someone's organ of hearing' is metonymically extended to 'to obtain someone's attention'. Goossens basically sees a metaphorical shift at the level of the expression as a whole, but at the same time allows for a metonymic interpretation. In the context of the prismatic model, the metonymic interpretation would seem to be more plausible: materially taking hold of someone's ear is metonymically conceptualized as a cause (or at least, a contributing factor) for getting someone's attention. At the same time, there is indeed a metaphorical aspect to the expression, but it involves the development of *catch* at the bottom level of the two-dimensional structure: the verb undergoes a metaphorical shift from a material to an immaterial reading. To be sure, non-uniqueness surfaces again, to the extent that it could also be said that obtaining something is the result of taking hold of it (and of course, the relationship between action and result, or cause and effect, is a metonymical one). *Ear*, finally, is metonymically linked to the notion of attention: the hearing organ is one of the media for channeling a person's attention.

In the light of this analysis, the advantage of the prismatic model can be defined as follows: it draws the attention to the fact that the more specific semantic development is not restricted to one of the constituent parts (as might be suggested by Goossens's examples) but actually has to be determined for all of them.

At least for composite expressions, then, the prismatic model appears to have a wider scope than the notions introduced by Goossens, specifically because it allows for other sequences than just metaphor from metonymy. More importantly, the model combines the intuitions behind 'metaphor from metonymy' and 'metonymy within metaphor' / 'metaphor within metonymy' by bringing the two relevant aspects of the development of composite expressions together: on the one hand, the semantic development of the expression as a whole, on the other, the role of the constituent

parts of the expression and their independent development. The model thus allows for a uniform and more detailed description of the semantics of composite expressions.

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Figure 1

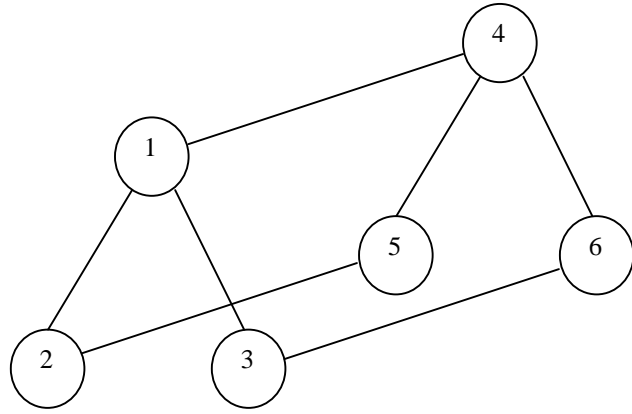


Figure 2

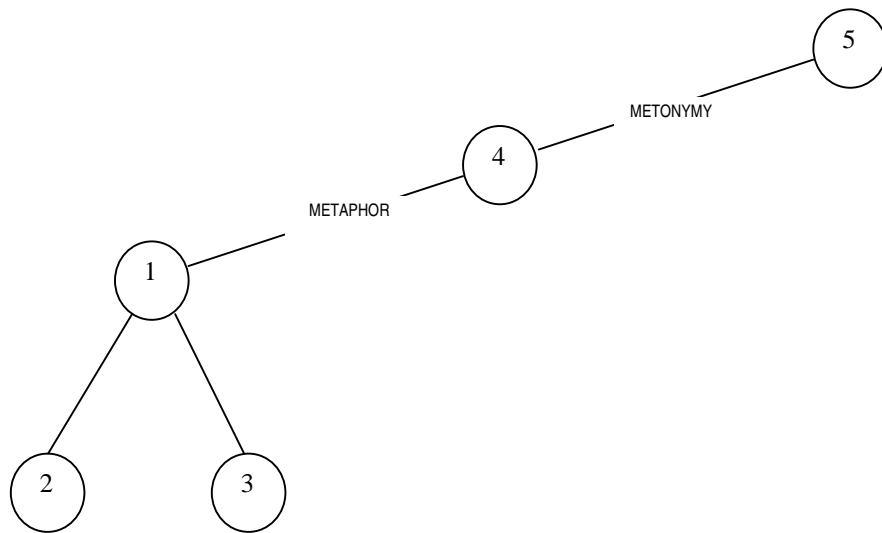


Figure 3

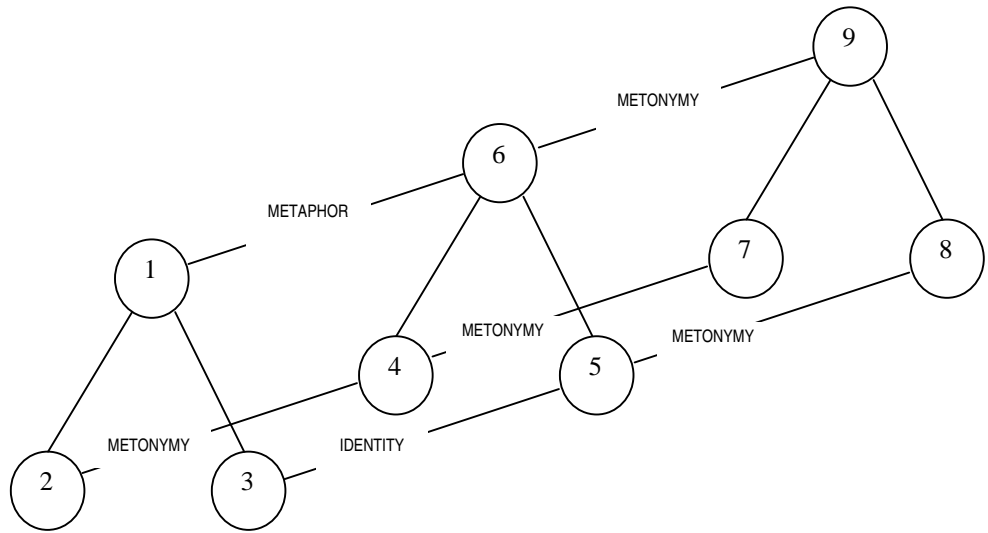


Figure 4

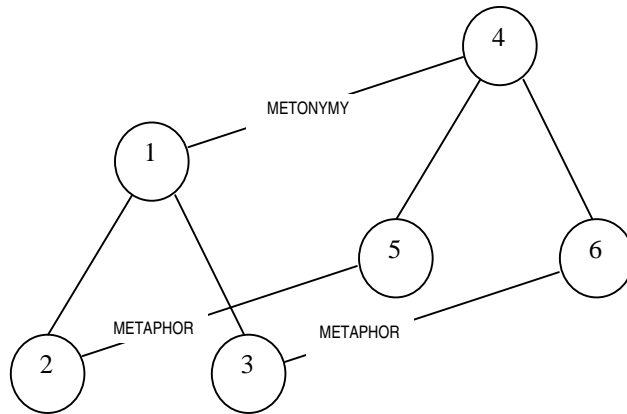


Figure 5

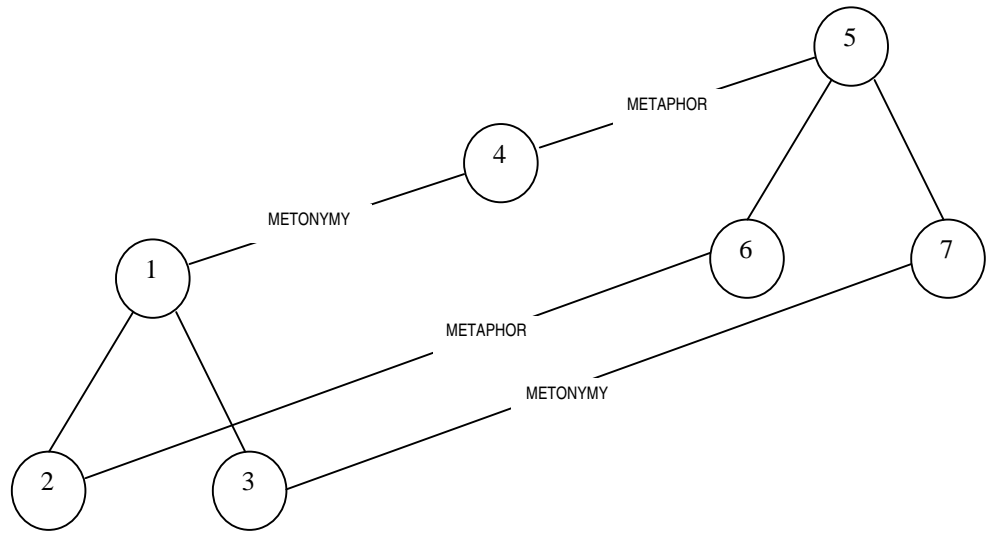
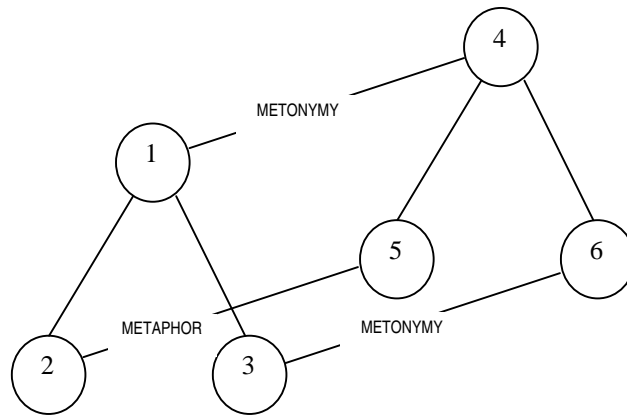


Figure 6



Notes

¹ In the Saussurean tradition, syntagmatic relations involve associations between linguistic expressions that exist *in presentia*, whereas paradigmatic relations involve associations that exist *in absentia*. In an expression like *dames en heren*, for instance, the association between *dames* and *heren* is realised in the expression *dames en heren* itself. The semantic association between *dames* 'ladies' and *vrouwen* 'women', on the other hand, exists even if it does not show up explicitly in the expression being used as such. Paradigmatic relations may be of various sorts; they do not just include semantic associations of the type just mentioned, but also morphological relations between a lexical base and the derivatives or compounds in which it features. Among the semantic paradigmatic associations, metaphor traditionally features prominently (see a.o. Jakobson 1971:74, *XXX); note that in this case, the association exists not between different words, but between two readings of the same word. The paradigmatic relations that will be envisaged in this paper are precisely of the kind illustrated by metaphor: semantic associations between different readings of one linguistic expression. Apart from metaphor, the relevant associations involve semantic relations like metonymy, generalisation, and specialisation.

² The bottom-up interpretation is present in quotations like the following: 'Whatever linguistic meaning is, there must be some sort of compositional account of the interpretation of complex expressions as composed from the interpretations of their parts and thus ultimately from the interpretations of the (finitely many) simple expressions contained in them and of the syntactic structures in which they occur' (Chierchia & McConnell-Ginet 1990:6).

³ In most work in the tradition of Cognitive Semantics, the concept of motivation is used in a slightly broader way than the way in which it is defined here. In Lakoff (1987) and related work, for instance, 'motivation' involves the principles that explain (or make plausible) why a particular linguistic expression means what it does. The concept is explicitly introduced as an alternative to the more traditional notion of predictability: even if meanings are not entirely predictable, they may be motivated by existing tendencies and schemata. The distinction that is drawn here between 'motivation' and 'isomorphism' tries to be more specific about the general concept of motivation by distinguishing between its syntagmatic and its paradigmatic form. The concept of 'isomorphism', on the other hand, links up with existing work within the Cognitive tradition relating to the iconicity of grammar (see e.g. Haiman 1980). Isomorphism as used here is a form of iconicity to the extent that features of meaning (in particular, its complex nature) are reflected by features of the linguistic form (*viz.*, its composite nature).

⁴ The question might be asked how we can put *koe* as interpreted in the figurative context into correspondence at all with *koe* as interpreted in the literal plane. On the one hand, we would still be willing to say that *koe* 'problem' corresponds with *koe* 'cow'. But on the other hand, there is no associative semantic link from 'cow' to 'problem'. So can we say at all that *koe* maps onto 'problem' ? What is there to stop us from mapping *bij de horens vatten* onto the 'problem' part of the idiomatic reading of the expression ? In this particular instance, of course, the link between *vatten* 'to seize (literally)' and the figurative reading 'to tackle' is not unmotivated, and hence, by elimination, *koe* is easily mapped onto 'problem'. But even if this paradigmatic link between both interpretations of *vatten* were to be just as untransparent as that between 'cow' and 'problem', the syntactic structure of the expression (as interpreted literally) would favour a figurative interpretation of *koe* as a noun, and one of *vatten* as a verb. This would seem to lead to the conclusion that there is *always* some paradigmatic link at the bottom of the prism between the literal readings of the constituent items and their figurative interpretation: at the very least, the literal reading would motivate the figurative reading because the latter is consistent with the word class of the former. In principle, such a weak form of motivation can be accounted for by accepting degrees of motivation; it will be made clear further on in the text that this is a useful step to take in any case. Empirically speaking, however, it remains to be seen whether figurative readings are always consistent with the word class of the constituent elements of the literal expression. (Notice that at least in the realm of morphology, reinterpretative processes may violate the initial syntagmatic structure: the isomorphically metanalytic reanalysis of *hamburger* as *ham + burger* violates the initial formal structure.)

⁵ The representation in Figure 1 might be adapted to take into account degrees of motivation by drawing thicker or thinner lines, or by attaching a numeric weight to them.

⁶ The reinterpretation processes mentioned in this paragraph constitute one kind of proof of the cognitive reality of the semantic structure embodied in the prismatic model of Figure 1. Other kinds of support for the validity of the model will have to be explored in further research. Two main alternatives have to be envisaged. First, psychological investigations (involving on-line processing tasks, or on the basis of questionnaires) may be invoked to establish the psychological reality of a specific analysis. Second, synchronic linguistic phenomena (rather than the diachronic reinterpretation processes mentioned here) may point to the structural importance of the model. Consider, for instance, the possibility of incorporating anaphoric elements in the expression. As a working hypothesis, it would seem

that only those idioms that are isomorphic on the figurative level allow for the introduction of anaphoric demonstrative pronouns referring to a previous instantiation of the figuratively interpreted concepts. In this way, it is quite plausible to have a sequence like the following: 'Then came the problem of formatting the text according to the style sheet. To take this bull by the horns appeared to be much more difficult than applying the revisions required by the editors'. Because *bull* maps onto 'the problem' that is to be tackled, *this* may be introduced to refer to a previous identification of that problem. In the case of *met de handen in het haar zitten* 'to sit with one's hands in one's hair > to be at one's wit's end', however, the absence of a clear interpretation for *handen* in the idiomatic context makes sequences like the following: 'Toen moesten er camera-ready kopieën van de figuren gemaakt worden. Met deze handen in het haar te zitten bleek veel erger dan het schrijven van het oorspronkelijke artikel geweest was (Then came the problem of producing camera-ready figures. To sit with these hands in one's hair appeared to be much more taxing than writing the original paper had been)' rather implausible. This is, to be sure, just an example of the type of phenomena to be studied, but it illustrates how additional evidence for the linguistic reality of the prismatic model may be sought.

⁷ An example of a reinterpretation of compounds is provided by the element *scharrel-*, the verbal stem of *scharrelen* 'rummage about, scratch, scrape'. From the compound *scharrelkip* 'free-ranging chicken' it is extrapolated to compounds like *scharrelei* 'an egg of a free-ranging chicken': *scharrel-* is reinterpreted as 'produced by biological farming'.

⁸ There might be some discussion with regard to this specific case: it could perhaps also be considered a generalization. Examples of competing and interchangeable motivations will be discussed explicitly further on in the article.

⁹ In Geeraerts & Bakema (1993), the prismatic representation of compounds looks slightly more complicated than in the representation used here. For instance, the compositional reading 'sheep's head' would be analyzed as a specialization of a more general reading 'head having something to do with sheep'. The motivation behind this approach is the underdetermination of compounds. *Schapenkop* could in fact mean many things: a sheep's head, but also 'a head with a talent for or a specific interest in sheep' (just like a *studiekop* is 'a bright head, a head with a talent for or of a specific interest in study'). The construction of nominal compounds in Dutch does not formally differentiate between the possessive reading and the alternatives; by contrast, the syntactical construction of idiomatic expressions is much more specific as to the semantic role of the constituent parts. This underdetermination of a

compound XY can be expressed by merely defining the initial compositional reading as 'a Y that has something or other to do with an X'. The next step is then invariably a semantic specialization yielding specific readings like 'a sheep's head' or 'a head with a talent for or a specific interest in sheep'. In the present article, this complication at the front end of the prismatic diagrams for compounds has not been included, because it does not add very much to the line of thought that is relevant in this text.

¹⁰ It may be useful to point out that the 'prismatic model' is a *model* precisely because it involves a certain degree of abstraction: the semantics of the composite expressions is rendered in a schematic way (in the sense, for instance, that the number of constituent elements is systematically reduced to two).