1. Introduction

Metaphor has been regarded as a special phenomenon of language at least since the term was coined in ancient Greece. *Metaphora* is derived from *meta-*, ‘beyond’ and *phora*, which is derived from *pherein*, ‘to carry’. In the original, etymological sense *meta–phor* refers to a kind of movement from one thing to another. The idea that two aspects are involved in metaphor has remained important in many subsequent theories, and is often explicitly formulated in terms of a ‘from … to …’ expression. Although it is in principle impossible to give even a quasi theory-neutral definition, metaphor can be defined in very general terms as a way of expression, in language or any other semiotic system, in which one ‘meaning’ or ‘thing’ is described as or looked...
upon in terms of another ‘meaning’ or ‘thing’. For instance, in the following example, the dismissal of employees is described as an action of sweeping them out:

(1) All the senior managers will be *swept out*.

From Aristotle to the 20\textsuperscript{th} century, a large number of theories of metaphor have emerged, which, on a general level, vary according to the overall disciplinary perspective from which metaphor is looked at. On a more specific level, within the boundaries of one discipline, the conception of ‘metaphor’ is further based on how one theorizes and delineates the ‘scene’ in which metaphor is regarded to play a role (if it is seen as having a role at all). Metaphor has received attention in virtually all disciplines which have a hermeneutic basis, including philosophy, linguistics, literary theory, anthropology, sociology (including political theory), psychology (including pedagogy), informatics (especially artificial intelligence) and psychiatry.

This paper focuses on the conception of metaphor in linguistics (the primary theoretical niche of the *Handbook of Pragmatics*), and, to a lesser extent, philosophical theories of metaphor (philosophy being the first field in which metaphor came to be looked at).

In the linguistic study of metaphor as a whole, two general aspects are important: (i) types of metaphors, i.e. the recognition and classification of different categories of metaphors as *linguistic expressions*; and (ii) theories of metaphor, i.e. the definition and explanation of metaphor as a *linguistic process*. This paper focuses on the first aspect, since extensive treatments of the different ways in which metaphors can be classified are relatively rare in the literature on metaphor, while distinctions and relations between theoretical frameworks have often been highlighted (cf. below), albeit not often in a comprehensive manner.\textsuperscript{2}

This paper is organized as follows. In section 2, the variation between major types of linguistic approaches to metaphor will cursorily be looked at. Section 3, which forms the greater part of this paper, discusses a number of different classifications of metaphor. After this discussion, these typologies of metaphor are placed in a larger framework explaining the variation between them (§ 4). The paper ends with a summary of a number of further issues which have come to be highlighted in relation to specific types of metaphors, or in relation to particular perspectives on the classification of metaphor types (§ 5).
2. Theories of metaphor

Within linguistics, the theoretical ‘scene’ in which metaphor is contextualized is what may be referred to as ‘lingual meaning’ in the broadest sense. Hence, linguistic theories of metaphor differ according to their underlying (explicit or assumed) basic theory of ‘meaning’, especially their conception of the delineation of and interaction between various levels of ‘meaning’ (such as, linguistic vs. extra-linguistic, semantic vs. pragmatic, propositional vs. pre-propositional, lexical vs. conceptual). Onto this underlying theory of ‘meaning’ is grafted [i] the general definition of metaphor (and the concomitant question whether metaphor is to be regarded as a special phenomenon at all); and [ii] the explanation of how metaphorical meaning arises and is understood in linguistic communication. In this section, three major types of linguistic theories of metaphor will briefly be discussed (§§ 2.2–4).

2.1. Metaphorical meaning as relational: Interaction-organization theories

One type of theory of metaphor which is not strictly linguistic but which needs to be mentioned in this brief overview because of its foundational role in twentieth century metaphorology as a whole, is Richards’ and Black’s “interaction-organization theory”. As has been indicated in the introduction, a metaphor necessarily involves ‘two aspects’. The philosopher Ivor A. Richards has been the first to name these two aspects: he called the word/expression indicating the metaphor, or the word which is used with a metaphorical meaning, the vehicle, while the “underlying idea” was termed the topic of the metaphor (Richards 1971 [1936]). In example (1) above, the expression used metaphorically, i.e. sweep out in its metaphorical sense, is the vehicle, whereas the new sense of the of the expression, viz. the meaning of ‘dismiss’ as represented in a new way by the vehicle sweep out, indicates the topic of the metaphor.

Richards’ ideas were further developed by Black (1962 [1954]), who further emphasized the (conceptual) interaction between vehicle and topic. Conceiving of both aspects in a broad way as systems of ideas and associations, Black specified this interaction as a projection of the vehicle onto the topic, by which the topic comes to be “seen through” a lens formed by the vehicle, and by which a similarity is created between topic and vehicle.
The specification of the two aspects of metaphor, and furthermore the conception of the relation between topic and vehicle as dynamic opened up various possibilities for further theorizing this relationship in subsequent theories of metaphor developed in the latter half of the twentieth century.

2.2. Metaphorical meaning as transferred and/or second-order meaning:
Semantic theories

The first linguistic theories of metaphor which emerged in the 1960s were semantic theories. In the initial proposals for a linguistic treatment of metaphor developed in the framework of generative grammar, metaphor was accounted for in terms of componential semantics: it was seen as being based on a transfer of semantic features from a vehicle to a topic (cf. e.g. Bickerton 1969, Matthews 1971). A more recent theory of metaphor which takes a componential semantic approach is Levin’s (1977, 1988).

Outside the framework of componential semantics, the semantic properties which are seen as being transferred from a vehicle to a topic in a semantic view in general can be defined in different alternative ways, viz. as aspects of the intension of an expression (including connotation) (Beardsley 1958), aspects of gestalts (Reddy 1969), aspects of the extension or reference of expressions (Sanders 1973: “empirical features”). Kittay (1987) proposes a semantic account of metaphor which is based on the theory of semantic fields: in this approach, aspects of the semantic field of a vehicle term are transferred onto a topic term, and in this way, a second-order meaning is created.

Recent semantic treatments of metaphor include Leezenberg’s (2001) theory of metaphor based on indexical semantics (see also Stern 2000) and Steinhart’s (2001) approach based on possible world semantics.

2.3. Metaphorical interpretation as intentional: Pragmatics

In pragmatic perspectives on metaphor, the creation and interpretation of metaphor is defined and explained in terms of the interactants’ communicative intentions. In pragmatic approaches in general, metaphor is accounted for at the level of utterance meaning (or speaker’s meaning) as opposed to sentence meaning. The nature of a metaphorical utterance meaning has however been explained in various ways. A
number of authors (e.g. Mack 1975, Loewenberg 1977) deal with metaphor in the framework of *speech act theory*, and propose to conceive of metaphor as a type of *speech act*. In the framework of Grice’s theory of the *Cooperative Principle*, metaphor is treated as a specific type of *conversational implicature* (Grice 1989: 34), whereas in the framework of Sperber & Wilson’s *Relevance Theory*, metaphor is theorized as a type of *loose language* use (Sperber & Wilson 1986: 170).

### 2.4. Metaphor as conceptual mapping: Cognitive linguistics

The cognitive (or conceptual) theory of metaphor, which was launched in 1980 by Lakoff & Johnson and which has come to be referred to as the ‘conceptual metaphor theory’, focusses not on the linguistic expression of metaphors, but rather on the conceptual-semantic metaphors underlying such metaphorical expressions. Conceptual metaphor, in this framework, is defined as a mapping of the conceptual structure of a donor domain (or source domain) onto that of a recipient domain (or target domain). Three major premisses of the cognitive theory of metaphor are (i) the belief that all human meaning is embodied in experience (experientialism); (ii) the view of conceptual metaphor as a type of gestalt structuring and (iii) the postulate that the majority of conceptual metaphors are highly systematic in nature. Below, each of these dimensions of the cognitive theory of metaphor will first be looked at in turn, and will then illustrated by means of a large-scale, complex conceptual metaphor called the Event Structure metaphor.

(i) **The embodiment of meaning: Image schemata.** A basic type of metaphor in the cognitive approach is the image-schematic gestalt structuring. An *image schema* is defined by Johnson (1987: 29) as “a recurrent pattern, shape, and regularity in, or of, [our] ongoing ordering activities”. It is held that in the world’s languages, abstract concepts are structured in terms of spatial relations by a relatively small number of ‘primitive’ embodied schemata such as CONTAINER (PART-WHOLE), SOURCE-TARGET, CONTACT, FORCED MOTION. This thesis is also referred to a the “spatialization of form” hypothesis (cf. Lakoff 1987). Some examples of metaphorical expressions which in cognitive linguistics are explained in terms of image schematic mappings are given in (2)–(4). (4) illustrates a particular sub-type of image schematic metaphor, *viz. orientational metaphor* (based on the image schema UP-DOWN).
(2) AN ARGUMENT IS A CONTAINER

   a. Your argument doesn’t have much content.
   b. Your argument won’t hold water.
   c. I’m tired of your empty arguments.

(3) AN ARGUMENT IS A JOURNEY

   a. This observation points the way to an elegant conclusion.
   b. When we get to the next point, we shall see that philosophy is dead.
   c. We will proceed in a step-by-step fashion.

(4) HAPPY IS UP; SAD IS DOWN

   a. You’re in high spirits.
   b. My spirits rose.
   c. I’m feeling down.

(ii) The conceptual nature of metaphorical mappings. Metaphor is regarded as a type of gestalt structuring. In other words, the conceptual structure of a donor domain is mapped onto that of a recipient domain, or, a recipient domain is understood in terms of the conceptual organization of a donor domain. In one common type of metaphor which Lakoff & Johnson call structural metaphor or complex metaphor, this means that multiple aspects of a donor domain are mapped onto a recipient domain. These aspects can be of two kinds: the metaphor can highlight and/or create ontological correspondences between a donor concept and a recipient concept, or it can focus on epistemic correspondences or entailments, which map knowledge inferences from the donor domain onto the recipient domain (cf. Lakoff 1990: 48ff). Table 1 illustrates both types of correspondences as specified in a cognitive treatment of the conceptual metaphor LOVE IS A JOURNEY. Metaphors which highlight ontological correspondences between donor and recipient domains are also called sub-mappings of a conceptual metaphor. For instance, BEING IN THE SAME LOVE RELATIONSHIP IS TRAVELLING IN THE SAME VEHICLE is a sub-mapping of the metaphor LOVE IS A JOURNEY.
The structural conceptual metaphor **LOVE IS A JOURNEY** is exemplified in expressions such as the following:

(5) **LOVE IS A JOURNEY**  
  a. Look *how far we’ve come*.  
  b. It’s been a *long, bumpy road*.  
  c. We may have *to go our separate ways*.  
  d. The relationship isn’t *going anywhere*.

(iii) **Inheritance: Generic vs. specific metaphors.** While, in a cognitive treatment of metaphor, single metaphorical expressions can be seen as instances of a certain structural metaphor, highlighting one or more of its ontological or epistemological correspondences (cf. Lakoff 1990: 48f.), various metaphorical mappings can also be systematically linked to one another, and can be described as being part of a more general mapping. Lakoff (1993: 222) argues that metaphorical mappings “are sometimes organized in hierarchical structures, in which ‘lower’ mappings in the hierarchy inherit the structures of the ‘higher’ mappings”. Such hierarchical structures of metaphorical mappings are called *inheritance hierarchies*. The highest metaphor in an inheritance hierarchy is formulated at a very general level, and is hence defined as a *generic-level metaphor*. Examples of generic metaphor are a
PURPOSEFUL LIFE IS A JOURNEY and LIFE IS A POSSESSED OBJECT. A number of more specific conceptual metaphors can then be seen as instances of these two types: LIFE IS A COMMODITY, A CAREER IS A JOURNEY. These mappings will be further specified and illustrated below, in dealing with the Event Structure metaphor.

(iv) The Event Structure metaphor. A generic, complex and highly systematic type of metaphor which has received much attention in cognitive studies of metaphor, is the Event Structure metaphor. One dimension of its systematic nature is its hierarchical organization: the Event Structure metaphor refers to a complex of metaphorical mappings, comprising a limited number (two) of generic-level metaphors, and a larger variety of more specific mappings which inherit the internal structure of these generic metaphors. The organization of the Event Structure metaphor in terms of an inheritance hierarchy might be referred to as its vertical systematicity. Cross-cutting this dimension of inheritance is another dimension of systematicity, which has been called duality: at the most generic level, there is a variation between two alternative generic donor domains which may organize the conceptual structure of EVENTS, viz. MOVEMENT VIS-À-VIS LOCATIONS and POSSESSION OF ENTITIES. Metaphors based on these different generic donor domains are referred to as duals. Figure 1 gives an overview of the Event Structure metaphor as dealt with in cognitive linguistics.
The following examples serve to illustrate various aspects of the Event Structure metaphor (from Lakoff 1990, 1993):

(6) Sub-mappings: STATES ARE LOCATIONS VS. STATES ARE POSSESSIONS:
   a. I’m in trouble.
   b. I have trouble.

(7) Sub-mappings: CAUSES ARE FORCES VS. CAUSES ARE FORCES CONTROLLING THE POSSESSION OF OBJECTS:
   a. The stock market crash brought about political instability.
   b. The noise gave me a headache.
(8) **Sub-mappings: Purposes are destinations vs. purposes are desired objects**

a. We’re going nowhere with this.

b. We got it.

(9) **Specific metaphor, level 1, location: A purposeful life is a journey**

a. He’s *without direction* in his life.

b. I’m *at a crossroads* in life.

(10) **Specific metaphor, level 1, possession: Life is a possession**

a. He *lost* his life in an accident.

b. I regret that I *have* but one life to give for my country. (both from Lakoff & Turner 1989)

(11) **Specific metaphor, level 3, location: A career is a journey**

a. He’s *climbing* the corporate *ladder*.

b. He *clawed his way to the top*.

(12) **Specific metaphor, level 3, possession: A career is a possession**

a. I’m *hunting* for a job.

b. They just *handed* him the job.

(v) **Conceptual blending.** In the theory of conceptual blending (also referred to as conceptual integration), which was developed by Fauconnier and Turner (1996, 1998, 2002, Turner & Fauconnier 1999), metaphor is placed in a more general framework comprising a number of other linguistic/conceptual phenomena. In this approach, metaphor is explained in terms of an integration of two or more ‘mental spaces’ (see Fauconnier 1994/1985). See Grady et al. 1999 on the relationship between the original theory of conceptual metaphor proposed by Lakoff and Johnson, and the more recent theory of conceptual blending.
3. Typologies of metaphor

The various classifications of metaphor types which have been advanced in philosophical, linguistic and literary studies illustrate the multi-dimensional nature of metaphor as a phenomenon of language. Dimensions which have been focussed on in classifying metaphors include, for example, their status vis-à-vis the lexico-grammatical system of a language, their lexico-grammatical realization or encoding, their scope (which, in itself, can be interpreted in various ways, as we will see below), the meanings which are involved as donor and recipient domains. Figure 2 proposes a theoretical matrix by which the variation between typologies of metaphor can be understood.

Figure 2: Different types of classifications of metaphor placed in a larger framework
Summarizing and re-interpreting a number of different classifications of metaphor, Goatly (1997: 253) organizes the variation between metaphors in terms of five “metaphorical clines”. These clines have been incorporated in Figure 2 (viz. conventionality, similarity, contradictoriness, explicitness and marking), together with additional classifications. In this section seven major types of classifications of metaphor will be discussed. Figure 2 will initially serve as a general overview for this discussion.

3.1. Degree of conventionality

Tokens of metaphor can be placed on a scale of conventionality. The two extremes on this scale are generally referred to as live metaphor and dead metaphor. Dead metaphors (or conventionalized metaphors) in a particular language are metaphors which have been conventionalized, i.e. lexicalized, in that language, and hence have become unmarked members of the vocabulary of that language, i.e. they have become conceptually entrenched (cognitive linguistics, cf. e.g. Grady et al. 1999: 106). Any metaphoricity in their sense is only relevant in a diachronic or etymological perspective. At the farthest end of conventionality, one finds lexemes which, in the current state of the language, do not have a metaphorical and a non-metaphorical sense. Examples in English include, on the one hand, lexemes which derive from older languages, and whose original metaphorical sense is only clear in the non-English original word, as in chapter (from Latin caput ‘head’) or the word metaphor itself (from Greek metaphor a ‘movement beyond’). On the other hand, dead metaphors in English can be native Germanic words in which the original, metaphorical sense has become obsolete. For example, daisy has been derived from an Old English compound meaning ‘day’s eye’ (cf. Klein 1971). Further examples of dead metaphors are polysemic expressions with a more literal sense and a more metaphorical sense, but where the metaphorical sense is completely conventionalized, as in current, referring to a flow of a liquid, or (more metaphorically) to a flow of electricity, or grasp, which can refer to the physical holding of an object, or, metaphorically, to the comprehension of an idea. (See also § 5 below on grammaticalization.)

Live metaphors (or active metaphors, creative metaphors, novel metaphors) are ad hoc metaphors, which are newly created by a speaker and have to be understood in
a particular context. Most of live metaphors remain one-time expressions, i.e. they do not find their way into the vocabulary of a language. An example is given in (13) (from Goatly 1997: 35):

(13) The kidneys are the body’s sewers.

Live metaphors often have the purpose of providing a new, inventive or unique perspective on something. Specific sub-types of live metaphors are therefore distinguished on the basis of this type of purpose, such as poetic metaphor (or more broadly, literary metaphor), or educational metaphor (example (13) used in the context of a biology class).

Various other types of metaphor have been distinguished to further subdivide the large area in between ‘live’ and ‘dead’ metaphors. One such more fine-grained classification is offered by Goatly (1997: 32ff).

3.2. Degree of tension and degree of contradictoriness

Tokens of metaphor can be placed on a scale according to the degree of semantic or conceptual tension which holds between their donor and recipient domains. This degree of tension depends on the degree of resemblance or similarity between the two domains united in a metaphor. Elaborating a distinction originally proposed by Wheelwright (1962: 72ff), MacCormac differentiates between epiphors, or metaphors which build upon a perception of similarity between a recipient concept and a donor concept (they are metaphors which “arise from an apperception”, in Ricœur’s (1994: 195) terms); and diaphors, or metaphors which suggest or create a similarity.

The criterion of tension or resemblance has be interpreted in two ways, depending on the level of theoretical abstraction from which the phenomenon of metaphor is looked at. In one perspective, which is the more absolute of the two, the scale of tension or resemblance coincides with the scale of conventionality (§ 3.1). In this view, the ‘creation of a new perception of similarity’ is conceived of in its most absolute sense, at the level of the actual, synchronic interpretation of (non-)metaphorical expressions by language users: it is only novel metaphors which can create a new perception of similarity. Hence, diaphors are for example the new metaphors which appear in scientific theories; or highly suggestive metaphors which are found in poetry.
In a more abstract view, which focuses on the semantic relationship between donor and recipient concepts, the scale of tension or resemblance is applied within the area of novel metaphors, or, alternatively, taking a diachronic perspective, is extended to conventional metaphors. This view is taken by Indurkhya (1992), who speaks of similarity-creating and similarity-based metaphors. In examples (14)–(16) (all novel metaphors), (14) and (15) illustrate less tensional metaphors (based on a straightforward perception of similarity), while (16) is more tensional (creating similarity):

(14)  
  a. Tears fell from the sky.  
  b. The sky was crying.  

(from Indurkhya 1992)

(15)  
  Dictionaries are goldmines.

(from Indurkhya 1992)

(16) Observe  
  the jasmine lightness  
  of the moon.  

(from W.C. Williams, “To a solitary disciple”, discussed in Lakoff & Turner 1989: 140–59)

3.3. Type of semantic relationship between donor and recipient

Special sub-types of metaphors have been distinguished according to the nature of the semantic relationship between their donor and recipient domains. What is at stake, in this perspective, is not the general degree of resemblance between donor and recipient (as in § 3.2 above), but rather, the more specific type of semantic relationship. At least four special types of donor–recipient relationships must be mentioned in this respect.

(1) **Contradiction.** Types of metaphor which are based on a relationship of contradiction between donor and recipient include paradox and oxymoron. A *paradox* is a type of metaphor in which the donor and recipient domains are opposite lexemes from the same semantic field, as in:

(17) the child is the *father* of man

A special type of paradox is an *oxymoron*, in which the semantic relationship of opposition is concentrated in one nominal expression rather than a predication. The paradox can be expressed in two contrastive adjectives modifying the same noun (18), or in an adjective which contrasts with the lexical semantics of the noun it modifies (19):
(18) a bitter sweet experience

(19) organized chaos

(2) Multi-modality. In synesthesia, the donor and recipient concepts belong to two different modes of sensory perception. Taking six basic human modes of perception as a starting point (HEARING, VISION, SMELL, TEMPERATURE, TASTE and TOUCH), there is a very large (but not unlimited) range of possible multi-modal combinations. From a study of 1269 synesthetic metaphors in English texts, Day (1996) has found that the most common pattern is HEARING is TOUCH (i.e. tactile sounds, accounting for 42% of the total number). This pattern occurs in conventional metaphors such as (20):

(20) a. soft words
    b. a harsh sound
    c. sweet music

Other common patterns of synesthesia are HEARING is TASTE (21) and VISION is TOUCH (22) (cf. Day 1996):

(21) The violin gave a sour sound.

(22) humid green

The following examples illustrate more complex, highly suggestive types of synesthesia as created in a literary text (Morgan 2002):

(23) But now when I thought of Monday, I saw red velvet, felt its warmth, tasted the corners of its softness.

(24) Hair as long as the sound of honey.

(3) Contiguity. In metonymy, the semantic relationship between the donor and recipient concepts is one of contiguity. In terms of the cognitive theory of metaphor, this can be explained as follows: one concept (the recipient) is represented by another concept (the donor), which is just one aspect associated with the first concept (i.e. the two concepts are con–iguous), but which, in the metonymic expression, comes to
stand for the first concept. Common examples of metonymy are AUTHOR IS WORK, where the name of an author is used to stand for his/her work (25); PLACE IS ACTIVITY, where the name of a place stands for an activity located at that place (26):

(25) He likes reading *Dickens*.

(26) She spent the whole night watching *Wimbledon* on TV.

As we will see further below (cf. § 5), there is no consensus about the relationship between metonymy and metaphors: metonymy is either perceived as a kind of metaphor (as in the approach taken in this overview), or it is regarded as a distinct type of construction which can be explained without referring to metaphor as a more general type of phenomenon.

(4) **Part-whole relationship.** A metaphor – or metonymy – in which the donor and recipient concept are related as part and whole, is referred to as *synecdoche*: in this type of metaphor, the part stands for the whole. A familiar type of synecdoche are expressions where parts of the body stand for people (PERSON IS BODY PART), as in the following:

(27) Many *hands* make light work.

(28) We need some new *faces* for the second phase of this project.

A synecdoche can be interpreted as a special type of metonymy, if one regards a part-whole relationship as a particular case of contiguity.

(5) **Classifications according to donor/recipient.** Metaphors in general can also be subdivided according to their donor domain or recipient domain. A specific type of metaphor which is termed on the basis of the former criterion is *personification*, in which concepts associated with persons come to construe non-human things. This type of metaphor is well-spread in conventionalized expressions while it also occurs in everyday live metaphors, and is equally very common in literary texts (especially fairy tales):

(29) a. the *face* of a watch
b. the foot of a mountain

c. the Head of Department

d. tablelegs

(30) a. The sky is crying.

b. The tree’s bark was wounded.

(31) “Who is it?” the wolf called softly.

3.4. Type of construction

In linguistic approaches to metaphor, a further significant parameter for categorizing sub-types of metaphor is the linguistic construction type by which they are realized in language. This ‘construction type’ can be specified on a number of levels and from different perspectives, the viewpoint one takes depending on the underlying theory of language (cf. § 2 above). In general, and hence also with reference to metaphor, construction types can be differentiated from two complementary vantage points: from semantics and from lexico-grammar. Below, each of these two perspectives will be looked at in turn, and for each of them, two specific types of classification will be distinguished.

(1) Construction type: Semantic perspectives. The semantic perspective has been prevalent in linguistic studies of metaphor (cf. § 2.2 above), and lies at the basis of the various semantic classifications dealt with in the previous section (§ 3.3). While the focus of these classifications is on the semantics of the donor–recipient relationship lying at the basis of metaphors, in the present section we are concerned with semantics of metaphorical constructions as linguistic means of expression. Metaphorical constructions have been semantically characterized and classified in various ways, according to the underlying definition of aspects of ‘linguistic meaning’ and the way in which the relationship between these aspects is theorized. The most important aspects which have been adduced as defining elements in semantic specifications of metaphorical construction are sense, extension vs. intension (or, sometimes, denotation vs. connotation) (lexical semantics), reference (of referring expressions) and truth-value (of predications) (truth-functional semantics).
■ **Intensional vs. extensional metaphor.** Eco (1983: 241) makes a distinction between intensional and extensional metaphor. The metaphoricity of intensional metaphors is manifest from the intension of their donor and recipient. For example, in (32), the defining property (or “meaning postulate” in Eco’s terms) ‘human’ which is part of the intension of girl contrasts to the property ‘non-human’, which is part of the intension of birch:

(32) The girl is a *birch.*

(from Eco 1983)

In extensional metaphor, according to Eco’s distinction, the metaphorical nature of the expression is not clear from a contradiction between the intension of a donor lexeme and a recipient lexeme; rather, it appears from the extension (understood as reference in Eco’s account) of the donor term. This type of metaphor is illustrated in (33), where the emperor is used to refer to an office manager:

(33) The *emperor* entered.

(from Eco 1983)

■ **Colligational vs. referential metaphor.** Goatly (1997: 111ff) makes a comparable distinction between colligational and referential types of metaphoricity. A colligational metaphor is a metaphor in which a donor term colligates unconventionally with a recipient term, while a referential metaphor is based on an unconventional reference of a donor term. In Goatly’s account, most tokens of metaphor are regarded as based on both colligational and referential unconventionality. For instance, in example (32) above (Goatly’s example is *John is a pig*), girl and *be a birch* colligate unconventionally, but the actual referent of birch in this expression, viz. the girl, is an unconventional referent for the lexeme birch. Other instances of metaphor are based on referential unconventionality only, i.e. their colligational pattern is of a conventional type. Goatly gives the following example:

(34) The building was a *barn,*

which is similar in this respect to example (33) above: in Goatly’s illustration, the building refers to a cathedral, and therefore, in his interpretation, the cathedral becomes an unconventional referent for a barn.
Although Eco’s and Goatly’s approaches are very similar, there is a difference in theoretical-semantic perspective. Eco’s classification of metaphors is based on the general distinction between intension and extension (interpreted as reference). In practice, it comes down to a contrast between metaphors based on the non-referential (intensional metaphors) vs. referential (extensional metaphors) use of nominal expressions. The latter type is parallel to Goatly’s referential metaphor, in which a referring expression has an unconventional (metaphorical) referent which, reference being inherently context-dependent, can only be interpreted in a specific context. The first type in Eco’s approach, viz. intensional metaphor, is limited to non-referential nominals occurring as predicates in ascriptive copula constructions of the type *The girl is a birch, John is a pig*. This is a common construction type for non-referential nominals (cf. Huddleston & Pullum 2002: 402), and, more importantly, in the contexts of Eco’s semantic classification of metaphors, this pattern is the most archetypical kind of construction in which an intensional property of a donor can metaphorically be ascribed to a recipient which may have a contrastive intensional property (cf. the contrasting properties ‘human’ vs. ‘non-human’ of the recipients and donors, respectively, in the two ascriptive examples just cited), precisely because the recipient is realized as the subject of the ascriptive copula construction. The upshot is that, due to its focus on the intension–extension contrast, Eco’s approach centres on nominals, and even more restrictively, with respect to one of his categories, nominals occurring in one specific construction type (viz. ascriptive copula constructions).

Goatly’s account is broader in this respect. His starting point is the occurrence of a metaphorical expression in a colligational pattern: metaphors can be based on an unconventional colligation of the donor lexeme with other constituents in the linguistic construction in which it occurs (which mostly results in unconventional reference of the donor term as well), and, if this is not the case, a further possibility is that the metaphor is solely based on unconventional reference of the donor term. Because of the central role of colligation, which is not solely based on lexical semantics (in contrast to the lexical intension–extension contrast) but also brings in grammar, Goatly’s account allows for a much larger variety of grammatically different metaphorical patterns. Further examples which are accounted for as colligational metaphors in Goatly’s approach include the following (all from Goatly 1997):
(35)  a. (We roll back the lid of) the sardine tin of life. (Alan Bernet)
       b. Winds stamped the fields (Ted Hughes)
       c. The air was thick.

Apart from having a more comprehensive classificatory potential, Goatly’s semantic classification also opens up the possibility of a more fine-grained grammatical classification of colligational metaphors, which will be considered in the second part of this section.

(2) **Type of construction: Lexico-grammatical perspectives.** The lexico-grammatical approach to classifying metaphorical constructions has received much less attention than semantic treatments. Notable exceptions in this respect include Brooke-Rose (1958), and, more recently, White (1996) and Goatly (1997). Lexico-grammatical classifications of metaphorical expressions can either be elemental, focussing on the *linguistic realization of the donor concept*, or constructional, focussing on the *linguistic realization of the donor–recipient relationship*. Each of these two types will be looked at in turn. The former is a simple grammatical classification and is briefly mentioned here with a view to noteworthy further developments in particular categories of metaphor defined on this basis (to be dealt with in § 4 below); the latter, which is a more complex and refined type of grammatical classification, will be given more attention.

- **Lexico-grammatical realization of the donor.** The donor of a metaphor can be realized by any type of grammatical category of a lexical word, viz. nominals used referentially ((36)a) or non-referentially ((36)b-c), verbals (37), adjectivals (38), adverb(ial)s (39):

(36)  a. I hate that pig for what she put you through!
       b. She’s a real pig when it comes to food.
       c. He is in the spring of life.

(37) The sun was smiling in the sky.

(38) He provided a strong argument for market led software development.
(39) The General rubbed his chin and thought *very hard*.

A type of word class which is particularly prone to metaphorical uses is prepositions, whose spatial meaning can be transferred to other types of more abstract meanings, such as time, as can be seen in the following highly conventionalized expressions:

(40) a. *in* 1980,

b. *before* Christmas

Further towards the grammatical end of word classes, personal pronouns can be used metaphorically (cf. Leezenberg 2001: 7):

(41) There *she* comes. (said of an effeminate male) (from Leezenberg 2001)

A special type of expression which needs to be mentioned in this respect is proper names. When they are used metaphorically (either non-referentially (42), as predicate and preceded by an article, or referentially (43)), they come to convey certain descriptive properties associated with the person whose name is referred to:

(42) John thinks he’s a *Napoleon*.

(43) I saw *count Dracula* today.

- **Lexico-grammatical realization of the donor–recipient relationship.** As has been hinted at in the first part of this section, the use of colligation as a criterion to distinguish two major semantico-grammatical category of metaphor, viz. referential and colligational metaphor, provides a linguistic framework for further subclassifying the category which is positively defined in this respect, i.e. colligational metaphors. More precisely, sub-types of colligational metaphors can be distinguished according to the type of colligation between their recipients and donors (i.e. the relationship between the syntactic categories by which recipient and donor are realized (cf. note 7), for example a subject–predicate relationship). Two major grammatical dimensions for such a sub-classification are [i] the type of *grammatico-syntactic unit* in which the donor–recipient relationship is linguistically encoded (verbal-clausal or nominal-phrasal) and [ii] the *grammatico-semantic relationship*
which holds between the donor and recipient constituents within that unit (predication, attribution, modification). Table 2 summarizes these grammatical dimensions, and the sub-types of metaphors which can be distinguished on this basis. In Table 2 and the examples given below, the donor domain is indicated in bold, while the recipient domain and any elements associated with it are underlined.

<table>
<thead>
<tr>
<th>grammatico-syntactic unit</th>
<th>VERBAL-CLAUSAL</th>
<th>NOMINAL-PHRASAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>with of-PP</td>
<td>other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>argumenthood</th>
<th>NOMINALIZATION</th>
<th>ATTRIBUTIVE USE OF VERB</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbal (+ other arguments)</td>
<td>deverbal noun</td>
<td>deverbal adjective</td>
</tr>
<tr>
<td>argument(s)</td>
<td>of-argument NP</td>
<td>noun</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>predication</th>
<th>copula constructions</th>
<th>predicative of-PP</th>
<th>apposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>equation (specification)</td>
<td>subject predicand</td>
<td>NP</td>
<td>apposition: equative (NP)</td>
</tr>
<tr>
<td>ascription (qualitification)</td>
<td>subject predicand</td>
<td>NP predicate</td>
<td>apposition: ascriptive (NP)</td>
</tr>
<tr>
<td></td>
<td>predicate: ascriptive (Np)</td>
<td>if+NP predicate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>adverbial modification</th>
<th>nominalization</th>
<th>attributable modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbal</td>
<td>nominalized quality</td>
<td>adjectival modifier (attribute)</td>
</tr>
<tr>
<td>adverbial modifier</td>
<td>of+NP</td>
<td>head noun</td>
</tr>
</tbody>
</table>

| partitive | head noun = part | of+NP whole |

**Table 2:** Grammatical sub-classification of colligational metaphors

The two central types of syntactic units, viz. verbal-clausal and nominal-phrasal, are indicated in the columns. For the noun-phrase, constructions containing prepositional phrases introduced by *of* (henceforth *of-PP*) deserve special attention,
since they are a very favorite construction type for expressing metaphors in noun phrases (cf. Brooke-Rose 1958: 288ff, Goatly 1997: 215ff). They are indicated in a separate column in Table 2.

The major types of grammatico-semantic relationships (in general) are indicated in the left column in Table 2: on the one hand, argumenthood, which is typically expressed in a verbal-clausal environment; on the other hand, modification, which is typically expressed in a nominal-phrasal environment, and, as a type of pattern which is intermediate between these two, predicative relationships of specification (equation) and qualification (ascription), which can be expressed in clausal copular constructions, but which can also be encoded in nominal patterns. Apart from central patterns for the verbal-clausal and nominal-phrasal environments, which are highlighted by thick borders in Table 2, patterns arising from trans-categorization also need to be taken into account. The most common of these are constructions with deverbal nouns (nominalization) and deverbal adjectives (attributive use of verbs), which are indicated by arrows in Table 2. Hence, types of patterns which are linked through trans-categorization show similar types of semantic relationships, while their syntactic organization is different.

Various of the examples given above are instances of metaphors based on an unconventional colligation between a verb(al) and one or more of its arguments. In this type of pattern it is a verbal lexeme which is used metaphorically:

(1)’ All the senior managers will be swept out.

(35) b’ Winds stampeding the fields.

(37)’ The sun was smiling in the sky.

In these examples, the donor domain is expressed in the verb only, and the various arguments and adverbial elements together express the recipient domain (and any related aspects, such as the sky in (37)’ or the fields in (35)b’). The following further illustrations show that the expression of the donor domain can also be extended beyond the verb itself and be realized in arguments as well:

(44) a. We have covered a lot of ground in our argument.

b. What he said left a bad taste in my mouth. (both from Lakoff & Johnson 1980)
More complex types of colligations are possible, in which the recipient domain is realized within arguments expressing the donor domain, especially through of-prepositional phrases:

(45) a. I lost the thread of his argument.
   
   b. We roll back the lid of the sardine tin of life. (= (35)a)

Similar types of expressions in which a verb is used metaphorically and thus colligates unconventionally with one or more arguments occur in two types of nominal environments based on two types of transcategorization, viz. the nominalization of such verbs (46), or the attributive use of metaphorical verbs (47):

(46) a. She dreaded the explosion of her boss’s anger.
   
   b. Is the flow of time an illusion?

(47) a. She noted the redness slowly flooding her friend’s face.
   
   b. Nametags with screaming colours are not appropriate for this occasion.

At clause level, the most straightforward type of grammatical relationship which can serve to express a metaphorical link between a donor and a recipient is the copular relationship, in which a donor NP is the predicate of a recipient NP. In this construction, the donor-predicate is the non-referential metaphorical noun phrase which has been highlighted above (cf. Eco’s intensional metaphor). Two general types of copular constructions, viz. equative (13)’ and ascriptive (48), can form the basis for metaphorical expressions:

(13)’ The kidneys are the body’s sewers.

(48) John is a pig.

Now this pattern can be placed in a larger descriptive grammatical framework which also takes into account the internal structure of the noun phrase as a possible environment for realizing a donor–recipient relationship. At the level of the noun phrase, two types of patterns construe an equative relationship. A familiar nominal
equivalent of the clausal equative relationship expressed through a copula, is a construction where recipient and donor are linked by apposition:

(49) a. Elton John, the **star of pop music**, was born in 1947.

(50) b. Mucus is made up of the body’s **white blood cells**, the body’s **garbage cans** containing toxic residue.

The ascriptive relationship can also be realized within the noun phrase through a prepositional phrase introduced by *of*. In this type of construction (cf. also Huddleston & Pullum 2002: 440), the head noun expresses the donor, while the recipient is realized in the *of*-PP (termed “predicand” in Huddleston & Pullum 2002: 442 – this terminology is used in Table 2). Examples of this common pattern are:

(51) (We roll back the lid of) **[the sardine tin of life]**. (= (35)a)

(52) She was a sort of **[colourless mouse of a woman]**. (from Goatly 1997)

Within the noun phrase in general, a central pattern of colligation is that between a modifier and the head noun. This pattern forms the basis for at least four types of metaphor, depending on two factors: (i) whether the modifier is adjectival or nominal; and (ii) the direction of the metaphor, i.e. whether the donor is construed as head or modifier:

(53) **adjectival modifier • head noun**  
    a. a **harsh** speech  
    b. a **juicy** story

(54) **adjectival modifier • head noun**  
    a. a **family** tree  
    b. She felt she was a **human lab rat** in pharmaceutical drug research.

(55) **nominal modifier • head noun**  
    a. **honey** hair  
    b. **chestnut** hair
(56) **nominal modifier • head noun**

a. butter *mountain*

b. question *tag*

An equivalent of this modification structure within a verbal-clausal environment is the adverbial modification of a verb, as in the following example:

(57) But as he walked King Arthur panted **hard.**

(from Goatly 1997)

A final type of pattern encoding the semantic relationship of modification-qualification which needs to be mentioned as a possible construction for the realization of metaphor is the construction in which the quality-donor is nominalized, and the recipient is expressed in an *of*-PP:

(16)’ But observe | the jasmine **lightness** | of the moon.

(58) He thought about the **softness** of her smile.

A construction which also builds on the common pattern of a noun phrase including an *of*-NP, but which expresses a semantic relationship not dealt with so far, is the partitive construction. This favorite type of metaphorical construction was specified by Aristotle as proportional metaphor (cf. Eco 1983: 226). For instance, in example (36)c’, spring is to the year as a certain stage of life is to life as a whole.

(36)c.’ He is in the **spring** of **life**.

Metaphors based on a partitive or qualifying relationship between a donor and recipient can further be expressed in compounds such as the following:

(29)b.’ **Tablelegs**

(59) **armpit**

3.5. Degree of marking

Apart from the explicit realization of the donor-recipient relationship through various types of colligation, the metaphorical nature of an expression can also be explicitly marked through various linguistic means (cf. Goatly’s (1997: Ch. 6) cline of explicit-
ness). Expressions can be marked as metaphorical by metalinguistic adjuncts (Huddleston & Pullum 2002: 775) at clause level, or by other metalinguistic qualifications at phrase level. The most explicit signalling of metaphoricity is realized by markers related to metaphorical and literal (60)–(61), but a wide variety of expressions related to metalinguistic terms such as meaning and sense serve the same function (62):

(60) a. Metaphorically speaking, the journey goes on until you meet yourself.

   b. The situation was especially grim in England where industrialism was literally swallowing the country’s youth.

(61) a. The space between Earth and the mood is a literal soup of matter and energy compared to interstellar space.

   b. This sculptural environment will be the starting point of a metaphorical voyage through time and space, a shuttle into the museum, a point of entry into the past.

(62) a. Being in that community sheltered him and, in a sense, cut him off from the wider world.

   b. I think we should all be artists in a certain meaning.

Closely related to this type of metalinguistic comments are various types of expressions of degree, which have been termed and classified in diverse ways in different grammars:

(63) a. As day two of the decisive contest wore on, he had virtually drawn the tourists to their knees.

   b. She was, in a way, burnt out.

(64) a. The significance of Fewkes’ recording is that it’s something of a metaphorical cornerstone for a new law that is arguably the most significant piece of music-related legislation ever passed in this country.
b. The goal of evolution, kind of a metaphorical goal because evolution doesn’t really have any goal, can be very different from the goal of the product of evolution.

Goatly (1997: 178) calls attention to a range of expressions indicating “artefacts and acts of imitation and representation” which can be used as markers of metaphoricity. Such expressions include nouns such as model, diagram and adjectives such as symbolic:

(65) a tree diagram

(66) It represents a symbolic struggle between order and chaos, between good and evil.

A special type of explicit markers of metaphoricity are the prepositions as and like, indicating a semantic relationship of comparison between a recipient and a donor. The presence of an as-PP or like-PP to indicate the relationship of the donor to the recipient is the defining property of what has been termed a simile, which can be regarded as a specific sub-type of metaphor (however, see also § 5 below):

(67) a. We walked as a swarm of oversized fireflies toward the party house on campus.

b. In life, a friend is like water in a desert.

3.6. Scope of metaphor 1: Structural extent

Metaphors can be classified on a scale according to their structural extent, defined as the extent of the structural realization of one (semantic type of) metaphor across a stretch of text – which comes down to the extent of the structural specification of the donor domain. On one end of this scale are metaphors which are expressed by a single word only, as in the examples given above. As has already been hinted at in discussing colligational metaphors, the explicit realization of the donor domain may be further extended beyond one word. This is especially the case where a verb is used metaphorically, and one or more of its arguments also realizes aspects of the donor domain:
We have covered a lot of ground in our argument.

I lost the thread of his argument.

A number of diverse terms have been introduced to account for different types and sub-types of metaphors based on the extent of the structural realization of their donor domains. For example, Crisp et al. (2002: 60f) distinguish complex metaphor and multiple metaphor from simple metaphor.

The various possibilities for extending the structural realization of a metaphor over different constituents within a clausal pattern or within a noun phrase indicate intermediate categories on the scale of structural extent. At the farthest end of this scale one finds metaphors which are even further extended, over a complete clausal expression, or even a longer stretch of discourse. In this respect, (some ?) proverbs and other types of gnomic utterances can be recognized as special types of metaphors extended over one clause:

Too many cooks spoil the broth.

In a similar sense, particular genres of discourse, such as allegory and parable, should be taken into account in a comprehensive treatment of metaphor. These examples of extended metaphor are characterized by two complementary features: (i) semantically, they build on one (semantic type of) metaphor that is maintained throughout a text, such as the metaphorical motif of the prodigal son, and (ii) structurally, this motif is linguistically realized by anaphora and cohesive links throughout the text. The following is an example of an extended metaphor, where a novel is metaphorically construed as a jet plane:

Chuck Palahniuk […] has penned one of those novels that people like to say reminds them of a metaphorical jet airplane of the Twentieth Century slowly losing its engines and then beginning its descent into Eternity. Thank you for traveling Twentieth Century Air. Please exit at the Millenium.

(from a book review of Palahniuk’s Survivor, by C. Railey)

3.7. Scope of metaphor 2: Semantic breadth

The previous section (§ 3.6), which dealt with the structural extent of metaphors, focussed on the scope of metaphors as defined from a particular perspective, viz. the
perspective of their linguistic, structural realization in texts. Alternatively, the scope of metaphors can also be specified from a semantic-conceptual viewpoint. In this perspective, the focus is not on metaphorical expressions as such, i.e. the linguistic realization of metaphors, but rather, on the semantic-conceptual metaphors which underlie such linguistic expressions.

The semantic-conceptual scope of a metaphor can be defined in two ways: (1) in terms of its breadth of application or its functionality, and (2) in terms of the conceptual nature of the donor domain.

(1) **Semantic-conceptual scope: breadth of application.** A basic distinction which has often been made regarding the scope of application of metaphors is that between single metaphors (narrow scope) and metaphors which underlie complete theories (large scope). One author who has highlighted this distinction is MacCormac (1985: 48f), who uses the terms *conveyance metaphor* (indicating “an insight limited in scope”) and *basic metaphor* (underlying “an entire theory or discipline devoted to the description of widespread phenomena”).

In the study of large-scope metaphors, a pioneering job was done by Pepper, who formulated his “root metaphor thesis” in 1942. According to this thesis, every theory about the world, or every “world-hypothesis” or philosophy, is based on fundamental analogies, which he called “root metaphors”. Examples of such world-hypotheses (based on root metaphors) given by Pepper include mechanism and organism. From the 1970s onwards, large-scope metaphors have received more attention especially in anthropology, where various studies of the metaphorical basis of *cultural models* emerged (cf. Holland & Quinn (eds.) 1987, Fernandez (ed.) 1990) and also in the philosophy of science, especially due to Kuhn’s influential book, *The Structure of Scientific Revolutions* (1962, enlarged edition 1970), which drew attention to the role of metaphor in scientific thinking.

(2) **Semantic-conceptual scope: conceptual features of the donor domain.** As we have seen above (§ 2.4), in cognitive studies of metaphor, various different types of classifications have been proposed on the basis of the conceptual features of the donor domain. A number of distinctions which bear on the notion of the semantic-conceptual scope of metaphors are summarized in Table 3.
Two major differentiating dimensions for a classification of metaphors in terms of scope as determined by their donor domain are: (i) the conceptual organization of the donor domain (simple vs. complex) and (ii) the cognitive generality of the donor domain (specific vs. generic). Each of these two dimensions entails a differentiation in terms of the semantic-conceptual scope of a metaphor: generic-level metaphors are larger in scope than specific-level metaphors, and complex metaphors are larger in scope than simple ones.

4. Typologies of metaphor: General outlook

In the previous section, seven alternative ways of classifying metaphors have been dealt with. It is now possible to place these classifications in a larger theoretical framework which shows the major dimensions along which these classifications differ, and which thus highlights the specific nature of the various classifications vis-à-vis one another. Such a framework is visualized in Figure 2, which has been presented above by way of overview.

The various classifications which have been discussed above can be grouped according to three major aspects of metaphors in language: their status vis-à-vis the system of a language (conventionality), their scope, and the relationship between their donor and recipient domains. The diverse typologies related to these three themes differ in terms of two dimensions: on the one hand, they can focus on linguistic vs. cognitive-cultural aspects of metaphor; on the other hand, they either pertain to the content-side of metaphors, focussing on their semantic or conceptual features, or they pertain to the expression-side of metaphors, focussing on their expression or encoding...
in language (i.e. their structural or lexico-grammatical, or textual aspects). As is shown in Figure 2, these two differentiating dimensions converge at one point, indicating aspects of metaphor which have come to be highlighted in a prevalent contemporary theory of metaphor, viz. its cognitive-conceptual features, focussed on in cognitive linguistics.

5. Types of metaphor: Further issues

Having looked at the different ways in which metaphors have been classified, we can now turn to further issues in the study of metaphor, which pertain to the classification itself, or which are associated with certain classes of metaphors. This section gives a cursory overview of such issues.

- Three types of classifications are important in the characterization of metaphor as a linguistic phenomenon in general, viz. [i] degree of tension (§ 3.2), [ii] type of semantic relationship (§ 3.3), especially the class of metonymy, and [iii] type of construction (§ 3.4), especially the class of simile.

  [i] In the above discussion, the notions of epiphor and diaphor were mentioned as two types of metaphor according to the degree of tension involved. In the original proposal to distinguish between epiphor and diaphor formulated by Wheelwright (1962: 72ff), these two categories were not intended to indicate specific sub-types of metaphor, but rather, two types of metaphorical forces which are present to a higher or lower extent in each metaphor. In this more abstract, theoretical view, metaphor itself is a tension between diaphor and epiphor: a metaphor builds on the perception of some similarity (epiphor) in order to be recognizable, but it also creates new meaning (diaphor) through the unconventional juxtaposition of two aspects. A theoretician who has further studied the relation between diaphor and epiphor is Ricoeur (esp. 1994: Ch. 7).

  [ii] Both simile and metonymy have played a constitutive role in definitions of metaphor. Simile has been used in at least three ways in the history of the study of metaphor. In one type of approach, which has been prevalent before the proposal of an interactive view of metaphor by Richards (1971 [1941]) and Black (1962 [1954]), metaphor is regarded as based on an underlying comparison, and thus, as an abbreviated simile (a simile without as or like). This type of view has been called a
comparison view by Black. In a view which is presented as opposed to the comparison view, such as the interaction theory introduced by Richards and Black, metaphor is distanced from simile, and is regarded as having more cognitive force than simile. In recent more abstract conceptions of metaphor which also take into account a criterion such as the relative markedness of metaphoricity itself, such as Goatly’s approach, simile is regarded as a sub-type of metaphor which is more explicit marked, as we have seen above.

[iii] Metonymy has received much attention since the 1990s. In the early 1980s, when the importance of metaphor for the study of language came to be highlighted through the work of Lakoff & Johnson (cf. § 2.4 above), metonymy also received its due attention, but was merely seen as a particular type of metaphor. In the past decade, however, metonymy came to be theorized as a more general type of semantic process which has a constitutive role in the creation of metaphor. In the framework of a semantic study of verbs of communication (1990, 1994, 1996), and later also of modal verbs (2000), Goossens has explored the relationship between metonymy and metaphor, and has proposed the term *metaphonymy* (and various sub-types) to account for their interaction. Further recent studies of the metaphor–metonymy relationship include Barcelona (2000) (who interprets metonymy in a very broad sense and explores whether metonymy does not underlie metaphor in general), Radden (2000) (who focusses on “metonymy-based metaphors”, conceived of as one category of metaphors), Ruiz de Mendoza (2000) (who conceives of metaphor and metonymy as lying on a continuum). See also Panther & Radden (eds.) (1999).

An important aspect of metaphor which needs to be mentioned in relation to the scale of *degree of conventionality*, is its relevance to the study of linguistic change. In relation to semantic change, metaphor has often been adduced as one of the major factors lying at the basis of the formation of new lexemes. More recently, however, the role of metaphor in grammatical change has also been highlighted, especially in the study of grammaticalization. Metaphor has been shown to play a role in the grammaticalization of tense (e.g. Bybee et al. 1994), and of modality (e.g. Sweetser 1990), and more recently, in the more general process termed subjectification by Langacker. See also Claudi & Heine (1986) and Heine, Claudi &
Hünnemeyer (1991) for an overview of the importance of metaphor in the study of grammatical change.

- A recent development which is relevant in relation to the typology based on construction type, is the introduction of the notion of grammatical metaphor, within the framework of systemic-functional linguistics, by Halliday (1985: 319ff). Halliday claims that most metaphorical expressions are not only based on a variation in the use of words (a word is used with a transferred, metaphorical meaning), but also involves a variation in the use of grammatical categories, which is referred to as grammatical metaphor. For example, in

(70) A flood of protests poured in following the announcement.  
(from Halliday 1985)

the donor domain is realized by the lexemes flood and pour, but the expression as a whole also involves a reconstruction of the recipient domain: the process protest (i.e. many people protested), is construed as a noun (the nominalized protests).

- As mentioned in the introduction to this paper, being a multi-faceted phenomenon which occurs in any type of semiotic system, metaphor has been studied in a myriad of disciplines. At this point it is useful to mention a number of disciplines in relation to the types of metaphors distinguished above. Evidently, it is especially the creative type of metaphor (typology: degree of conventionality) which is relevant in the theory of literature. The category of metaphor which has received most attention in other disciplines is large-scope metaphor (i.e. models, theories; typology: semantic-conceptual scope): such metaphors have received attention in anthropology (especially in relation to cultural models) and in the philosophy of science, as indicated above, but also in pedagogy (cf. Pietrie & Oshlag 1993), in psychiatry (for example, the therapeutic use of metaphorical models, cf. Spence 1990), in psychology (especially the notion of analogical thinking in general, cf. Gentner & Jeziorski 1993).

A special type of metaphor which needs to be highlighted because of its relevance to other disciplines are synesthetic metaphors: synesthesia, apart from referring to this type of metaphor, also refers to a kind of neurological disorder, in which a person (called a synesthete) for example perceives sounds as having colours (auditio colorata) (e.g. Cytowic 1993).
Notes

1 Aristotle also emphasized the idea of a movement, or, as Ricœur (1994: 17) terms it, a change “with respect to location”, in explaining metaphor.

2 Overviews of different theories of metaphors can be found in, for example, Mooij 1976, Mackenzie 1985, Leezenberg 2001, and taking a historical perspective, Ricœur 1994/1975, Taverniers 2002.

3 The term ‘lingual’ is used in order to avoid the expression ‘linguistic’ meaning, which has received a particular theoretical reading in contrast to ‘non-linguistic’, or ‘encyclopedic’ meaning. ‘Lingual meaning’ as meant here refers to ‘meaning of language’ in its broadest, pre-theoretical sense.

4 In the present section, whenever terminology is used which is typical of a particular theory of metaphor to be discussed further on in this paper, this will be indicated in brackets.

5 Although this theory also recognizes the creative power of novel metaphors, a characteristic tenet of the cognitive approach to metaphor is that it is especially conventional metaphors which structure human thinking in a metaphorical way, precisely because they are deeply rooted in language systems. (As we will see below, this tenet has to do with one of the most central ideas of the conceptual theory of metaphor, viz. that each metaphorical expression in language – whether novel or conventional – has an underlying conceptual mapping.) In cognitive theories of metaphor, therefore, even in a synchronic perspective, dead metaphors are not regarded as being less metaphorical than live metaphors. For this reason, in the remainder of this article, whenever a ‘diachronic perspective’ is mentioned in a general context, the reader should bear in mind the non-restriction of cognitive theories of metaphor in this respect.

6 See Lyons (1977: 159, 208ff; 1995: 294ff) for a discussion of this terminology from a general linguistic semantic viewpoint.

7 Although Goatly does not refer to Firth (1957: 13), who introduced the term *colligation*, it can be assumed that he intends the term in Firth’s sense, i.e. association of grammatical classes.
By extension this also refers to nominal environments based on the nominalization of a verb. Depending on the theoretical perspective which is taken, the relationship of argumenthood may also be applied to adjectival, adverbials and prepositional constructions.

I am here again using Huddleston & Pullum’s (2002: 78, 444) terminology.

Nicola Morgan’s novel *Mondays are red*, from which examples (23) and (24) have been taken, describes the story of a synesthete and at the same time exploits the synesthetic type of metaphor from a literary perspective.

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