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Mácha, Jakub

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Metaphor in Analytic Philosophy and Cognitive Science *

JAKUB MÁCHA**

Abstract

This article surveys theories of metaphor in analytic philosophy and cognitive science. In particular, it focuses on contemporary semantic, pragmatic and non-cognitivist theories of linguistic metaphor and on the Conceptual Metaphor Theory advanced by George Lakoff and his school. Special attention is given to the mechanisms that are shared by nearly all these approaches, i.e. mechanisms of interaction and mapping between conceptual domains. Finally, the article discusses several recent attempts to combine these theories of linguistic and conceptual metaphor into a unitary account.

Keywords: analytic philosophy, cognitive science, conceptual metaphor, cross-domain mapping, metaphor, non-cognitivism, pragmatics.

1. The scope of this article

Since metaphor has become such a wide-ranging topic, several restrictions must be placed on the scope of this article. This article covers the topic of metaphor from a philosophical perspective and only touches briefly upon approaches to metaphor from the fields of rhetoric, linguistics, psychology and literary studies. Some attention will also be paid to current approaches to metaphor in cognitive science. Moreover, this article focuses on thinking about metaphor in analytic philosophy (broadly understood) since 1950, leaving out approaches to metaphor in continental philosophy. Even within analytic philosophy, there are hundreds of theories of metaphor and so this article is able to cover only the most influential and important ones, sometimes employing crude generalizations.

Philosophical approaches to metaphor are usually called theories of metaphor, which may suggest that they are akin to scientific theories. However, 'theory' must be understood very loosely here (although there are exceptions to this: some theories of metaphor are embedded within

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** Masaryk University, Czech Republic.
✉️ macha@mail.muni.cz
more general theories of linguistic meaning or communication). We can reasonably expect a theory of metaphor to fulfil two main functions: (1) A theory of metaphor should explain what metaphor is, that is, define metaphor. This includes recognizing metaphors in language. (2) The central function of a theory of metaphor, however, is to explain how metaphors work and what their effects are. This is usually (though not always) done by postulating and explaining the notion of metaphorical meaning. There are several additional or auxiliary questions, problems, and philosophical issues: what is the nature of metaphorical truth (if there is any)? Does metaphor convey cognitive content? Are metaphors paraphrasable in literal language? How can the distinction between literal and metaphorical (or figurative) language be drawn? Is metaphor a natural kind (and thus explainable by a unified theory) or are we dealing with several diverse phenomena (each to be explained separately)?

Why do we study metaphor in philosophy? There are two main reasons: (1) The topic has traditionally (since Aristotle) been part of rhetoric or poetics (today we would say the theory of argumentation and literary studies). Among other goals, these disciplines aim to provide a useful method for interpreting metaphors. The philosophical issue is also how to interpret metaphors in philosophical texts. Or more generally: what is the role of metaphors in philosophical texts? There is a long tradition, especially within empiricism, of banning metaphors from philosophical texts. This attitude started to change under Romanticism. The main reason for studying metaphors in the continental tradition is to provide tools for interpreting metaphors in philosophical texts. (2) Language and especially linguistic meaning became an essential topic in analytic philosophy. The second main reason for developing theories of metaphor is to complement, question or test general theories of meaning. A theory of meaning that ignores metaphor is in some respect incomplete. This article focuses primarily on the second point.

2. Definition and terminological clarifications

A typical way of defining metaphor is by providing some relatively uncontroversial examples such as

(1) ‘Richard is a gorilla.’
(2) ‘She was burning with anger.’
(3) ‘Juliet is the sun.’ (W. Shakespeare)
(4) ‘Death is the mother of beauty.’ (W. Stevens)
(5) ‘The hour-glass whispers to the lion’s paw.’ (W. H. Auden)
It turns out, however, that such examples are anything but uncontroversial. For some authors, the first two examples are conventional metaphors or even dead metaphors: inactive former metaphors that must be excluded from the study. Such authors primarily focus on novel, poetical and creative metaphors like (3)–(5). Other authors, in contrast, focus primarily on conventional metaphors (and sometimes run into difficulties when they attempt to explain rich metaphors). One could say that a theory of metaphor can be identified based on the examples it relies on. These difficulties fuel the suspicion that metaphor is not a unified phenomenon (a natural kind) and that we are dealing with a multiplicity of distinct phenomena here.

It has been pointed out by many authors that metaphors, or at least some of them, are open-ended. That means that interpretation of such metaphors has no obvious stopping point and can continue indefinitely. Poetic and imaginative metaphors like (4) or (5) above are typically deliberately open-ended. On the other hand, there are many metaphors that convey a clearly delimited content. They are conventionalized or conversational metaphors like (1) or (2). (3) may be a borderline case. One of the most challenging tasks of a theory of metaphor is to account both for open-ended and conventionalized metaphors, that is, to allow for unlimited and delimited interpretations. Finally, there is the phenomenon of dead metaphor, that is, former metaphors that have been conventionalized to the extent that they are part of our conceptual system. Several theories of metaphor aim to explain how a metaphor dies over the course of its history (that is, they take a diachronic perspective).

A definition of metaphor is primarily the matter of a particular theory of metaphor. Before we go into the details of these theories, reflecting on a few pre-theoretical and historical points will be useful. There is, of course, no uncontroversial definition of metaphor. Let us begin with Aristotle’s definition, which can instruct us about the etymology of the term ‘metaphor’. He writes in his Poetics: ‘Metaphor consists in giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to genus, or from species to species, or on grounds of analogy.’ (1457b 6–9) Metaphor is defined in terms of transference (ἐπιφορὰ, epiphora). Phora is, in Aristotle’s Physics, a kind of change (κινῆσις), it is a movement from one place to another – other

kinds of *kinēsis* being a qualitative change (*alloiôsis*) or a quantitative change, that is, either growing or shrinking (*auxēsis/phthisis*). Several authors have pointed out that this definition is itself metaphorical. *Phora*, a term from physics, applied to physical bodies, is moved into the study of language and is applied to names (nouns, words). This is something universal. As a matter of fact, many, perhaps all, definitions of metaphor are metaphorical. Some authors\(^2\) have asked whether a non-metaphorical definition of metaphor is even possible or desirable. Another observation about Aristotle’s definition: the word used metaphorically is transferred rather than qualitatively or quantitatively changed. In fact, contemporary theories of metaphor often propose various methods for how to change the literal meaning into a metaphorical one. This change is usually qualitative (in semantic and some pragmatic theories) but can also be quantitative (enrichment in Relevance Theory and other pragmatic theories). In contrast, non-cognitivist theories\(^3\) insist on Aristotle’s intuition that literal meaning does not undergo any change. Finally, Aristotle distinguishes four kinds of metaphors. The first three, which concern genera and species, would today be classified as metonyms (and it is an open question whether metonymy should be classified as a kind of metaphor or rather as another figure of speech). Aristotle’s last kind of metaphor defines metaphor as in today’s sense. The majority of contemporary theories employ, in some sense, the notion of analogy or mapping – between two meanings, linguistic systems, semantic fields or domains of experience.

Metaphor is also a linguistic expression of a particular type. A definition of metaphor should place metaphor among other non-literal or figurative uses of language or among figures of speech. Sometimes another figure can be used to explain metaphor (metaphor can be taken as a kind of simile, for example); in other cases, metaphor is contrasted to another figure.\(^4\) Sometimes a theory of metaphor provides a mechanism for explaining metaphor alone; in other cases, a theory employs


a more general mechanism that is suitable for explaining other kinds of non-literal language as well.

2.1. Linguistic and conceptual metaphors

As already noted at the outset, the term ‘metaphor’ is genuinely ambiguous. The most crucial ambiguity is the one between linguistic and conceptual metaphors. Metaphor has been treated primarily as a linguistic phenomenon: metaphors occur in language. We can speak of metaphorical words, expressions, sentences or utterances. In their Conceptual Metaphor Theory, first developed in the 1980s, Lakoff and Johnson locate metaphor in thinking, while linguistic metaphors are regarded simply as surface manifestations of conceptual metaphors. Conceptual metaphor is a cross-domain mapping in the conceptual system. A typical example is the metaphor LOVE IS A JOURNEY, which is a mapping between entities from the domain of journeys and entities from the domain of love:

- Travellers are mapped onto lovers.
- Vehicles are mapped onto love relationships.
- A journey is mapped onto the events in a relationship.

This mapping (a list of ontological correspondences) is a cognitive structure of our thinking that may be expressed in surface language in various ways, notably in linguistic metaphors:

- ‘Our relationship has hit a dead-end street.’
- ‘We’re stuck.’
- ‘Where is our relationship headed?’

The distinction between linguistic and conceptual metaphors is sometimes not evident in recent literature. Some authors use the term ‘metaphor’ without indicating what kind of metaphor they actually mean. For instance, Lakoff put forward the contemporary theory of metaphor, suggesting that this is the only valid theory of metaphor and that conceptual metaphor is the only valid definition of metaphor.

3. Theories of linguistic metaphor

Theories of linguistic metaphor are classified according to the domain where they locate the mechanism of metaphorical meaning or

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metaphorical effect. These domains are semantics, pragmatics and the domain beyond them (sometimes called the perlocutionary realm). The distinction between semantics and pragmatics is notoriously a matter of dispute. Following Kent Bach⁶ let us draw the distinction as follows: semantics is about what is encoded in what is uttered; it is about encoded or conventional meaning. Semantic properties are stable in the sense that they are independent of anybody’s act of uttering. Pragmatics is about the utterances and about what is said/communicated in the act of uttering. Pragmatics is about a speaker’s meaning, which is influenced by a speaker’s intentions. Pragmatic properties arise from the act of uttering.

It is also a matter of disagreement where to locate and how to delimit pragmatic processes. *Literalists* have argued that semantics is autonomous. The context-dependence of certain expressions is rule-governed and semantically constrained and should therefore be handled within semantics. Traditional pragmatists like Grice⁷ argued that pragmatic processes (except for disambiguation and reference assignment to indexicals) usually affect the implicit content of an utterance; they operate at the level of implicatures (‘what is implicated’). Accordingly, metaphor would be located as a kind of implicature. *Contextualists* maintain, on the other hand, that pragmatic processes are pervasive; they intrude on the level of sub-sentential units (words) and on the level of logical form, and affect the truth-conditional content of the utterance (‘what is said’, ‘explicature’). These processes have various names, such as free/pragmatic enrichment or modulation, and contextualists usually explain metaphor by invoking these kinds of pragmatic processes.⁸

Within semantics, there is a challenge of how to cope with context-dependency. More precisely: where is context-dependency to be located and how should it be handled? *Semantic minimalists* argue that the set of context-dependent expression should be kept to a minimum (including only indexicals, demonstratives and a few other expressions). At any rate, metaphors must be located elsewhere, typically beyond semantics.

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and pragmatics.\textsuperscript{9} Other literalists have argued that semantic tools can be employed to explain context-dependent expressions like metaphors.\textsuperscript{10}

### 3.1. Semantic theories

Semantic theories of metaphor claim that metaphors have cognitive content that can be captured as a metaphorical meaning, which is a kind of non-literal meaning. This metaphorical meaning is produced by the \textit{interaction} of various inputs. It is typically the interaction between the literal meanings of the words used literally (primary subject, focus, tenor) and the literal meanings of the surrounding words used metaphorically (secondary subject, frame, vehicle) together with the context of the utterance. Such a method of interaction is quite general; it is a part of our linguistic competence. Note that the term ‘interaction’ is a metaphor used to explain metaphors.

Semantic theories go back to I. A. Richards’ \textit{Philosophy of Rhetoric} and Max Black’s seminal paper ‘Metaphor’ from 1955.\textsuperscript{11} Let us outline their theory in more detail, for subsequent semantic and certain aspects of pragmatic theories are variations\textsuperscript{12} and elaborations of this influential account. In order to cope with the enormous complexity of natural languages, they restrict their investigation to subject-predicate sentences of the form ‘A is B’. The basic idea is that if such an utterance is intended and/or recognized as a metaphor, then the literal meaning of ‘A’ interacts with the literal meaning of ‘B’ resulting in a \textit{metaphorical} meaning of ‘B’ which is thereby predicated of ‘A’. Metaphorical \textit{interaction} is thus a way of combining the subject and the predicate that is different from the usual (literal) predication. This trait makes this account distinctively semantic. Thus, Richards writes, ‘Principle of metaphor: when we use a metaphor we have two \textit{thoughts} of different things active together and supported

\begin{itemize}
\end{itemize}
by a single word, or phrase, whose meaning is a resultant of their interaction'.

Black’s main aim is, essentially, to give an explicit characterization of these complexes and an explication of how two meanings can interact. They do so indirectly through so-called implication-complexes or associated implications. An implication-complex is a set of implications predicatable to a term. An implication-complex A is a set of implications of the form ‘A implies A_i’ and an implication-complex B is a set of implications of the form ‘B implies B_i’. These complexes are typically enriched by the context of the utterance (by commonplaces, by background and encyclopaedic knowledge, by deviant or ad hoc implications induced by the author or by the context). (Pragmatic theories have developed this idea of contextual enrichment in great detail.) The interaction has a processual and reciprocal character:

(a) the presence of the primary subject incites the hearer to select some of the secondary subject’s properties; and (b) invites him to construct a parallel implication-complex that can fit the primary subject; and (c) reciprocally induces parallel changes in the secondary subject.

The outcome of the (process of) interaction consists of pairing members of these complexes [A_i, B_i]. The meaning B_i is transformed by a function f_i so that it is predicatable of A instead of B. The function f_i may stand for an ‘(a) identity, (b) extension, typically ad hoc, (c) similarity, (d) analogy, or (e) what might be called a metaphorical coupling’, (where, as often happens, the original metaphor implicates subordinated metaphors). In the final step, parallel changes are induced in the secondary subject. That is, some of the A_i implications are, conversely, transformed and predicated of B even though the surface grammatical form ‘A is B’ does not make any commitment that A ought to be predicated of B. The idea of pairing two complexes, systems or domains is central also to Lakoff’s Conceptual Metaphor Theory as we will see.

Here is an illustration of this method with an example of Thomas Hobbes’ metaphor

(6) ‘Consequence is a train’ (of thought).

15. Ibid., 31.
The implication-complexes, which depend on the context of utterance or reception, might be:

<table>
<thead>
<tr>
<th>Thomas Hobbes: Consequence is a train (of thought)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary subject: consequence</td>
</tr>
<tr>
<td>Secondary subject: train (of thought)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implications</th>
<th>Implications</th>
<th>Pairing</th>
<th>Way of pairing</th>
</tr>
</thead>
<tbody>
<tr>
<td>consequence is a succession</td>
<td>train is a movement</td>
<td>[succession, movement]</td>
<td>extension</td>
</tr>
<tr>
<td>consequence is a link connecting thoughts</td>
<td>train is a link connecting places</td>
<td>[link, link], [places, thoughts]</td>
<td>identity</td>
</tr>
<tr>
<td>consequence is a causal connection</td>
<td>train connection is mechanic</td>
<td>[causal, mechanical]</td>
<td>extension</td>
</tr>
<tr>
<td>consequence is difficult to avoid</td>
<td>train is difficult to stop</td>
<td>[difficult to avoid, difficult to stop]</td>
<td>analogy</td>
</tr>
</tbody>
</table>

**Additional implications**

- consequences follow logical laws
- trains follow timetables

The outcome of the interaction might be the following properties predicated of the concept of logical consequence: a kind of causal connection connecting thoughts, which is difficult to avoid. This listing is open-ended; the hearer is often able to add additional implications. Moreover, there are subordinated metaphors: ‘Logical laws are (like) timetables’, ‘Thoughts are places in space’. We can now recursively apply the same method to these metaphors. Furthermore, train movements can be seen as being more like organic processes in human bodies, which are expressed, for example, in the biological metaphor ‘the railway network is a nervous system’ or when we speak about ‘backbone tracks’.16

The weak spot in this schema is how to determine which implications from this potentially endless list are included in the metaphorical meaning of the original metaphor. We can restate this point as the problem of commitment: to which implications is the speaker committed? Either

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they are committed to (i) all, or (ii) some, or (iii) none of them. The first option is wholly implausible. We cannot take Hobbes to be committed to the claim that the railway network is a nervous system. There will always be implications that were not intended by the speaker as the propositional content, but that will only be alluded to with lower emphasis. The other options seem to be more plausible. We can take Hobbes to be committed, for instance, to the implication that consequence is a kind of causal connection. However, we can do so only because Hobbes stated this implication in the sentence following the original metaphor. The implication is, thus, asserted in the context of the utterance, but not in the utterance itself. The question is how we can distinguish those implications that are asserted from those that are merely alluded to or connoted. This distinction must be lexically encoded in the metaphor itself or in some of its lexical units. But then the metaphorical meaning would be given conventionally, which, however, contradicts the definition of metaphor as a novel, that is non-conventional, use of language. Those who think that metaphorical utterances have a definite cognitive content must also explain how to delimit the potentially endless list of pairs of implications. This is the main challenge for pragmatic theories and Conceptual Metaphor Theory. Non-cognitivists maintain, in contrast, that such a delimitation is impossible in principle. In their view, metaphor has no definite cognitive content.

The original semantic theories have been further developed using more general semantic theories of meaning. Eva Kittay,17 in her ‘perspectival theory’, employed the semantic field theory in order to argue that the interacting (or ‘interplaying’ in her terminology) complexes include semantic information that goes far beyond the metaphorical sentences. Although there are pragmatic clues for recognizing metaphorical utterances, the interplay of semantic fields can be rendered semantically.

Josef Stern18 argues that the context-dependence of metaphor is akin to that of indexicals and demonstratives and thus can be explained using similar tools. Stern, utilizing Kaplan’s theory of demonstratives, maintains that metaphorical sentences contain an implicit operator [Mthat] that makes it possible to capture, in a systematic, rule-governed way, the intrusion of the context into the interpretation of a metaphorical

utterance. Stern’s theory is the most elaborate semantic theory of metaphors yet developed. This theory is also exceptional among other theories of metaphor, because, unlike the majority of theories, it does not employ any interaction or mapping across two domains. Some objections to this theory are discussed below.

Semantic theories of metaphor are somewhat out of fashion at present. The reason for this may be the fact that the context-dependence of metaphor is highly complex. To capture this dependence, very complicated semantic tools must be used. It is no wonder that many literalists gave this endeavour up and banned metaphor from semantics. Semantic theories of metaphor have also been superseded by pragmatic theories that seem to have better resources to cope with metaphor’s context-dependence.

3.2. Pragmatic theories

Speech-act theory and Gricean pragmatics have proved to be a highly apt framework for explaining metaphor (along with other non-literal linguistic phenomena). Gricean pragmatics (Grice 1975, Searle 1979) distinguishes between sentence meaning and speaker (or utterance) meaning. Sentence meaning is conventional meaning. Speaker meaning is an occasion-meaning; according to Grice, it is determined by the speaker’s communicative intention to produce certain effects and by the addressee’s recognition of this intention. Speaker meaning is reached by sets of inferential procedures; it is thus a form of conversational implicature. Within this theoretical framework, metaphorical utterances are cases of speaker meaning rather than sentence meaning. The core of a pragmatic theory of metaphor is to describe these inferential procedures. In general, they consist of two main stages. The first step is recognizing that speaker meaning departs from sentence meaning. This divergence is typically recognized as a violation of Grice’s Cooperative Principle; in the case of metaphor it is a violation of one of its maxims: ‘Do not say what you believe to be false’.19 The second step is the actual inferring of speaker meaning. Grice is very brief here, but Searle provided a detailed list of principles or procedures by which one can recognize the speaker’s metaphorical utterance meaning. These principles provide a rational reconstruction of shared inference patterns. It is not necessary to state these

19. Herbert Paul Grice, ‘Logic and Conversation,’ 46. Let us ignore the rare cases of metaphors that are literally true.
principles in detail, because they are fundamentally similar to Black’s principles of interaction.

Two points are of importance here. First, pragmatic principles of metaphorical interpretation are somewhat vague; they do not sort out metaphor from other figures (they apply to implicatures and indirect speech in general). This feature is seen by some pragmatists as an advantage; by others, however, as a disadvantage. Second, there is the question of the speaker’s commitment to the inferred speaker meaning. Searle is not entirely explicit here, but Grice takes metaphor as a kind of conversational implicature where the speaker is not committed to any particular inference. Following Anne Bezuidenhout, one can employ Grice’s cancelability test, which was developed to decide whether some content is part of ‘what is said’/explicature or merely conversationally implied. A particular metaphorical interpretation will always be cancelable in favour of another metaphorical interpretation. Therefore, metaphorical interpretations are conversationally implied. The speaker cannot be a priori committed to any particular metaphorical meaning.

3.2.1 Contextualism and Relevance Theory

As already noted, contextualism in pragmatics is the view that pragmatic processes can have an impact on the truth-conditional content of the utterance (on ‘what is said’, ‘explicature’). This means that there may be a gap between what is semantically encoded and what is directly expressed by a sentence. Hence, even in the case of literal utterances, pragmatic processes may be at work. One example:

(7) ‘It is quiet here.’

What (7) expresses depends on the context of its utterance. What counts as quiet in a recording studio is different from quiet at a busy railway station. In the latter case, the encoded concept quiet is loosened, resulting in an ad hoc concept quiet*. Another example:

‘I overslept and missed the train.’

Suppose that I utter (8) to my boss as an excuse for my being late at work. What is expressed by (8) in this context is, however, significantly richer than its semantically encoded meaning:

(9) ‘Because I overslept today in the morning, I missed the train that was supposed to bring me to work.’

These are examples of pragmatic processes of loosening and enrichment (other processes are context-shifting and meaning transfer). Enrichment narrows the encoded concept; loosening broadens it. These processes can work together. An encoded concept can be loosened in one respect and enriched in another. One encoded concept is thus capable of expressing indefinitely many ad hoc concepts in proper contexts. We can also say that (7) and (8) are instances of loose use of language.

The central claim of the contextualist theory of metaphor is that metaphor is an extreme kind of loose usage. The same processes of enrichment and loosening are operative in metaphorical utterances. Note that these pragmatic processes roughly correspond to the four types of metaphorical transfer in Aristotle’s definition.

Let us take Shakespeare’s metaphor again:

(10) ‘Juliet is the sun.’

Its metaphorical interpretation consists of constructing an ad hoc concept sun*. This concept is enriched, because from the context of the play it is clear that it is a case of the rising sun; the ad hoc concept is also loosened, for it is applicable to Juliet or to people in general – to mention two out of many pragmatic adjustments.

Metaphor is a kind of direct expression of ‘what is said’ rather than a conventional implicature or inferred speaker meaning, as in Grice or Searle respectively. In this respect, metaphor is distinct from figures like irony, sarcasm and rhetorical questions and from indirect speech acts where something is said and something else is implied. This contrast led François Recanati23 to argue that metaphor is a kind of literal use of language. He, however, defines literal use of language as its direct expression (which allows pragmatic processes as described above). Non-literal use of language thus refers to a case when the addressee

first constructs the literal meaning and then, due to its oddity, infers a secondary/speaker meaning. The major advantage of putting metaphor on a par with the literal use of language is this: if literal language is typically used for making truth-valued assertions, then metaphorical utterances can be used as assertions as well. In particular, if the pragmatic processes of enrichment and loosening can result in a definite ad hoc concept in the case of literal utterances like (7) and (8), then nothing prevents the resulting ad hoc concept in (10) being definite as well. This advantage can be turned into a disadvantage: how can the contextualist theory of metaphor account for highly poetic, typically open-ended metaphors without clearly delimited content, but with the kind of evocative capacity seen in Auden’s metaphor above? Bezuidenhout responds to this worry by pointing out that non-metaphorical interpretations are open-ended too. One can always invest more interpretative effort in any utterance. One can for instance explore a broader context or bring more background knowledge to bear. In the case of a poetic metaphor, this effort will likely be rewarded by a richer understanding of the metaphor: Metaphors have higher interpretative flexibility. Contextualism is, therefore, in a position to account for the creative dimension of metaphorical interpretations.

The main line of criticism of this theory (by literalists/semantic minimalists) has been to attack the plausibility of contextualism itself. This kind of criticism is beyond the scope of this article. One can, however, insist on the traditional Gricean orthodoxy that metaphorical interpretations are nevertheless inferred rather than directly expressed, that is, one can treat metaphor as a kind of speaker meaning. Elisabeth Camp presents many examples of metaphorical utterances that it is reasonable to interpret as implicatures or speaker meaning instead of ‘what is said’. ‘What is said’ cannot be, according to Camp, radically divergent from conventional meaning as contextualists seem to maintain.

The contextualist theory of metaphor is close to Stern’s semantic theory of metaphor. They all locate metaphorical content at the level of ‘what is said’; for these thinkers, metaphorical interpretations are not

inferred, but rather direct. Both sides hold that the truth-conditions of metaphorical utterances are context-dependent. They disagree, however, on whether there are systematic semantic constraints governing this context-dependence. What, then, are the arguments for and against these positions? Stern maintains, contra contextualism, that the contextual contribution to the content of an utterance is semantically constrained at the level of logical form. Part of the speaker’s linguistic competence is to know the rule that maps contextual parameters into the content of the metaphor in that context (this rule is called ‘character’ in Kaplan’s theory). Stern is ready to acknowledge that there is also pre-semantic and post-semantic context-dependence. The former typically includes the speaker’s linguistic intentions and the topic of the discourse, the latter the illocutionary force (the kind of speech-act that it is). Contextualists are guilty, according to Stern, of blurring the distinction between pre-semantic and semantic context-dependence.

Contextualists argue against Stern in the following way: his semantic theory cannot get rid of pragmatic processes while selecting contextual parameters that are mapped onto a metaphorical character. Furthermore, if metaphors were approached on the model of indexicals and demonstratives, every metaphor (expression type) would need its own metaphorical character and not only a single metaphorical operator $M$ that (each indexical has its own $D$ that operator). If this were nevertheless so, there would be many ways to place this operator in a sentence. This would, however, lead to the need for pervasive disambiguation.

Let us now turn to the account of metaphor within Relevance Theory, which is a general theory of meaning and communication that is close to contextualism. Relevance Theory shares with contextualism the basic view that there is a significant gap between semantically encoded concepts and sentential structures on the one hand and the content that is communicated by uttering these encoded concepts and sentences in a given situation. Encoded conventional meanings are, almost always,
underdetermined. This gap is bridged by processes of pragmatic modulation, primarily enrichment and loosening. The outcome of a modulation process is an ad hoc (that is occasion-specific) concept that is then conveyed. What Relevance Theory adds to this contextualist framework is a detailed explanation of the mechanism that governs the pragmatic modulation. Clearly, if sentences are used to communicate specific propositional content, the same modulation must be at work on the speaker’s side as on the addressee’s side. If the speaker intends to convey content that is not encoded, she must provide her addressee with the relevant information needed to infer her intended meaning. Here relevance comes into play. Relevance is, in general, the property of any input of a cognitive process (in our case, relevance is a property of utterances). The degree of relevance depends on two factors: cognitive effects and the processing effort needed for achieving these effects. An input is more relevant if it leads to higher cognitive effects with less processing effort (for perception, memory, inferring). Because human cognition tends to the maximization of relevance, the speaker and her addressee can mutually assume optimal relevance. This is expressed in the Communicative Principle of Relevance: ‘Every act of inferential communication conveys a presumption of its own optimal relevance’. Relevance Theory thus maintains that human communication is essentially inferred. Contextualism, in contrast, reserves the notion of inference for deriving implicatures from ‘what is said’. The inferential process departs from encoded meanings until the addressee’s expectations of relevance are satisfied. At this point, after deriving explicit content, the process may stop, or it may continue deriving further implicatures with lesser degrees of relevance. In fact, both contextual implication and implicatures have a particular strength. Sometimes, the speaker intends one strong implication, which is asserted; other times, she intends to convey an indefinite array of weak implicatures without asserting any particular one of them.

Given this universal account of communication and meaning, relevance theorists endorse the contextualists’ claim that metaphorical interpretations are arrived at in the same way as other (literal as well as non-literal) interpretations. There is nothing distinctive about metaphor. Metaphor is at one end of a continuum of cases between literal uses, loose uses, perhaps hyperbolical uses and metaphorical uses of language. On

the one hand, metaphorical interpretations can have a clearly delimited content. Consider the following conversational metaphor uttered in the context of discussing dining habits:

(11) ‘John is a greedy pig.’

By way of loosening and enrichment, the ad hoc concept of pig* is created, meaning ‘a person who eats too much’. This interpretation satisfies the expectations of relevance in that context.

On the other hand, Relevance Theory is able to explain more highly poetic metaphors. Take for instance the following metaphor by Keats:

(12) ‘Life is but a day; / a fragile dew-drop on its perilous way from a tree’s summit.’

One can take the poet to be asserting that life is fragile. This conventional interpretation, however, would not meet the constraints of optimal relevance. What is expressed in these lines is somewhat indefinite. There is a broader range of weakly implicated claims expressed here (life is finite, made of water, moved by external forces and so on). Readers are encouraged to entertain some of them, bring in their own life experiences and come up with their own implicatures. This multitude of implicatures has a higher total relevance than the banal claim that life is fragile. This structure of weak implicatures is essential for the poetic effects of certain metaphors (and not only metaphors can elicit poetic effects).

Finally, Relevance Theory has the means to explain how a novel metaphor becomes routinized and eventually dead, that is, part of our literal language. Repeated interpretations of a novel metaphor reduce the processing effort of recurrently inferred implicatures, thereby increasing their relevance. Some weak implicatures gradually become strong implicatures and can eventually become part of the encoded concept.

There have been two main objections raised against contextualism in general and Relevance Theory in particular: first, these theories rest upon the notion of conventional or encoded meaning which is the starting point of pragmatic modulation. This notion has, however, been less reflected within Relevance Theory and some (Davidson 1986, for instance) have raised doubts about whether convention plays such a central role in linguistic communication as has traditionally been assumed. The second objection is the worry that the notion of pragmatic modulation (enrichment, loosening, meaning transfer and some other processes) is rather indeterminate. One could explain any change of meaning by invoking some of these processes.
3.3. Non-cognitivist theories

In 1978, Donald Davidson came up with a radical critique of all previous theories of metaphor. He claims: ‘metaphors mean what their words, in their most literal interpretation, mean, and nothing more.’\footnote{Donald Davidson, ‘What Metaphors Mean,’ 32.} This ‘nothing more’ means no secondary/metaphorical meaning and no cognitive content, no attached idea. Davidson’s claim seems to be \textit{prima facie} counterintuitive. There are several ways of understanding Davidson’s claim. Following Camp,\footnote{Elisabeth Camp, ‘Metaphor and Varieties of Meaning.’ In: E. Lepore and K. Ludwig (eds.) \textit{A Companion to Donald Davidson}. Oxford: Wiley-Blackwell, 2013, 361–378.} we can distinguish its weak reading: metaphor is a matter of speaker meaning, not word meaning, from its strong meaning: metaphor does not have any meaning and does not convey any cognitive content. There might be an issue about the notion of (linguistic) meaning. Davidson and other proponents of non-cognitivism maintain highly intricate theories of meaning. However, Davidson’s claim does not depend on this or that theory of meaning; and that is why Davidson also speaks about ‘cognitive content’. Let us focus on the strong reading (for the weak reading is not so controversial). Curiously enough, Davidson agrees with Black’s and Searle’s descriptions of what metaphor accomplishes. He is, however, reluctant to call the outcome of their methods and procedures ‘metaphorical meaning’, which is a meaning of the same kind as the literal meaning (this view is explicitly endorsed by Searle and implicitly by other pragmatists). Davidson’s claim hence comes to this: the effects of a metaphor cannot be analysed using the notion of speaker or secondary meaning, because such meaning is propositional and conveys cognitive content.

To support his view, Davidson offered several arguments. Two of them shall be discussed here. The first argument is that the notion of metaphorical meaning does no explanatory work: ‘Once we understand a metaphor we can […] say what the “metaphorical meaning” is. But simply to lodge this meaning in the metaphor is like explaining why a pill put you to sleep by saying it has a dormative power.’\footnote{Donald Davidson, ‘What Metaphors Mean,’ 33.} The notion of metaphorical meaning will have explanatory power if we are able to determine the metaphorical meaning apart from a particular context of use. In other words, if there were a shared determinate and rule-governed procedure that allows us to take the literal meanings of the words involved and, for
a given context, compute the metaphorical meaning. Semantic and pragmatic theories rest on the assumption of such a determinate connection. Davidson claims, in contrast, that what is distinctive about metaphor is precisely the absence of such a rule-governed connection. This connection can be described, at best, in causal terms. Davidson argued that semantic and pragmatic theories’ methods of deriving metaphorical meaning are anything but determinate.

This brings us to Davidson’s second argument: ‘there is no limit to what a metaphor calls to our attention […] there is no end to what we want to mention.’ As already noted above, non-cognitivists believe that the cognitive content of a metaphor cannot be delimited. Thus, it would be misleading to call the effect of a metaphor ‘cognitive content’. Many authors have objected that at least some metaphors do express a clearly delimited cognitive content in a particular context. Non-cognitivists can reply that if the cognitive content were delimited, there would have to be a rule excluding further content or implications. If this rule were drawing upon a linguistic convention, the metaphor in question would be a dead one (like the metaphor (11) above). If the rule were quite general (like the Communicative Principle of Relevance), non-cognitivists would insist that there is no such rule or that such a rule is indeterminate. Such discussions usually end up with the resolution that there are two kinds of metaphors: conversational ones like (11) that express a clear content and poetic, elusive, evocative ones where no clear content is expressed.

Let us turn to Davidson’s positive account of metaphor. The effects that metaphorical utterances cause are entirely non-propositional (and non-truth-conditional) and therefore not suitable for linguistic communication. In Austin’s terminology, such effects belong to the perlocutionary realm. The point of such an effect is to make us attend to a novel or surprising likeness, to promote unexpected and subtle parallels, and, most importantly, to make us ‘see’ one thing as another by making some literal statement that inspires or prompts the insight. Davidson thus, with reference to Wittgenstein, invokes the notion of seeing-as (more about seeing-as later). A metaphor thus makes us invoke or imagine two images,
where one is seen as the other. These images are invoked or prompted by the literal meaning (of the involved words). It is important that these literal meanings stay active and are not changed by any semantic or pragmatic method. This is often the case with so-called extended metaphors (or rather analogies) like (12) where the reader is invited to imagine her life as a dew-drop travelling down from a tree’s summit. In order to imagine this natural scenery, we do not need any metaphorical meaning. In this respect metaphors are like jokes or even lies, where nobody is tempted to postulate any secondary meaning.

Davidson’s non-cognitivism about metaphor does not rest upon his theory of meaning and interpretation. However, some kinds of literalism, and semantic minimalism in particular, draw on Davidson’s account of meaning. According to semantic minimalists, semantics with the notion of linguistic meaning should be reserved for rule-governed and clearly delimited linguistic phenomena. According to this criterion, metaphor falls outside semantics, if one follows Davidson’s intuition that there are no general rules for creating and interpreting metaphors. Metaphors thus do not have any meaning beyond the literal, if ‘meaning’ is understood in this minimalist way. In this vein, Ernie Lepore and Matthew Stone argue that metaphor cannot be analysed as a kind of speaker meaning if the notion of speaker meaning is understood, following Grice and refinements by Lewis and Stalnaker, as an intention to update the conversational record.

4. Conceptual Metaphor Theory

Conceptual Metaphor Theory (CMT), which is sometimes called Cognitive Metaphor Theory or Contemporary Metaphor Theory, has been further elaborated by George Lakoff and his collaborators ever since Lakoff and Johnson’s landmark book *Metaphors We Live By*. The main claim

CMT makes is that metaphors are a matter not only of language (i.e., of mere words) but of thought. CMT thus distinguishes between conceptual metaphors, which operate at the level of thinking, and linguistic metaphors (or metaphorical expressions), which occur in language and were discussed above. To say that our thinking is inherently metaphorical is primarily a claim about the structure of our conceptual system, which is structured around conceptual metaphors. Conceptual metaphor is defined as a mapping between two domains, the source domain, which is usually concrete, and the target domain, which tends to be more abstract. A domain of experience, or conceptual domain, means a category of things or, more specifically, a structured and coherent organization of human experience. The notion of the domain is close to what is called ‘semantic frame’ or ‘lexical field’ in linguistics, ‘mental space’ in cognitive science and ‘ontology’ in information science. A conceptual metaphor maps entities (objects, properties, relations, processes) from the source domain onto the target domain.

Let us go back to the example of a conceptual metaphor, LOVE IS A JOURNEY. Actually, LOVE IS A JOURNEY is the name of a mapping between entities from the domain of journeys and entities from the domain of love:

- Travellers are mapped onto lovers.
- Vehicles are mapped onto love relationships.
- A journey is mapped onto the events in a relationship.
- Impediments are mapped onto difficulties.
- Destinations of the journey are mapped onto the goals of the relationship.
- Decisions about direction are mapped onto choices about what to do.

This list of ontological correspondences between our conceptualization of journeys and love is not exhaustive. It is crucial, however, that this mapping is a cognitive structure that may be expressed in surface language in various ways, for instance, in:

- ‘Our relationship has hit a dead-end street.’
- ‘We’re stuck.’
- ‘Where is our relationship headed?’
- ‘We may have to go our separate ways.’
- ‘We are at a crossroads.’

These everyday expressions are not necessarily regarded as linguistic metaphors. They are, however, expressions or surface manifestations of conceptual metaphors. It is not necessary, for the existence of this conceptual metaphor, that the expression ‘Love is a journey’ occurs
in an actual utterance. LOVE IS A JOURNEY is a mere name of the mapping (and that is why it is capitalized). Moreover, this mapping does not occur in any actual utterance as such but is only activated through language use, whether metaphorical or literal. CMT nonetheless maintains that conceptual metaphor is almost all-pervasive (there are rare cases of non-metaphorical concepts that do not belong to any conceptual metaphor).

More generally, CMT aims to explain why our conceptual system is structured in a certain way, whereas the primary goal of theories of linguistic metaphor is to explain what linguistic metaphors mean or how metaphorical utterances are processed. Both kinds of theories operate with a mapping between two domains. For classical theories, this mapping emerges as a result of the interpretation of a linguistic metaphor. For CMT, in contrast, the mapping is already there, it is built into our conceptual system and it is activated in the processing of literal expressions and linguistic metaphors.

Conceptual domains are not flat sets; rather, they are structured. CMT calls the structure of a domain an image-schema. Lakoff proposed an image-schematic structure containing elements such as spatial primitives (up, down, near, far), containers, boundaries, interiors/exteriors, paths, sources/goals of movements, trajectories.43 Image-schemas are like gestalts, except they are not static; they are conceptual structures that develop from a person’s early childhood. Other authors have suggested many refinements of the notion of image-schema. Image-schemas should be thought of as abstract mental images, dynamic spatial patterns. Elements of image-schemas are building blocks of the most basic conceptual metaphors, so-called primitive metaphors (see below).

Conceptual metaphors are not arbitrary. In a conceptual mapping, the image-schema structure must be preserved. This is called the Invariance Principle. The structure of the source domain cannot be altered, and the structure of the target domain cannot be violated. This means, however, that the structure of the target domain always remains intact. A metaphor always maps the source domain onto the target domain, but not the other way around. Metaphorical mappings are thus asymmetrical and partial.

If linguistic metaphors only activate pre-existing conceptual metaphors, that is, pre-existing fixed mappings, how can CMT explain the novelty and creativity of poetic metaphors? CMT is concerned primarily

with the structure of our conceptual system, where poetic metaphor is a marginal phenomenon. The issue lurking beneath the surface is, however, more serious: how does a new conceptual metaphor, a cross-domain mapping, emerge? CMT provides several explanations for the mechanism of novel and poetic metaphors. The main idea is that existing mappings (conceptual metaphors), which are always partial, are either extended or combined. This also allows us to characterize different kinds of metaphors:\textsuperscript{44}

(i) The first class are non-metaphorical concepts, which are related to our experiences with concrete physical objects (‘The balloon went up.’).

(ii) The second class are marginal metaphorical concepts, which are conceptual metaphors that are idiosyncratic, unsystematic and isolated (‘the foot of a mountain’).\textsuperscript{45}

(iii) The third class are literal conventional metaphors, which are conceptual metaphors as described above.

The following species of metaphors go beyond the conventional system; they are labelled as ‘non-literal’ or ‘imaginative’.

(iv) The fourth class is made up of extensions of the used part of a literal metaphor (‘These facts are the bricks of my theory.’).

(v) The fifth class are instances of the unused part of a literal metaphor (‘His theory has thousands of little rooms and long, winding corridors.’).

(vi) The sixth class are novel metaphors, which are not based on our conventional conceptual system.

This classification and all the examples are taken from \textit{Metaphors We Live by}. Later, Lakoff came up with the notion of an image metaphor.\textsuperscript{46}

(vii) \textit{Image metaphors} map one conventional mental image onto another; the mapping itself is not conventional, but a ‘one-shot’. These metaphors do not involve conceptual domains, but rather structured mental images. Their aim is to create or adjust a rich image in the target domain (which is usually more abstract) rather than to create an inferential structure. Like cross-domain mappings, image mappings must preserve the image-

\textsuperscript{44} For more details, see George Lakoff and Johnson, Mark. \textit{Metaphors We Live By} and Esther Romero and Soria, Belén. ‘Cognitive Metaphor Theory Revisited.’ \textit{Journal of Literary Semantics} 34, no. 1, (2005): 1–20.

\textsuperscript{45} George Lakoff and Johnson, Mark. \textit{Metaphors We Live By}, 2003, 56.

\textsuperscript{46} George Lakoff, ‘The Contemporary Theory of Metaphor.’

\begin{footnotesize}
\begin{enumerate}
\item George Lakoff and Johnson, Mark. \textit{Metaphors We Live By}, 2003, 56.
\item George Lakoff, ‘The Contemporary Theory of Metaphor.’
\end{enumerate}
\end{footnotesize}
schema structure. So, for instance, when Kant says that understanding is the land of truth, which is an island surrounded by an ocean of illusion, we are prompted to perform a mapping of the image of an island amid an ocean onto the target domain of our mind’s understanding and create an abstract image there. This mechanism of invoking mental images has many similarities to the non-cognitivist accounts of metaphor discussed above.

Finally, Lakoff argues that poetic effects can be achieved by combining several fixed mappings and activating them simultaneously in one phrase or sentence. Lakoff gives as an example Dylan Thomas’ line

(13) ‘Do not go gentle into that good night.’

where ‘go’ employs DEATH IS DEPARTURE, ‘gentle’ employs LIFE IS A STRUGGLE and ‘night’ employs A LIFETIME IS A DAY.47 Or let us turn back to Keats’ metaphor (12) about life. The first verse activates A LIFETIME IS A DAY, which is based on the more basic metaphors LIFE IS LIGHT and LIFE IS A CYCLE. The second verse, however, employs LIFE IS A JOURNEY, but LIFE IS A CYCLE is explicitly denied there. What is important is that these mappings have to be highly conventionalized in order to be recognizable in a single line.

4.1. Further development of Conceptual Metaphor theory

Various aspects and details of this basic framework of CMT have subsequently been developed further. Let us look at some of these elaborations on the basic theory. Many authors have observed that some conceptual metaphors are more general and more widespread than others. That is, not all conceptual metaphors are at the same level. Some metaphors are grounded in our basic experiences, like spatial and temporal experiences or basic emotions. Such metaphors, called ‘primary’ or ‘generic level’ metaphors, tend to be more general (up to a certain extent). Here are some examples:

SIMILARITY IS CLOSENESS
PURPOSES ARE DESTINATIONS
DIFFICULTIES ARE IMPEDIMENTS
RELATIONS ARE CONTAINERS
MORE IS UP

47. Ibid., 219.
These primary metaphors can be combined into complex ones, like LOVE IS A JOURNEY, which is grounded in the first four primary metaphors from the list, but probably not in MORE IS UP. Furthermore, conceptual metaphors are very rarely isolated mappings; rather, they belong to hierarchically organized systems. There are several principles of organization for such hierarchies: for instance, according to some aspects of the source domain, aspects of the target domain or aspects of generic-level metaphorical concepts like EVENT or FORCE. One example of such a hierarchy:48

EVENTS ARE MOVEMENTS

↳ ACTIONS ARE SELF-PROPELLED MOVEMENTS
('What is the next step?')

↳ LONG-TERM PURPOSEFUL ACTIVITIES ARE JOURNEYS
('a long-run project')

↳ LOVE IS A JOURNEY

If we go down through this hierarchy, the generic level concept EVENT is being more and more precisely specified: EVENT → ACTION → LONG-TERM PURPOSEFUL ACTIVITY → LOVE RELATIONSHIP. Hence, if conceptual metaphors are structures of our conceptual system, hierarchies of conceptual metaphors can be conceived as higher-level structures of this system.

At the end of the 1990s, several authors, including Lakoff, started to employ the results of neuroscience and cognitive science and use them as the basis for CMT. More specifically, Lakoff drew on Neural Theory of Language, which is a variant of Computational Theory of Mind, in order to develop his Neural Theory of Metaphor.49 The basic tenet of Neural Theory of Language is that the meaning of concrete concepts is embodied in certain neuronal groups, so-called nodes. These nodes are sometimes connected by permanent bindings, sometimes by instantaneous links.


Reasoning is, then, the consecutive activation of certain nodes. Nodes that are often activated together or synchronically are more likely to be connected by a permanent link.50

Within this cog-sci framework, conceptual domains can be grounded in concrete nodes or circuits. Sometimes, the source and target domains are active simultaneously. This can be explained by the fact that the circuits in which these domains are embodied are connected by a permanent link. These are cases of primary metaphors which are either innate or learned at an early age through our first experiences. In cases of more complex conceptual metaphors, which are most likely learned and partly culturally conditioned, the activation of the target domain can be slightly postponed. The source domain circuit is activated first, then, in combination with the context, this in turn activates the target domain circuit and the mapping circuit. This should, however, not be seen as an algorithmic or step-by-step process.

The main advantage of employing the methods of cognitive science within CMT is that they provide an empirical basis independent of linguistic evidence, on which CMT had formerly relied. Neural Theory of Metaphor provides explanations for why we use certain conceptual metaphors and how they are grounded in our primitive experiences with the world. Finally, this theory redefines the meaning of the main claim of CMT, that is, that metaphor is a matter of thought. Conceptual metaphor is a matter of thinking processes that are physically embodied in our brains.

Conceptual Blending Theory, sometimes called Conceptual Integration, is another important offspring of CMT, although it draws on other sources as well. Like CMT, Blending Theory is based on the notions of domain and mapping. Blending theorists prefer to call a domain 'mental space'. Instead of two domains, Blending Theory works with multiple mental spaces: the generic space, (at least two) input spaces or simply inputs and the blended space. Whereas CMT is primarily concerned with the structure of our conceptual system, the primary objective of Blending Theory is to explain the emergence of instantaneous meaning. Conceptual metaphor is a mapping between two domains. In Blending Theory, the generic space and the inputs are projected into a newly emergent entity, which is called the blend. More specifically: first, a mapping is established between the generic space and each of the input spaces, which contains

50. This is so-called Hebb’s principle: neurons that fire together wire together.
what the inputs have in common. Then there emerges a cross-space mapping between the input spaces. Finally, a blended space is developed. There is a three-step process for achieving this: composition (of the elements from the inputs), completion (bringing additional structure to the blend) and elaboration (running the blend, modifying it imaginatively). In addition, there is a backward projection: that is, the elements of the blend are projected back onto their counterparts in the input spaces. These steps cannot be conceived as events in an actual process unfolding over time.

Although Blending Theory has different goals and priorities to CMT, conceptual metaphors can be described as one kind of blend (namely, single-scope blends). Here is an example: CMT takes the ARGUMENT IS WAR metaphor as a mapping between the source domain of WAR and the target domain of ARGUMENTATION. There are several correspondences between the elements from these domains. Some of these correspondences are activated in various linguistic expressions like ‘He destroyed my argument’. Blending Theory, in contrast, begins with the generic space of OPPOSING, with two inputs, WAR, ARGUMENT. These spaces are composed in the emerging blend ARGUMENT UNDERSTOOD AS WAR. Then, there is a backward projection of this blend into the input spaces (for instance, military combat can be seen as argumentation). This backward projection is explicitly denied in CMT. Lakoff, being more sceptical about interpreting conceptual metaphors within Blending Theory, presents examples of conceptual metaphors that cannot be taken as blends. For instance, the sentence ‘The temperature went up’ expresses the conceptual metaphor MORE IS UP. There is no emergent structure that would combine the domains of TEMPERATURE and VERTICAL ELEVATION. Blending Theory can, on the other hand, explain meaning emergence, where one cannot find two clearly distinguished domains. In fact, simultaneous mappings, like those involved in the poetic metaphors (4), (5), (12) and (13), are can be better explained by Blending Theory.

52. Compare Black’s method of interaction discussed above where a similar backward projection concludes the process too.
4.2. Debates and criticisms

CMT has been an extremely successful theory, and it has been discussed, developed and applied substantially more than any other theory of metaphor. This, however, does not mean that CMT is widely accepted without any critical issues. In what follows, we look at some criticisms that are relevant from a philosophical point of view.55

One line of criticism has been levelled against the very notion of conceptual metaphor. Some authors have doubted the very existence of conceptual metaphors, whereas others have questioned the explanatory value of the conceptual metaphor construct.56 The main argument raised against CMT is an accusation of circular reasoning: the most important evidence for the existence of conceptual metaphors is the existence of (mostly dead) linguistic metaphors or the existence of linguistic polysemy in general. Conceptual metaphors, however, have to explain the very existence of linguistic metaphor and the metaphorical structure of our conceptual system. So, for example, we talk about love in terms of journeys because we think of love in terms of journeys; however, we know that we think of love in terms of journeys because we talk about love in terms of journeys. Proponents of CMT dismiss these objections by pointing out that the evidence of the existence of conceptual metaphors is not current linguistic practice but rather the structure of our conceptual system, which is (to an extent) invariant across cultures and languages. Furthermore, Neural Theory of Metaphor presents additional non-linguistic evidence. This line of argument, however, brings us to the ongoing debate about the level at which conceptual metaphors exist. Do conceptual metaphors reside primarily at the level of cultural models or do they express some aspect of contemporary language (polysemy, for instance), or is neural processing the most fundamental level? This debate also concerns the most fundamental level of evidence for the existence of conceptual metaphors.57

Another particular criticism has been targeted at the vagueness of the notion of domains. Advocates of CMT usually dismiss this criticism

57. See Raymond Gibbs, ‘Evaluating Conceptual Metaphor Theory,’ 552 for a discussion.
by insisting on the definition of a domain as a coherent organization of human experience.\textsuperscript{58} However, this criticism cannot be so simply refuted. As we have seen above, domains have unused parts that can be activated, or they can be extended in non-literal metaphors. Among attempts to implement CMT in computational models, Barnden points out that domain boundaries and domain divisions are based on decisions made by metaphor theorists. These decisions about the structure of domains impact on reasoning about particular metaphors, which, in effect, must be considered theory-relative. It is thus a (useful in isolated cases) fiction that domains do real work in metaphor.\textsuperscript{59} These results call into question neural approaches within CMT which are based on the presupposition that conceptual domains are real structures embodied in neural nodes and circuits.

The problem of delimiting conceptual domains leads to the problem of putting constraints on metaphorical mappings. Lakoff’s Invariance Principle (the preservation of the image-schema of the source and the target domain) is one such constraint. Several amendments and refinements of the principle have been proposed.\textsuperscript{60} Matthew McGlone\textsuperscript{61} argues that CMT is committed to the claim that all aspects of the source domain that preserve the Invariance Principle are mapped onto the target domain. This suggestion is supported by some of Lakoff’s formulations, for instance: each mapping is ‘a fixed pattern of ontological correspondences [...]’. As such, each mapping defines an open-ended class of potential correspondences across inference patterns. When activated, a mapping may apply to a novel source domain.\textsuperscript{62} There is a possible tension between ‘fixed’ and ‘open-ended’. Raymond Gibbs\textsuperscript{63} argues that primary metaphors impose crucial constraints on conceptual mappings. The debate is, however, still ongoing because these constraints cannot explain why only a limited part of a potentially open-ended domain gets activated in everyday language. Some authors have suggested that methods from other theories

\textsuperscript{58} Zoltán Kövecses, ‘Conceptual Metaphor Theory,’ 24.


\textsuperscript{60} See Ruiz de Mendoza Ibáñez, Francisco José and Pérez Hernández, Lorena. ‘The Contemporary Theory of Metaphor: Myths, Developments and Challenges,’ 180–182.


\textsuperscript{63} Raymond Gibbs, ‘Evaluating Conceptual Metaphor Theory,’ 535–537.
of metaphor might be employed here.\textsuperscript{64} As we have seen above, this is a problem that also affects semantic and pragmatic theories of metaphor.

Another critique concerns the originality of CMT. The idea that metaphor is a matter of thinking (or even brain processes) rather than language was endorsed by philosophers such as Herder and Nietzsche. The observation that our language is clustered along certain analogies has been made by many philosophers and rhetoricians since Cicero and Quintilian. These authors used various labels for the phenomenon of conceptual metaphor: allegory (Quintilian), radical metaphor (Müller), ex-metaphor (Jespersen), symbolic representation/analogy (Kant), background metaphor (Blumenberg), analogic frame and, of course, dead metaphor.\textsuperscript{65} Olaf Jäkel\textsuperscript{66} provides an extensive list of possible predecessors of CMT, ranging from Locke and Vico to Arendt and Blumenberg. Lakoff countered such a critique by insisting that ‘one can find quotes here and there’ that ‘are usually so vague you can’t tell’.\textsuperscript{67} Johnson claims that the theories of Searle and Davidson are ‘badly mistaken’\textsuperscript{68} because they ignore the empirical research on conceptual metaphor and for that reason are not able to explain this phenomenon. This is, however, a terminological misunderstanding. Searle’s and Davidson’s theories focus on the phenomenon of linguistic metaphor and its processing. CMT is primarily concerned with the fixed structure of our conceptual system, which is not Searle’s or Davidson’s concern at all. Where CMT explains novel and imaginative metaphors (points (iv)–(vii) above), it uses a mechanism and explanation not that different from those used by Searle and Davidson.\textsuperscript{69}


\textsuperscript{68} Johnson, Mark. ‘Philosophy’s Debt to Metaphor.’ 47.

CMT has been criticized for its bold claims about the nature of reality, the essence of cognition and the structure of our mind. Let us, then, look at the philosophical implications of CMT as voiced by its proponents. Lakoff and Johnson call for a ‘revis[ion of] central assumptions in the Western philosophical tradition’ or claim that ‘analytic philosophy in general [is] fundamentally mistaken’. In particular, they argue against the ‘myths’ of objectivism and literalism. They regard objectivism as the view that the world is made up of objects which have properties independent of any people who experience them and we gain our knowledge by experiencing such objects and properties. Under literalism (not to be confused with literalism as discussed above) Johnson includes classical theories of (literal) meaning that do not pay attention to the phenomenon of conceptual metaphor. Following this definition, Searle, Rorty and Davidson are literalists. Now, denying literalism implies denying objectivism and the correspondence theory of truth because standard theories of meaning are rooted in (the myth of) objectivism. Several authors have cast doubt on whether an empirical theory like CMT can have such far-reaching philosophical consequences.

This brings us to CMT’s implications for a general theory of meaning. Lakoff and Johnson are opposed to the common praxis of ‘extending or patching up some existing theory of meaning’ in order to account for the phenomenon of metaphor. For that reason, they consider virtually all theories of meaning within analytic philosophy to be mistaken. On the other hand, they endorse some of the key elements of Wittgenstein’s later philosophy: family resemblances, rejections of the picture and the building-block theory of meaning, taking the meaning as relative to the context. Later, after the cognitive turn, the basis of meaning is its embodiment in organic neural structures. This is, however, a presupposition of Neural Theory of Metaphor rather than its implication. If language and meaning are considered to be embodied, then CMT has an important implication: there are no separate nodes, circuits or brain centres responsible for specific tasks. Our mind is holistic rather than modular, as mainstream cognitive science (including Relevance Theory) has it.

70. George Lakoff and Johnson, Mark. Metaphors We Live By, 2003, ix–x.
72. George Lakoff and Johnson, Mark. Metaphors We Live By, 2003, 147.
73. Johnson, Mark. ‘Philosophy’s Debt to Metaphor.’
74. George Lakoff and Johnson, Mark. Metaphors We Live By, 2003, ix.
75. Ibid., 182.
5. Hybrid theories and other accounts

It is not surprising that each theory of metaphor explains some kinds of metaphors better than other kinds. Some theories focus more on poetic metaphors, others on conversational metaphors and still others on conventionalized metaphors. This brings us back to the question of whether metaphor is a unified phenomenon (that is, a natural kind) to be explained by a single theory, or whether we are dealing with a multitude of diverse phenomena only accidentally labelled as ‘metaphor’. Prima facie, a unified theory (of metaphor; of figurative language, of meaning in general) would be preferable. No such theory has yet been found. On the other hand, this may lead to inappropriate overgeneralizations that would disregard the intricate complexities of the phenomena under scrutiny. These issues have led to the rise of hybrid theories of metaphor. Some of them pick out certain aspects from other theories but aim at a unified account; others are more bifurcated, highlighting differences among various kinds of metaphor.

Adopting the latter option, William Lycan\textsuperscript{76} proposes combining Searle’s pragmatic theory with Davidson’s non-cognitivist/causal theory. Lycan argues that many metaphorical utterances can be explained as cases of clearly delimited speaker meaning, while other metaphorical utterances are more open-ended and thus transcend the category of speaker meaning. Lycan further maintains that Searle’s theory is the most appropriate theory for explaining the former cases, and Davidson’s theory for the latter cases. Although these two classes cannot be accounted for by a unified theory, they occupy two ends of a scale. Lycan, in fact, proposes that one should try to interpret a metaphor within Searle’s framework by finding speaker meaning, and then, if this turns out not to be possible, to look for non-propositional effects (both approaches can be employed simultaneously). Furthermore, Lycan defends his Pragmatic-Causal Theory against many possible objections and highlights the advantages of his theory over Conceptual Metaphor Theory and Relevance Theory. Roger White’s\textsuperscript{77} refined and subtle theory is in many respects similar to Lycan’s.

Some authors, notably Robyn Carston,\textsuperscript{78} have recently suggested

\textsuperscript{77} Roger White, The Structure of Metaphor: The Way the Language of Metaphor Works.
combining Relevance Theory with Davidson’s non-cognitivism. The Relevance Theory orthodoxy states that open-ended poetic metaphors are analysed in terms of (possibly open-ended) arrays of weak implicatures. These implicatures are nevertheless propositional in nature. Carston argues that there are cases of imaginative metaphor where literal meanings remain active longer (that is, they are not immediately pragmatically modulated) in order to evoke images. The reader is then invited to elaborate on a comparison between such images and the topic of the metaphor. In other words, one thing (the topic) is seen as something else (an evoked image). Let us illustrate this by reference to Keats’ extended metaphor (12), now in a broader context:

Stop and consider! life is but a day;  
A fragile dew-drop on its perilous way  
From a tree’s summit; a poor Indian’s sleep  
While his boat hastens to the monstrous steep  
Of Montmorenci.

The reader is invited to see life, the topic of the metaphor, through the images of a day, of a dew-drop gliding from a tree and of an Indian sleeping in a boat that is approaching the Montmorenci Falls. The Relevance Theory approach would be to adjust the literal meanings of the words used metaphorically into the ad hoc concepts day*, dew-drop*, tree*, Indian*, boat* and Montmorenci*, which would evoke an array of weak implicatures. Although this is not impossible in principle, Carston proposes an alternative way of processing such metaphors: the literal meaning is lingering in the background while the metaphors are being processed. An instant transformation of these literal meanings would, in fact, prevent these images from being evoked. This is an idea that comes from Davidson, who claimed that literal meanings must remain active in their metaphorical setting and not be transformed into metaphorical meanings. Carston highlights the imaginative aspects of Davidson’s theory and sidelines the causal aspects. There are also, according to Carston, two kinds of metaphor processing: (a) pragmatically adjusting literal meanings and (b) evoking mental images and elaborating on a comparison between these images and the topic of the metaphor. In the former method, literal meanings are adjusted in order to capture the topic; in the latter method, the topic is adjusted in order to correspond to the literal meaning. Following the Communicative Principle of Relevance, the reader may prefer one route over the other. There are, however, kinds of metaphors where one method
is clearly preferable to the other. Carston thus tends to side with those who think that there are two types of metaphors: that is, metaphor is not a unified phenomenon.

Relevance Theory has been combined with other theories as well. It is the only major account of metaphor that is not based on mappings between two conceptual domains. The idea is to take such a mapping from some other theory and find a role for it within Relevance Theory. This idea is also implicit in Carston’s proposal above, except it works with a mapping between two images rather than conceptual domains. Esther Romero and Belén Soria\textsuperscript{79} propose combining Relevance Theory with a mapping approach, primarily drawing on Black’s Interaction Theory, but consistent with CMT as well.\textsuperscript{80} They take up the problem of emergent properties: if metaphorical interpretations are arrived at by a kind of loosening of the encoded literal meaning, how, then, can new properties emerge in metaphorical concepts that were not part of the original meanings and that originate in encyclopaedic knowledge? Relevance Theory explains the emergence of encyclopaedic properties by appealing to a loosening of loosening. Romero and Soria argue, contra Carston, that we can nevertheless employ the mechanism of an ad hoc concept construction; the input of such a pragmatic process is not an isolated atomic concept (like day, dew-drop or tree), but rather larger conceptual structures (represented by phrases or by an extended text). The complexes, similar to Black’s implication-complexes, are already enriched and consist of sometimes divergent ad hoc implications. The inputs may be either atomic concepts or a complex structure that within CMT is called a ‘source domain’. These inputs are then processed in the same way, following the Communicative Principle of Relevance. Once we start with an already enriched domain, other ad hoc concepts can emerge based on this domain and not necessarily originating in the lexical meanings of any lexical units used in the metaphor. This approach allows for a unitary, homogeneous explanation of all metaphors. Metaphor, for Romero and Soria,\textsuperscript{81} is a kind of language use with certain essential characteristics found in all instances of it.

Another hybrid theory comes from Markus Tendahl.\textsuperscript{82} His basic


\textsuperscript{81}. Esther Romero and Soria, Belén. ‘Relevance Theory and Metaphor.’ \textit{Linguagem em (Dis)curso}: 506.

\textsuperscript{82}. Markus Tendahl, \textit{A Hybrid Theory of Metaphor: Relevance Theory and Cognitive
approach is to provide a theory of metaphor processing that draws on Relevance Theory and Blending Theory and whose inputs are structured along the lines of conceptual domains (image-schemas) and conceptual metaphors (and other cognitive structures). Tendahl calls such structures conceptual regions. They consist of context-invariant parts (lexical content) and context-dependent parts known as ‘free slots’, which are connectors to external knowledge structures. There are two kinds of free slots, entrenched or ad hoc. Entrenched slots are typically filled with conceptual metaphors. The content of ad hoc slots is generated entirely from the context of the utterance. The emergent enriched structure is similar to mental spaces as defined in Blending Theory. Only parts of the input structures are activated and transferred into a mental space. This activation is guided by the expectation of relevance, that is, by the Communicative Principle of Relevance. Only those parts of the input structures are activated that contribute to the overall relevance of the utterance. In cases of activation of conceptual metaphors, the Invariance Principle must be preserved, that is, the image-schema of the source domain must not be violated. Tendahl argues that his hybrid theory is able to cope with category-crossing metaphors which are problematic within Relevance Theory because of emergent properties that are not part of the lexical content of the involved concepts. One example:

(14) ‘Ruud is a tree.’

Ruud is the name of a person, but no apparent properties of trees can be attributed to people. These lexical concepts, however, have free slots that can be filled with the conceptual metaphor PEOPLE ARE PLANTS. This metaphor maps certain attributes of plants onto specific attributes of people. Some of these attributes, those that contribute to the relevance of the utterance, are activated and transferred into the ad hoc concept tree*. This concept consists of (some) properties of people, not of trees. On the one hand, Tendahl’s hybrid theory is able to explain how some properties can emerge in the course of metaphor processing by considering conceptual metaphor mappings; on the other hand, it has a mechanism available for determining which elements of the source domain are mapped onto the target domain and activated in the resulting ad hoc concept. Deirdre


Wilson\textsuperscript{84} has advanced the similar idea that Relevance Theory can offer a mechanism for restricting conceptual metaphor mappings, that is, for deciding which elements are activated in a concrete utterance.

In conclusion, hybrid accounts of metaphor are often able to utilize the particular advantages of theories they combine while avoiding their particular disadvantages. The price to pay for this manoeuvre is a disruption of the unity of the concept of metaphor itself.

5.1. Seeing-as

Many authors have noticed a link between metaphor and visual perception. Aristotle says that for the right use of metaphor one needs to have \textit{`an eye for resemblances’} or, in Janko’s more verbatim translation, \textit{`to observe what is like [something else]’} (\textgreek{δ}ο\textgreek{μων θεωρεῖν ἐστίν, homoion theorein estin}).\textsuperscript{85} Black and Davidson conclude that metaphor is to be likened to \textit{seeing-as}. Davidson furthermore mentions Wittgenstein’s ‘duck-rabbit’ and maintains that \textit{‘seeing as is not seeing that’}.

Some pragmatic approaches, such as Carston’s,\textsuperscript{87} also explicitly invoke the notion of seeing-as. In the metaphor \textit{`A is B’} the subject \textit{A} is thus \textit{seen as} the predicate \textit{B}. This \textit{‘seeing-as’} is (again) a metaphorical explanation of metaphor. The seeing-as in a metaphor is supposed to be akin or somehow analogous to the seeing-as in visual perception. In the terminology of CMT, we are dealing here with the conceptual metaphor \textit{UNDERSTANDING IS SEEING} and its subordinate metaphor \textit{UNDERSTANDING METAPHORS IS SEEING-AS}. Let us look at several ways in which this idea has been developed.

Some authors\textsuperscript{88} have taken up the suggestion that metaphor is like Wittgenstein’s duck-rabbit, an ambiguous picture which has multiple \textit{aspects} that can dawn and switch between each other. This idea has usually been developed into hybrid theories combining tenets of pragmatic and non-cognitivist approaches. The basic story is that in the metaphor \textit{`A is B’} the frame concept \textit{B} activates some \textit{aspect} of the topic concept \textit{A}. This topic concept \textit{A}

\begin{footnotesize}
\begin{enumerate}
\item Deirdre Wilson, ‘Parallels and Differences in the Treatment of Metaphor in Relevance Theory and Cognitive Linguistics.’
\item Poetics, 1459a.
\item Donald Davidson, ‘What Metaphors Mean,’ 45.
\item Robin Carston, ‘Relevance Theory and Metaphor,’ 51.
\end{enumerate}
\end{footnotesize}
is now organized as if it were the frame B.89 This is what one can extract and interpolate from Wittgenstein’s characterization of aspect seeing.

There are more developed and fine-grained approaches that go far beyond this basic story. The most prominent one is arguably Camp’s theory.90 Here is the gist of the theory: by uttering the metaphor ‘a is F’ the speaker intends her addressee to think of a under the aspect of F (or to frame a in terms of F). This means that the addressee takes the most prominent features in the framing characterization of F, identifies relevant matching features of the subject a and raises these a-features to prominence. This prominence is determined by the context of the utterance. The characterization of a is thus reconfigured or restructured in such a way that those a-features that match the prominent F-features are highlighted. This process is not only an invitation to cultivate a perspective (as non-cognitivist theories maintain), but also a precondition for identifying propositional content which is asserted with illocutionary force (that is, which is part of speaker meaning). The speaker presents the subject a framed by the perspective F and intends to convey some propositional content that is accessible (only) from this perspective. The addressee is invited to cultivate this perspective, in order to access the propositional content intended by the speaker. In other words, the content is not accessible unless the addressee is engaged in framing the subject in the way intended by the speaker.91 Cultivation of a perspective is a typical non-propositional effect of metaphor. This effect can, however, be a way to access, or a precondition for accessing, some propositional content.

This account of perspective allows talk of ‘seeing-as’ or ‘perspective’ to be taken literally, that is, as a spatio-temporal point of view. The resulting metaphorical thinking will, then, be rather pictorial. Perspective can be taken in a more abstract way than just selecting certain features. The resulting metaphorical thinking will then be more abstract.

The addressee may continue thinking of a under the perspective F. She may include less prominent features in the framing characterization of F and try to match them with some features of a. A metaphor interpretation can hence lead to specific propositional content and, at the same time, be rich and open-ended.

Camp’s theory combines and refines the central tenets of Black’s interactionism and Searle’s pragmatics theory while espousing the key intuitions that

89. Jakub Mácha, ‘Metaphor: Perceiving an Internal Relation.’
90. See Elisabeth Camp, Saying and Seeing-as: The Linguistic Uses and Cognitive Effects of Metaphor and her subsequent articles.
fuel non-cognitivist approaches, primarily their insistence on the pictorial and imaginative dimension of understanding metaphor. The notion of perspective has been elaborated as a frame, which is a notion that goes back to Charles Fillmore’s frame semantics. The same source led to the development of the notion of a domain within CMT.

Gergő Somodi has put forward a perlocutionary account of metaphor, which is in many respects similar to Camp’s theory, but which is closer to non-cognitivism (albeit different from Davidson’s/Rorty’s causal account). Somodi maintains that, after all, the ultimate aim of a metaphorical utterance may be, in some cases, to elicit the framing effect.

References


