XIII—METAPHOR: AD HOC CONCEPTS, LITERAL MEANING AND MENTAL IMAGES

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I propose that an account of metaphor understanding which covers the full range of cases has to allow for two routes or modes of processing. One is a process of rapid, local, on-line concept construction that applies quite generally to the recovery of word meaning in utterance comprehension. The other requires a greater focus on the literal meaning of sentences or texts, which is metarepresented as a whole and subjected to more global, reflective pragmatic inference. The questions whether metaphors convey a propositional content and what role imagistic representation plays receive somewhat different answers depending on the processing route.

I

Introduction. Here are some examples of language use which are generally agreed to be metaphorical:[1]

(1) My lawyer is a shark.

(2) The river sweated oil and tar.

(3) Love is the lighthouse and the rescued mariners. (Oskar Davičo, 'Hana')

(4) And when you find yourself at the cliff edge, do not be afraid to jump: either you will fly or He will catch you in His arms. (Christian proselytizer, attested)

(5) The buds of hope and love called out by a day or two of sunshine are frozen again and again till the tree is killed. (Harriet Beecher Stowe, *The True Story of Lady Byron's Life*)

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[1] For the examples used throughout this paper I have borrowed freely from other authors (including Davidson, Moran, Reimer, Sperber and Wilson, Tirrell, and Wearing) as well as introducing some of my own.

(6) I find myself thinking why don't you go to that compart-
    ment in your brain where ideas are meant to be found and
    knock on the door; you just might find it isn't completely
    closed. (Simon Armitage on *The Review Show*, BBC2,
    April 2010)

(7) The fog comes
    on little cat feet.

    It sits looking
    over harbor and city
    on silent haunches
    and then moves on.

                (Carl Sandburg, 'Fog')

(8) If they be two, they are two so   ['they' = 'our souls']
       As stiff twin compasses are two;
    Thy soul, the fix'd foot, makes no show
       To move, but doth, if th' other do.

    And though it in the centre sit,
       Yet, when the other far doth roam,
    It leans, and hearkens after it,
       And grows erect, as that comes home.

    Such wilt thou be to me, who must,
       Like th' other foot, obliquely run;
    Thy firmness makes my circle just,
       And makes me end where I begun.

                (John Donne, 'A Valediction Forbidding Mourning')

I start with some preliminary, somewhat banal, observations about
this disparate range of cases. While all of them have an evocative
imagistic element, it seems to play a more dominant role in some
than in others, most vividly in the detailed, extended metaphors in
(7) and (8). Some of the examples seem more amenable to being de-
scribed as informative, as having a more or less definite proposition-
al content, than others: one might express agreement with the
statement made by an utterance of (1) or object to the content of
(6), insisting that the scriptwriters being criticized, who do a lot of
cross-referencing to earlier movies, are in fact being creative. In the
poetic cases, (3), (7) and (8), (dis)agreeing with propositional con-
tent would, if possible at all, be a mistake, while judging the aptness

or insightfulness of the metaphor (its accuracy in capturing an experience or feeling) would be to the point, and the same might hold also for the more prosaic (5).

Clearly, some of the examples are more familiar, more frequently used (even conventionalized), than others: (1) tops the list in this respect, (2), (4), (5) and (6) are based on fairly familiar metaphorical schemes, and (3),[2] (7) and (8) are the most unusual and inventive, although the 'fog as a cat' has occurred before in English poetry. Some are spontaneous, spoken and conversational while others are highly wrought, extended over a length of text and clearly literary or poetic. I've tried to present a good range of linguistic forms rather than just the 'X is a Y' construction that sometimes dominates discussions. This is a frequent form in conversational metaphors where the aim is often to achieve a strong swift expression of praise or blame ('She's a saint/angel/bulldozer/pig/mouse/battle-axe/dragon/block of ice/etc.'). It is also an easy form to convert into a corresponding simile, so serves well the purpose of those who want to explore the simile–metaphor relation.[3] In fact, there seem to be few, if any, formal linguistic restrictions on where a metaphorically used expression can appear in an utterance.

Some of these properties seem to cluster together: being conversational, spontaneous, conventional, single-word metaphors and having a propositional content, on the one hand; being literary, carefully crafted, extended and developed, expressive of a feeling or sensation, highly imagistic, on the other hand. So it may seem that there are two kinds of metaphor, the 'ordinary' and the 'literary', and that we should not expect a single account that applies to both. While I don't think that there is a clear-cut distinction between two kinds of metaphor, I will argue that there are two different routes to the understanding of metaphors—a quick, local, on-line meaning-adjustment process and a slower, more global appraisal of the literal meaning of the whole.

As a philosophical backdrop to the dual processing account that I will present, the next section sets out two broad positions on the

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[2] The example in (3) is a line from a poem which is quoted more fully (in translation) in §v.

[3] Virtually every possible relation between a metaphor and its corresponding simile has its advocates: metaphors as elliptical similes, similes as hedged metaphors, distinct tropes with much the same effects, distinct tropes with significantly different effects, and others. Current psycholinguistic evidence tends to support the fourth position but confines its experimental testing to very simple cases of the form 'X is (like) Y'. I don't pursue the issue in this paper.

nature of metaphor: the proposition view and the image view. Each
of these captures a part of the story about metaphor, I think, but
neither, on its own, adequately characterizes the full range of cases.
Instead, I will suggest that the propositional and imagistic compo-
nents are both present across the range of metaphors, irrespective of
which of the two processing modes is employed, but that differences
in their relative weightings tend to correspond with which of the
two routes is taken.

II

Proposition Theories and Image Theories. This distinction between
two kinds of philosophical accounts of metaphor is set out in some
detail by Martin Davies (1982).[4] He takes as the primary exponent
of the image theory Davidson (1978/1984), according to whom
there is no such thing as a metaphorical meaning ('Metaphors mean
what the words, in their most literal interpretation mean, and noth-
ing more' (Davidson 1978/1984, p. 245)) and what a metaphor
does is bring to our attention aspects of the topic that we might not
otherwise notice, by provoking us or nudging us to 'see' the topic in
a new or unusual way. Rather than communicating a cognitive con-
tent, a metaphor evokes certain responses, in particular, mental im-
ages. Discussing the now dead metaphor 'He was burned up',
Davidson says, 'When the metaphor was active, we would have pic-
tured fire in the eyes or smoke coming out of the ears' (Davidson
1978/1984, p. 253). In apparent opposition to this position, advo-
cates of one or another version of a proposition theory maintain
that a speaker who uses language metaphorically may m-intend (in
Grice's sense) or ostensively communicate (in Sperber and Wilson's
1986/1995 sense) a propositional content and may even assert such
a content (Bergmann 1982).

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[4] In Davies (1982), the proponents of the 'proposition' theory are Searle (1979) and Berg-
mann (1982), while the main image theorist is Davidson (1978/1984) with Max Black
(1979) more a fellow traveller than not. Now, so many years and so many papers on meta-
phor later, we can add to the 'proposition' camp Sperber and Wilson (1985–6, 2008),
Glucksberg (2001), Carston (2002), Hills (1997), Stern (2001), Wearing (2006) and to the
'image' camp Levin (1993), Moran (1989), Reimer (2001), Camp (2008). Needless to say,
this is the broadest of broad categorizations and there are important differences among
authors within one group or the other, and some authors mentioned as belonging on the one
side also have a foot on the other.

Until very recently, the stance taken by the proposition theorists was that this content is communicated indirectly, as an implicature (or implicatures) of the metaphorical utterance (Grice 1975; Searle 1979; Sperber and Wilson 1985–6). Although there are fundamental differences between the Grice-Searle and Sperber-Wilson accounts, in particular with regard to the interpretative procedure used for recovering the speaker's intended meaning, they share the assumption that the proposition literally expressed is merely a vehicle by means of which, guided by certain communicative presumptions, the implicated speaker-meaning is recovered. All acknowledge the rich open-endedness of metaphoric interpretation, the indeterminacy of the speaker's intention in this connection and the indefinite range of the implications that might be recovered. In this, the proposition theorists may seem to go some way towards Davidson's position, at least as he articulates it here: 'When we try to say what a metaphor "means", we soon realize there is no end to what we want to mention' (Davidson 1978/1984, p. 263).[5]

However, as Davies (1982, p. 74) points out, there is an essential difference between the image theorist and the proposition theorist, which is captured in the following passage from Davidson: 'If what the metaphor makes us notice were finite in scope and *propositional in nature*, this would not in itself make trouble. … But in fact there is no limit to what a metaphor calls to our attention, and much of what we are caused to notice is *not propositional in character*' (Davidson 1978/1984, pp. 262–3; my emphasis). And Davidson goes on to draw his well-known analogy with pictures, drawings, maps and photographs, finishing with: 'Words are the wrong currency to exchange for a picture.' In short, the literal content of a metaphor (which is its only 'meaning') evokes an image or images and the result is that we see one thing as another (the lawyer as a shark, the river's contamination with oil as sweating, the two lovers as the arms of mathematical compasses, etc.).

A striking feature of Davidson's paper is his concern for *an expla-*

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[5] Sperber and Wilson, in particular, develop a detailed account of this open-endedness of interpretation. They talk of metaphors as having a cognitive content which can be analysed 'in terms of an indefinite array of weak implicatures' (Sperber and Wilson 1985–6, p. 170), and, in a discussion of poetic effects more generally, they say such effects need not add entirely new assumptions to the mutual cognitive environment of speaker and hearer: 'Instead, they marginally increase the manifestness of a great many weakly manifest assumptions … poetic effects create common impressions rather than common knowledge' (Sperber and Wilson 1986/1995, p. 224).

nation of how metaphors work, of how we understand them. His central dissatisfaction with talk of metaphorical or figurative meanings and of metaphorical truths is not that they are entirely vacuous notions, but that they do no explanatory work: 'These ideas don't explain metaphor, metaphor explains them. Once we understand a metaphor we can call what we grasp the "metaphorical truth" and (up to a point) say what the "metaphorical meaning" is' (Davidson 1978/1984, p. 247). This seems essentially right to me,[6] and what follows in the next two sections is an attempt to meet this need for an explanation, for an answer to the question of how metaphors work, interpreted as a question about the mental processes of metaphor understanding.

Ultimately, the account encompasses aspects of both the proposition theory and the image theory since, in my view, full understanding of any metaphor involves both a propositional/conceptual component and an imagistic component, though the relative weight and strength of each of these varies greatly from case to case. The distinction made in the next two sections between two modes of processing focuses on the propositional component and how it may vary across different metaphors, with regard both to how it is derived (more or less directly) and to its strength or determinacy. The place of imagery in the story is deferred to §v, where it will be suggested that images are not only non-propositional *effects* of metaphor comprehension, but also, at least in some instances, *vehicles* used in the recovery of propositional effects.

I take the cognitive-propositional approach to metaphor developed within relevance theory as my starting point (Sperber and Wilson 1986/1995, 2008; Carston 2002) and, given that the aim of my account is to make a case for two distinct ways of processing metaphor, the discussion inevitably employs terms more familiar in psychology than philosophy, such as 'processing load', 'semantic priming', and 'degree of activation'.

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[6] Davidson briefly indicates that he would say much the same for 'any use of language' (Davidson 1978/1984, p. 263), implicitly drawing here a distinction between encoded or 'standing' linguistic meaning and the meanings and effects brought about by the pragmatics of language in use (whether literal or non-literal). The account that follows in the next sections is very much in keeping with this outlook.

III

How Some Instances of Metaphor Work. Recently, cognitively-oriented theorists have taken what might seem to be an even stronger propositional stance than that mentioned in the previous section: they claim that speakers of metaphorical utterances not only convey an array of implicatures but also directly communicate a propositional content, a constituent of which is, in effect, a metaphorical meaning of some sub-part of the utterance (e.g. of 'shark' in (1), or 'sweated' in (2), or, perhaps, 'the lighthouse and the rescued mariners' in (3)).[7]

As developed within the relevance-theoretic framework, the idea is that these are just like other cases of loose use, for which a word's standing linguistic meaning is pragmatically adjusted or modulated during comprehension. The result is an occasion-specific sense or ad hoc concept which contributes to the proposition explicitly communicated (the 'explicature' or truth-conditional content of the utterance):

(9) Utterance: My lawyer is a shark.
     Explicature: LAWYER X IS A SHARK*
     Implicatures: LAWYER X IS RUTHLESS, MERCILESS TO
         HIS OPPONENTS, EXPLOITS HIS CLIENTS FINAN-
         CIALLY, etc.

(where the asterisk distinguishes the communicated concept SHARK* from the lexically-encoded concept SHARK).[8]

Consider an example which can have a range of loose interpretations:

(10) The water is boiling.

An utterance of (10) could be intended and understood in any of the following ways: *strictly literally*, communicating that the water is BOILING, so at or above boiling point; as an *approximation*, communicating that it is close enough to BOILING for the differences to be inconsequential for current purposes (e.g. for making a cup of coffee); *hyperbolically*, so not BOILING but closer to it than expect-

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[7] See, for instance, Bezuidenhout (2001), Glucksberg (2001), Stern (2001), Carston (2002), Wilson and Sperber (2002), Recanati (2004), Wearing (2006), Sperber and Wilson (2008), Wilson and Carston (2008).

[8] Small caps are used throughout to represent concepts as distinct from linguistic expressions.

ed or desired (e.g. too hot to wash one's hands in comfortably); or *metaphorically*, suggesting, for instance, that the water, although not necessarily anywhere near boiling point, is moving agitatedly, bubbling, emitting vapour, and so on. In each case, a different concept is communicated, all of them derived from the literal encoded concept, and on the non-literal interpretations the concept's denotation is broader to varying degrees than that of the lexical concept.

The claim is that all these interpretations are reached in essentially the same way, namely, by an inferential pragmatic process of deriving contextual implications which meet particular standards of cognitive relevance.[9] In the course of that process, an explicature is pragmatically developed on the basis of the decoded linguistic meaning, elements of which, specifically the concept BOILING, may be adjusted by a backwards inference process in response to particular hypothesized implicatures. Consider a context in which the hearer has just run a bath for the speaker, who steps into it and then utters (10); typically, the relevant implications here are that the water is too hot to bathe in, feels unpleasant on the skin, and so on. Much of the information associated with the literal encoded concept BOILING does not enter into the interpretative process at all (information about actual boiling point, the use of boiling water for sterilizing instruments, the damage it can do to human skin, etc.). The lexically encoded concept is adjusted to an ad hoc concept BOILING* which warrants just these context-specific implications and whose denotation is consequently broader than that of the encoded concept: it includes not only actual instances of boiling point but a range of other lower temperatures. This is an instance of a hyperbolic use, and the idea is that a metaphoric use works in essentially the same way. In an appropriate context, perhaps a violent storm at sea, an utterance of (10) would carry implicatures about the way the sea looks (churning and seething, throwing up foam and vapour) and perhaps about how the speaker experiences it (as overpowering, dangerous, frightening), with quite possibly no implications at all concerning temperature. Again, the encoded concept BOILING would be adjusted so that the explicature as a whole can play its role as a premiss grounding these relevance-based implications and, again, the ad hoc con-

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[9] For an account of what these standards of relevance are and how they are motivated by the very nature of ostensive communication (against the backdrop of the general cognitive drive toward maximizing the benefits and minimizing the costs of processing new information), see Sperber and Wilson (1986/1995).

cept derived would be considerably broader in denotation than the lexical concept.[10]

An important question here concerns the appropriate notion of metaphorical content (and the content of ad hoc concepts more generally). Attempts to provide a literal paraphrase of metaphorically used language typically fail to specify its content in two ways: (a) they include much more than could possibly be part of the explicit propositional content because they articulate likely implications and effects of the metaphor; (b) they miss the essence of the metaphor's content, and this, I suggest, is because probably it simply cannot be expressed literally, hence the use of a metaphor in the first place.[11] Others have confronted this issue head-on,[12] so I will simply assume here that a notion of metaphorical content can be delineated which is appropriate to its role in explicature (the utterance's truth-conditional content).

The ad hoc concept account of metaphor seems to be very much at odds with Davidson's 'no metaphorical meaning, no cognitive content' position and his emphasis on non-propositional effects. More generally, there might seem to be some tension between what people usually find most striking about metaphors—their sensory, imagistic, phenomenal properties (their figurativeness)—and the apparently rather general, abstract nature of the ad hoc concepts the current account delivers.[13] Perhaps, as has been suggested by some, this is because this kind of theory applies only to relatively conventionalized or routinized cases like 'shark', 'saint', 'devil', 'boiling', 'block of ice', 'bulldoze' and 'butcher', for which a second, metaphorical, sense is listed in some dictionaries and whose evocative aspect could be argued to have been lost or greatly diminished as its conceptual content solidified.

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[10] There is a reconfiguring here of traditional relations among tropes: hyperbole and metaphor are closely aligned (in fact, allegedly, indistinguishable in some instances) while metaphors and corresponding similes are processed and understood differently (there is no radically broadened ad hoc concept in the explicature of similes).

[11] Behind this suggestion lies a particular view of the language–thought or word–concept relation, according to which human conceptual resources far outstrip the meanings encoded in linguistic systems (Carston 2002).

[12] See Wearing (2006) for a characterization of a notion of metaphorical content which puts it on a par with the standardly 'thin' notion of literal content.

[13] This is most marked for accounts that take the ad hoc concept to be superordinate to the literal encoded concept, e.g. analyses on which 'My lawyer is a shark' expresses a concept SHARK*, which includes all actual sharks and certain human beings, and is paraphrased as the category of predatory, aggressive, tenacious entities (Glucksberg 2001).

However, the scope of the account is intended to be considerably wider than this. The interpretative process outlined above is context-sensitive and pragmatic, so should apply to the understanding of relatively novel, unconventional cases, such as the following:

(11) The woods are *laughing*.

(12) My garden is a *slum* of bloom.

(13) Context: Discussion among some young people about older, rather dominant, female members of their families.
Utterance: You should meet my granny, Paul. She's the one would put manners on you. She's a real *paint remover*.[14]

The questions whether and, if so, how the account in terms of ad hoc concepts might have the resources to not only allow for, but also give proper weight to, the phenomenologically salient imagistic properties of metaphors such as these will be broached in §v.

IV

How Some Other Cases of Metaphor Work. Although the explanatory reach of the ad hoc concept approach extends beyond conventional metaphors, I don't think it works for all occurrences of metaphor, in particular (but not only) many of the more extended and/or literary examples. In the cases I have in mind, the literal meaning of the whole metaphorical text or utterance plays a more central and sustained role than it does for the examples just discussed, where the literal meaning of lexical or phrasal sub-parts is reworked locally on-line into a metaphorical meaning (the ad hoc concept).

Davidson's statement that 'the primary or original meanings of words remain active in their metaphorical setting' (Davidson 1978/1984, p. 249) expresses an intuition shared by many who investigate metaphor understanding, though exactly what it means needs further explication. Even in the cases of relatively rapid local meaning-adjustment the literal meaning doesn't just disappear once

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[14] The first two examples are discussed by Wearing (2006); the third is taken from Colm Toíbín's novel *The Blackwater Lightship* (1999, p. 37).

the expressed content has been recovered. One initial indicator of this is the often noted jarring effects of so-called mixed metaphors:

(14) If you find a student with a spark of imagination, water it. (Tirrell 1989)

This is a case where the intended meaning is pretty clear and can be readily accounted for in terms of the pragmatic construction of ad hoc concepts:

SPARK* (rough paraphrase: small beginnings of something that could grow to be substantial/vibrant/positive/productive)
WATER* (rough paraphrase: nurture, encourage, help to grow/develop)

Once the intended meaning of 'spark' is accessed in the on-line interpretation process, there is no obvious reason for its literal meaning to remain cognitively active, and yet it seems that it must do since many people are struck by the clash between the relevant interpretation and the conception that comes from the literal meaning of 'spark' and 'water'.

There is evidence from psycholinguistic experiments designed to tap on-line processing which indicates that literal meaning is always activated initially, even in heavily metaphor-biased contexts and—more significantly—that it remains activated well beyond the point at which the relevant, that is, the metaphorical, interpretation has been recovered (Rubio Fernandez 2007). The conclusion drawn is that deactivation of the literal meaning requires a higher-level process of suppression than is involved in other meaning selection processes, such as the disambiguation of homonyms like 'bank' or 'coach', where the contextually irrelevant meaning disappears significantly more quickly.[15]

This 'lingering of the literal' becomes more significant for metaphor understanding when we turn to metaphors that are extended and developed over a stretch of text or a whole poem, such as John Donne's 'twin compasses' conceit in example (8), or any number of

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[15] The psycholinguistic methodology used (cross-modal priming) is intended to reveal processes at a subpersonal (unconscious) level while, clearly, the effects of the mixed metaphor are consciously registered. The general point of interest here is the ongoing accessibility of aspects of literal meaning that are not part of the understood propositional content. The difference between those that remain subpersonal and those that surface to consciousness seems to be a matter of some sort of threshold in degree of activation (for relevant discussion, see Recanati 2004, pp. 76–80).

Shakespeare's extended metaphors. It stretches credulity that these cases, which often involve multiple sub-metaphors within the main metaphor (for instance, the 'leaning and hearkening' of the fixed foot of the compasses in the Donne example), are understood via the pragmatic mechanism of ad hoc concept construction. This would be a matter of multiple quite extreme adjustments of many individual lexical meanings, one after the other, and probably further readjustments at phrasal and higher levels, allegedly in response to contextual implications warranted by expectations of relevance. It can't be ruled out that this is what goes on, of course, but there is another possibility, one which seems to me more in tune with the phenomenology of understanding these metaphors and which makes very natural use of the ongoing availability of literal meaning.

 I'll try to make the case for this second route to understanding through a consideration of two examples of moderately extended metaphor (space constraints preclude longer examples):[16]

> (15) Life's but a walking shadow, a poor player
>   That struts and frets his hour upon the stage
>   And then is heard no more: it is a tale
>   Told by an idiot, full of sound and fury,
>   Signifying nothing.
>
>   (Shakespeare, *Macbeth*, V. v. 24–30)

After the introduction of the topic, 'Life', virtually every word here is used metaphorically. Are we to suppose that we are forming ad hoc concept after ad hoc concept, WALKING-SHADOW*, POOR-PLAYER*, STRUTS*, FRETS*, HOUR*, STAGE*, even UPON*, and so on, replacing each of the literal lexical meanings in the developing interpretation? What appears to me to be going on here is that the literal meaning is not just lingering in the background (remaining activated even once a new metaphorical meaning has been formed), but has taken over from any process of metaphorical adjustment of concepts. The linguistically encoded concepts are sufficiently closely related that they semantically prime and reinforce each other, to the extent that their activation levels are so high that a literal interpretation unfolds—a description of an indifferent theatre performance.

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[16] See Tirrell (1989) for more lengthy and intricate examples of extended metaphors from Shakespeare's work, which might serve my point even better than the examples discussed here.

Then, a second, distinct but related, scenario develops, describing the vehement telling of a meaningless story. Of course, we are not there yet with grasping the metaphors, whose subject is human life. These sets of literal representations are framed or metarepresented,[17] mentally held, and submitted for further reflective inferential processing. This process effectively extracts implications about life that are relevantly and plausibly attributable to Macbeth at this stage of the play (when all his grand ambitions have come to nought)—concerning its brevity and pointlessness, the deluded self-importance of each of us, how little our best efforts are valued by anyone else, and so on.

The central idea is that, in cases like this, the forming of metaphorical ad hoc concepts locally and quickly in the on-line interpretation process is too demanding, too effortful, given the persistent high activation (by backwards and forwards priming) of the closely associated literal meanings. So there is no explicitly communicated propositional content other than the literal meaning itself represented within the mental equivalent of scare-quotes. In this respect, the account meshes with Davidson's insistence that a metaphor (and so also the metaphor maker) doesn't 'say anything beyond its literal meaning' (Davidson 1978/1984, p. 246). The interpretation that ultimately results from processing the literal scenario as a whole consists of many weak implicatures and other implications (different to some extent for different hearers/readers).

This kind of explanation would apply also to the understanding of the following passage from a contemporary novel:

> (16) Depression, in Karla's experience, was a dull, inert thing—a toad that squatted wetly on your head until it finally gathered the energy to slither off. The unhappiness she had been living with for the last ten days was a quite different creature. It was frantic and aggressive. It had fists and fangs and hobnailed boots. It didn't sit, it assailed. It hurt her. In the mornings, it slapped her so hard in the face that she reeled as she walked to the bathroom. (Zoë Heller, *The Believers*, 2008, p. 263)

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[17] All I mean here by 'metarepresenting' the conceptual representation which comprises the literal meaning is that it is neither taken as descriptive/factual itself nor adjusted into another descriptive representation, but is held for a further process—of inspection, as it were, of its conceptual properties (implications, associations).

Again, rather than expending the inferential effort required to con-
struct a lot of distinct ad hoc concepts, TOAD*, SQUAT-ON-YOUR-
HEAD*, CREATURE*, FISTS*, FRANTIC*, FANGS*, HOB-NAILED-
BOOTS*, and so on, the highly accessible literal meanings impose
themselves and a coherent set of conceptual representations is
formed of a somewhat surreal world of repulsive amphibious crea-
tures with different kinds of characteristics (some sitting inertly on
human heads, some kicking and biting). From this set of descrip-
tions (and accompanying imagery), taken as a whole, we derive im-
plications that can plausibly apply to the human experiences of dull
depression and raw unhappiness.

   What I am suggesting is that there are two kinds or modes of met-
aphor processing: (a) a process of rapid on-line ad hoc concept for-
mation which is continuous with the kind of context-sensitive
pragmatic adjustments to encoded lexical meaning that are made in
comprehending a variety of other loose and/or non-literal language
uses, and (b) a process in which the literal meaning of metaphorical-
ly used language is maintained, framed or metarepresented, and
subjected to slower, more reflective interpretative inferences that
separate out implications that are plausibly speaker-meant. To put it
concisely: on the first method, word meaning is pragmatically ad-
justed so as to capture the thought, and, on the second strategy, the
thought or world conception is (albeit temporarily) made to corre-
spond to the (literal) language.[18] The first mode is, as it were, the
normal mode—we are adjusting word meanings to a greater or less-
er extent all the time in comprehending utterances, in accordance
with our occasion-specific expectations of relevance. The switch to
the second mode is made when a certain processing threshold or tip-
ping point is reached, when the effort of local ad hoc concept for-
mation is too great relative to the dominance, the high accessibility,
of the literal meaning. There may well be individual differences with

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[18] This is akin to a distinction Elisabeth Camp made in a talk (in Paris, 2006) between inter-
pretation in a 'basic way' and interpretation in an 'imaginative surrealizing way', where on
the basic way, we reconstrue our understanding of the words to fit our expectations about
the world, while on the imaginative way, we reconstrue our sense of the world to fit a literal
understanding of the words. However, I think her second way is broader than what I have
in mind for metaphor, as it would include the understanding of allegories and other fictions
and various kinds of pretence in language use. In a more recent paper, she herself distin-
guishes the imaginative activity involved in pretending that something is true from that
involved in metaphorical construal (Camp 2009). See also Levin (1993) on a proposal for
the understanding of specifically literary metaphors in terms of world construal (rather than
language construal).

regard to this threshold. And the move may, on occasion, be made deliberately, a top-down decision taken to go with the language and adopt a reflective contemplative stance on it.

The idea here is not that it is only sustained and intricately developed metaphors, those that contain a critical mass of words whose literal meaning is mutually reinforcing, which will tip the interpretation process into the second mode. Rather, it is that whenever the local processing load reaches a level at which the effort of accessing or constructing an ad hoc concept is too great, the system takes a different route (less steep and immediately demanding, but probably longer and slower). So, even certain metaphors that are not particularly lengthy or developed might have this kind of impact on the cognitive system. Consider, for instance, the following from Emily Dickinson (1863):[19]

> (17) My Life had stood—a Loaded Gun—
>   In Corners—

Rather than infer a new concept LOADED-GUN*, it seems likely that the literal meaning of 'a loaded gun' is held and metarepresented— 'A LOADED GUN'—and an explicit, deliberate process engaged, which assesses the implications and associations carried by this conceptual representation and selects those that might plausibly characterize a human life, specifically a life that 'HAD STOOD IN CORNERS'. More generally, a range of different factors can be expected to play a role in determining which processing mode is employed in any given instance: how conventional or familiar the metaphorical use is versus how novel or creative it is, how extended or developed it is, whether it occurs in time-pressured face-to-face speech or in a literary text, and perhaps others.

Finally, consider again example (7), Sandburg's 'The fog comes/ on little cat feet'. Sperber and Wilson (2008) discuss the cognitive effects these two lines have, including weak implicatures about the silent, smooth, stealthy way in which the fog arrives. They go on to say that the explicit content of these lines is that the fog comes ON-LITTLE-CAT-FEET*, where this ad hoc concept is 'the concept of a property that is difficult or impossible to define, a property pos-

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[19] This is the opening line-and-a-half of a poem in which this metaphor is, in fact, somewhat further developed, but even isolated like this it may be understood by means of the second mental route.

sessed in particular by some typical movements of cats … and, according to the poem, by the movement of fog. How is this ad hoc concept ON-LITTLE-CAT-FEET* arrived at? By taking the poet to be attributing to the coming of the fog that property which contextually implies the very ideas suggested by the phrase "little cat feet"' (Sperber and Wilson 2008, p. 102). Perhaps this is how some people's understanding of the metaphor works and perhaps with re-reading(s) more people would come to process it in this ad hoc concept way. However, the poem continues with 'It sits looking / over harbor and city / on silent haunches / and then moves on', and I suspect that, for many readers, especially on an initial reading, the literal meaning takes over and is metarepresented as a whole, along with the mental image of a large, soft, lightly padding but purposefully moving cat, and from these together are derived implications about the way the fog looks and feels.

The general claim of these two sections is that an account of metaphor understanding that covers the full range of cases needs to allow for two different modes of processing. On both of these, cognitive (propositional) speaker meaning is conveyed, but on the first route it consists of a direct, explicitly communicated propositional content (as well as some implicatures), while on the second route it is entirely a matter of implicature, often a dense cluster of weakly communicated implicatures. The focus so far has been on these conceptual components of metaphor understanding, with only occasional brief mentions of imagery. I have not yet addressed aspects of the familiar phenomenology of metaphor discussed in the introduction nor fully engaged with Davidson's emphasis on the 'seeing as' or 'noticing' experience that a metaphor provides, and which, as with other imagistic phenomena, makes available an open-ended array of possible observations: 'A picture is not worth a thousand words, or any other number. Words are the wrong currency to exchange for a picture' (Davidson 1978/1984, p. 263).[20] In the next section, I consider the phenomenon of mental imagery in metaphor understanding, as it manifests itself in both of the processing routes outlined.

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[20] Here, for 'words' I would substitute 'words or concepts', thus allowing that we may employ in our thoughts and also communicate to each other concepts that are not encoded in our linguistic systems. Like words, concepts are 'the wrong currency to exchange for a picture'.

V

Imagery and Literal Meaning. A characteristic of some lyric poetry is not so much to develop the details of a single metaphor as to present a string of loosely connected metaphors. The following example demonstrates this clearly, with a series of vividly imagistic metaphors each giving expression to the transformative effects of love (the personified referent of 'she'):

> (18) She woke me up as the bright screech of rockets wakes up
>   the forest
>   And now I am blind to you, you squinty-eyed vagrants.
>   Love is so lonely and so full of people.
>   Love is the lighthouse and the rescued mariners.
>
>   She makes my eyes burn—glowing torches in the crowd,
>   The sea and the fishing nets, the fish and the fishermen,
>   are ripe with her.
>   Down the rope of the waterfall the eels slither with her
>   And cut-throat thugs sing songs like sparrows or kids at
>   play.
>
> <div align="right">(Oskar Davičo, 'Hana')[21]</div>

Davidson's rejection of conceptualized metaphorical meaning and emphasis on the literal meaning of the words and their imagistic effects seems irresistibly right here—by staying with the literal meaning and the images it evokes we may come, at least partially, to understand how the world looks and feels to the poet in his exalted state of mind.

Among proposition theorists, Sperber and Wilson (1986/1995, 2008) stand out for their engagement with the rich, open-endedness of the effects that many metaphors (and other poetic uses of language) can have. Nevertheless, their account remains resolutely propositional: 'What look like non-propositional effects associated with the expression of attitudes, feelings and states of mind can be approached in terms of weak implicature' (Sperber and Wilson 1986/1995, p. 222), and 'if you look at these apparently affective effects through the microscope of relevance theory, you see a wide array of minute cognitive effects' (p. 224). Whether or not this is

true of apparently affective effects of particular uses of language, I don't think it can be true of the imagery that seems to be characteristic of many metaphors and from which much of the affective dimension of a metaphor's effects seems to be derived.

A compelling case is made for the distinctive, *sui generis* nature of mental imagery by McGinn (2004). He claims that images are not reducible to (traces or faint copies of) percepts, nor to some sort of dense clustering of thoughts, nor to some kind of amalgam of percepts and concepts/thoughts. It is his critique of a particular 'cognitivist' view of mental images that is most relevant to my concerns here, a view on which an image is taken to be a conjunction of concepts, thoughts or propositions entertained simultaneously. McGinn argues against this view on several grounds: (a) the concept theory cannot do justice to the sensory character of the image (such features as its colour, shape, or texture, for instance, that we 'see' with our mind's 'eye'); (b) related to this, concepts and images have very different relations to percepts; and (c) it is (he claims) not possible to imagine an object while actually seeing it (that is, to simultaneously have a percept and an image whose content is the same), but it is quite possible (a frequent occurrence, in fact) to conceptually categorize an object that one is perceiving, from which it follows that image and concept cannot be identical (McGinn 2004, p. 38). He concludes that images are a distinctive type of mental phenomenon 'and should be added as a third great category of intentionality to the twin pillars of perception and cognition' (McGinn 2004, p. 39).[22]

A strand of work in current psycholinguistics presents empirical evidence that, even in comprehending perfectly ordinary, literal language, people inevitably, immediately, and seemingly without much awareness, token mental images. In a series of experiments, Rolf Zwaan and colleagues presented sentences such as 'There was an eagle in the sky' and 'There was an eagle in its nest' and, importantly, also their negative counterparts ('There was no eagle in the sky/nest', etc.) to participants whose subsequent task was to name a picture of a bird. Those who had just heard either the positive or negative 'eagle in the sky' sentence responded (that is, uttered the word 'eagle') significantly faster to a picture of an eagle with out-

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[22] Here I am indebted to Adrian Pilkington who has been pressing for greater attention within relevance theory to the issue of non-propositional effects of metaphor for quite some time and who directed me to McGinn's book. See Pilkington (2000, 2010).

spread wings than to one with folded wings, and vice versa for those who had just heard one of the 'eagle in a nest' sentences. In a second set of experiments, the sequence of tasks was reversed, so participants first performed a word-picture verification in which the critical object was shown in one or the other of two states (e.g. flying or perching in the case of an eagle) and then they read one of the key sentences (e.g. 'In the sky an eagle …', 'In its nest an eagle …'). The results were that reading times of the target word (e.g. 'eagle') were longer when the shape implied by the text didn't match the shape in the preceding picture phase. While an explanation of these results in concept/thought terms may be possible, Zwaan's view that a mental image of an eagle, with wings either outspread or folded depending on the sentence, is activated[23] seems very plausible. It meshes with the phenomenology of language comprehension and is supported by numerous other experiments, including studies that map areas of brain activity during language processing.[24]

Suppose it is right that mental imagery is triggered by (descriptive) words quite generally and requires no particularly effortful processing, no special attention beyond that required for accessing encoded concepts, then it is there for speakers to exploit, to highlight and induce hearers/readers to pay extra attention to, to scrutinize with their mind's eye.[25] So, when reading the passage from Zoë Heller's novel given in (16), we are very likely to form an image of a toad squatting on a human head and another of some more fantastical creature with generally less well-defined contours, but with fists and fangs, and so on. By providing a literal meaning which is both persistent (it doesn't readily give way to the composition of a succession of non-literal ad hoc concepts) and quite bizarre, the text calls

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[23] There is a prima facie tension here between this talk of automatic activation of images in language comprehension and McGinn's position that mental imaging is attention-dependent. However, this seems resolvable. First, the process of utterance comprehension, within which the images at issue arise, is itself an attention-dependent activity. Second, the encyclopaedic information associated with the concepts that words encode may well include imagistic components which are activated when the lexical concept is accessed, rather than there being a separate mental act of image-forming.

[24] See, for instance, Zwaan et al. (2002) and Wassenburg and Zwaan (2010). Zwaan and his colleagues advocate an 'embodied' theory of language comprehension, which eschews amodal (conceptual) representation, but that stance is not required by their empirical findings.

[25] Here I skirt round an important issue raised by McGinn (2004, ch. 5) concerning what is, in fact, the object of scrutiny by the mind's eye. The question is whether it is the image which, like a picture in a gallery, is attended to or it is the imaged object itself that is scanned with the image playing the role of vehicle. McGinn argues for the second position.

for further, more deliberate, pragmatic processing, and together with that, I suggest, comes a more attentive focus on the accompanying imagery than would standardly be given to ordinary literal language use (such as the 'eagle' sentences above). The images that come with the literal meaning are dynamic and morph progressively as the incoming linguistic stimulus is decoded: first, there is a (probably rather schematic) image of a toad, which develops into an image of a glistening (wet) toad on a human head, and then into an image of the toad slithering down off the head. However, the more imaginative or creative imaging activity is that of 'seeing' the mental state of depression as revealed in these images, of inspecting them for how they depict 'depression', which is their subject and functions as a kind of constraining title or caption.

Scrutiny of the mental images formed might play a key role in prompting thoughts (conceptual representations) about the experiences of depression and of raw unhappiness, implications that may fall within the author's communicative intention (weak implicatures, in Sperber and Wilson's terms). This role for images could provide an explanation for what are sometimes called 'emergent properties' in metaphor understanding, that is, properties that are not among those directly associated with the literal meaning of the metaphor vehicle—for instance, the (not fully verbalizable) feeling of heavy hopelessness and inertia that is typical of depression but is not a component of our encyclopaedic (conceptual) knowledge about (squatting) toads.[26]

So far I have spoken as if mental imaging, although a general feature of language comprehension, only plays the role of prompting thoughts, including hypotheses about intended contextual implications, when the second mode of metaphor processing comes into play. However, although the slower, more consciously controlled, reflective processing of the second mode seems likely to induce more attention to the accompanying imagery, I see no reason for images not to play essentially the same role in the first processing mode, in which word meanings are adjusted to form ad hoc concepts descriptive of some actual world property. In typical cases like 'My lawyer is a shark', 'That surgeon is a butcher', 'He bulldozed the committee into agreement', images of the lawyer as a shark, the surgeon as a

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[26] For an attempt at a fully inferential account of some cases of emergent properties in metaphor comprehension, see Wilson and Carston (2008).

butcher, and so on, are, according to many people, phenomenologi-cally salient (we mentally 'see' the surgeon raising a butcher's cleav-er over the human body on the slab, for instance) and may in these cases too be a source of some of the contextual implications which in turn shape the ad hoc concepts SHARK*, BUTCHER*, and so on. The difference would be one of degree—of time and effort expend-ed on mental 'looking at' the image.

To close this section, I want to consider briefly an interesting question for pragmatic theories such as Grice's or Sperber and Wilson's, namely, whether the imagistic elements of metaphor un-derstanding can or should be thought of as components of speaker (m-intended) meaning, as falling within the author's communicative intention. The basic level intention in Grice's general definition of speaker meaning (1969) is an intention that the audience of the utterance produce some particular response *r*. On the face of it, this could include not only entertaining propositions (and attitudes to them) but also imagining objects or scenes. However, when he comes to give a specification of *r*, it is solely in terms of proposition-al attitudes, in particular believing a specific proposition or believ-ing that the speaker holds a certain propositional attitude. Similarly, the nested intentions in terms of which ostensive communication is defined by Sperber and Wilson (1986/1995, p. 63) depend on a notion of making facts or assumptions manifest to an addressee, where a fact or assumption is manifest to an individual only provid-ed he is capable of mentally representing it and accepting it as at least probably true. This definition excludes images and the objects they are images of by fiat—they are just not the kind of thing that can be made manifest because they are not the kind of thing that can be evaluated for truth.

We could try to redefine ostensive communication so as to allow for communicatively intended mental images as well as proposition-al entities. A first thought about the additional statement needed, in parallel with the definition of a manifest fact or assumption, would be that an image is manifest to an individual only provided that he is capable of representing it mentally and accepting its representa-tion as sufficiently accurate. But this clearly can't be right: an image is a mental representation, not something that is to be mentally rep-resented. The reformulation would have to be in terms of the mani-festness of the object or scene which is the content of the image and that may indeed be feasible.

But perhaps there are independent reasons for this not being an appropriate move to try to make. It seems that images are not encoded by linguistic forms while concepts are; mentalistic accounts of word meaning tend to be given in terms of concepts or concept schemas (sometimes procedures or rules for use) rather than images. In the first instance, it is lexically encoded concepts that give access to images, which are perhaps stored together with other representations (conceptual, affective) comprising encyclopaedic information about the denotations of the concepts. At the least, then, mental images are not available via language in the same way as mental concepts are, and perhaps they are, for this or for other reasons (for instance, insufficient stability across individuals?), not carriers of utterance content. Rather, they are components of the mental context within which communicated contents are recovered, sometimes mere by-products of the activation mechanisms, and sometimes, as in many metaphorical uses of language, playing an instrumental role in the recovery of speaker-meant content.

The activation or evocation of imagery through language use may fall in with other 'perlocutionary' effects, which are brought about (caused) by utterances or what Austin (1976) calls 'locutionary acts'. I am thinking here of such mental responses as being amused, comforted, unnerved, hurt, moved, and so on, which can be effects of utterances, quite possibly intended effects, although not communicated as such. Even if the speaker/writer does not (perhaps cannot) *communicatively intend* images or their objects, she may, nevertheless, have images in her own mind associated with the thoughts she seeks to communicate and she may intend, albeit non-communicatively, that among the effects of her utterance on her audience will be the entertaining of images similar to her own.[27] The fulfilment of this intention does not depend on the audience recognizing it and taking it as a *reason* for his image-entertaining response (as is the case with a Gricean m-intention) nor does it depend on that intention being made mutually manifest (as with a Sperber-Wilson communicative intention).

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[27] I take it that Davidson has something like this in mind when he writes of literary critics helping readers to see 'what the author of a metaphor wanted us to see' (Davidson 1978/1984, p. 264). It is not, therefore, the case that, on the image view of metaphor understanding, anything goes, that there are no (rational) constraints on the audience's imaginative response to a metaphor, as might seem to be implied by Davidson's earlier talk of metaphors giving us insights in much the same way as 'a bump on the head' can do (Davidson 1978/1984, p. 262).

I take this second position with regard to the imagistic effects of metaphorical (and other) utterances or texts: images are not communicated but are activated or evoked when certain lexical concepts are accessed and may be further imaginatively developed (by, for instance, shifting mental focus or perspective, zooming in on detail, or forming a connected dynamic sequence) as the conceptual content of the utterance is recovered. This is interesting because it would follow that, in some cases, the most powerful and memorable effects of a metaphor do not fall within the m-intended or communicated content at all and so, strictly speaking, lie outside the domain of a pragmatic theory. However, as well as being attended to for its own sake, imagery may function as a source of thoughts about the metaphor topic that *do* fall within the author's overtly intended meaning[28] and the author may intend or, at least, expect the imagery to be so used.[29]

VI

A Unitary Account? A Unified Phenomenon? In some of his more conciliatory passages, Davidson says: 'For the most part I don't disagree with [certain views on] what metaphor accomplishes, except that I think it accomplishes more and that *what is additional is different in kind*' (Davidson 1978/1984, pp. 246–7; my emphasis), and what he objects to is '… the thesis that associated with a metaphor is a definite cognitive content that its author wishes to convey and that the interpreter must grasp if he is to get the message. This theory is *false as a full account* of metaphor, …' (p. 262, my emphasis). The account of metaphor presented in this paper makes imagery central and 'different in kind' from whatever conceptual content or cognitive effects are conveyed. I hope it moves us closer to a 'full account' of metaphor, at least of how metaphors are understood.

But since the account proposes two distinct modes of processing

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[28] An idea worth pursuing, it seems to me, is that other tropes and schemes, like alliteration, assonance and onomatopoeia, also function in this way. That is, in conjunction with the meanings of the linguistic forms they are a part of, they evoke images (auditory as well as visual) which may then play an evidential role in the inferential recovery of what is communicatively intended (weak implicatures).

[29] This, then, is a third kind of intention (or, at least, expectation) a speaker/author may have, which might be called an 'instrumental' intention (or expectation), additional to her communicative intention and perlocutionary intention(s).

for metaphors, it might seem that we have ended up, in effect, with two different kinds of metaphor. At the end of his discussion of two types of metaphor theory, the proposition theory and the image theory, and how they apply to different examples, Davies (1982) says: 'Suppose we agree that the two kinds of theory apply to two kinds of metaphor. Is it then an illusion that metaphor is a unified phenomenon? … I think that it is not an illusion, for to the extent that the proposition theory is correct it seems to be a special case of the image theory.' His thinking is that the image theory (Davidson's) applies quite generally, but that for the more conventional or prosaic metaphors the proposition theory (Grice and Searle's implicature account) is adequate.

I essentially agree with Davies, but the account I've given here is rather more complicated, in that both propositional content and imagistic effects arise on both processing modes, albeit with significant differences in their relative prominence on the two routes. The first (ad hoc concept) route delivers an explicitly communicated (speaker-meant) propositional content, while imagery is often just an incidental effect; on the second route, speaker-meant propositional content is implicated (often weakly), while the literal meaning and the imagery it evokes play a more dominant role than on the first route. However, what all cases of metaphor have in common is that the second processing route is always available—literal meaning is always there to be searched further for relevant implications about the topic and, similarly, the imagery evoked is available for further 'looking' and 'noticing'.

What this implies is that metaphor is a unified phenomenon in the sense that there is no difference in kind corresponding to the two modes of processing. However, neither their image-evoking property nor their susceptibility to metarepresentational processing, nor the conjunction of the two properties, is specific to metaphorical utterances. Whether there is a property of 'metaphoricity', which all cases share and which distinguishes them from literally-used language and from other tropes, remains to be seen.[30]

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REFERENCES

Austin, J. L. 1976: *How to Do Things with Words*. London: Oxford University Press.

Bergmann, Merrie 1982: 'Metaphorical Assertions'. *Philosophical Review*, 91, pp. 229–42.

Bezuidenhout, Anne 2001: 'Metaphor and What is Said: A Defense of a Direct Expression View of Metaphor'. *Midwest Studies in Philosophy*, 25, pp. 156–86.

Black, Max 1979: 'How Metaphors Work: A Reply to Donald Davidson'. *Critical Inquiry*, 6, pp. 131–43.

Camp, Elisabeth 2008: 'Showing, Telling, and Seeing: Metaphor and "Poetic" Language'. *Baltic International Yearbook of Cognition, Logic and Communication*, 3.

——2009: 'Two Varieties of Literary Imagination: Metaphor, Fiction, and Thought Experiments'. *Midwest Studies in Philosophy*, 33, pp. 107–30.

Carston, Robyn 2002: *Thoughts and Utterances*. Oxford: Blackwell.

Davičo, Oskar 1939: 'Hana'. In *Pesme: Hana*. Belgrade: Prosveta, 1979.

Davidson, Donald 1978/1984: 'What Metaphors Mean'. *Critical Inquiry*, 5, pp. 31–47. Reprinted in his *Inquiries into Truth and Interpretation*, pp. 245–64. Oxford: Oxford University Press, 1984. Page references are to the reprint.

Davies, Martin 1982: 'Idiom and Metaphor'. *Proceedings of the Aristotelian Society*, 83, pp. 67–85.

Dickinson, Emily 1863: 'My Life had stood—a Loaded Gun'. In *The Poems of Emily Dickinson*, ed. Ralph W. Franklin. Cambridge, MA: Harvard University Press, 1999.

Donne, John 1611: 'A Valediction Forbidding Mourning'. In Songs and Sonnets by John Donne; first published 1633.

Glucksberg, Sam 2001: *Understanding Figurative Language*. New York: Oxford University Press.

Grice, H. P. 1969: 'Utterer's Meaning and Intentions'. *Philosophical Review*, 78, pp. 147–77. Reprinted in Grice 1989.

——1975: 'Logic and Conversation'. In Peter Cole and Jerry Morgan (eds.), *Syntax and Semantics*, 3: *Speech Acts*, pp. 41–58. New York: Academic Press. Reprinted in Grice 1989.

——1989: *Studies in the Way of Words*. Cambridge, MA: Harvard University Press.

Heller, Zoë 2008: *The Believers*. London: Fig Tree.

Hills, David 1997: 'Aptness and Truth in Verbal Metaphor'. *Philosophical Topics*, 25, pp. 117–54.

Levin, Samuel R. 1993: 'Language, Concepts, and Worlds: Three Domains of Metaphor'. In Andrew Ortony (ed.), *Metaphor and Thought*, 2nd edn, pp. 112–23. Cambridge: Cambridge University Press.

McGinn, Colin 2004: *Mindsight*. Cambridge, MA: Harvard University Press.

Moran, Richard 1989: 'Seeing and Believing: Metaphor, Image and Force'. *Critical Inquiry*, 16, pp. 87–112.

Pilkington, Adrian 2000: *Poetic Effects: A Relevance Theory Perspective*. Amsterdam: John Benjamins.

——2010: 'Metaphor Comprehension: Some Questions for Current Accounts in Relevance Theory'. In Belén Soria and Esther Romero (eds.), *Explicit Communication*. Basingstoke: Palgrave Macmillan.

Recanati, François 2004: *Literal Meaning*. Cambridge: Cambridge University Press.

Reimer, Marga 2001: 'Davidson on Metaphor'. *Midwest Studies in Philosophy*, 25, pp. 142–55.

Rubio Fernandez, Paula 2007: 'Suppression in Metaphor Interpretation: Differences Between Meaning Selection and Meaning Construction'. *Journal of Semantics*, 24, pp. 345–71.

Sandburg, Carl 1916: 'Fog'. In *Chicago Poems*. New York: Henry Holt.

Searle, John R. 1979: 'Metaphor'. In his *Expression and Meaning*. Cambridge: Cambridge University Press.

Sperber, Dan, and Deirdre Wilson 1985–6: 'Loose Talk'. *Proceedings of the Aristotelian Society*, 86, pp. 153–71.

——1986/1995: *Relevance Theory: Communication and Cognition*. Blackwell.

——2008: 'A Deflationary Account of Metaphors'. In Ray Gibbs (ed.), *Cambridge Handbook of Metaphor and Thought*, pp. 84–105. New York: Cambridge University Press.

Stern, Josef 2001: *Metaphor in Context*. Cambridge, MA: MIT Press.

Stowe, Harriet Beecher 1977: 'The True Story of Lady Byron's Life'. In Louise Desaulniers (ed.), *119 Years of the Atlantic*. Boston, MA: Little, Brown & Co., pp. 43–7. First published in *The Atlantic Monthly*, Issue 1, 1857.

Tirrell, Lynne 1989: 'Extending: The Structure of Metaphor'. *Noûs*, 23:1, pp. 17–34.

Toíbín, Colm 1999: *The Blackwater Lightship*. London: Picador.

Wassenburg, Stephanie I., and Rolf A. Zwaan 2010: 'Readers Routinely Represent Implied Object Rotation: The Role of Visual Experience'. *Quarterly Journal of Experimental Psychology*, 63:9, pp. 1665–70.

Wearing, Catherine 2006: 'Metaphor and What is Said'. *Mind and Language*, 21(3), pp. 310–32.

Wilson, Deirdre, and Robyn Carston 2008: 'Metaphor and the "Emergent Property" Problem: A Relevance-Theoretic Treatment'. *Baltic International Yearbook of Cognition, Logic and Communication*, 3.

Wilson, Deirdre, and Dan Sperber 2002: 'Truthfulness and Relevance'. *Mind*, 111, pp. 583–632.

Zwaan, Rolf A., Robert A. Stanfield, and Richard H. Yaxley 2002: 'Language Comprehenders Mentally Represent the Shapes of Objects'. *Psychological Science*, 13, pp. 168–71.