

INTERPRETING METAPHOR:  
PERSPECTIVES FROM PRAGMATICS  
AND  
PSYCHOTHERAPY

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I, Isabelle Needham-Didsbury, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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## ABSTRACT

The primary objective of this thesis is to provide an account of metaphor comprehension that applies to the full spectrum of metaphorical utterances. I take the relevance-theoretic account of communication, and its entailed theory of metaphor, to provide a good account of how *many* metaphorical expressions are comprehended, in particular lexical/phrasal cases. However, I maintain the need for a different processing route to account for instances of metaphor interpretation in which the literal meaning of the metaphorical utterance is more keenly felt and experienced by the interpreter. As I demonstrate, this applies to cases of extended and/or creative metaphorical utterances.

The additional processing route described, referred to as the ‘metaphorical/imaginary world’ route, is argued to be complementary to the relevance-theoretic *ad hoc* concept account and is, therefore, framed against the backdrop of RT’s general theory of communication. In order to incorporate the perspective-shifting and imagistic effects that I show to be derived during ‘metaphorical world’ comprehension, I suggest enriching the relevance-theoretic notion of ‘encyclopaedic entry’ to encompass affective and imagistic content. This work takes its cue from recent research in the field of embodied simulation.

In my attempt to offer support for the existence of the metaphorical world mode of understanding, I present two empirical investigations designed to test its claims. In addition, I provide extensive analysis of metaphorical expressions that occur in the context of psychotherapeutic discourse. I argue that this unique communicative context lends itself to the metaphorical world processing route in so much as it creates a reflective space that invites both client and therapist to deeply consider and sustain the literal meanings of their metaphorical expressions. While my main goal is to inform pragmatic theories of metaphor comprehension, this endeavour also serves therapeutic ends, by informing the theoretical underpinnings concerning the use of metaphor in psychotherapy.

**Keywords:** *metaphor, figurative language, pragmatics, Relevance Theory, Conceptual Metaphor Theory, psychotherapy, embodiment*

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## Preface

This thesis is chiefly concerned with the pragmatic phenomenon that is metaphor. Essentially, metaphor is a use of language through which speakers ‘say’ one thing and mean another. As philosophers Marga Reimer and Elisabeth Camp say, it is ‘a figure of speech in which one thing is represented (or spoken of) as something else’ (Reimer & Camp, 2006: 846). Consider the examples below:

1. Cigarettes are ticking time bombs.
2. Their relationship was a mug of watery fruit tea – comforting, yet unexciting.
3. Chris’ soul was an intricately complex crystal.
4. My wife is a volcano.
5. I’m totally inundated at work, standing at the foot of a laundry chute.

In example (1) cigarettes are spoken of as *being* ‘ticking time bombs’ (not merely as being *like* them), in (2) a relationship is said to be ‘watery fruit tea’, in (3) a soul is ‘crystal’, etc. Of course, speakers do not intend their audience to interpret their utterance literally (and it is an open question exactly what role the ‘literally encoded’ meaning plays in the comprehension process). That is, someone who utters (4) does not intend to communicate the blatantly false proposition that he is married to a hole in the earth’s crust that spews out red-hot lava at unpredictable moments in time. Instead, the speaker intends to communicate that his wife’s behaviour is hurtful, that she is emotionally volatile, uncontrollable, dangerous, etc. Similarly, in uttering (5), the speaker does not mean that he or she is quite literally standing at the bottom of a laundry chute, rather the speaker *feels* as if she is at the bottom of a laundry chute in the sense of being suffocated by a constant barrage of incoming information and tasks. My objective in this thesis is to find an account of metaphor comprehension that can explain how interpreters derive the intended meanings of these and other metaphorical expressions (many of them more complex and/or extended than these ones).

Self-proclaimed metaphor ‘designer’ Michael Erard notes how it is useful to have a metaphor for metaphor. Erard’s metaphor is rather long, but for me at least, it is highly apt, and has the advantage of encompassing a great deal of what interests me about metaphor. For Erard, a metaphor is a *room* and this is how it works:

The windows and doors frame a view toward the reality outside. Put the windows high, people will only see the trees. Put them low, they see the grass. Put the window on the south side, they'll see the sun. Sometimes the room can be empty. Sometimes the views from the room are a bit forced. Or perhaps they're new and uncomfortable. In those situations, you have to direct people's attention. You have to give them furniture to sit on that makes your architectural choices unavoidable. [...] maybe the best metaphor needs no furniture. [...] what often happens when you introduce people to this new metaphor is that they'll complain about the furniture colour or the window trim, or praise you for something minor, such as the window sashes. The danger is that they'll discard the enterprise before they've looked out the window – which, in most cases, offers a view onto the outside that's unfamiliar.

(Erard, 2015)

Erard is a linguist, author and former researcher at FrameWorks Institute, a national think-tank in America, which strives to resolve social issues by reframing debates, often through metaphor. The effects of metaphor that he touches on, e.g. its ability to invoke new ways of seeing and thus of thinking, will be critical to this thesis.

Metaphor bears many interesting similarities to other forms of figurative expression, such as simile, juxtaposition, analogy, allegory and symbol, to name but a few. While linguists, philosophers and psychologists have been at great pains over the years to distinguish these different phenomena, the distinct characteristics of each will not be a central issue in this thesis. Still, philosopher Ted Cohen provides a succinct and useful characterisation of the principal differences between some of these forms of figurative language:

In a metaphor A is said to be B, in a simile A is said to be like B, in an analogy A is said to stand to C as B stands to D (and in some cases C and D are the same, as in “God is to me as my father is to me,” and there may be cases in which A and B are the same), while in allegory, typically, only B is mentioned and it is left to the reader to understand that B stands for, or represents, or “allegorizes” A.

(Cohen, 2008: 10)

Like Erard and Cohen, I have long been ‘enchanted’ by figurative language. Primed perhaps by early exposure to Aesop’s Fables, in which lessons of moral importance are

imparted through allegory, and later to Hinduism, where deep philosophical truths are couched in symbolism. While my primary goal is to find a fully adequate account of metaphorical language interpretation, I will at different points throughout this thesis widen my interest to include other forms of figurative expression when they seem to be operating similarly to metaphor. However, I hasten to add that doing so is not intended to deny the many interesting, and important, differences between these divergent forms of figurative expression.

While metaphor used to be thought of as a purely decorative device, a special rhetorical flourish if you will, it is increasingly recognised as a pervasive feature of even the most pedestrian exchanges and one that affects the meaning conveyed and the cognitive effects achieved. Of course, the effects of many commonplace metaphors are rather banal, for example, 'Mary is an *angel*' or 'their marriage was a *bloody battle*'. Yet, other metaphors are quite striking and appear to possess some power over their audience, power to move and inspire. It is these productive or 'generative' metaphors, as Schön (1993) calls them, and their cognitive and affective effects which I am endlessly fascinated by. It is these metaphors, and their productive power in psychotherapy, that constitute a primary focus of this thesis.

I came to psychotherapy quite by accident. I myself am not what self-proclaimed metaphor 'designer' Michael Erard would call 'reflexively metaphorical'; that is, metaphorical expression does not flow freely through my veins. And yet, during emotionally charged moments of inner conflict and confusion, or when trying to explain complex, unfamiliar ideas to my students, I found my metaphorical reflexivity notably improved. These experiences inspired me to consider the nature of metaphorical expression and, over time, to reflect on how our affective experiences often move us to use language figuratively.

It was consideration of the affective domain that led me to examine the field of psychotherapy, and, much to my surprise, I found a wealth of literature concerning the use of figurative language in this context. I was confronted by opposing positions on how to treat clients' metaphoric utterances, how therapists ought to work with metaphor, and, most interesting to me, lengthy discussion about the psychotherapeutic effects of working with metaphor. As a pragmaticist, I began to wonder what pragmatic theories of metaphor interpretation might gain from the unique perspective of psychotherapists. What could we learn from the treatment of metaphor in psychotherapy, and could the attested effects of metaphor in this domain illuminate current theoretical debates within pragmatics?

The thesis proceeds as follows: in chapter 1, I evaluate two accounts of metaphor processing: Conceptual Metaphor Theory and Relevance Theory, arguing ultimately in favour of the latter as an account of metaphor interpretation. In Chapter 2, I focus my attention on instances of metaphor whose effects, I argue, do not lend themselves to the relevance-theoretic account outlined in chapter 1. As such, I discuss a number of alternative approaches to metaphor interpretation, in which the literal meaning of the expression in question plays a more dominant role in the interpretation process. Chapter 3 introduces the domain of psychotherapy, explores divergent practices within the field, and makes a number of suggestions concerning the special nature of this communicative context. Chapter 4 considers the role of metaphor in psychotherapy, where I note that figurative language often ‘close[s] the gap in people’s ability to grasp something, or speed[s] up what they’re already on track to see’ (Erard, 2015). Chapter 5 presents two empirical investigations designed to test the claim that there are two routes to metaphor comprehension, which give rise to distinct effects. Although the results of these experiments are inconclusive and do not directly support the dual processing view of metaphor within RT, they are most informative in terms of suggesting avenues for further research. Lastly, in chapters 6 and 7, I describe recent work on ‘embodied cognition’ and ‘multimodal concepts’, and suggest that the explanatory power of the interpretation route described in chapter 2 can and should be enhanced by enriching the relevance-theoretic account of concepts so as to incorporate more affective and imagistic content.

Some of the metaphorical expressions discussed in this thesis are constructed from my own imagination (such as those in examples (1) to (5) of this preface), while others are taken from existing literature, in philosophy, pragmatics and psychotherapy. Many examples from pragmatics and philosophy have been fabricated by academics and as such, the most that can be said of them is that they represent *possible* uses of language. In contrast, examples from psychotherapy literature come, for the most part, from transcripts of psychotherapy sessions, and are therefore, real-world instances of language use.

While discourse analysts have long been interested in psychotherapeutic talk, this is not a domain that anyone in the relevance-theoretic community has investigated up until this point. Similarly, RT has remained relatively disengaged from the increasingly large range of work on embodied cognition and its role in communication. A major accomplishment of this thesis lies in making a first step towards integrating these disassociated literatures. One conclusion that derives from this union is that psychotherapeutic practice can be used to inform theories of metaphor comprehension,

such as the relevance-theoretic account. On the basis of metaphor's treatment and use in psychotherapy, I argue in favour of an additional account of metaphor processing, one that complements the standard relevance-theoretic *ad hoc* concept account. At the same time, I suggest that the relevance-theoretic account makes sense of certain idiosyncratic features of psychotherapeutic communication, thus the feedback works in both directions. After setting up a dialogue between Relevance Theory and embodied cognition, I suggest that notions and data from the latter may, and indeed should, be incorporated into the former. While the intricacies of this move are yet to be worked out fully, this thesis marks the first stage of that potentially important development for Relevance Theory. The chief conclusions that one may derive from this thesis can be summarised as follows:

- (i) Relevance Theory, and its entailed account of metaphor comprehension, benefits from analysis of psychotherapeutic talk, and more applied domains generally.
- (ii) In the same way that Conceptual Metaphor Theory has been fruitfully applied to psychotherapy, Relevance Theory too can be used to explain certain unique characteristics of psychotherapeutic talk.
- (iii) The relevance-theoretic *ad hoc* concept account of metaphor comprehension is not the only processing route at interpreters' disposal; different contexts and linguistic forms may call for, and induce, different modes of interpretation.
- (iv) Different processing routes may be characterised by different effects (as the results from an exploratory memory questionnaire conducted as part of this work suggest, see chapter 5).
- (v) Relevance Theory ought to take heed of the work in embodied cognition and to assess whether and how imagistic and affective effects of metaphors can be incorporated into its theoretical framework.

# Chapter 1 · Cognitive accounts of metaphor comprehension

## 1.1 INTRODUCTION

Over the last century, the study of metaphor has undergone dramatic development. While the traditional belief that metaphor is a special, deviant form of language dominated opinion for many years, it is now almost universally accepted that metaphor is a ubiquitous and ‘normal’ feature of everyday discourse. In large part, the widespread acceptance of this view can be credited to George Lakoff and Mark Johnson’s influential ‘Conceptual Metaphor Theory’ (henceforth CMT). According to Lakoff and Johnson, metaphor is pervasive in language since it is pervasive in thought; cognition itself is deemed to be metaphorical. In other words, linguistic metaphors are considered to be a natural consequence of underlying metaphorical thought; they are surface reflections of conceptual mappings between different cognitive domains (Lakoff & Johnson, 1980). Relevance Theory (henceforth RT) shares the assumption that metaphor is a normal and natural phenomenon; however, the grounds for this position are wholly different from those of CMT. For relevance theorists, metaphor is a loose use of language that arises naturally in communication, sometimes as a result of our attempt to communicate complex and vague thoughts (Sperber & Wilson, 2008; Wilson & Carston, 2007) and at other times, as an economical mode of expression that serves to effectively communicate a speaker’s intended meaning in a succinct manner. This fundamental difference in the two positions might seem to primarily speak to the pressures that affect *production* of metaphorical utterances, but both theories also offer an account of how metaphorical uses of language are *interpreted*. Given the main focus of this thesis, which is to find a satisfactory account of metaphor comprehension, I am chiefly concerned with each theory’s account of metaphor comprehension/interpretation.

In part, the motivation to consider CMT stems from my interest in psychotherapeutic discourse. Exploration of this domain reveals that many writers in the field of psychotherapy ground their use of metaphor on the notion of *metaphorical cognition*. Perhaps unsurprisingly, the theoretical adequacy of CMT is never challenged in the therapy context. This has led me to consider the extent to which the use of metaphor in psychotherapy relies on the assumption that thought/conceptualisation (and not just linguistic expression of thought) is metaphorical; in other words, my first question is whether it is necessary to subscribe to metaphorical cognition (and conceptual mappings) in order to support the use of metaphor in psychotherapy? Secondly, I have wondered



how subscribing to metaphorical cognition influences the use of metaphor in the therapy context; that is to say, what effects, if any, would not subscribing to the view that cognition is metaphorical have on psychotherapeutic practices involving the use of verbal metaphor? I have considered whether the relevance-theoretic account of metaphor could fulfil the same function that CMT does, in terms of validating and informing the use of metaphorical language in psychotherapy. Lastly, I have been interested in whether the unquestioning faith in metaphorical cognition from writers in the field of psychotherapy, who take this notion in a general sense (largely unaware of CMT's theoretical underpinnings and implications), is warranted by the theory itself – it is this more theoretical question that will be principally addressed in this chapter.

I begin this chapter by presenting the basic tenets of CMT, followed by the various criticisms lodged against the theory and the evidence used to counter those criticisms. Subsequently, I outline the relevance-theoretic account of metaphor comprehension, highlighting points of contrast with CMT along the way. In section 1.5, I consider whether and how the two accounts might be fruitfully combined. Here I take my lead from relevance theorist Deirdre Wilson and conceptual metaphor theorists Ray Gibbs and Markus Tendahl who have recently noted the complementary perspectives that each theory provides (Gibbs & Tendahl, 2006, 2011; Tendahl & Gibbs, 2008; Wilson, 2011). Throughout, I consider what both CMT and RT offer to the study and use of metaphor in psychotherapy. Ultimately, I suggest that RT provides a better account of how metaphorical utterances are interpreted, but this is not intended to diminish the valuable insights afforded by CMT. In the chapter that follows, however, I will argue that neither CMT nor standard RT provides a psychologically plausible description of metaphor interpretation that can be applied to *all* metaphorical utterances; I pave the way for this argument towards the end of this chapter.

## 1.2 CONCEPTUAL METAPHOR THEORY

### 1.2.1 AN OUTLINE OF CONCEPTUAL METAPHOR THEORY

At the heart of Conceptual Metaphor Theory is the claim that metaphor is a fundamental part of human thought; 'our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature' (Lakoff & Johnson, 1980: 3). The basis of metaphorical cognition is a system of conceptual mappings between cognitive domains. According to proponents of the theory, people construct many concepts by

mapping abstract conceptual domains onto their knowledge of concrete domains. It is claimed that abstract concepts, for example LIFE, TIME and ARGUMENTS<sup>1</sup>, cannot be thought of without reference to some other, more concrete entity. CMT proponents believe that we structure these abstract concepts by projecting more concrete domains of thought onto them (for example journeys, money and wars respectively). In other words, we conceptualise life in terms of a journey, time in terms of money and arguments in terms of wars. These metaphorical conceptualisations are referred to as conceptual metaphors (LIFE IS A JOURNEY, TIME IS MONEY, ARGUMENT IS WAR). In CMT terms, LIFE, TIME and ARGUMENT are the target domains, and JOURNEY, MONEY and WAR the source domains. These, and many other, conceptual metaphors are stored in long-term memory and are said to motivate and constrain our use of language. Verbal metaphors are, therefore, considered as mere by-products, or surface reflections, of conceptual metaphors. See below some examples of linguistic expressions and the conceptual metaphors from which they are derived:

1. LIFE IS A JOURNEY

I've *come so far*, but now I'm at a *crossroads* and don't know which *way to turn*.

I've reached a *turning point* and feel completely *lost*.

I wish someone would show me *the right way to go*.

2. TIME IS MONEY

I've *invested* so much time in this relationship and I'm worried it's going to be *wasted*.

I missed my train and it *cost* me over an hour.

3. LESS IS DOWN; MORE IS UP

My salary is still incredibly *low*, even though my client load is on the *rise*.

Our rent keeps going *up*, if it gets any *higher* I'll have to move out.

According to CMT, domain mappings involve setting up systematic correspondences between the elements of the respective domains. Therefore, our knowledge of a source domain such as WAR, structures the more abstract domain of thought, ARGUMENT, via the conceptual metaphor ARGUMENT IS WAR. Lakoff notes that metaphorical mappings 'preserve the cognitive typology (that is, the image-schematic structure) of the source

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<sup>1</sup> Following common linguistic practice, small caps are used to represent concepts.

domain' (1993: 214)<sup>2</sup>; this is referred to as the 'invariance hypothesis'.<sup>3</sup> As such, we regard individuals in an argument as opponents in a battle who can gain or lose ground, win or lose, attack with force, be defeated, shoot each other down, etc. An example of a verbal metaphor which reflects this conceptual metaphor is, 'he's *attacking* me with harsh words all the time; I'm too exhausted to *defend* myself against his verbal abuse so I just let him *win*'.

In their later works, Lakoff and Johnson make the additional claim that the mind is inherently embodied.

This is not just the innocuous and obvious claim that we need a body to reason; rather, it is the striking claim that the very structure of reason itself comes from the details of our embodiment. The same neural and cognitive mechanisms that allow us to perceive and move around, also create our conceptual systems and modes of reason.

(Lakoff & Johnson, 1999: 4)

Lakoff and Johnson noted that the source domains of many conceptual metaphors are derived from recurrent patterns of sensory-motor experiences (i.e. image schemas). They subsequently suggested that the system of conceptual metaphors consists of a set of primary conceptual metaphors, which are grounded in our shared bodily experience of the world, and more complex secondary conceptual metaphors, which are composed of simpler primary metaphors combined with general knowledge. An example of a secondary complex metaphor is THEORIES ARE BUILDINGS; this conceptual metaphor gives rise to expressions such as 'his theory is lacking *foundations*, it seems to be *built on shaky ground*'. Purportedly, this complex metaphor is built from two primary metaphors, ORGANISATION IS PHYSICAL STRUCTURE and PERSISTING IS REMAINING ERECT, both of which clearly have a basis in our bodily experience, plus some general knowledge (for

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<sup>2</sup> The term 'image schemata' was originally coined by Mark Johnson (1987) and is loosely defined as recurring dynamic patterns of our perceptual interactions, or as Hampe says, they are 'schematic gestalts which capture the structural contours of sensory-motor experience' (2005: 1).

<sup>3</sup> The invariance hypothesis speaks to an objection raised by critics of CMT. Murphy (1996), for example, questions how individuals are able to make so few erroneous inferences about the applicability of source domain properties to the abstract concepts they are mapped to. If knowledge of abstract concepts were entirely parasitic on knowledge of more concrete domains, one would expect that a conceptual metaphor like THEORIES ARE BUILDINGS would result in 'stairwells' and 'hallways' (i.e. entities from the source domain) being attributed to theories (the target domain). According to Gibbs (2011a), the invariance hypothesis accounts for why these errors do not occur: because it is only the image-schematic structure of the source domain that is mapped to the abstract concept.

instance, that component parts of a theory may have to be revised (like structural parts of a building), or that theories are often overturned and replaced by other theories (just as buildings are often destroyed and replaced with new constructions) etc.).<sup>4</sup>

After analysing systematic patterns of linguistic expression, conceptual metaphor theorist Joseph Grady (1997) compiled an extensive list of primary metaphors which he claimed were grounded in shared bodily experience, for example, MORE IS UP, LESS IS DOWN, HAPPY IS UP, SAD IS DOWN, IMPORTANT IS BIG, AFFECTION IS WARMTH, INTIMACY IS CLOSENESS, KNOWING IS SEEING, PURPOSES ARE DESTINATIONS. The primary metaphors HAPPY IS UP and SAD IS DOWN give rise to expressions such as ‘my spirits *rose*’, ‘I’m feeling *down*’, ‘I *fell into* depression’, and ‘thinking about her gives me a *lift*’ (Lakoff & Johnson, 1980: 16). According to conceptual metaphor theorists, these primary metaphors are born out of the associative connections between positive and negative experiences and being physically upright or down. Likewise, KNOWING IS SEEING comes from the correlated experience of knowing something as a result of seeing it and PURPOSES ARE DESTINATIONS from the experience of realising one’s intention or purpose when reaching a destination, for example, when I intend to go on holiday, I fulfil that purpose when I *reach* the place that I’m visiting.<sup>5</sup>

Perhaps the most fundamental claim of CMT, certainly the most relevant for this chapter, is the idea that we use metaphorical language *because* much of our thought is constituted by conceptual metaphors. It is important to note the far-reaching consequences of this assertion. Not only do conceptual metaphors influence the way in which we speak, but they also impact on, and indeed govern, the way that we think (since they constitute thought) and so too the way that we behave. In this sense, conceptual metaphors are metaphors that ‘we live by’.<sup>6</sup> To further illustrate: from the pervasive conceptual metaphor TIME IS MONEY it follows that we think of time in terms of money (which we know is a valuable and limited resource) and therefore, we talk of *wasting*,

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<sup>4</sup> There is significant discussion amongst CM theorists concerning the universality of conceptual metaphors. Although the bodily basis of primary metaphors implies their universal status, contrasted with secondary conceptual metaphors, which one might assume to be culture-specific, research calls into question this strict demarcation. It is now more common for CM theorists to describe primary conceptual metaphors as particularly *widespread* and *possibly universal* (as opposed to *definitely universal*). For further detail see Evans, 2013, Kövecses, 2005 and Yu, 2003, 2008.

<sup>5</sup> A more recent proposal within CMT is that metaphorical mappings consist of neural connections that bind sensory-motor information to abstract thought. Seen in this light, target domains are construed in terms of source domains as a result of neural links between the two domains (for further detail see Lakoff, 2008).

<sup>6</sup> ‘Metaphors we live by’ is the title of Lakoff and Johnson’s seminal work in which they first introduced Conceptual Metaphor Theory.

*saving, spending, borrowing* and *investing* time. Support for the claim that this conceptual metaphor impacts on more than just our language use comes from considerations of our behaviour and the way in which we treat time. For instance, in most western societies at least, we are paid by the hour (as opposed to being paid by the task). Take therapy as a fitting example, we do not pay therapists a fixed amount of money for ‘completing the job’ of making us feel better, rather we pay them by the amount of time that they spend with us, typically fifty minutes. For conceptual metaphor theorists, this behaviour is the result of the conceptually entrenched metaphor TIME IS MONEY. According to CMT, our actions and behaviour are directly influenced by thought (that is, by our concepts); to put it differently, thought foretells behaviour. Since language is a reflection of thought, it follows that like thought, the language that a speaker uses may be a predictor of how that individual will behave. This aspect of CMT, which we may call the ‘language to behaviour’ connection, will be most relevant when considering the appeal of CMT to psychotherapists.

In order to compare and contrast CMT with the relevance-theoretic account of metaphorical language, it is necessary to spell out CMT’s claims concerning language comprehension. Yet, this is no simple task. Many cognitive linguists themselves recognise the vague and vastly underspecified claims that CMT makes with regards to metaphorical language comprehension (Gibbs, 2011a; Gibbs, 2013a; Gibbs & Ferreira, 2011; Gibbs & Perlman, 2006). The broad claim is that conceptual metaphors are automatically accessed during language use and, more specifically, that we ‘apply’ our knowledge of conceptual metaphors when making sense of language. Given this claim, research has, unsurprisingly, tended to focus on demonstrating that people access conceptual metaphors during interpretation (Gibbs & Nascimento, 1996; Gibbs, 2013b). Any evidence to this effect, some of which will be evaluated in the following section, has been taken as support for the theory overall, and for the role of conceptual metaphors during interpretation. However, while research might indicate *that* conceptual metaphors are accessed during comprehension, this evidence alone cannot explain *how* they are deployed in the comprehension procedure; for example, it is possible that activation of conceptual metaphors is a mere by-product (or even a result) of the interpretation process, and not integral to the process itself. Critically, CMT does not explain how accessing conceptual metaphors enables us to derive our interlocutor’s intended meaning. CMT has been widely criticised on this basis, that is, for its lack of an explicit account of metaphor understanding. At the more fundamental level, CMT’s implications for theories of conceptual structure have also been questioned and, therefore, the very existence of

conceptual metaphors has been called into question.<sup>7</sup> In the following section, I briefly explore some of the criticisms lodged against CMT, together with the evidence used in attempts to counter these criticisms.

### 1.2.2 CRITICISMS OF CONCEPTUAL METAPHOR THEORY

Much of the evidence for the existence of conceptual metaphors has been derived from analyses of patterns of linguistic expressions, such as those described in the preceding section: ‘primarily on the basis of linguistic evidence, we have found that most of our ordinary conceptual system is metaphorical in nature’ (Lakoff & Johnson, 1980: 4). These analyses and so-called evidence have been the main source of scepticism on the part of psychologists and philosophers. As McGlone notes, ‘Lakoff’s claim that metaphors transcend their linguistic manifestations to influence conceptual structure rests solely on these manifestations’ (McGlone, 2006: 115). To illustrate, according to CMT we know that people think about life in terms of journeys because of the systematic use of journey-oriented terminology to talk about life. The same answer applies to the question of *why* people think about life in terms of journeys, because they use journey-orientated terminology to talk about life. Evidently, CMT cannot account for *why* conceptual metaphors exist, nor *how* we know that they do, without calling on linguistic manifestations. An important issue here is whether these linguistic manifestations could be explained without assuming an underlying conceptual metaphor; according to the RT account to be discussed in section 1.3, they can.

McGlone (2001) draws our attention to the difficulties of using linguistic expressions to infer conceptual structure by reminding us of the Whorfian hypothesis and linguistic relativity. Simply put, the principle of linguistic relativity states that thought is shaped and determined by language (Whorf, 1956). Whorf famously proposed that language provides the means by which we perceive and act in the world, and, therefore, that speakers of different languages think about the world differently and, as a result, act differently in objectively similar situations. As with CMT, Whorf’s hypothesis was initially based on linguistic evidence, in Whorf’s case, on anecdotal observations of linguistic diversity. For example, Whorf claimed that Inuit speakers have many more ‘snow descriptors’ in their language than English, and that as a result, they think about snow differently from English speakers. As outlined in the preceding paragraph, CMT likewise

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<sup>7</sup> Arguments against CMT that are built on the theory’s flawed implications for conceptual structure will be addressed in chapter 7.

relies on and uses linguistic evidence to substantiate claims about conceptual structure: on the basis of linguistic expressions, conceptual metaphors are posited. This line of reasoning, however, has been shown to be deficient and the strong, deterministic version of the Whorfian hypothesis has thus long been abandoned. McGlone supports the abandonment of the strong Whorfian hypothesis by citing evidence that Inuit speakers do not in fact think about snow differently from English speakers. However, this evidence does not serve McGlone's purpose, for it has been revealed that, contrary to Whorf's original observation, English has just as many expressions for snow as Inuit does (Pullum, 1989). Therefore, the lack of discordant thought between the two cultures may indeed, as Whorf claimed, be a reflection of their language (a reflection that each language has an equal number of terms to describe snow).

Studies from psychologist Eleanor Rosch, on the other hand, do support the rejection of Whorf's deterministic claims. Rosch (1973) compared performances between Dani speakers (an agricultural community in New Guinea) and English speakers on a number of colour related tasks. Unlike English, which has many colour terms, Dani has only two: 'mili' (to refer to cool, dark colours) and 'mola' (to refer to warm, bright colours). Rosch found that Dani speakers were just as competent as English speakers when it came to recall of made-up colour words, and furthermore, that both groups of speakers found it easier to recall words associated with basic colours (e.g. red), compared to unusual colours (e.g. magenta). This evidence shows that Dani speakers' limited vocabulary for colour terms does not affect their ability to perceive colour. Relevant to linguistic relativity, it shows that linguistic diversity does not necessarily indicate conceptual diversity. Rosch's work demonstrates the pitfalls of using linguistic evidence as an indication of cognition; such external material cannot reliably be used to judge the internal substance of the mind. Hence, McGlone's plea is that CM theorists should validate their claims regarding the conceptual system with evidence that is independent of linguistic expressions.

While the strong, deterministic version of linguistic relativity has, as stated, long been abandoned, there are a plethora of studies in favour of its weaker claims: that language influences, but does not determine, thought *processes* (note, not necessarily the *content* of thought itself). For example, the linguistic system in Mandarin represents time along a vertical dimension (e.g. the past is up and the future is down), whereas English describes time along a horizontal dimension (e.g. the future is forward (to the right), the past is back (to the left)). Boroditsky (2001) found that these differences in spatial terms ensured that Mandarin speakers were better able, i.e. faster, to verify that March came

before April when they had just been presented with objects on a vertical axis as opposed to a horizontal axis (the reverse was true for English speakers). Moreover, when English speakers learnt Mandarin terms for time, their performance on the aforementioned task revealed the same bias as Mandarin speakers. This work indicates that language can play an important role in shaping our behaviour, as reflected by subjects' performance on cognitive tasks.<sup>8</sup> That this is the case *may* be an indication that language reflects underlying conceptual structure. However, the findings cited thus far in no way point exclusively to such a claim (and therefore, cannot be taken as support for CMT). Language may influence cognitive capacities, but conceptual structure, which is the fabric of the mind, may be symbolically represented and not, as CMT claims, determined by language (this idea will be explored at length in chapter 6).

An additional criticism of CMT relates to the lack of criteria for identifying and classifying conceptual metaphors. For example, how can one be sure that the expressions 'he defended his position' and 'he attacked my argument' are derived from the conceptual metaphor ARGUMENT IS WAR, as opposed to ARGUMENT IS CHESS or ARGUMENT IS BOXING? (See Vervaeke and Kennedy, 1996 and Ritchie, 2003 for further discussion). Furthermore, what constitutes sufficient systematicity amongst linguistic expressions to justify positing the existence of a conceptual metaphor? The answer is that it appears to be arbitrary, with no logical justification for specifying the adequacy of any number of expressions; a family of fifty related expressions would seem to be a lot, but how does one determine whether or not it is *enough*?<sup>9</sup> The root of the problem is the circularity of reasoning in CMT. One initially analyses verbal expressions in order to infer conceptual metaphors, but then, in order to verify the existence of these conceptual metaphors, one returns to language. As Gibbs and Perlman rightly note, 'independent, non-linguistic evidence is needed to break open the language-to-thought-to-language circle' (2006: 215).

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<sup>8</sup> For further evidence in support of a weak version of Whorf's hypothesis, see Gumperz and Levinson, 1996, and for a review of research in the field of linguistic relativity, see Boroditsky, 2003.

<sup>9</sup> Many scholars have applied CMT to analyses of large corpora and in so doing have stipulated conceptual metaphors. For example, in her analysis of the endangered Low Saxon dialect Westmünsterländisch, Piirainen (2012) proposed the existence of many culturally specific conceptual metaphors, for instance STUPIDITY IS AN (INHERITED) PROPERTY OF AN ANIMAL (instantiated by the idiomatic expression, 'the goat had bitten him' which means 'he is stupid'). While Lakoff and Johnson may not have intended their theory to be applied in such a manner, and may not endorse the claim that these expressions reflect conceptual metaphors, there is nothing intrinsic to the theory that can disconfirm Piirainen's claims. Since there is no formal criterion for identifying conceptual metaphors on the basis of linguistic expressions, there is nothing to prevent all manner of arbitrary stipulations. (For a review of *Endangered Metaphors*, the book in which Piirainen's paper appears, and further argument against positing a number of conceptual metaphors on the basis of systematicity of verbal expressions, see Needham-Didsbury, 2013).



Keysar and Bly (1995) likewise stress the need for non-linguistic evidence of conceptual metaphors by demonstrating the inescapable problem of *hindsight bias*. In a series of experiments, participants examined a set of existing (albeit unfamiliar) idioms, which were embedded in one of three scenarios; these scenarios biased the participants' interpretation, to the original meaning of the idiom, to a reversal of the original meaning, or to an unrelated meaning. For example, the idiom 'the goose hangs high' was embedded in a scenario that either (i) suggested its original meaning (things are looking good, everything is rosy), (ii) suggested the reversal of the idiom's original meaning (the end has come, failure) or, (iii) suggested an unrelated meaning of the idiom (something is very loud). In the first experiment, after participants had 'learned' the meanings of the unfamiliar idioms, by reading stories in which they were embedded, they were asked to take the perspective of an uninformed individual, thereby suppressing their prior exposure to the idioms in context. Participants were then given the same idioms embedded in scenarios that did not bias their interpretation towards any of the meanings (original, reversed or unrelated) and were subsequently asked to indicate the meaning of the idiom by choosing from the original, reversed or unrelated meanings. In addition, they were required to rate the confidence with which they had made their judgments, on a 15-point scale. In the second experiment, participants were again biased towards either the original meaning of the idiom or the reversed meaning of the idiom. Subsequently, they read the unfamiliar idiom, together with its original meaning and reversed meaning, and were instructed to evaluate the extent to which each meaning 'made sense'. Keysar and Bly found that once participants had learned a meaning of the unfamiliar idiom, during the first phase of the first experiment, they struggled to consider the possibility that someone might interpret the idiom in a different way. Therefore, participants attributed to an uninformed person the meaning of the idiom that they themselves had learned initially. The results of the second experiment corroborated these findings and indicated that the 'learned' meaning was always rated as more sensible than the unlearned meaning.

The authors note that their results pose a problem for CMT. If, as Lakoff claims, 'there are independently existing elements of the conceptual system that link the idiom to its meaning' (Lakoff, 1987: 449), one would expect that the original meanings of the idioms in Keysar and Bly's experiment would make sense, even when they were not used during the learning phase. That is, one would expect that the original meaning of the idiom 'the goose hangs high' (the positive meaning) would always be readily comprehensible and judged as a sensible reading, since the linguistic expression is derived

from the underlying primary conceptual metaphor MORE IS UP. McGlone (2007) makes additional use of Keysar and Bly's results by pointing out how CM theorists' reasoning suffers the same faulty post-hoc rationalisation process observed in these experiments. In CMT, intuitions concerning an idiom's meaning are assumed to reflect the way in which these meanings are represented in semantic memory. Yet, the assumption that our intuitions about the meaning of idioms directly reflect meaning representations in semantic memory cannot be evaluated without calling on these very intuitions. As Keysar and Bly demonstrate, these intuitions cannot be trusted, for the act of generating an intuitive theory about an idiom's meaning can blind us to alternative possibilities that may be more accurate. Once again, the dangers of using linguistic evidence and intuition to uphold the claims of CMT are patent, and the importance of non-linguistic evidence is once more highlighted as essential in order to support the theory.

Addressing the need for non-linguistic evidence, Gibbs (2011a) cites a range of social psychology studies, which he believes support the existence of conceptual metaphors. To give one example, Meier and Robinson (2004, cited in Gibbs, 2011a) found that subjects were faster to recognise a positive word when it was presented in a high vertical position on the screen than when it was presented in a low vertical position, and vice versa for negative words. Gibbs suggests that performance on these non-verbal tasks can be taken as support for the idea that people conceive of GOOD and BAD along a vertical dimension, as is suggested by CMT. Participants' performance on this task, and a range of others, is certainly consistent with the conceptual metaphors GOOD IS UP/BAD IS DOWN and is, furthermore, indicative of people activating conceptual metaphors when thinking. The question remains, however, are conceptual metaphors recruited in the processes of on-line comprehension of metaphorical language? And, if they are, *how* do they contribute to the comprehension procedure? In what follows, I focus on the evidence brought to bear on these two questions.

Evidence used to support the claim that conceptual metaphors play a role in metaphorical language comprehension comes primarily from psycholinguistic studies. For example, it has been found that participants are quicker to process, i.e. to read, metaphors whose meaning is motivated by a conceptual metaphor that has already been activated during prior discourse than those whose meaning is not supported in this way. In other words, people are faster to comprehend a metaphor that is consistent with previously computed conceptual metaphors and slower to comprehend a metaphor that is derived from a distinct conceptual mapping from that which has already been

processed (Gentner, Imai & Boroditsky, 2002; Langston, 2002; Pfaff, Gibbs & Johnson, 1997; cited in Gibbs, 2011a).

In Pfaff, Gibbs and Johnson's (1997) study, participants first read metaphorical vignettes derived from conceptual metaphors, and subsequently read euphemistic expressions (the target sentences). For example, they would read a vignette that was consistent with the conceptual metaphor LOVE IS A JOURNEY, followed by an expression that employed a term consistent with that conceptual metaphor, for example 'they decided it would be better if they *moved on*'. In order to rule out the possibility that their results merely reflected standard semantic priming, the authors also tested euphemistic expressions that were semantically related to the vignettes, but inconsistent with the conceptual metaphors from which those vignettes were derived (e.g. 'they decided it would be better if they *switched trains*').<sup>10</sup> They found that semantic relatedness did not affect subjects' reading of the target, euphemistic expressions while conceptual metaphors did. On this basis, the authors concluded that it was the consistency of the underlying conceptual metaphors, which must have been activated, that enabled participants to read the euphemistic terms quicker.<sup>11</sup> While these studies demonstrate a facilitative effect that is consistent with the claim that conceptual metaphors affect on-line processing of verbal metaphors, the exact role of conceptual metaphors in the comprehension procedure remains unclear.

The reliability of the aforementioned experiments is, furthermore, called into question by studies that allege to have found the opposite effect. McGlone (1996), for example, found that when participants were asked to paraphrase the metaphor 'Dr Moreland's lecture was a three-course meal for the mind', which the author supposed was a reflection of the conceptual metaphor IDEAS ARE FOOD, participants rarely cited potential correspondences between ideas and food. Instead, participants focused on the 'high quantity and/or quality aspects of three-course meals that can be attributed to lectures' (McGlone, 2007: 117). In addition, it was found that when asked to construct metaphors with a comparable meaning to 'Dr Moreland's lecture was a three-course meal

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<sup>10</sup> According to the authors, this sentence is 'inconsistent with at least one of the mappings between love and junctions – specifically, the mapping of end states. [...] for the familiar-consistent ending (*moved on*), the end state reflects a possible ending for a journey: moving on, or starting a new journey. In contrast, switching trains is usually done at some point during a journey, not at the end' (Pfaff, Gibbs & Johnson, 1997: 74).

<sup>11</sup> It is possible that the euphemistic expression 'they decided it would be better if they moved on' is easier to comprehend than the expression 'they decided it would be better if they switched trains', simply because it is more familiar (as opposed to because the former is consistent with the conceptual metaphor that underlies the preceding vignette, as Pfaff, Gibbs and Johnson (1997) suggest).

for the mind', participants tended to generate metaphors such as 'Dr Moreland's lecture was a truckload of information', as opposed to 'Dr Moreland's lecture was a steak for the intellect', thus showing no evidence that they had activated the conceptual metaphor IDEAS ARE FOOD (McGlone, 1996). Likewise, participants did not rate the latter expression regarding steak as more similar to the three-course meal metaphor than expressions such as 'Dr Moreland's lecture was a goldmine'. Finally, comprehension of the original metaphor was not enhanced by prior exposure to metaphors from the food domain, such as 'the book was a snack'. Comprehension was, however, facilitated by metaphors that made use of stereotypical properties of the vehicle, for example, metaphors that drew on ideas of something being large in quantity, or of good quality, variety, etc. (e.g. that book was a goldmine). McGlone concludes from these seemingly robust results that people do not retrieve conceptual metaphors when interpreting nominal metaphors. He suggests instead that people infer the attributive categories that these metaphors imply (the attributive category implied by the metaphor vehicle in 'Dr Moreland's lecture was a *three-course meal for the mind*' being 'high quality/quantity/variety').

Gibbs finds fault with McGlone's study on the basis that paraphrasing novel metaphors is notoriously difficult and, therefore, unlikely to reliably indicate the presence of conceptual metaphors (Gibbs, 2011a). What's more, Gibbs claims that some of the metaphors used in McGlone's study might not be motivated by single conceptual metaphors as McGlone suggests and, therefore, that the absence of a facilitative effect does not pose a threat to CMT, since it is not predicted by CMT. Gibbs suggests that the metaphor 'Dr Moreland's lecture was a three-course meal for the mind' is an example of what Gibbs calls an 'XYZ metaphor', i.e. one that does not follow the standard *X is Y* form, but rather *X is the Y for Z*. In such metaphors, comprehension is said to involve bringing *X* and *Z* ('Dr Moreland's lecture' and 'the mind') together in a conceptual domain that is metaphorically understood in terms of some conceptual domain containing *Y* ('three-course meal'); in other words, the metaphor is understood as *X* is to *Z* as *Y* is to some unmentioned element *W* (for further discussion of XYZ metaphors, see Turner, 1991 and Okonski and Gibbs, 2010). According to Gibbs, CMT does not predict that 'three-course meal for the mind' activates the source domain FOOD (since the metaphor is not seen as an instantiation of the conceptual metaphor IDEAS ARE FOOD). Gibbs proposes that 'XYZ metaphors' may be produced and understood through complex conceptual blending processes, which he does not go into (Gibbs, 2011a, see Fauconnier and Turner, 2002). While this may be a valid criticism of McGlone's study, it points to a disadvantage of CMT in general, by highlighting the theory's inability to provide an

account of metaphorical language comprehension that can be applied to the full range of metaphorical expressions. In addition, it highlights the difficulty that one experiences when retrospectively tracing verbal metaphors to conceptual metaphors and the somewhat arbitrary nature of this act.

While Gibbs is a staunch supporter of CMT, he raises several highly significant questions concerning the involvement of conceptual metaphors in metaphorical language comprehension. He rightly asks:

Does one initially access the complete conceptual metaphor from memory and then apply it to infer the metaphoric meaning of an expression? Second, if the conceptual metaphor is accessed prior to interpretation of expression, does it come with a package of detailed meaning entailments of what the expression means?; or, must people compute source-to-target domain mappings online to determine which entailments of the conceptual metaphor are applied to the meaning of utterance?

(Gibbs, 2011a: 550)

Both of these questions, neither of which has been answered, come with equally important sub-questions. *If* hearers do initially access the complete conceptual metaphor, *how* do they apply it when inferring the metaphorical meaning of an expression? Secondly, *if* people compute source-to-target domain mappings on-line, what are the mechanisms that enable them to do this, that is, how do they derive the 'right' entailments? Even if one were to answer Gibbs' questions, CMT evidently remains in dire need of a complementary pragmatic theory, which can explain how a speaker's intended meaning is derived in context.

Gibbs poses a final question, worthy of note: 'do conceptual metaphors arise as products of understanding and are, therefore, not necessary to create an initial understanding of a metaphorical expression?' (*idem*). Gibbs himself concedes that there are 'no empirical studies that provide exact answers to these questions' (*idem*). However, this final question in particular is in vital need of being addressed, for it seems to be the crux of the problem with positing CMT as a model of metaphorical language comprehension. If conceptual metaphors are not *necessary* to derive an interpretation of a metaphorically used expression, then we are left without an account of how hearers do derive metaphorical meaning. As stated earlier, it is not clear if activation of conceptual metaphors represents actual *purposeful use* of conceptual metaphors. It is highly plausible

that conceptual metaphors are not being meaningfully recruited during the comprehension procedure, and, therefore, it is possible that they are not integral to the comprehension procedure at all.

An even more fundamental challenge to CMT is to show that conceptual metaphors really exist. That is, to show that abstract concepts are truly structured metaphorically and stored as such (for arguments to the contrary see Murphy, 1996, 1997;<sup>12</sup> this material will be discussed in chapter 7, where I consider new developments within CMT, which suggest that embodied simulation (of literal meaning) plays a role in language interpretation. This view is founded on a multi-modal view of cognition (i.e. a sensori-motor view), which will be discussed in chapter 6 and distinguished from the amodal view).

The aforementioned findings, which Gibbs takes to be consistent with the existence of conceptual metaphors, are in fact equally consistent with the idea of ‘conceptual metaphors’ being no more than standardised analogies that arise in communication. Vega-Moreno elaborates on this possibility:

What cognitive linguists refer to as conceptual metaphors are not really metaphors at all. Many are simply more or less standardised analogies (or similes) which people may exploit in conversation and which readers may construct or retrieve from memory in understanding a novel metaphor, a text or a poem.

(Vega-Moreno, 2007: 139)

Vega-Moreno’s claims do not exclude the possibility that analogies, for example, between life and journeys, are stored in long term memory and used during the interpretation of metaphorical expressions. However, she does reject the claim that these analogies structure our thoughts and that they are *essential* to the interpretation process. Vega-Moreno’s claims are grounded in Relevance Theory, which provides an account of how all utterances, including metaphorically intended ones, are comprehended. After the next section in which I consider how and why CMT appeals to psychotherapists wishing to utilise metaphors in their practice, I will present a detailed explication of Relevance

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<sup>12</sup> The notion that metaphorically structured concepts are stored in the mind raises the question: *how* and *where* are they stored? Unlike encyclopaedic information, conceptual metaphors are patently false (time is not synonymous with money, just as feeling happy is not the same as being physically high up, nor sadness the same as being physically low down). Encyclopaedic information and conceptual metaphors must, therefore, be conceptually distinguished somehow. I return to this issue, of how and where conceptual metaphors are stored, in chapter 7, section 7.5.

Theory, which is the main pragmatic account investigated in this thesis and which will be the focus of my empirical investigation (see chapter 5).

Before exploring how CMT relates to psychotherapy and contrasts with the relevance-theoretic account of metaphorical language, let us briefly reflect on the definition of metaphor that falls out of CMT. Notice how the notion of conceptual metaphors alters the common conception of what is metaphorical. Under Lakoff and Johnson's theory, many utterances that are typically considered to be literal uses of language are re-classified as metaphorical uses of language, *because* they reflect conceptual mappings. While most people have no difficulty in recognising that the utterance 'Mary is an *angel*' is a metaphorical use of language, the same cannot be said of an utterance such as 'let's *spend* more time together'. Without some prior knowledge of CMT, it is unlikely that such an utterance, 'let's *spend* more time together', or 'I *wasted* the whole of this week', would be considered as metaphorical. However, for Lakoff and Johnson, as illustrated above, these utterances are indeed metaphorical since they are underpinned by the conceptual metaphor TIME IS MONEY. That CMT widens the scope of what is considered to be metaphorical will be relevant to our discussion of psychotherapeutic approaches to metaphorical language in chapter 4 (and will also be a point of comparison with RT, see section 1.4).

### 1.2.3 CONCEPTUAL METAPHOR THEORY AND PSYCHOTHERAPY

It is not difficult to understand how and why the notion of underlying metaphorical thought as proposed in Conceptual Metaphor Theory has appealed to psychotherapists. As we shall see in chapter 3, many psychotherapists' primary concern is to uncover clients' deep-rooted assumptions or beliefs, beliefs which the client is unaware of, yet which are affecting their behaviour in potentially maladaptive ways. The idea that there are conceptual metaphors that govern our speech and our behaviour implies that paying close attention to utterances has the potential to reveal fundamental assumptions, which may be affecting an individual in ways that they are not aware of. Since these fundamental assumptions or conceptual metaphors may be at the root of the client's maladaptive thoughts and behaviour, it is evidently in the therapist's interest to uncover them, if they do indeed exist. That attention to language has the power to reveal the structure of one's conceptual system is unarguably appealing to psychotherapists and ties in with the intuitions of many, that our utterances are a reflection of our unconscious conceptions.

Any theory that advocates and supports attention to language as a way of revealing unconscious thoughts is thus very much in line with psychotherapeutic principles.

As will be discussed at length in chapter 3, a basic cornerstone of certain psychotherapeutic practices, most notably of cognitive behavioural therapy, is to 'teach' clients how to see the world differently, to think and behave differently, in part by changing the way that the individual talks about the world. The idea that such an enterprise is viable is often ascribed to CMT. Nevertheless, the claim that language shapes thought is not inherent to the theory itself. On the contrary, according to CMT, thought shapes language, and thus it follows that our use of language is a reflection of our thought; yet, language does not necessarily have the power to change that from which it is derived.

The misattribution to CMT of the notion that language affects thought appears to stem from confusion in relation to the linguistic relativity research cited in section 1.2.2. As discussed, research in linguistic relativity has revealed that language shapes our behaviour and may influence our cognitive capacities; for example, by affecting our perceptual abilities. It follows from this work, as psychotherapists argue, that language affects the thoughts, beliefs and conceptions that we have. However, this claim is not derived from CMT, which asserts that language reflects the *components* of thoughts and beliefs (i.e. that language reflects underlying concepts). Recall the 'language to behaviour' connection: language may be a useful predictor of thoughts and behaviour; but consciously changing language will not necessarily alter conceptual structure (at least, not according to CMT). If CMT is right, that conceptual mappings (revealed by language) are fundamental (driven by our own physicality) and unavoidable, it should be very difficult, arguably impossible, to change many assumptions and to alter conceptual structure. I emphasise that, contrary to their beliefs, psychotherapists whose practices are based on the assumption that thoughts are shaped through language do not find direct support for their approach in CMT. However, that is not to say that such practice is unsupported. Linguistic relativity research does not support CMT, but it does demonstrate that language has the power to alter our thoughts and behaviour, as psychotherapists would have it.

### 1.3 RELEVANCE THEORY

#### 1.3.1 AN OUTLINE OF RELEVANCE THEORY



Unlike Conceptual Metaphor Theory, which deals exclusively with metaphorical language, Relevance Theory sets out to provide an all-encompassing account of (ostensive) communication. RT is derived from Grice's theory of communication (or 'conversational logic'), which attributes a fundamental role to the recognition of speaker intentions during utterance interpretation (Grice, 1989). Prior to Grice, it was widely assumed that successful communication was based on a code model. According to this model, when a speaker wishes to convey a certain message, they produce a signal associated with that message in their code (that is, they produce an utterance). Upon receiving this signal, the recipient (i.e. the hearer) decodes the signal using their identical copy of the code, which they have at their disposal. In contrast to the code model of communication, Grice argues that, in addition to the decoding of the explicit content of an utterance (i.e. 'what is said'), successful communication depends on the ability to recognise the intentions of the speaker.

One of my avowed aims is to see talking as a special case or variety of purposive, indeed, rational, behaviour.

(Grice, 1989: 28)

RT inherits this fundamental assumption from Grice. As an inferential model of communication based on Gricean pragmatics, RT maintains that utterances (like all ostensive stimuli) provide pieces of evidence about a speaker's communicative (or 'meaning') intention. A second key point of agreement between Grice and RT is their shared claim that hearers have particular, and warranted, expectations concerning the quality of utterances addressed to them. For Grice, speakers observe a 'Co-operative Principle' when talking:

Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.

(*ibid.*: 26)

It is this principle that entitles hearers to have various expectations concerning the quality of utterances, for example, that an utterance be truthful, informative and

relevant.<sup>13</sup> RT, as will be explained, maintains that hearers have a single expectation: that an utterance will satisfy a particular level and kind of relevance.

Underlying RT is the basic assumption that human cognition quite generally is geared to the maximisation of relevance (this is known as the ‘Cognitive Principle of Relevance’). The idea is that perception, memory and inference are all oriented towards processing what is most relevant in the current context and to doing so in the most cost effective way. The notion of relevance is operationalised in terms of a balance between cognitive effects and processing effort. Essentially, an input is relevant when it interacts with a set of contextual assumptions to generate (positive) cognitive effects (to be defined below). Newly presented information is irrelevant if and when it does not yield any (positive) cognitive effects in the context. Other things being equal, the greater the (positive) cognitive effects, the greater the relevance, and the greater the processing effort, the lower the relevance. To illustrate, imagine that you ask your colleague “is it 6 o’clock yet?” In answer to this question, your colleague may respond by answering either “yes” or “no”, or they may respond by passing you their watch, on which the time is displayed. Both responses will provide you with the answer that you need, that it is either *is* or *isn’t* 6 o’clock. However, the latter response of passing you the watch will require more processing effort than processing the simple utterance, “yes” or “no”. In relevance-theoretic terms, the second response of passing the watch is less relevant than the “yes” or “no” response.<sup>14</sup>

Given the centrality of cognitive effects and processing effort to the RT account, both constructs are explicitly defined. A positive cognitive effect is one that ‘contributes positively to the fulfilment of cognitive functions or goals’ (Sperber & Wilson, 1995: 265), for example, one that provides new true information, or that strengthens existing true assumptions, or contradicts and eliminates a previously held false assumption. A paradigmatic kind of cognitive effect, widely discussed within the RT framework, is a ‘contextual implication’. Contextual implications are ‘deducible from input and context together, but from neither input nor context alone’ (Wilson & Carston, 2007: 24), they are

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<sup>13</sup> The Cooperative Principle subsumes a set of four maxims, which hearers expect that speakers will obey: maxims of quality (e.g. truthfulness), quantity (informativeness), relation (relevance) and manner (e.g. brevity and orderliness). In Grice’s account, the assumption that speakers obey the Cooperative Principle and maxims provides hearers with a strategy for deriving conversational implicatures (see Grice, 1989: 26-35 for further detail).

<sup>14</sup> However, there could be additional effects that a speaker wants to achieve by showing the addressee her watch in which case the extra effort required may be warranted. For a more detailed description of Relevance Theory’s key features, see Blakemore (1992) and Clark (2013), the latter of which provides a definitive account of recent developments within RT.

'a synthesis of old and new information, a result of interaction between the two' (Sperber & Wilson, 1995: 108). Sperber and Wilson (1995) further clarify:

A set of assumptions P *contextually implies* an assumption Q in the context C if and only if

- (i) the union of P and C non-trivially implies Q,
- (ii) P does not non-trivially imply Q, and
- (iii) C does not non-trivially imply Q.

(*ibid*: 107-108)

A non-trivial implication is defined as follows:

A set of assumptions P *logically and non-trivially implies* an assumption Q if and only if, when P is the set of initial theses in a derivation involving only **elimination rules**, Q belongs to the set of final theses.

(*ibid*: 97)

While non-trivial implications (e.g. the implication from 'P' and 'If P then Q' to 'Q') are directly, and automatically, computed, trivial implications (e.g. the implication from 'P' to 'P or Q'), which are in a sense less natural, are not.<sup>15</sup> Contextual implications may be communicatively intended (in relevance-theoretic terms, an intended contextual implication is an 'implicature') or they may be unintended. Take the following exchange, for example:

4. Nick: Have you ever been to see a psychic?  
Laura: I don't like con artists.

The proposition expressed by Laura's utterance (which in relevance-theoretic terms is referred to as the 'explicature'), is that she does not like con artists, while the (main) implicature of the utterance (the intended contextual implication) is that Laura has never been to see a psychic.<sup>16</sup> Some unintended contextual implications that Nick could derive

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<sup>15</sup> For the importance of 'elimination' rules (as opposed to 'introduction' rules) in an account of spontaneous human inference, see Sperber and Wilson (1995: 95-97).

<sup>16</sup> According to Relevance Theory implicatures come in varying degrees of strength. At one end of the spectrum are very strong implicatures, which must be retrieved for the hearer to reach a satisfactory interpretation. The derivation of weak implicatures, in contrast, may only marginally

from Laura's utterance are that she is cynical, not very spiritual, perhaps not very open-minded about possibilities such as life after death, or if Nick himself does not believe in the work of psychics, he might derive from her utterance the implications that she is clever, and the sort of person that he could be friends with. Processing effort, against which cognitive effects are offset, is defined as 'the effort which a cognitive system must expend in order to arrive at a satisfactory interpretation of incoming information' (Carston, 2002: 379), where a satisfactory interpretation is one which meets expectations of relevance (to be discussed further below). There are many different factors that can affect processing effort, for example, in the case of an utterance, how recently the word, speech sounds or syntactic construction, etc. has been used, its frequency of use, its complexity; concepts which have been used more recently and/or more often will require less processing effort.

RT maintains that utterances create an expectation of relevance in the hearer, a presumption that the utterance is at least relevant enough to warrant the attention that the speaker is calling for and as relevant as the speaker is able and willing to make it. This idea is encapsulated in the Communicative Principle of Relevance which states, 'every act of inferential communication conveys a presumption of its own optimal relevance' (Sperber & Wilson, 1995: 270; Clark, 2013: 108). Optimal relevance is defined as follows:

- (i) The ostensive stimulus is relevant enough for it to be worth the addressee's effort to process it.
- (ii) The ostensive stimulus is the most relevant one compatible with the communicator's abilities and preferences.

*(idem)*

The relevance-theoretic comprehension procedure that follows from this principle is the following:

Follow a path of least effort in looking for cognitive effects:

- Test interpretive hypotheses in order of accessibility;
- Stop when you have enough contextual implications (and/or other effects) to

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increase the relevance of an utterance. Clark (2013: 237) explains how 'the degree of strength of an individual implicature depends on how much evidence the speaker provides that she intends to convey it'. The weakest implicatures shade off into unintended contextual implications. Since these weak implicatures are not strongly communicated by a speaker, the responsibility for their derivation lies more with the hearer. For more detailed discussion see Clark (2013: 235-238).

satisfy the expectations of relevance raised by the utterance.

An important mechanism internal to RT pragmatics is what is known as ‘mutual parallel adjustment’. According to this process, hearers recover and process the content of the utterance, the context in which it appears and its cognitive effects in parallel, which enables them to adjust both explicit and implicit meaning in arriving at an inferentially sound interpretation. ‘The process may involve several backwards and forwards adjustments of content before an equilibrium is achieved which meets the system’s current “expectations” of relevance’ (Carston, 2002: 143).<sup>17</sup> In relevance-theoretic terms, the outcome of the comprehension procedure is a set of explicatures and implicatures (a set of propositional conceptual representations). The former term refers to communicated assumptions that are developed from the logical form (or semantic representation) encoded by the utterance, while implicatures are derived solely on the basis of pragmatic inference. The operation of these mechanisms will be demonstrated in the next section, which focuses on the modulation of encoded concepts, including those that are used metaphorically.

### 1.3.2 LEXICAL PRAGMATICS AND THE RELEVANCE-THEORETIC ACCOUNT OF METAPHOR INTERPRETATION

The account of metaphor comprehension within RT is based on work in the field of lexical pragmatics which seeks to explain how linguistically specified word meanings are modified in context. Content words like nouns, verbs and adjectives are taken to encode concepts, each of which has a logical entry, an encyclopaedic entry and a lexical entry. Broadly speaking, the logical entry (given in the form of inference rules) registers essential properties of the concept (for example, that cats are animals). The encyclopaedic entry captures general and contingent knowledge about the denotation of the concept (for example, that cats are furry). The lexical entry consists of information about the natural-language counterpart of the concept. The encyclopaedic information, in particular, plays a key role in the lexical pragmatic account, to be outlined herein.

According to RT, lexically encoded concepts are adjusted in the process of deriving the proposition explicitly communicated, which is attributed to the speaker. When a concept undergoes such adjustment it results in an *ad hoc* or occasion-specific concept,

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<sup>17</sup> For a more detailed description of pragmatic processes, in particular, the key mechanism of mutual parallel adjustment, see Carston (2002: 323-334) and Wilson and Sperber (2004).

whose denotation may be broader than the encoded concept in some respects or narrower in some respects, or both. In the case of broadening, ‘a more general sense’ of the word is communicated (Wilson, 2004: 344), while narrowing gives ‘a more specific sense than the encoded one’ (Wilson & Carston, 2007: 232). Consider the following:

5. I was so close to having a *drink* last week.
6. Mary has a *ton* of work to do.

Example (5) is an instance of narrowing, in which the word *drink* is used to refer to a more specific sense of the word (i.e. alcoholic drink) than the lexically encoded word (i.e. liquid). Conversely, in order to derive the intended meaning of the hyperbolic expression in (6), it is necessary to adjust the encoded concept in such a way that the linguistically specified denotation of the word *ton* is broadened or loosened to mean that Mary has *a lot* of work to do, rather than an amount that weighs 2000 pounds. According to RT, the pragmatic process of lexical adjustment, that results in narrowing and/or broadening, applies spontaneously and automatically to fine-tune the interpretation of almost every word. The process is relevance-driven and results from the mutual adjustment of explicit content, contextual assumptions and cognitive effects.

For example, imagine that a speaker utters (5) at an Alcoholics Anonymous meeting. In order to understand the utterance, which is underspecified by the logical form, the recipients must derive the speaker’s intended meaning: that she was close to consuming an alcoholic drink last week. The recipient(s) of this utterance are first and foremost driven by the expectation that the utterance will be optimally relevant to them in the context in which they are situated. This expectation of relevance gives rise to hypothesized contextual implications that shape the audience’s construction of the *ad hoc* concept, by backwards inference. Since it is mutually manifest to both speaker and recipient(s) that everyone in the room is endeavouring to resist alcohol, interpretive hypotheses concerning general liquids would not provide sufficient cognitive effects and are, therefore, not warranted. By narrowing the concept of ‘drink’ to denote ‘alcoholic drink’, the hearers’ expectations of relevance are satisfied, which in turn halts the consideration of alternative interpretive hypotheses (in order to conserve processing effort). Similarly, imagine that (6) is uttered by Sarah’s flat-mate in response to her suggestion: ‘let’s have a party on Saturday’. Though Sarah’s sister is called Mary, the expectation that her flat-mate’s utterance will be relevant to her own utterance guides Sarah’s comprehension process and guarantees that she interprets Mary as referring to

their flat-mate and not to her sister (who she would never invite to a party). On the basis of the assumption that having a lot of work to do leads to a lack of time for social activities and also, a need for a peaceful home environment in order not to be distracted, Sarah successfully interprets her flat-mate's utterance as implicating: our flat-mate Mary has a lot of work to do and therefore, it is not a good idea to have a party on Saturday.

On the RT account, metaphor is considered to be a case of loose use of language, that is, a case of broadening. Sperber and Wilson (1995, 2008) claim that there is a continuum of cases, which ranges from strictly literal uses of language to approximations, category extensions, hyperboles and, at the more radical end of the spectrum, to metaphors. The RT account of metaphor is considered to be 'deflationary' in the sense that no special processing mechanism is posited for metaphor. As for all uses of language, one simply follows the relevance-oriented path, in forming and testing hypotheses in order of their accessibility, stopping when expectations of relevance are satisfied. As Wilson and Carston (2007: 29) write:

We suggested [...] that 'approximation', 'hyperbole', 'metaphor' are not distinct theoretical kinds, requiring different interpretive mechanisms, but merely occupy different points on a continuum of degrees of broadening.

To illustrate, consider the metaphorical utterance below:

7. My mother is an *angel*.

According to RT, the hearer first decodes the utterance, included in which is the lexical meaning of the word *angel* (i.e. the encoded concept ANGEL). This encoded concept is a clue to the speaker's intended meaning and it serves the purpose of activating a range of information associated with the concept. This includes the logical property of the concept (e.g. an angel is a supernatural being) and a number of encyclopaedic properties (e.g. an angel is kind, innocent, beautiful, ethereal, delicate, pure etc.). The discourse context will affect the levels of activation of these encyclopaedic properties; therefore, in a situation in which the mother is being accused of a crime, properties related to character are likely to receive higher degrees of activation than those related to appearance. During the interpretation process, the logical property or definitive element of the encoded concept (supernatural being) is dropped from the metaphorical interpretation, which causes the encoded concept to become broadened, resulting in the *ad hoc* concept ANGEL\*. The

concept is broadened in the sense that its denotation includes non-supernatural beings, such as the speaker's mother. In other words, some content-constitutive features associated with the encoded concept (e.g. not human) are not included in the *ad hoc* concept, while some encyclopaedic properties of the encoded concept are included in the *ad hoc* concept (e.g. good, innocent). The *ad hoc* concept is claimed to contribute to the proposition explicitly communicated and, thus, to the asserted content of the utterance (its truth-conditional content).<sup>18</sup> Any poetic effects evoked by the metaphor are construed in terms of a mass of weakly manifest implicatures and strengthenings, shading off into cognitive effects that do not fall under the speaker's communicative intention (see Sperber and Wilson, 1995, 2008 and, for more developed discussion of poetic effects, Pilkington, 2000).

It is important to note that the metaphorical interpretation, as with all lexical adjustments, contributes to the proposition explicitly communicated, i.e. the pragmatically modulated *ad hoc* concept is part of the proposition expressed. The propositional content of the metaphor in (7) is consequently: 'my mother is an ANGEL\*'. This aspect of RT is significant for two reasons. Firstly, it represents a significant departure from Gricean accounts of metaphor such as that proposed by Searle (1979), which maintain that figurative interpretations contribute only to the implicit content of an utterance (its implicatures). According to these models, the explicit content of an utterance is limited to what is linguistically encoded, together with disambiguation of homonyms and reference assignment ('what is said'). In contrast and as previously stated, RT maintains that explicatures and implicatures are the result of the same inferential process and differ solely in terms of the type of representation on which the pragmatic processes operate. Explicatures are constrained by the logical form of an utterance, whereas implicatures are inferentially derived.<sup>19</sup> As we will see, the idea that the

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<sup>18</sup> Sperber, Wilson and Carston are not alone in their suggestion that interpreting metaphorical expressions involves on-line construction of occasion-specific concepts. Glucksberg and Keysar's class inclusion account of metaphor likewise claims that comprehension of metaphors involves constructing an appropriate *ad hoc* superordinate category of the metaphor vehicle. On the class inclusion account, the metaphor vehicle provides the properties to be attributed to the topic, while the metaphor topic provides the dimensions to be attributed (for further detail see Glucksberg, 2001; Glucksberg and Keysar, 1990; Glucksberg, McGlone and Manfredi, 1997; McGlone and Manfredi, 2001).

<sup>19</sup> This is a reflex of much deeper differences between RT and the Gricean account of metaphor, according to which metaphorical utterances involve blatant violation (or flouting) of a maxim of truthfulness. On Grice's account, the intended meaning of a metaphor is derived from, and following, the recognition that a violation of a maxim has occurred. In contrast, the RT account, which has no maxim of truthfulness, involves no flouting of pragmatic principles, since it is not possible to violate the communicative principle of relevance. Therefore, the pragmatically modulated *ad hoc* concept may feature in the explicit content of the utterance.



metaphorical interpretation contributes to the proposition explicitly communicated is also an important point of contrast with theories of metaphorical language processing to be described in chapter 2.

While Sperber and Wilson initially claimed that metaphor was a simple, albeit often extreme, instance of broadening, more recent research within the relevance-theoretic community has modified this view of metaphor as continuous with other loose uses. Wilson and Carston (2007) noted that, unlike hyperbole and approximation, metaphors may involve both broadening and narrowing; a single word may thus express an *ad hoc* concept whose denotation is narrower than that of the lexically encoded concept in some respects and broader in others. While the authors did not assert that such bi-directional lexical adjustment was a defining feature of metaphor, Carston and Wearing (2011) have since done so. They argue that metaphor *always* and *inevitably* involves a narrowing as well as a broadening of the lexically encoded concept:

So while the denotation of the *ad hoc* concept communicated by a hyperbolic use is simply more inclusive than that of the original lexical concept, the denotation of the *ad hoc* concept derived on a metaphorical use either merely overlaps with the denotation of the encoded concept or is entirely disjoint from it.

*(ibid: 293)*

Before looking at the two distinct types of metaphorical adjustment mentioned by Carston and Wearing (one in which the *ad hoc* concept overlaps with the encoded concept and one in which the *ad hoc* concept is disjoint from the encoded concept), let us briefly consider an example (of the overlapping kind):

8. My thesis is a *marathon*.

The *ad hoc* concept MARATHON\* picks out a category of activities with particular characteristics, roughly paraphraseable as 'long, psychologically demanding and emotionally exhausting' (Carston & Wearing, 2011: 293). The key point is that this will not only include instances of PhD thesis-writing, but it will also include many actual marathons, as well as other activities, such as the process of undergoing psychodynamic therapy, for instance. While the *ad hoc* concept includes many actual marathons (i.e. the *ad hoc* concept overlaps with the encoded one), it will not include marathons run without any psychological/emotional stress (by extremely fit athletes, for instance). Therefore, the

word ‘marathon’ is both narrowed and broadened. The same can in fact be said of the *ad hoc* concept ANGEL\* (from example (7)), which is not only broadened, but also narrowed so as not to include fallen or avenging angels like Lucifer. Despite Carston and Wearing’s proposal of interpretive discontinuity between hyperbole and metaphor, the relevance-theoretic account of metaphor comprehension remains a unified theory of figurative language in the sense that all figurative interpretations are the result of the same lexical adjustment procedure, which results from the parallel adjustment of explicit and implicit content and is driven by the search for an optimally relevant interpretation. That this is the case is relevant to the forthcoming comparisons between RT and CMT.

As posited by Carston and Wearing (2011), and first and foremost by Carston (2002), there are two distinct cases of metaphorical concept adjustment. Either, the *ad hoc* concept and the encoded concept overlap, or they are disjoint from one other. The metaphors hitherto discussed, ‘my mother is an angel’ and ‘my thesis is a marathon’, belong to the category of metaphor in which the encoded concept and *ad hoc* concept overlap. Recall that what is communicated by the utterance ‘my thesis is a marathon’ is that the speaker’s thesis is a psychologically demanding and emotionally exhausting activity. These are both properties that a ‘literal’ marathon often has, and therefore, the *ad hoc* concept MARATHON\* includes in its denotation actual marathons (but not *all* marathons, i.e. not marathons that are run effortlessly). Likewise, the crucial properties of the predicate in the metaphor ‘my mother is an angel’, properties such as kind and innocent, are found in the encyclopaedic entry of the lexically encoded concept. Therefore, while the *ad hoc* concept ANGEL\* does not contain the logical property of the encoded concept, it does contain features that overlap with the encyclopaedic entry of this concept.

Carston (2002: 350-352) and Wilson and Carston (2008) discuss a number of metaphorical utterances in which the properties of the encoded concept cannot be predicated of the topic, i.e. examples which belong to the category of metaphors where the encoded concept and the *ad hoc* concept are disjoint. Consider:

9. Robert is a *bulldozer*.
10. Sally is a *block of ice*.

The properties which are communicated as pertaining to Robert, in example (9), are that he is unyielding, insensitive, pushy and, potentially, unaware of the feelings of others. Needless to say, these are not properties that feature in the encyclopaedic entry for the

concept BULLDOZER, since only sentient beings, and not machines, can possess these characteristics. Likewise, example (10) communicates that Sally lacks emotional warmth and normal human responsiveness. Again, these properties are not included in the encyclopaedic entry for BLOCKS OF ICE. These properties are referred to in the literature as ‘emergent properties’, which are ‘neither standardly associated with the individual constituents of the utterance in isolation nor derivable by standard rules of semantic composition’ (Wilson & Carston, 2008: 1). Carston notes that these examples pose a threat to the explanatory value of the RT account of metaphor interpretation, since, according to RT, the communicated content of a metaphorical expression is recovered via the encyclopaedic entries of the concepts, BULLDOZER and BLOCKS OF ICE:

It is difficult to see how any encyclopaedic sorting process can, by itself at least, effect the transition from the property BULLDOZER, which is literally inapplicable to Robert, to a set of attributes that may well be true of him, because none of those attributes are found in the encyclopaedic entry of BULLDOZER.

(Carston, 2002: 350)

Carston subsequently poses the question: ‘how is the move from the lexically encoded concept to the *ad hoc* concept effected in these fundamental category-crossing cases?’ (*ibid.*: 354). This question is not definitively answered, but some speculative suggestions for further consideration are proposed.

In a recent paper, Catherine Wearing (2014) offers a solution to the emergent property issue by suggesting that categorization accounts of metaphor, such as Relevance Theory, can and should incorporate an analogical reasoning mechanism into their interpretation heuristic. As Wearing notes, analogical processes rely on *structural* features that obtain in both domains (i.e. in the metaphor’s topic and vehicle). This is contrasted with the *ad hoc* concept construction procedure, which is built on the search for *specific properties* of the vehicle’s encyclopaedic entry that hold in the metaphor’s topic also. According to Wearing, the search for an analogy between the metaphor’s topic and vehicle (e.g. between *Robert* and *bulldozer* or *Sally* and *ice*) may effectively foreground the necessary properties of the metaphor vehicle, thereby solving the emergent property problem.

An analogy brings properties of each domain which do *not* apply in the other domain into alignment under relations or properties which *do* apply in both

domains.

(Wearing, 2014: 95)

To illustrate, consider the following example (taken from Wearing, 2014), which describes an actor's performance in a play:

The gold standard performance comes from McDiarmid. Vocally, he is spell-binding, giving lines *dexterous topspin* and unexpected bursts of power.

(*ibid*: 90)

'Topspin' is a sports term, which in tennis refers to the practice of dropping one's racquet under the ball and then in a swift motion, brushing the racquet upwards, such that the ball spins (i.e. rotates forward) as it moves through the air, bouncing high when it reaches the receiver. Needless to say, these properties of 'topspin' cannot be literally predicated of an actor speaking lines in a play; 'an actor's lines don't "spin forward" toward the hearer, or "bounce high" when they "land" on the hearer's ear' (*idem*). According to Wearing, the analogy between the tennis ball spinning towards the receiver and the actor's lines reverberating towards the audience brings them into alignment (thereby providing the basis for the intended *ad hoc* concept) under more abstract properties, for example, having forceful impact.

It doesn't matter that an actor's lines can't literally spin [...] it is enough that the delivery of those lines be recognized as analogous to the motion of a ball laden with topspin on the basis of a shared literally applicable property [i.e. forceful impact].

(*ibid*: 95)

Wearing supposes that the more effortful process of searching for an analogy is triggered during the interpretation of novel metaphors or category-crossing metaphors, where the resulting *ad hoc* concept is typically disjoint from the encoded concept. For these metaphors, the fruitlessness of the standard relevance-theoretic process (of accessing encyclopaedic properties of the metaphor vehicle) prompts the search for an analogy, which effectively 'assemble[s] the resources on which that [*ad hoc* concept] construction can draw' (*ibid*: 99). Wearing's account presumes that the standard RT process of encyclopaedic search is engaged by default, and it is only when this process fails to yield an appropriate figurative interpretation from its search through the encyclopaedic entry

of the metaphor vehicle (e.g. 'topspin') that the move to accessing more structural relations by way of analogical reasoning is instigated. Typically, analogical processes are triggered by the failure of the search for relevant encyclopaedic properties, but it also seems plausible that, in some situations, there is a top-down, potentially conscious, decision to treat a metaphor analogically (when expectations of relevance are not satisfied by the first most accessible interpretive hypothesis).

In her 2002 book, Carston raises the emergent property problem and looks to the CMT approach for a possible solution. She speculates that conceptual metaphors, or pre-existing metaphorical schemes, as she calls them, may play a role in our comprehension of metaphorical expressions of the type discussed above (where the lexically encoded concept is wholly distinct from the communicatively intended concept). As we saw in section 1.2, CMT claims that our conceptual system is made up of conceptual metaphors, many of which map psychological phenomena to physical phenomena, for example PEOPLE ARE MACHINES and PSYCHOLOGICAL FORCE IS PHYSICAL FORCE. It is possible that such conceptual metaphors enable us to understand character traits (such as obstinacy and insensitivity) in terms of physical objects (like bulldozers), by mapping the psychological traits to the physical traits of machines. Carston suggests that *if* our conceptual system does include such metaphorical schemes, as Lakoff and Johnson (1980) suggest, then part of the role of a concept's encyclopaedic information would be to provide the connection with the appropriate metaphorical scheme. I return to this area of enquiry in chapter 7, where I propose an amendment to the RT notion of the encyclopaedic entry. I argue for an enriched conception of encyclopaedic information, which encompasses modality-specific (sensori-perceptual and motor) information. My revision of the encyclopaedic entry provides hearers with affective and imagistic content (non-propositional content). I believe that this amendment may go some way in enabling people to derive the intended meanings of (9) and (10), if we suppose, as Carston (2002: 356) conjectures, that conceptual representations (e.g. Robert is obstinate, inconsiderate of other people's views etc.) can be derived from scrutiny of a mental image of Robert *as* a bulldozer.<sup>20</sup>

### 1.3.3 RELEVANCE THEORY AND PSYCHOTHERAPY

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<sup>20</sup> For an alternative attempt to resolve the emergent property problem, using a purely inferential account, see Wilson and Carston (2008) and Vega Moreno (2007: 100-112).

Considering how the relevance-theoretic approach to communication and, more specifically, its account of metaphor might relate to psychotherapeutic principles and practice is a new, so far unexplored, domain of enquiry. Though researchers in psychotherapy have limited their exploration of linguistic theories of metaphor to CMT, it is not difficult to see how RT can also be fruitfully applied to psychotherapy and used to validate psychotherapists' attention to metaphor and language in general. According to RT, the use of metaphor is frequently prompted by our attempt to communicate complex and vague thoughts. The theory quite generally supposes that the encoded meaning of a linguistic expression used in an utterance underdetermines the proposition that is explicitly communicated. The pragmatic process of interpretation is first and foremost a matter of grasping the thoughts that a speaker intends to communicate. RT's focus on the derivation of communicatively intended meaning is relevant to psychotherapy in that, parallel to CMT, it supports the claim that every act of communication is a window into a speaker's mind and, furthermore, an invitation to derive an intended meaning. I am not suggesting that psychotherapy needs, or is looking for, a theoretical basis to its attention to language, but merely that RT can perform the same function as CMT in this regard.

To directly compare CMT's and RT's relation to psychotherapy: CMT implies that attention to language reveals the underlying fabric and structure of a speaker's thought, whereas RT implies that attention to and engagement with language reveals a speaker's intended meaning. While RT makes a weaker claim, the same general message comes from the two theories; that is, it is worth paying attention to the language your interlocutor employs if you want to understand him or her. While this might seem like a trivial message, it is relevant to the practice of psychotherapy, given its dependence on talking and interpretation of that talk, and thus, is worthy of mention in this context of this thesis.

Although the same general message derives from CMT and RT, CMT might seem better suited to the psychotherapist's desire to uncover clients' *unconscious* thoughts as its focus is less on a speaker's intended meaning and more on what the language employed may reveal about the speaker's mind. In other words, according to CMT, focusing on the specific expressions a speaker/client employs may expose content (assumptions) that goes beyond that which is intended, i.e. it may detect unintended, yet revealing, underlying assumptions. For RT, in contrast, as a pragmatic theory, the emphasis is on intended content and contextual implications, that is, the recovery of what the speaker wants to convey, so hearers following the RT comprehension procedure are less likely to gain insight into the interlocutor's unconscious conceptions. Although RT

may be less apt in terms of application to psychotherapy, this chapter has revealed significant theoretical shortcomings that pertain to CMT; most notably, the lack of concrete evidence in support of the posited connection between language and thought. While it may suit psychotherapists to appeal to CMT in order to validate their attention to language, in particular its metaphorical aspects, as a means of uncovering unconscious thought, those aware of the specifics of CMT will be unlikely to support this misplaced appeal and application of theory.

Relevance Theory's more general Cognitive Principle of Relevance, which is not limited to the recovery of intended meanings, has interesting applications to psychotherapy. Recall that, according to RT's Cognitive Principle of Relevance, human cognition is at all times geared towards the maximisation of relevance; in other words, 'the goal of human cognition is to derive as many cognitive effects as possible for as little effort as possible' (Clark, 2013: 32). This principle goes beyond pragmatics, i.e. beyond what is communicatively intended, and enables interpreters to calibrate their expectations of relevance at different levels, in line with their abilities and preferences. As will be discussed in chapter 3, psychotherapists bring their own theoretical apparatus to the communicative domain; this theoretical apparatus derived from psychotherapy training governs how therapists monitor their environment for relevant stimuli. I believe that the Cognitive Principle of Relevance neatly explains how, and why, psychotherapists' analyses and interpretations often go beyond clients' communicatively intended content – since psychotherapists find relevance (cognitive effects) in utterances that goes far beyond what the speaker intends. The distinctive quality of psychotherapeutic communication, and the way in which psychotherapists' attention is often directed to non-communicatively intended content, will be explored in greater detail in chapter 3, section 3.5.

To summarise, CMT informs psychotherapeutic practice by validating the connection between language and thought and advocating close scrutiny of the individual clients' linguistic choices as revealing of underlying (possibly unconscious) assumptions. However, it is not clear that CMT's claims, with respect to metaphor *constituting* abstract thought are at all well founded. In addition, CMT is unable to explain how deeply embodied conceptual metaphors, which underpin clients' language and behaviour, may be productively altered. RT is less aligned to psychotherapeutic principles in terms of uncovering speakers' unconscious assumptions, though it does validate psychotherapists' attention to language and to metaphor, by maintaining that every utterance is an invitation to derive an intended meaning. Furthermore, RT's general Cognitive Principle

of Relevance is applicable to the way in which psychotherapists look beyond clients' intended meaning and find their own relevance often in unintended content. In the following section, I consider additional theoretical differences between RT and CMT and, in section 1.5, I look at how the two accounts may complement each other.

#### 1.4 RELEVANCE THEORY AND CONCEPTUAL METAPHOR THEORY COMPARED

As I have continually stressed throughout this chapter, the principal difference between RT and CMT lies in each theory's claims concerning the origin of metaphor. For conceptual metaphor theorists, metaphor originates in thought and is part of the fundamental nature of our conceptual system's makeup. For relevance theorists, on the other hand, metaphor originates in communication and is the natural consequence of using language loosely, so leaving much to the recipient's pragmatic capacities, in order to convey our thoughts. For the latter camp, thoughts communicated by metaphorical language need not themselves be metaphorical and verbal metaphorical expressions are not taken to be a reflection of any pre-existing conceptual mapping (Wilson, 2011).

An additional contrast between CMT and RT concerns the literal/non-literal distinction. On the RT account, metaphor simply lies at one end of a literal-non-literal continuum. Sperber and Wilson (2008: 84) themselves say:

We see metaphors as simply a range of cases at one end of a continuum that includes literal, loose and hyperbolic interpretations. In our view, metaphorical interpretations are arrived at in exactly the same way as these other interpretations. There is no mechanism specific to metaphor, no interesting generalisation that applies only to them.

As Carston (2012: 486) points out, this stance could not be more different from that of conceptual metaphor theorists for whom there is necessarily a 'sharp literal/metaphorical distinction, which applies to both thought and language'. While metaphor is taken to be a natural phenomenon, pervasive in language and thought, it nevertheless occupies a unique position in conceptualisation. Verbal metaphors reflect mappings between conceptual domains, while such loose uses as hyperbole and approximation, which are seemingly and unsurprisingly not of interest to conceptual metaphor theorists, do not.

A final point of comparison between CMT and RT, and one that is also noted by Carston (2012), pertains to each theory's view of the relationship between metaphor and



simile. RT's take on simile is clear and entailed by the theory's account of metaphorical meaning. Essentially, metaphor is wholly distinct from simile, since the *ad hoc* concept account cannot apply to the latter. In other words, when interpreting the simile 'my mother is like an angel', the simile vehicle 'angel' is treated literally. To explain, recall that, when interpreting the corresponding metaphorical utterance 'my mother is an angel', the metaphorical vehicle ANGEL is pragmatically adjusted to ANGEL\*, an *ad hoc* concept whose denotation includes my mother (i.e. my mother is a member of the category picked out by the *ad hoc* concept ANGEL\*). It is for this reason that the *ad hoc* concept account does *not* apply to similes. It would be odd to say 'my mother is *like* an ANGEL\*' since my mother belongs to the category of ANGEL\*. In other words, any given entity that is a member of a category cannot sensibly be said to be *like* that category. An apple is not *like* a fruit, it is a fruit; a tiger is not *like* an animal, it is an animal. In interpreting a simile such as 'his idea was like a diamond', therefore, the lexically encoded concept DIAMOND is preserved rather than adjusted and there is a pragmatic process of inferring implicatures concerning the ways in which an idea may resemble a diamond. RT's concept adjustment account thus clearly distinguishes the processing of simile and metaphor, and applies only to the latter form of figurative expression. CMT, in contrast, suggests no such distinction between metaphors and their corresponding similes.

Carston (2012: 487) points out that the metaphor/simile distinction seems to be viewed by conceptual metaphor theorists as no more than a 'superficial difference in linguistic form with little interpretive import'. Consequently, CM theorists may view the metaphor 'Bill is a bulldozer' and its corresponding simile 'Bill is like a bulldozer' as minimally different linguistic manifestations of the PEOPLE ARE MACHINES conceptual metaphor. However, there is good reason, in the form of empirical evidence, to suggest that this is not the case and that, in fact, the difference in linguistic form between metaphors and similes effects a different interpretive process also (see Glucksberg and Haught, 2006), with metaphors giving rise to significantly more emergent properties than their corresponding similes.<sup>21</sup>

The aim of this section was not so much to criticise CMT as to contrast it with RT. In the section that follows, I briefly consider some recent proposals from scholars invested

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<sup>21</sup> Carston (2012: 487), furthermore, points out that many verbal metaphors discussed in CMT are not easily recast as similes (e.g. 'she is *in* danger' and 'she looked at him *coldly*'). Also, that many similes stipulate a single salient resemblance between source and target domains (e.g. 'he *followed her around* like a puppy'), while the mapping between domains in metaphorical uses of language is usually more open-ended.

in each theory, which suggest that the two accounts may be mutually beneficial and amenable to amalgamation.

#### 1.5 RELEVANCE THEORY AND CONCEPTUAL METAPHOR THEORY: COMPLEMENTARY PERSPECTIVES?

In a detailed paper, Tendahl and Gibbs (2008) set out many interesting points of comparison between conceptual metaphor theorists' account of metaphor, and that depicted by Relevance Theory. The authors suggest a hybrid theory of metaphor, which integrates the two frameworks and which, they believe, provides a more comprehensive account of both metaphor production and metaphor interpretation. Tendahl and Gibbs hold on to the core of CMT by maintaining the cognitive origin of cross-domain mappings (i.e. the existence of conceptual metaphors). How conceptual metaphors contribute to metaphor comprehension, however, is set within RT's pragmatic framework, such that conceptual metaphors are said to 'constrain the on-going maximization of cognitive effects and minimisation of cognitive effort' (*ibid*: 1859). They, furthermore, state that:

People [may] infer LIFE IS A JOURNEY as a consequence of understanding optimally relevant metaphorical meanings, and not as a precondition to understanding a metaphorical utterance.

*(ibid*: 1860)

Tendahl and Gibbs suppose that conceptual metaphors 'may become strongly manifest if either the source domain or the target domain has been activated' (*ibid*: 1859), and suggest that this will subsequently affect the process of mutual parallel adjustment by altering the accessibility of contextual assumptions and implications. Tendahl and Gibbs assert that 'a domain may be activated, if a salient element of the domain has been activated' (*idem*).

Wilson (2011) gives credit to CMT by recognising the significant contribution that the theory has made to the field of metaphor research – most notably, with respect to highlighting the striking systematicity of many metaphorical expressions. However, she rejects CMT's claim that families of related linguistic metaphors are the result of metaphorical cognition. As outlined in section 1.3.2, the lexical pragmatic process of *ad hoc* concept construction is conceived of as an occasion-specific matter, so it may be a

'one-off affair', but, equally, it may catch on and recur within a community, leading ultimately to new lexicalised senses of words. Wilson suggests that repeated encounters with linguistic metaphors that link two conceptual domains (and therefore, that result in similar *ad hoc* concepts) may give rise to 'stabilised' *ad hoc* concepts, that is, additional lexicalised senses of the encoded concept. She suggests that, in such instances, the recurring activation of two conceptual domains may result in systematic cross-domain mappings of the type suggested by CMT. Crucially for her, the origin of these mappings is communication.

Vega Moreno (2007) makes a similar claim to Wilson, grounding her proposal in the relevance-theoretic notion of processing effort. She claims that activating cross-domain correspondences, which may have been stored in long-term memory due to repeated exposure to linguistic metaphors linking two conceptual domains, may 'narrow the search space' during the interpretation procedure, and may, therefore, help to conserve processing effort (and, therefore, to maximise relevance). Recall that the relevance-theoretic comprehension heuristic detailed in section 1.3.1 proposes that hearers follows a path of least effort in deriving cognitive effects, considering interpretations in order of accessibility. Automatic activation of cross-domain correspondences may contribute to the comprehension procedure by directing hearers along this path, suggesting highly accessible and fruitful interpretations.<sup>22</sup>

The account endorsed by Vega Moreno (2007) and Wilson (2011) concedes that cross-domain correspondences (for example, between time and money) may contribute to our production of metaphorical expressions. Just as argued in CMT, cross-domain correspondences may govern and affect our choice of expression – a claim that is made manifest by the multitude of metaphors that, as Lakoff and Johnson (1980) brought to light, display remarkable systematicity. Likewise, relevance theorists Vega Moreno and Wilson grant that cross-domain mappings may play a significant role in the interpretation of metaphorical expressions, by facilitating comprehension of metaphors that are based on the same conceptual activation patterns. Where RT and CMT continue to disagree (as is evidenced by Gibbs and Tendahl, 2011 and Tendahl and Gibbs, 2008), however, is on the fundamental origin of these 'cross-domain' correspondences. According to RT, the systematicity of metaphorical expressions is derived from cross-domain correspondences that arise in communication (through repeated exposure to linguistic metaphors that associate two conceptual domains). Although Gibbs and Tendahl do not reject this

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<sup>22</sup> Effectively, this is Tendahl and Gibbs' (2008) suggestion; except that Tendahl and Gibbs maintain the cognitive origin of conceptual metaphors.

possibility, they maintain that cross-domain correspondences may also arise for purely cognitive reasons.

There is no reason to assume that the underlying motivation for verbal metaphor has to be either (a) embodied/cognitive or (b) social/communicative. Embodied and linguistic experience may *both* [my emphasis] continually contribute to the emergence of different verbal metaphors.

(Gibbs & Tendahl, 2011: 603)

Gibbs and Tendahl are right in that adopting RT's claim that linguistic metaphors are communicatively motivated need not entail rejection of the claim that verbal metaphors may also be cognitively motivated (in different situations). However, if one wishes to hold onto both accounts of metaphor, it is necessary to find conclusive evidence for both proposals. That linguistic metaphors may be motivated by embodied conceptual metaphors will be discussed at length, and ultimately rejected, in chapters 6 and 7.

## 1.6 CONCLUSIONS

This chapter has explored two accounts of metaphor comprehension, which until recently were kept entirely apart from one another. I hope to have demonstrated the limitations of Conceptual Metaphor Theory, at least as an account of how metaphorical language is interpreted, and to have established Relevance Theory as a viable account of how metaphorically used expressions are comprehended in real time. I hasten to add that my endorsement of the relevance-theoretic framework is in no way intended to detract from the valuable insights afforded by CMT. Through its systematic analysis of patterns of linguistic metaphors, CMT reveals the extent to which metaphor abounds and is embedded in the conventional meaning of our everyday language; for this, all scholars of metaphor owe Lakoff and Johnson a large debt of gratitude. Psychotherapy too, and, in particular, specialised approaches to psychotherapeutic use of metaphor, are indebted to CMT. Without the detailed work of cognitive metaphor theorists, and the widespread acknowledgement of metaphor that resulted from this research, it is unlikely that some of the uses of metaphor in psychotherapy to be discussed in chapter 4 would have developed. Still, while psychotherapy may be indebted to CMT, I have shown that, in fact, it need not be wedded to the fundamental theoretical claims of CMT, which in reality do not support the psychotherapeutic aim of altering entrenched assumptions. RT's

pragmatic account of utterance interpretation may be less suited to explaining how hidden (unintended) assumptions are uncovered, but its more general Cognitive Principle of Relevance accords well with the fact that psychotherapists' attention is so often focused on what may be unintentionally revealed by a client's choice of words (as a result of their training, this is where psychotherapists expect to find most relevance).

At the beginning of this chapter, I suggested that, while I take RT to offer a superior account of metaphor processing to CMT, I, nonetheless, do not believe that it can be applied to the full spectrum of metaphorical utterances. In the next chapter, I look at instances of metaphor interpretation in which the literal meaning of the metaphorical utterance seems to play a more sustained role and is more keenly felt and experienced by the interpreter than in the cases discussed so far. For these metaphorical expressions, I support an alternative model of processing to the *ad hoc* concept account, albeit one that is developed within the general relevance-theoretic framework.

## Chapter 2 · ‘Metaphorical worlds’, literal meaning and extended metaphor

### 2.1 INTRODUCTION

The relevance-theoretic approach to metaphor in terms of loose use and *ad hoc* concepts provides an elegant account of the comprehension of many metaphorical expressions, in particular lexical/phrasal cases. Nevertheless, in the present chapter, I advocate the need for a distinct account of the interpretation of certain metaphors, one in which the literal meaning of the metaphorical utterance is more deeply processed and more keenly experienced by the interpreter. The alternative processing route to be characterised in this chapter applies principally to cases of extended and/or creative metaphorical utterances, whose poetic effects are often markedly rich and evocative.

My discussion of an alternative mode of metaphor processing contributes to the primary objective of this thesis – to provide an account of metaphor comprehension that can be applied to the full spectrum of metaphorical utterances. In addition, and as will be demonstrated in chapters 3 and 4, the alternative account of metaphor processing is highly relevant to the exploration of psychotherapeutic discourse. I will argue that this unique communicative context lends itself to an alternative processing route, in so much as psychotherapy creates a reflective space that invites, and rewards, both client and therapist to deeply consider and sustain the literal meanings of their metaphorical expressions (a characteristic feature of the processing route to be outlined herein).

While the chief focus of this thesis concerns metaphor comprehension, I am additionally interested in metaphor production. In chapter 1, I presented two hypotheses concerning production of metaphorical language. CMT, on the one hand, asserts that verbal metaphors are the result of underlying metaphorical cognition. RT, on the other hand, maintains that verbal metaphors arise for communicative purposes and may be either a result of our attempt to communicate ‘economically’, or a reflection of our attempt to communicate complex and vague thoughts, for which literal language may be inadequate. In this chapter, I delve deeper into the forces that govern metaphorical language production and suggest a more fine-grained picture of the inadequacy of literal language. This work is of particular relevance to our discussion of psychotherapeutic discourse and to observations made by writers in the field of psychotherapy, who note the prevalence of metaphorical language in this domain (Pollio et al., 1977).

I begin this chapter by motivating the case for an additional account of metaphorical language interpretation that can complement the relevance-theoretic account outlined in chapter 1. This motivation arises from instances of metaphorical language whose interpretation, and cognitive effects, do not appear to be fully accounted for by RT's *ad hoc* concept account. After highlighting the discordancy between these instances of metaphorical expression and the *ad hoc* concept account, I suggest a number of alternative accounts of metaphor processing, which assign a more central role to the literal meaning of the metaphorical utterance in the interpretation process. I shall argue that these theories provide a more realistic picture of how, in certain contexts, non-literal utterances are processed. I hope to demonstrate that pursuing the deep, reflective comprehension process suggested by these theories yields an altogether different interpretation from that which results from the *ad hoc* concept construction route and is more in line with our intuitions about the interpretations that are, in fact, derived. That these different, complementary, routes of metaphor processing give rise to different cognitive effects will be relevant to our discussion of the functions of metaphor use in psychotherapy (see chapter 4, section 4.3).

## 2.2 TWO ROUTES TO METAPHOR COMPREHENSION: CARSTON (2010)

Consider the following examples of metaphorical language:

1. Martin is a pig.
2. Cigarettes are time bombs.
3. Happiness is the death of ambition.
4. The past is a foreign country: they do things differently there.  
(L.P. Hartley, *The Go-Between*, 1953: 1)
5. Falling apart, if you can be with it fully, will be the seat of your harmonious mind.  
(Buddhist teacher, attested)
6. The fact that your relationship had enough of a vacuum in it that I could slip into your thoughts and take up residence in your head might reveal something to you.  
(Personal communication, attested)
7. Loving does not at first mean merging, surrendering, and uniting with another person (for what would a union be of two people who are unclarified,

unfinished, and still incoherent?), it is a high inducement for the individual to ripen, to become something in himself, to become world, to become world in himself for the sake of another person; it is a great, demanding claim on him, something that chooses him and calls him to vast distances.

(Rainer Maria Rilke, *Letters to a Young Poet*)

8. Hope is the thing with feathers  
That perches in the soul  
And sings the tune – without the words,  
And never stops at all,

And sweetest in the gale is heard;  
And sore must be the storm  
That could abash the little bird  
That kept so many warm.

I've heard it in the chilliest land,  
And on the strangest sea;  
Yet, never, in extremity,  
It asked a crumb of me.

(Emily Dickinson, *Hope*)

9. 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)

Carston (2010) presents a similar range of metaphors, which she uses to highlight the incredibly varied nature of metaphorical expression. As she points out, metaphors may differ greatly with respect to their conventionality/familiarity, on the one hand, and their complexity/creativity, on the other; evidently, the examples in (1) and (2) are on the more familiar end of the spectrum, while (6) and (7) are more creative and novel, and (8) and (9) more poetic and literary. In addition, Carston observes how the imagistic content of a metaphor may play a more or less dominant role in certain cases than in others; the extended metaphors in (8) and (9), for example, give rise to particularly vivid images, (4)



less so. Example (6) overtly attempts to reveal a different side of a situation and, in so doing, manifests an air of persuasion. For me personally, (7) has a deeply affective content, which induces subtle bodily sensations. This range of metaphorical language also serves to illustrate how metaphors may differ in terms of the definitiveness of their propositional content. As Carston demonstrates, metaphors with a more definite propositional content lend themselves to being described as informative, and may inspire either agreement or disagreement from interpreters. For example, it is conceivable that an interpreter, perhaps a friend's of Martin's, might object to (1) and insist that in fact, Martin is a very tidy and house-proud person, he just doesn't have a lot of time to clean at the moment. For metaphors with a less definite propositional content, on the other hand, such as (8) and (9), it is almost inapt, and indeed potentially impossible, to agree or disagree with the propositional content of the expressions. For these metaphors, it seems more appropriate to assess the extent to which the metaphor is apt and/or insightful.

On the basis of these observations, Carston draws a loose distinction between metaphors that are 'ordinary' and metaphors that are 'literary'; a distinction that she notes is by no means clear-cut or absolute, as there are differences in processing/interpretation across individuals and contexts. Belonging to the category of 'ordinary' metaphors, are the conversational, conventional, single-word cases with definite propositional content, while the more 'carefully crafted, extended and developed' metaphors, which are highly imagistic, belong to the category of 'literary' metaphors (Carston, 2010: 297). Carston suggests that these two different kinds of metaphor call for two different routes of interpretation: there is the relevance-theoretic 'quick, local, on-line meaning adjustment process' (*idem*) outlined in chapter 1 and, in addition, a slower, more reflective process in which the literal meaning of the metaphorically used expression plays a more central and sustained role.<sup>23</sup> In what follows, I outline this alternative, more reflective process, highlighting points of contrast with the RT account of *ad hoc* concept construction along the way.

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<sup>23</sup> It is important to note that Carston (2010) is by no means the only advocate of different processing routes for metaphor. Two additional theories stand out in this regard, most notably Bowdle and Gentner's 'Career of Metaphor' hypothesis (1999, 2005) and Steen's theory of 'deliberate metaphor' (2008, 2011a). Bowdle and Gentner propose a distinction between novel and conventional metaphors, suggesting that the former are processed as comparisons (i.e. implicit similes) and the latter *either* as comparisons or as categorisations. The career of metaphor hypothesis predicts that as a metaphor becomes more conventional 'there is a shift in mode of processing from comparison to categorization' (1999: 92). According to Steen, it is deliberate metaphors that are processed via comparison, while non-deliberate metaphors are processed via categorisation. For Steen, a deliberate metaphor is one that is intended to direct the addressee's attention to the source domain (e.g. 'football is war').

In order to comprehend Carston's proposal, let us take one further example, which illustrates her theory most neatly.

10. 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.

(Zoe Heller, *The Believers*, p. 263, cited in Carston, 2010: 309)

According to the relevance-theoretic *ad hoc* concept construction account of metaphor outlined in chapter 1, interpreters would replace each of the literal lexical meanings, e.g. TOAD, CREATURE, FISTS, FANGS, etc. with pragmatically constructed *ad hoc* concepts, TOAD\*, CREATURE\*, FISTS\*, FANGS\*, etc. However, Carston points out that this seems an extreme, and potentially unnecessary, expenditure of effort for insufficient cognitive reward. The linguistically encoded concepts are closely related to each other and therefore, as psycholinguistic experiments demonstrate (Giora, 1999), semantic priming of a mutually reinforcing sort will ensure high activation of the literal meaning.<sup>24</sup> Carston thus proposes that interpreters entertain the internally consistent literal meaning and the imagery that it evokes *as a whole* and metarepresent it as descriptive of an imaginary world. This results in a representation of the literal interpretation of the entire passage, in this case of Karla's unhappiness as a vicious and violent animal contrasted with depression as a slimy sluggish creature. In order to derive the meaning intended by the writer, the literally false conceptual representations together with its accompanying imagery, which make up the imaginary world, are framed or metarepresented (hence kept apart from factual belief representations) and subjected as a whole to more attentive and reflective inferential processes. Thus, from the patently false representations of depression as a sluggish toad and grief, in contrast, as a vicious animal, we derive implications that accord with our expectations of relevance, and which, therefore, can be integrated with our existing beliefs about the kind of negative mental states that humans have. For example, that grief is powerful, that it can make one feel dominated, violated and even out of control. In relevance-theoretic terms, the outcome of this alternative

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<sup>24</sup> Empirical support for Carston's proposal will be discussed in chapter 5, prior to my own empirical investigation (see section 5.2 for further detail).

processing route is an interpretation that consists of an array of implicatures concerning the mental and physical anguish that Karla is experiencing.<sup>25</sup>

Carston suggests that this processing route, which I shall refer to as the alternative/imaginary world construction/processing route, is resorted to when the literal language of the metaphor vehicles is so highly activated that it overwhelms the process of *ad hoc* concept formation. In such instances, conceptual adjustment becomes a more effortful process than maintaining the literal meaning as a whole, since the literal meanings of the metaphorically used expressions, which have been semantically primed and reinforced, are so much more accessible than the metaphorical *ad hoc* concepts. It is the high activation and accessibility of literal meanings that, for Carston, results in the process of *ad hoc* concept formation being overpowered. When this occurs, the literal meaning 'wins out' for a period of time, leading hearers to derive a global metaphorical meaning, via a process which is off-line in the sense that the communicatively intended meaning is not recovered on a word-by-word first pass basis.

In order to comprehend the distinctive features of Carston's alternative imaginary world processing route, it is useful to make a direct comparison with the *ad hoc* concept route. On the *ad hoc* concept account, the literal meaning of a metaphorical expression merely provides access to the materials for constructing an intended *ad hoc* concept (which ultimately replaces the literal meaning). The *ad hoc* concept is rapidly formed in an on-line local process and contributes to the proposition explicitly communicated (that is, to the explicature). On the alternative account, on the other hand, the literal meaning does more than remain idly in the background – it is maintained, developed and represented as material for a reflective pragmatic process that extracts from it relevant implications (implicatures) that are taken to comprise the metaphor's meaning. Unlike interpretations derived via the *ad hoc* concept route, there is no explicature communicated or recovered on the alternative processing route, since the speaker (or writer) does not endorse the literal meaning (the imaginary world) as a representation of the actual world. In further contrast to the *ad hoc* concept account, the metaphorical

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<sup>25</sup> Recall that according to Relevance Theory, metaphor and simile are clearly distinguished – it is only the former that involves *ad hoc* concept construction, while similes are interpreted literally (see chapter 1, section 1.4). Notice how Carston's account of imaginary world construction effectively brings metaphor and simile closer together (since the account entails literal interpretation of metaphors). It is, therefore, possible that the previously attested differences between metaphor and simile may evaporate in the case of extended forms of figurative expression. In other words, it is possible that in extended forms of figurative expression the presence of 'like' or 'as' (i.e. the presence of simile markers) will have little effect on the interpretation process (for further discussion see Carston and Wearing, 2011: 296-304 and 306-307).

meaning derived via the alternative route consists of an array of weakly implicated propositions that emerge gradually.

It is important to note that ‘gradual emergence’ of implicatures (which constitute the intended meaning of the metaphor) does not entail that interpreters *refrain* from deriving figurative interpretations as they are presented with metaphorical uses of language. In other words, it is not the case that a hearer or reader has to suppress or stall the derivation of metaphorical meanings until he/she is no longer in receipt of metaphorical language (i.e. implicatures are continually derived throughout processing). What sets the alternative imaginary world processing route apart from the *ad hoc* concept construction route is that these metaphorical meanings are not derived as or from *ad hoc* concepts, but rather from the literal meaning and accompanying imagery of the metaphorically used expressions.

As I have outlined, Carston (2010) suggests that the imaginary world construction route is often triggered when the activation level of the literal meaning is so high as to make the derivation of metaphorical *ad hoc* concepts too costly. Needless to say, this is often the case with poetic and/or extended metaphors (such as those in (8), (9) and (10)), where there is a high level of internal coherence in the literal meanings of the extended metaphorical passages. Recall Emily Dickinson’s poem *Hope* in (8), which is made up of a number of semantically related metaphor vehicles: feathers, sings, bird, perch, crumb, etc. which gives the literal meaning (and accompanying imagery) a sense of coherence. As a consequence of the high degree of semantic coherence, the literal meaning in extended metaphors is almost always highly activated and, as a result, these metaphors are the classic candidates for interpretation via the imaginary world route.

Still, Carston suggests that a number of other factors may provoke the shift to the imaginary world style of processing, and that it is not solely a matter of accessibility of literal meaning. She suggests that more novel, complex or creative metaphors may likewise induce the interpreter to engage in a more attentive style of interpretive process, such as the imaginary world construction route. In addition, individual differences may govern interpreters’ processing strategies; intuitively, those with a reflective disposition or literary inclination will be more naturally inclined towards Carston’s alternative processing route compared to those who have little interest in the rich and wide-reaching connotations of metaphorical expressions. Similarly, the communicative context may affect interpreters’ choice of processing route.<sup>26</sup> On one occasion, in one context, an

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<sup>26</sup> My use of the word ‘choice’ here is not intended to imply that interpreters necessarily make *conscious* decisions concerning how to comprehend metaphors.

individual may interpret metaphorical language by constructing *ad hoc* concepts; however, on another occasion, in a different context, that same individual may proceed along the imaginary world reflective route (theoretically, this could happen for the very same metaphor). This idea is consistent with the general approach of many psychologists, who maintain that there is a significant role for context in figurative language comprehension models and who resist interpretation procedures which specify delimited inputs (products) and outputs (processes) (Gibbs 1993, 1994).<sup>27</sup>

Before considering how Carston's alternative route compares to a number of other approaches to metaphor interpretation, I want to briefly acknowledge an apparent paradox concerning processing effort that presents itself in my description of the theory. On the one hand, it is asserted that construction of multiple *ad hoc* concepts requires an unnecessary expenditure of processing effort, and may overwhelm the process of *ad hoc* concept construction, thereby tipping the reader or hearer to switch to the alternative imaginary world processing route. On the other hand, it is implied that the alternative, imaginary world route is more demanding in terms of effort than the standard inferential processes engaged during *ad hoc* concept construction. To resolve the apparent paradox, I stress that while the effort of the imaginary world route may be greater, it is importantly different in kind from the effort that is invested during *ad hoc* concept construction, and consequently, it gives rise to distinct effects (which outweigh and reward the expenditure of effort). That this is the case should be evident given the different outcomes of each processing route. While *ad hoc* concept construction is in many cases a sufficient mechanism by which to derive meaning, following this path for a metaphor of the extended variety inevitably leads to a loss of meaning derivable from the whole developed metaphor, relative to the imaginary world construction route (that considers and scrutinizes a wider range of associates of the metaphor's global literal meaning).

To illustrate, consider the following analogy: imagine that you are stood at the foot of a mountain; in this scenario you are faced with two options. Either you can walk directly up the mountain, in which case you will most likely reach its summit rather quickly and will no doubt expend a great deal of physical effort as you climb; your other option is to zigzag your way to the summit. Although the second option may not require as much strength as the first, it is no less demanding in terms of effort, since the overall trek will likely take many more days. If reaching the summit is your main objective, you

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<sup>27</sup> In chapters 3 and 4, I further explore the effect of communicative context and more specifically, hypothesise that the idiosyncratic nature of psychotherapeutic discourse may, in some situations, both reward and invite interpreters to engage a style of processing much akin to that depicted by Carston's imaginary world construction route (see chapter 4, section 4.4 for further detail).

might prefer to scale the face of the mountain and to get the arduous, lengthy slog out of the way as quickly as possible. Yet, there is considerable argument for taking the lengthier route, especially if your objective is not solely focused on reaching the summit. On the more time-consuming zigzag journey, you will undoubtedly stand to take in more jaw-dropping views, be privy to sights of hidden valleys not visible from the summit, trickling waterfalls etc. Not only will this route leave you better acquainted with the surrounding region of the mountain, but you will also become better acquainted with the mountain itself (you will get to know it better, as a result of traversing more of it). This in turn may foster a different appreciation of the mountain, which may likewise, foster a different appreciation of the view from the summit. In a metaphorical sense at least, the view from the summit when it is reached via this zigzag route will be altogether different, certainly the experience of reaching and being at the summit will be different. Carston's two processing routes are much like this: if you construct multiple *ad hoc* concepts, you will progress swiftly from one metaphorical expression to the next and will succeed in deriving sufficient meaning of each expression; if you construct imaginary worlds, on the other hand, you will be rewarded with much more profound effects, deriving a 'fuller' meaning of the expressions. That is to say, maintaining and metarepresenting the literal meaning of metaphorically used expressions, confronting and scrutinizing that meaning, promises deeper insight, an improved view from the top of the mountain, as it were. To explicate the analogy, the experience one has on reaching the summit is the outcome of the interpretation process, and the mountain itself is the literal meaning, which has to be processed in order to reach that summit and derive the interpretation of the metaphor.

Consider how the two routes of interpretation, *ad hoc* concept construction and imaginary world construction, yield different effects in the case of the extended metaphor in example (10). Recall that in this example Karla's depression is described as a dull, inert thing, a toad that squats on her head, while Karla's unhappiness is depicted as an aggressive and frantic creature that slaps her hard in the face. If one interprets this metaphor via *ad hoc* concept construction, then the literal meaning of 'toad' and its accompanying imagery is quickly replaced with a pragmatically modulated *ad hoc* concept, TOAD\*. Deriving *ad hoc* concepts immediately for each metaphorically used word as it is encountered leads to an overall loss of meaning, relative to the imaginary world construction, since the literal meaning of each metaphorically used word is swiftly replaced with a more abstract concept. When one engages the imaginary world interpretation route, the literal meanings of metaphorically used words are sustained and, therefore, their accompanying imagery is held in the mind of the interpreter. As a result,

the interpreter has the opportunity to access more literal associates of each metaphorically used word and to construct more fine-grained images. Simply put, sustaining the literal meanings of metaphorically used expressions gives those meanings time to be scrutinised, and consequently, a wider range of information associated with that expression is attended to. It is this protracted scrutiny of literal meaning and accompanying imagery that fosters more insightful interpretations and a richer yield of weak implicatures that emerge gradually (as opposed to instantaneously, as is the case with *ad hoc* concept construction).

In the following section, I consider an approach to metaphor interpretation that exhibits interesting similarities to Carston's imaginary world construction route. Like Carston's, this account grants an important role in the interpretation procedure to the literal meaning of the metaphorically used language and displays particular interest in the rich, affective power of metaphor. The account in question is that of philosopher Samuel Levin (1976, 1988). As well as providing an account of metaphor comprehension, Levin makes a number of hypotheses concerning the motivations behind metaphor production. I begin the next section by sketching Levin's claims concerning metaphorical language production, which I see as motivating his account of metaphorical language interpretation.

### 2.3 METAPHORICAL WORLD CONSTRUCTION: LEVIN (1976, 1988)

The fundamental motivation of Levin's account of metaphor was to do justice to the way in which writers of the Romantic movement use language to express their transcendent views of the world, their depictions of nature as a living, breathing entity. His account of metaphor was primarily intended to explain the way in which metaphor was used by William Wordsworth and other Romantic poets. His theory bears noteworthy similarities to Carston's account of metaphor, and in addition, has many interesting implications for what goes on in the development of sustained metaphors during psychotherapy.

According to Levin, metaphors arise at a time in which speakers are 'conceiving of certain thoughts, thereby generating 'conceptions'; this is to be distinguished from 'conceiving' something which gives rise to 'concepts'. In the former process, that is, in conceiving *of* something, say *x*, (an object or state of affairs), we 'prepare a mental space into which that *x* might be placed' (Levin, 1988: 69). Thus, rather than having a clear image of *x* as we would if it had been conceived, we simply allow for the possibility of producing an image. Flying horses and golden mountains, according to Levin, can be

conceived since although neither exists ‘the elements out of which they are composed are physical characteristics, and those elements can be combined’ (*ibid*: 70). Trees weeping and seas laughing, on the other hand, cannot be conceived. Instead, we have to conceive *of* such ‘objects’, thereby delineating an area in our minds where such concepts, of a tree weeping or the sea laughing, *would* fit. However, we do not, and cannot, fill that area (mental space) with a concept; instead we fill it with a conception. This idea might seem initially unintuitive since metaphors are typically thought of as arising from concrete and vivid images. Nevertheless, Levin goes on to suggest that in focusing on the ‘unfilled area’ we project schemas and these schemas are taken to be an implicit, or at least potential, representation of the object or state of affairs in question. A conception is thus defined by Levin as ‘the schema of a possible concept’ (*ibid*: 67).<sup>28</sup>

Levin suggests that since metaphors (or as he calls them ‘semantically deviant expressions’) express conceptions, ‘the state of affairs thereby conceived of will in some sense lie beyond conventional notions of how the world is constituted’ (*ibid*: xii). Interpreting Wittgenstein’s *Tractatus* (1961), Levin notes the philosopher’s resignation with regard to explicating ‘what we cannot speak about’ (Levin, 1988: 7), that which ‘we must pass over in silence’ (*idem*); on matters of importance, i.e. anything that ‘counts’, Wittgenstein preaches silence, for such matters, he believes, lie beyond our power of expression. Following Wittgenstein, Levin asserts that there are things that we have awareness of, but which we cannot express in language. Levin describes these things, rather beautifully, as ‘intimations, promptings of the spirit which enter our consciousness even if they do not crystallise into conceptual constructions. They are ‘thoughts’ that [...] lie too deep for words’ (*ibid*: 134); Levin hereby partially echoes Wordsworth’s ‘thoughts that do often lie too deep for tears’. It is these thoughts that Levin sees as inspiring metaphoric conceptions and giving rise to metaphorical utterances where, he claims, the language is metaphorical in the sense that it is ‘strangled, twisted and decentered from its normal mode of expression’ (*idem*). For Levin, conceptions are expressed as metaphors because they represent unconventional thoughts. In this respect, Levin follows a long line of philosophers and psychologists who see language as an ‘[in]efficient mechanism’ (*ibid*: 138). This view, often referred to as the ‘inexpressibility hypothesis’ (Ortony, 1975), will be discussed at various points throughout this thesis. In section 2.5 of this chapter, I consider how the claim that metaphor arises from a fundamental inadequacy of literal

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<sup>28</sup> Philosopher Andrew Woodfield (1991: 566) offers a perceptive analogy of conception construction: ‘constructing a conception is cooking a meal. The chef selects ingredients from a store and combines them as he cooks. The resulting dish is freshly prepared [...] they often draw upon old beliefs, but they do not usually draw upon prearranged constellations of beliefs’.



language relates to both Lakoff and Johnson's and Sperber and Wilson's views of metaphor as seen in the previous chapter, and in section 2.6, how it may cast light on the use of metaphorical language in the context of psychotherapy.

Speaking in greater depth about the sort of conceptions that give rise to metaphorical utterances, Levin directly acknowledges affective experiences as archetypal examples of thoughts that 'lie too deep for words'. Due to the complex nature of these experiences, Levin claims that ordinary language is ill-suited to their expression and can at best 'approximate to such expression by means of deviant sentences' (*ibid*: xiii). He describes these conceptions as being of a profound and difficult nature, and interestingly, relates them to conceptions that come about in academic science. To compare, he notes how both sorts of conceptions involve conceiving of states of affairs previously unthought of. In this sense, Levin says, metaphorical utterances not only involve conceptions which lie beyond conventional notions of how the world is constituted, but perhaps as a result, they also involve the creation of 'new knowledge' (*ibid*: 91).<sup>29</sup>

While it might seem that metaphors arise primarily at times when people are grappling with foreign thoughts and ideas (an interesting claim when thinking of psychotherapy), it is important to note that this is not always the case. As mentioned at the beginning of this section, Levin leaned heavily on literary texts when explicating his theory, and in particular, on the work of the Romantic poet William Wordsworth. In Levin's view, the poet uses metaphorical language because of the inadequacy of literal language and the complex, novel nature of his/her conceptions. Levin spoke of poets being in a state of mind that he terms 'the conceptual sublime' (*ibid*: 206); a state which, for Wordsworth, was evoked by his thoughts on the natural world and which involved seeing nature as very much alive (see Levin, 1988: 220-237 for further detail). One must not forget, however, that the language of any writer, and indeed any speaker, may in fact reflect a conscious, potentially stylistic choice. It is, therefore, plausible that only *spontaneous* metaphors arise due to puzzling conceptions and the shortcomings of literal language. In production theories, therefore, a distinction should be made between, on the one hand, metaphors that are uttered instinctively, those whose 'metaphoricity' we are not aware of, and, on the other hand, metaphors that are engineered more consciously with some other purpose in mind – be that stylistic, economy of expression or persuasive (the economic and persuasive functions of metaphor will be discussed in chapter 4,

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<sup>29</sup> The discussion of Elisabeth Camp's work on imaginative perspectives in section 2.4 will further explore the notion of 'new knowledge' and insight as a feature of metaphorical conceptions and a consequence of metaphor interpretations.

section 4.2).<sup>30, 31</sup> For the poet, the conception and its affective nature are spontaneous and immediate, though the process of finding expression for that conception may be a conscious and potentially laboured struggle.

Addressing the issue of how hearers, or readers, interpret metaphorical language, Levin proposes an account which, up to a point, is quite similar to that of Carston (2010). Prominent theories of metaphor comprehension in pragmatics and psychology (for example Sperber and Wilson, 1995, Glucksberg, 2001) suggest that when faced with a metaphorical expression we adjust the meaning of the language used, thereby making it fit to our fixed conception of the world (an objective external reality). Roughly speaking, this is the stance adopted by the *ad hoc* concept account of metaphorical language: one takes the metaphorically used vehicle and adjusts, or pragmatically modulates, it so that it can be applied to the metaphor's topic. Levin's account, in contrast, claims that we leave the metaphorically used language intact and instead we modify our conception of the world.<sup>32</sup> Like Carston, who invokes a similar notion of imaginary world construction, Levin suggests that interpreting metaphorical language entails constructing an alternative reality (a metaphoric world), in which the literal meaning of the metaphorically used expression pertains. He describes this world as being construed by conceiving of the state of affairs that the expression, in its literal sense, depicts and as such, it is a world that transgresses conditions that pertain in the 'real' world. For Levin, 'the crediting of possibility to the state of affairs represents the meaning of the sentence' (Levin, 1988: 59).

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<sup>30</sup> This idea mirrors that of Gerard Steen (2008, 2010, 2011a, 2011b, 2013) who hypothesises two distinct classes of metaphorical expression: deliberate and non-deliberate metaphors (these can be seen as reflecting non-spontaneous and spontaneous metaphors, respectively). Steen claims that the 'deliberateness' of a metaphor affects the recipient's processing. Loosely speaking, non-deliberate metaphors are not processed as metaphors as such, while deliberate metaphors are. I believe that Steen's theory of deliberate metaphor touches on an interesting and valid distinction, one that reveals itself as most pertinent when considering Conceptual Metaphor Theory, which gives little attention to the differences between wholly dead metaphors (which are surely non-deliberate) and metaphors which are very much alive (and potentially, more deliberate). However, whilst I endorse the distinction between deliberate and non-deliberate metaphor (a distinction that I would not be inclined to assert as clear-cut), I do not hereby endorse Steen's stronger claims with respect to metaphor processing. For arguments both for and against Steen's theory of deliberate metaphor processing see Gibbs, 2011b, forthcoming a, forthcoming b and Steen, forthcoming.

<sup>31</sup> In chapter 3, section 3.5, I return to the topic of spontaneous and non-spontaneous communication, and consider how psychotherapy often invites the speaker to engage in the former type of expression. Needless to say, it is highly problematic to assess whether a metaphor has been uttered spontaneously (non-deliberately) or non-spontaneously (deliberately); such assessments rely on a speaker's post-hoc intuitions, which as we saw in chapter 1 section 1.2.2 are rarely unbiased.

<sup>32</sup> Davies (1982: 81-82) sums up this distinction rather nicely in saying that on the standard account of metaphor, 'metaphorical language is interpretatively construed downwards to fit the world', whereas on Levin's account 'the world is imaginatively construed upwards to fit the metaphorical language'.

Drawing out the finer details of his theory, Levin goes on to describe what happens in the mind of the interpreter when he/she undergoes conceptual construal of metaphorical language (that is, the interpreter endeavours to mentally construe a world which the language taken literally seems to describe). Levin expands on the notion of metaphoric world construction using the example metaphor, 'the trees are weeping'. He clarifies that conceiving of the state of affairs that this metaphor depicts does not involve imagining that the trees are shedding their leaves or exuding sap (which might constitute modifying the language to fit our conception of the real world). Rather, we imagine that the trees are experiencing emotion (a state of affairs that may be impossible in the real world, yet wholly conceivable in the alternative reality of the metaphoric world). Levin points out that in our attempt to mentally participate in the metaphoric world constructed by the speaker we, the audience, are doomed to failure. Evidently, we cannot produce a *definite* understanding of trees literally weeping, yet the 'interpretive imperative impels or urges the process on to completion' (*ibid*: 21). For Levin, though our efforts are ultimately doomed, it is the effort, the process of conception construction, which constitutes interpretation.

Speaking further about 'metaphoric worlds', Levin claims that their construction is contingent on the 'raw materials' afforded to us by the natural world, which we register via our senses. Through our conceptual and imaginative faculties we may 'combine, alter, modify, [...] rearrange and transmute' these materials (*ibid*: 63), and in so doing, produce our own personal ontologies (that is, our own unique alternative realities). In these acts of combining and rearrangement we are said to enjoy 'wide latitude' (*idem*). Levin draws on the work of philosopher David Hume, who notes that 'to form monsters, and join incongruous shapes and appearances, costs the imagination no more trouble than to conceive the most natural and familiar objects' (Hume, 1966: 16, cited in Levin, 1988: 63, footnote 3). In citing this quote, Levin leads us to consider whether it truly costs our imaginative faculties no greater pain to form metaphoric conceptions than it does to conceive the raw materials of our world. Though both speaker and hearer engage in metaphoric conception construction, it seems that it is only the speaker for whom this process involves no greater cost than conceiving 'the most natural and familiar objects'. For the spontaneous speaker, the metaphoric world arises naturally and with ease, it is simply a reflection of their vision and their attempt to communicate a conception for which literal language is ill-suited. The interpreter, on the other hand, who sits on the receiving end of someone else's metaphorical conception, is likely to have to work quite hard to grasp the metaphoric world (and recall, according to Levin, their efforts will

always fail). For the recipient of a metaphorical expression, therefore, joining incongruous shapes and forming monsters (i.e. constructing metaphoric worlds) may cost the imagination a great deal. This idea mirrors Carston's (2010) imaginary world construction process, which as discussed, involves more attentive pragmatic processes than simple *ad hoc* concept construction. Seen in the relevance-theoretic light, the additional processing effort that one must expend in order to construct metaphoric or imaginary worlds is offset by the additional cognitive effects that one stands to gain.

It should be clear from the exposition presented thus far that Levin's account of metaphor interpretation is a consequence of his views on metaphorical language production. For Levin, it is essential that interpreters, be they readers or hearers, entertain the literal meaning of the metaphorically used expression. According to him, adjusting language so that it fits one's existing model of the world declines the invitation to partake in the unique internal world of the interlocutor (be it the writer in his/her conceptually sublime state, or the speaker in his/her alternate reality). Engaging with the literal meaning of the metaphorically used language is the only way that one stands to gain insight into the interlocutor's world (which their utterance is an attempt to depict and which Levin takes to be the objective of interpretation). Speaking in relation to our understanding of poetry, Levin claims that 'as long as we perceive the poet's descriptions as metaphors, our suspension of disbelief is not total and we do not share fully in the poet's vision' (Levin, 1976: 159). We must, therefore, interpret metaphorical utterances as we do literal ones, that is, we must take them to be genuine and honest productions that are intended to express exactly what it is that they literally describe. In so doing, the recipient of Wordsworth's poetry attempts to participate in the poet's state of sublimity.

To conceive of a world in which nature is 'alive', in which a community of spirit exists between ourselves and the objects of nature.

(Levin, 1988: 236)

This idea rests on Levin's fundamental belief about metaphor production: metaphors are not 'designed', their production reflects the personal and sometimes novel way that the metaphor creator is experiencing the world, conceiving *of* something. As interpreters, we must release ourselves from conventional ontologies and allow our vision of reality to be infused with that of another, if we seek to gain insight into how our interlocutor's world is ordered and thereby, expand our own world-view. Levin further motivates metaphoric world construction by stating that 'to conceive of a river as loving, of nature as breathing,

opens up for us a world different from the ordinary world of our senses and cognitions' (*idem*).

Levin's idea that metaphors are derived from personal metaphoric worlds gives a nod to the widespread observation that metaphors cannot be paraphrased in literal terms, without significant loss of content. As Black says:

The relevant weakness of the literal paraphrase is not that it may be tiresomely prolix or boringly explicit; it fails to be a translation because it fails to give the insight that the metaphor did.

(Black, 1962: 46)

We cannot *learn* anything from a literal paraphrase, or derive any significant insight from it, since it does not tell us anything about the reality that the speaker was immersed in when uttering his or her metaphor. As the famous Italian poet Pablo Neruda says to Mario Ruoppolo in *Il Postino*:

"I can't tell you in words different from those I've used. When you explain it, poetry becomes banal. Better than any explanation, is the experience of feelings that poetry can reveal to a nature open enough to understand it".

Levin's interpretation process of constructing a metaphorical world potentially 'opens' the reader's nature to a new, perhaps profound, sensory and emotional experience. Any attempt to paraphrase a poetic or creative metaphor will inevitably miss the point of the original metaphor, which is to provoke feelings and insight.<sup>33</sup>

Elaborating on his claim that a metaphorical expression depicts a reality for its maker, Levin writes, 'for us, not having accompanied the poet on his sojourn and thus not having experienced the direct vision of this other reality, the descriptions are metaphors' (Levin, 1976: 159). What he means is that metaphorical expressions are metaphoric *only* for the audience, and not for the speaker or writer who has generated the metaphorical expression. This idea reinforces Levin's claim that for the metaphor 'creator' the

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<sup>33</sup> Later in the film, Mario attempts to explain his experience of one of Pablo's metaphors. Mario struggles to express this experience until eventually, he locks onto a spontaneous figurative expression: "I felt like a boat tossing around on those words". When Pablo points out that Mario has generated a metaphor, Mario professes that it does not count, since he had not meant to. Yet, as Pablo says, "meaning to is not important, images arise spontaneously". Mario and Pablo's exchange echoes Levin's sentiments: that (a) metaphors cannot be paraphrased in literal terms, and that (b) the most poetic and interesting metaphors arise spontaneously, not from concretised concepts, but from conceptions.

metaphorical expression reflects the reality (or truth) of their felt experience; as such, as far as his/her mental conception goes, the use of language is not metaphorical (it is simply how he/she experiences it). Of course, this does not rule out the possibility that the speaker may be aware that in giving her experience linguistic expression she is not using language literally and therefore, that the utterance will be metaphorical *for the receiver*.<sup>34</sup>

#### 2.4 IMAGINATIVE PERSPECTIVES: CAMP (2008, 2009)

Elisabeth Camp's work on metaphor is relevant to this chapter for a number of compelling reasons. Firstly, like Carston and Levin, Camp places strong emphasis on the importance of retaining the literal meaning of metaphorically used expressions during interpretation. Her claims, therefore, exhibit interesting points of comparison to Carston's and Levin's, and thereby enable us to draw out the finer details of each theorist's claims, so that we might understand them more fully. Secondly, Camp is chiefly concerned with the distinctive and insightful *effects* of metaphor and, therefore, her work is highly relevant to the subject of psychotherapy, and more specifically, to the analysis of the functions of metaphor in psychotherapy (one of which is to 'bring about change' by inspiring shifts in perspective, see chapter 4, section 4.2). For these reasons, this section is dedicated to a presentation of Camp's work.

Although Camp's approach to metaphor interpretation places strong emphasis on the literal meanings of metaphorically used expressions, the role of literal meaning in the interpretation process she describes is notably distinct from the role of literal meaning ascribed by Levin. For Camp, the literal meaning of a metaphor provides the 'perspective' for generating the intended meaning, while for Levin, the intended meaning simply *is* the literal meaning of the metaphorical expression. By providing the 'perspective' for generating the intended meaning, the literal meaning of the metaphorically used expression effectively serves as the 'lens' through which we view the metaphor topic. In other words, the literal meaning plays a 'structural role' in the interpretation process, thereby helping us to frame our understanding of the metaphor topic. To further clarify her position, Camp contrasts her proposal to the *ad hoc* concept account of metaphor

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<sup>34</sup> That metaphorical expressions are metaphorical for the receiver implies an agreement with Davies' (1982: 78-79) point, that 'metaphorically affirming that *q* in thought' (where *q* refers to a speaker's world view) is not *believing* that *q*. In other words, in constructing a metaphoric world the recipient of the metaphorical expression does not come to believe in the truth of the metaphoric world, as perhaps the speaker did to some extent. As image theorist Reimer says: 'it is possible to see A as B, without simultaneously seeing (or believing) that A can be seen as B' (Reimer, 2008: 2-3).

outlined in the previous chapter, in which the literal meaning simply acts as a ‘skeleton’ for generating the speaker meaning (Camp, 2008: 4).

To illustrate Camp’s proposals, let us re-consider the conventional metaphorical utterance discussed in chapter 1 and repeated below:

11. My mother is an angel.

Camp distinguishes her account from the contextualist theory (advocated by Sperber and Wilson, 1995), in which she says the encoded meaning of ANGEL serves as a ‘springboard for constructing a further, extended meaning’ (*ibid*: 16), i.e. a springboard for constructing the intended meaning (which meshes with our existing conception of the world). For Camp in contrast, the encoded concept ANGEL serves as a perspective (a frame or lens) for thinking about the metaphor topic, ‘my mother’.<sup>35</sup>

To use the metaphor vehicle’s encoded meaning as a springboard or skeleton for constructing the speaker’s intended meaning is to use the encoded meaning somewhat generally. In doing so, one does not invest close attention to the encoded meaning. Instead one takes properties of the encoded meaning that are available fairly immediately, and quickly replaces the encoded meaning with a pragmatically derived sense (i.e. an *ad hoc* concept) – ‘springing’ from the literally encoded meaning to the pragmatically derived meaning. To use the encoded meaning as a perspective for constructing speaker meaning, on the other hand, is to commit significantly more attentive resources to the metaphor vehicle’s encoded meaning during the interpretation process. Doing so entails activating more features of the encoded meaning, as a result of using it continually (as opposed to more temporarily, as one does when using it as a springboard – where the encoded meaning is ultimately, and fairly swiftly, discarded). When the encoded meaning of a metaphor vehicle provides the perspective for thinking about the metaphor topic, speaker meaning emerges from the vehicle’s encoded meaning as a result of, in some sense, ‘sticking with’ the encoded meaning. The distinction between using the encoded meaning as a springboard and using it as a perspective is much like the distinction between reaching a mountain summit by traversing the face of a mountain and reaching it by zigzagging the mountain. Using a metaphor vehicle’s encoded meaning as a perspective is like zigzagging the mountain, one becomes better acquainted with the encoded meaning, taking more of it into the interpretation process. In other words, when

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<sup>35</sup> Camp’s position on the way in which a metaphorical use of language affects the final interpretation is that it does not contribute to explicit content (explicature), but is entirely registered at the level of implicature (see Camp, 2006a).

the semantically encoded meaning serves as a perspective (as Camp claims), then that meaning contributes to our interpretation in a more significant sense than when the encoded meaning is being used as a springboard or skeleton (as is the case on the *ad hoc* concept construction account).

There are some philosophers, such as Kendall Walton and David Hills, who have likened metaphorical use of language to the act of pretending. To a certain extent it is fitting to describe metaphor as a mode of pretence, especially for those who agree with the (Gricean) view that metaphor involves saying one thing while meaning another, as Camp does. However, Camp argues against the pretence view of metaphor. It is interesting to explore her arguments on this matter, for they serve to clarify her position on the role of the literal, encoded meaning in the interpretation of metaphorical language and thereby, also serve to facilitate comparison between herself, Carston and Levin.

For contemporary philosophers Walton (1993) and Hills (1997), metaphor interpretation is conceived of as a form of imaginative activity, which itself is a form of mental pretence. Metaphor 'implies or suggests or introduces or calls to mind a (possible) game of make-believe' (Walton, 1993: 46), and within this game the literal assertion of the metaphorical sentence is true. On this account, the real world objects mentioned in any metaphorical assertion are said to be props in the game of make-believe. To illustrate, take the canonical example discussed in chapter 1:

12. Bill is a bulldozer.

According to Walton, in uttering this sentence a speaker intends her audience to recognise that Bill is a prop in a game of pretence, a game in which the literal assertion of (12) is true (the underlying assumption being that Bill possesses certain features that make him an appropriate prop). For Walton, by realising that Bill can be used as a prop in the game of pretence the interpreter is facilitated to generate a new perspective. Embracing this idea, Hills likewise maintains that 'in saying that 'Juliet is the sun', Romeo *pretends* that she just plain is exactly that' (Hills, 1997: 147). Camp rejects any account of metaphor as a form of pretence and argues that metaphor calls for a particular 'species' of imaginative activity, which is importantly distinct from the imaginative act of pretence.

Camp sees the difference between metaphor and pretence as rooted in 'the interpretive direction of fit' (Camp, 2009: 113), by which she refers to whether the interpretation involves the subject or topic being fitted to the predicate or vice versa. In pretence, the subject is 'fitted' to the predicate (i.e. the predicate is the focus, e.g.



pretending to be a bulldozer); in metaphor interpretation, the predicate is 'fitted' to the subject (i.e. the subject is the main focus, e.g. Bill in example (12)). Consider the example below, uttered by a female academic colleague:

13. I am Christopher Columbus.

If I were to interpret (13) by way of pretence, I would need to imaginatively transform my colleague into Christopher Columbus. This transformation would involve erasing properties of my colleague that do not exist in Columbus and endowing her with properties that he does possess, ones that perhaps my colleague lacks. For example, I would represent her as a Roman Catholic male, of Genoese nationality (thereby 'erasing' or dropping her actual properties of being female and British). Metaphorical interpretation, on the other hand, does not entail entertaining any imaginative alteration of the speaker who claims to be Christopher Columbus. Instead, Camp proposes that it entails using Columbus as a 'lens' (*ibid*: 112), or perspective, through which to reconfigure my existing understanding of the speaker. This reconfiguration involves matching salient characteristics of Columbus to those that she possesses or resembles in some way. Thus, a metaphorical interpretation of (13) might highlight the speaker's disposition for intrepid exploration, and her longing to be at the forefront of pioneering discoveries. According to Camp, the more features that are matched, between Columbus and my colleague, the greater the emotional valence of the metaphor, or, one could say, the more apt and effective it is, so the more it resonates.<sup>36</sup>

According to Camp, an additional distinction between metaphorical construal and pretence is to be found in the 'twofoldness' or 'doubleness' of metaphor (Camp, 2009: 113). During metaphor interpretation, we maintain dual attention on the focal subject (*Bill, my colleague*), and on the frame (*bulldozers, Columbus*), recognising that subject and frame are distinct entities. In pretence, in contrast, our awareness of the subject and frame as distinct entities is if you like somewhat suppressed (at the least, it is not foregrounded). Our dual attention to both subject and frame during metaphor interpretation does not appear to weaken the effect of the metaphor; on the contrary, it is

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<sup>36</sup> Camp (2009), furthermore, rejects the notion that metaphor evokes a game of pretence on the grounds that if *P* is true, and we know it to be true, then we cannot pretend that *P*. Metaphor interpretation is more complex than pretending, since not all metaphors are literally false or trivially true (consider, *Jesus was a carpenter* and *no man is an island*). If the interpretive process of metaphor were simply to pretend that the literal meaning of the metaphorically used expression were true, then there would be no imaginative work to undertake in instances of metaphor that are neither literally false nor trivially true. See Camp (2009: 110) for more detailed discussion.

the imaginative interaction between the two may that is largely responsible for the richness of interpretation. As Camp notes, the dual attention aspect of metaphor interpretation is similar to the experience of viewing a picture, where ‘simultaneous attention to what is represented and to the representation itself, to the object and to the medium’, is required (Wollheim, 1980: 213, cited in Camp, 2009: 113). Camp describes the subject and frame as being ‘united into a single cognitive state, of thinking of the one entity *through* our conception or characterisation of the other’ (*idem*); she refers to this cognitive state as an instance of ‘aspectual thought’ (see Camp, 2003). This, she notes, reflects the ‘seeing *X* as *Y*’ aspect of metaphor, which, for many philosophers, is deemed to be a distinctive characteristic of metaphor (see Camp, 2006b; Davidson, 1978; Reimer, 2008; Stern, 2000 for accounts of metaphor that emphasise the ‘seeing as’ aspect of metaphor).

The distinction between metaphor and pretence can be summed up in simple terms: with pretence, a real world object or situation *X* serves as a prop for imagining something else *Y*, while in the case of metaphor construal, *Y* acts as a tool for understanding *X* as it really is. Pretence endows *X* with the *exact* properties that are possessed by *Y*, whereas metaphor highlights properties of *X* which are similar in some significant respect to *Y*’s important properties.

In her efforts to highlight the rich, perspective shifting effects of metaphor (non-propositional effects), and to draw our attention to metaphor’s persuasive force, Camp constructs a number of detailed contexts in which she embeds a metaphorical expression. Imagine the following scenario (which is similar to one that Camp sets up in her 2008 paper): Francesca has spent five years working on her PhD, an endeavour which has entailed agonising nights riddled with self-doubt and a constant sense of guilt whenever she allowed her thoughts to stray to anything but her research. Her final year of study has been characterised by a manic rush to meet the thesis submission deadline, to the detriment of her mental and physical health. Finally, Francesca has gained her doctorate and it is time for her celebratory dinner, to be held at St. Andrews University in Scotland after her PhD viva exam, an occasion that marks the completion of a lifetime achievement that she never thought she could fulfill. It is this dinner that her husband, whom she lives with in London, tells her he cannot attend due to a conflicting engagement. Focusing on the fact that getting to St. Andrews and attending the dinner will be expensive, especially considering that it will only last a few hours, he has decided not to attend. So it goes ahead without him. Now, imagine that a year later Francesca’s husband decides to run a marathon, a goal that he has had in mind to achieve just once in his lifetime. Naturally, he

has undergone extensive, grueling training and is looking forward to having all those who have supported him being there at the finishing line. Due to a long-standing commitment, his wife Francesca tells him that she will not be present at the finishing line. When her husband tries to reason that she should cancel her plans, Francesca, in a passive-aggressive tone, utters the metaphorical expression: 'That post-viva dinner was my finishing line'. Camp argues that this metaphor (or rather her example of it) has the ability to change the hearer's thinking in a way that a literal statement could not. It elegantly, and persuasively, highlights elements of the post-viva dinner that may perhaps have been known to Francesca's husband, but which were not in the foreground for him during his decision-making process. For example, upon hearing Francesca's metaphorical remark, he would most likely come to realise that completing the PhD (symbolised by the dinner) was the end of a physically and mentally exhausting process, and that, like the finishing line of his marathon, the dinner marked the most important celebration of her achievement. Such insight, Camp argues, could not be achieved with any corresponding literal remark. A metaphor, she claims, extends our cognitive capacities by 'suggest[ing] avenues for further investigation, [and] by presenting important features of the framing characterization that are as yet unmatched by features in the focal topic' (Camp, 2009: 125). Like many features of metaphor discussed in this chapter, the perspective-shifting effects of metaphor are of particular relevance in the context of psychotherapy and will be discussed in this chapter, section 2.6, and in chapter 4, section 4.2.4.

## 2.5 CARSTON, LEVIN AND CAMP COMPARED

In this section, I consider the parallels and differences between the accounts discussed thus far (namely Carston's, Levin's and Camp's). In addition, I explore where these theories stand in relation to the relevance-theoretic account (in terms of *ad hoc* concepts) outlined in the previous chapter and to Conceptual Metaphor Theory, from which they are all notably distinct. Let us first consider the extent to which each theorist advocates full suspension of 'fact-based beliefs' during the interpretation of metaphorically used expressions. For Camp, it seems that full suspension of real world beliefs only occurs during pretence, and not so much during metaphor interpretation. Levin, in contrast, seems to suggest that metaphorical utterances invite interpreters to fully suspend their sense of reality, and to engage in a process similar to Camp's description of pretence. Yet, as already noted, Levin also claims that 'the effort to achieve interpretive consummation [during metaphor interpretation] is doomed, ultimately, to failure' (Levin, 1988: 24). This

would suggest that, in fact, Levin does not think that an interpreter loses all sense of ordinary reality whilst constructing metaphoric worlds, for as he suggests, we are incapable of doing so. Though a metaphorical utterance reflects the reality of the felt experience for the speaker, and is thus not perceived as metaphorical for them, it is metaphorical for the receiver and, therefore, ordinary reality remains present throughout interpretation (on this matter, Levin and Camp are in agreement). Where Levin and Camp seem to diverge is with respect to their attitude towards this fact: for Levin it is regrettable, while for Camp it is fine. To clarify, neither Levin nor Camp suggests that hearers are capable of fully suspending ordinary factual world knowledge during metaphor interpretation. However, Levin is undeniably eager that interpreters make every possible effort to do so, in order to attain the full meaning of metaphorical expressions (and experience the metaphorical world of the speaker/writer; Camp makes no such appeal.

Carston's view concerning the suspension of ordinary factual world beliefs during metaphor interpretation is nicely clear-cut. As outlined in section 2.2, built into the imaginary world framework is a final (albeit overlapping) stage of interpretation, during which time the representations of the imaginary world are subjected to relevance-based inferential processing, in order that the hearer may draw implications that can be applied to the familiar world in which we all live. This final stage of processing openly acknowledges that while hearers may attempt suspension of reality *for a time* (and that it is worth their doing so), there is an inevitable final stage of interpretation that involves re-emerging from the imaginary world back into the real world. This final stage of processing is central to Carston's account and is derived from the view that the primary objective of interpretation is to infer contextual implications that can be integrated with real world assumptions (a fundamental aspect of the Relevance Theory pragmatic account). Recall that the outcome of the comprehension process for Carston is an array of weakly communicated implicatures whose derivation depends on contextual assumptions drawn from existing beliefs.<sup>37</sup>

Levin is markedly less interested in such 'ordinary' implications and is altogether more focused on how the careful reader might partake in a poet's unique vision and in

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<sup>37</sup> One way of thinking about the difference between Carston, Levin and Camp, with respect to suspension of fact-based beliefs, concerns the role of metarepresentation in each account. Both Levin and Carston's theories involve metarepresentation – the literal meanings of metaphorically used expressions are, kept apart from ordinary factual world knowledge, albeit only temporarily on Carston's account. Pretence likewise involves metarepresentation. In contrast, using a metaphor's literal meaning as a perspective or lens, i.e. Camp's account, does not seem to involve metarepresentation. Thanks to Robyn Carston for suggesting this interesting distinction.

some sense, 'lose themselves' to banal daily reality whilst doing so. His theory is essentially an account of how readers may grasp and experience the same sensations and visions as the Romantic poets; this is the insight that Levin's account is designed to reveal. Needless to say, integrating the metaphorical meaning with ordinary factual beliefs about the world is much less relevant to this practice than it is to Carston's relevance-based account. I do not wish to suggest that Levin would deny the inevitability and necessity of the interpreter accepting banal factual beliefs. However, it is of less use and interest to Levin's interpreter, whose goal is to share in a poet's unique insight, which is derived from a metaphoric world. The contrast here, much like that between Levin and Camp, does not so much depict contention between Carston's and Levin's views, as highlight differences in their attentional focus.

The different interests of Carston and Levin can be summed up by noting the difference between what it means for an interpreter to construct a metaphoric world, and what it means for the interpreter to metarepresent the literal content of metaphorically used expressions. 'Metarepresenting the conceptual representation which comprises the literal meaning' of a metaphor is to hold that meaning 'for a further process' (Carston, 2010: 307, footnote 17). Constructing a metaphoric world is to take much more seriously the literal meaning of the metaphorical expression – it is not to take that meaning as 'descriptive/factual itself' (*idem*), but it is to take that meaning as representative of something real and true for the speaker or writer of the metaphor. The metaphoric world, for Levin, therefore constitutes the ultimate goal or end of interpretation, while for Carston, it is a means (albeit a rich and interesting experience in itself) to the ultimate goal or end of relating it to the actual world.

In addition to highlighting the divergent intentions of Carston and Levin, I believe that the clarity of Carston's position concerning suspension of fact-based beliefs, and what happens when one re-emerges into the ordinary world, speaks to the coherence of Carston's account in general. As she continually emphasises, the output of the imaginary world processing route is a set of weakly communicated implicatures. As I have just stated, the output on Levin's account is a metaphoric world that depicts, as best as possible, the world constructed or experienced by the metaphor creator. Yet, it is not entirely clear what the metaphoric world consists of for the interpreter. For example, is it a set of images; is there any propositional content? This question indicates an interesting point of comparison between Sperber and Wilson (1995), Carston (2010), Levin (1988) and Camp (2008) – namely, each theory's divergent predictions concerning whether, and to what extent, metaphors have cognitive content. Or, to put it another way, the extent to

which each theory agrees with Donald Davidson's non-cognitivist claim that metaphors do not *mean* anything beyond their literal meaning.<sup>38</sup>

The relevance-theoretic *ad hoc* concept account of metaphor strongly opposes Davidson's central thesis. It argues that metaphor interpretation results in an explicitly communicated propositional content that is intended by the speaker, although there may be some indeterminacy in its content (some differences between the *ad hoc* concepts derived by different interpreters). While RT emphasises the rich and evocative effects that metaphor may bring to mind, it holds that these effects can be inferentially derived (Wilson & Carston, 2008). As Sperber and Wilson put it:

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 [...] if you look at these apparently affective effects through the microscope of relevance theory, you see a wide array of minute cognitive effects.

(Sperber & Wilson, 1995: 222-224, cited in Carston, 2010: 311)

This statement stands in direct opposition to Davidson's claim that 'much of what we are caused to notice [in metaphor] is not propositional in character' (Davidson, 1978: 46). Carston's (2010) imaginary world processing route adopts a more middle ground, granting that 'in some cases [of metaphor interpretation] the most powerful and memorable effects do not fall within the m-intended or communicated content' (Carston, 2010: 317). By this statement, Carston partially endorses the image theorist's camp, recognising that not everything that metaphors call to mind can be represented propositionally. In particular, Carston notes the unlikelihood that imagistic effects, which are central to the imaginary world route, are propositional. Camp likewise also abandons the commitment to exhaustive propositionality that characterises Relevance Theory, stating that 'perspectives can't be cashed out in propositional terms' (Camp, 2008: 14). However, like Carston, Camp retains the core of the propositional theorist's view in maintaining that many conversational uses of metaphor make truth-evaluable claims and assert determinate propositional content. For Camp, a metaphor's propositional content is central to the metaphor's meaning, while non-propositional features of the metaphor (derived through aspectual thought) lie outside metaphorical meaning *per se*. What Camp and Carston thus share is a serious engagement with Davidson's image theory, not nearly full endorsement

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<sup>38</sup> Here Davidson uses the term 'mean' to refer to truth-conditional propositional content. That is, we do not 'mean' images of affective states.

of his claims, but a more appreciative recognition than that granted by most proposition theorists.

In comparing Levin's account to that of Davidson, the significant parallels seem, at least initially, to create an esoteric deception. Given Davidson's claim that 'metaphors mean what the words, in their most literal interpretation mean, and nothing more' (Davidson, 1978: 32), it might appear that the two philosophers are wholly aligned. However, Levin discusses Davidson's work in some detail and highlights the respects in which his own theory is distinct from it. Levin writes that, while for Davidson the interpretation of metaphor grows out of the literal meaning, for Levin the meaning of metaphor is an *interpretation* of the literal meaning (Levin, 1988: 17). What he appears to be suggesting in this subtle distinction is that on his account, the interpretation of a metaphorical expression is to some extent a construal of the expression's literal meaning. For Davidson, on the other hand, the meaning of the metaphorically used expression is the expression's literal (encoded) meaning and the interpretation, i.e. that which is brought to mind, may be quite remote from the literal meaning (images and associations). Davidson emphasises that 'the common error is to fasten on the contents of the thoughts a metaphor provokes and to read these contents into the metaphor itself' (Davidson, 1978: 45). This quote highlights the divergent objectives of Davidson and Levin. Levin's account is chiefly concerned with specifying the thoughts provoked by metaphor, i.e. the allusive quality of metaphor, which he does by suggesting that these thoughts are derived from a process of metaphoric world creation, which involves generating conceptions of what the metaphor creator was conceiving *of* when he/she employed the metaphorically used expression. Davidson's objective, in contrast, is chiefly a rejection of proposition theories and the view that metaphor has a cognitive content (in addition to its literal content). As Rorty (1987: 290) says, according to Davidson, 'metaphors do not (literally) tell us anything [beyond their literal meaning], but they do make us notice things [...] they do not have cognitive content, but they are responsible for a lot of cognitions'. Unlike Levin, Davidson does not strive to account for the cognitions that metaphor is responsible for; that is, Davidson does not concern himself with *what* metaphor calls to our attention and *how* metaphor calls to our attention that which it does. Davidson's central thesis is that what is called to our attention when interpreting metaphor is some non-propositional content. It is not the case, therefore, that Levin necessarily disagrees with Davidson's central thesis, rather that his focus and interests are wholly different.

A point on which every account discussed in this chapter is unanimously agreed relates to the origin of metaphor. Sperber and Wilson (1995), Carston (2010), Levin

(1988) and Camp (2008) are united in their belief that verbal metaphors are not a reflection of underlying conceptual structure, as Conceptual Metaphor Theory claims (Lakoff & Johnson, 1980). Levin explicitly notes the discordancy between his view of metaphor and that of CMT. As explained in section 2.3, Levin asserts that metaphorical language is *not* metaphorical for the creator of the metaphor (in the sense that it represents their reality, an aspect of their thinking or experience). On first parse, this stance might appear to endorse Lakoff and Johnson's notion of metaphorical cognition – that metaphorical utterances reflect the fundamental nature of speakers' cognition and that it is only the recipient who must engage in a cognitive mapping process in order to comprehend the metaphor in question. Perhaps it is already obvious just how different this claim is to that of Levin. For Levin, metaphorical expressions (which are not metaphorical for their maker) arise from *conceptions*. Critically, and in fundamental contrast to Lakoff and Johnson, metaphorical expressions do not arise from concepts, let alone from metaphorical concepts.

Recall the difference between concepts and conceptions: the former are 'clear and distinct representations, the products of conceiving', whereas the latter are 'mental schemas, the product of conceiving of' (Levin, 1988: 6). Conceptions are idiosyncratic and changeable, unlike concepts, which are relatively stable components of thought. As Rey (2010: 222) says, 'concepts are what remain stable across variability in conceptions'. Levin does not make any claim to the effect that any concept is metaphorically structured (a central claim of Lakoff and Johnson's Conceptual Metaphor Theory); for him, verbal metaphors reflect conceptions (and not concepts).<sup>39</sup>

A further point of contrast between CMT and Levin's account of metaphor (in fact all accounts of metaphor outlined in this chapter) is found in the respective theories' account of metaphor comprehension/interpretation. As we saw in chapter 1, it follows from CMT that comprehension of metaphorical expressions involves activating cross-domain mappings (conceptual metaphors). This is fundamentally different from taking the metaphorical expression *literally*. For Levin, interpreting metaphorical language literally involves 'project[ing] novel conceptions, whose realisations would entail the actualisation of metaphoric worlds' (*ibid*: 12); it does not involve accessing cross-domain mappings.

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<sup>39</sup> Levin's account of metaphor may be considered congruent with Conceptual Metaphor Theory, in that for Levin the metaphor maker actually conceives of his experience in the terms of the literal language he or she uses. Therefore, while metaphors are not deemed to reflect fundamental domain mappings, their construction may, in some sense, be cognitively motivated. For Camp (2008), Carston (2010) and Sperber and Wilson (2008), in contrast, metaphor always arises for communicative purposes.



A genuine disparity between Carston and Camp, and to some extent between Carston and Levin, lies in Carston's maintained confidence in an *additional* process of metaphor comprehension distinct from and complementary to her 'imaginary world' account (namely, the relevance-theoretic *ad hoc* concept account). While Camp concedes that different metaphorical expressions give rise to strikingly different effects, she maintains that these effects are manifestations of the *same* process. Carston, in contrast, suggests that the different effects derived from metaphor may reflect two different processes: imaginary world construction and *ad hoc* concept construction (both of which are grounded in Relevance Theory). That interpreters have the alternative imaginary world processing route at their disposal does not entail that they will always choose to utilise this approach. Indeed, Carston believes that many conversational uses of metaphors found in everyday discourse, which often give rise to less vivid readings and a more determinate content, are processed via the construction of *ad hoc* concepts. Where Levin stands with respect to metaphor interpretation involving one or more processes is somewhat ambiguous. Although he does not explicitly acknowledge distinct processing routes separate from his own, it seems reasonable to assume that he would not exclude the possibility of their existence and the notion that more conventional everyday metaphors, in which he simply has less interest, are processed differently to more poetic uses of metaphor.

Carston's approach of proposing two separate processing routes has the advantage of being in line with the intuition that the metaphors 'Martin is a pig' and 'Hope is the thing with feathers that perches on the soul' truly engage different cognitive mechanisms. Recall that according to Camp, comprehension of both metaphors involves aspectual thought, such that 'pig' provides a lens for restructuring 'Martin' and 'thing with feathers that perches on the soul' restructures 'hope'. There is, undoubtedly, a certain complexity in maintaining two processing accounts and a difficulty in specifying exactly how the two accounts (*ad hoc* concept construction and imaginary world construction) interact and what triggers the use of one rather than the other. As I tried to show in section 2.2, there is a multitude of factors that may lead to the adoption of one processing route rather than the other: for example, the relative conventionality versus novelty of the metaphor, the discourse context (conversational vs literary), etc. It is quite possible that on some occasions, a hearer begins by interpreting metaphorically used language via *ad hoc* concept formation, and then, switches to metarepresenting the literal meaning as a whole. Equally, it is plausible that a hearer may begin by attempting to construct an imaginary world, and then, perhaps as a result of finding the process overly effortful or simply

uninteresting, switches to the construction of *ad hoc* concepts from the metaphor vehicles instead. The interaction between the *ad hoc* concept route and the imaginary world route is, therefore, quite complex. It is unlikely that one could ever discern the point at which each process, *ad hoc* concept formation and imaginary world construction, begins and ends, although some cases seem relatively clear: 'John is a pig' versus the passage above from Shakespeare's 'Macbeth'.

To conclude this section, consider the interesting (apparent) paradox concerning literal meaning that presents itself in this chapter. On the one hand, it is widely suggested by linguists and philosophers that we employ language metaphorically because literal language is inadequate (Carston, 2002; Ortony, 1975; Sperber & Wilson, 1995); indeed, this is the very foundation of Levin's theory. On the other hand, it is claimed by at least some of the advocates of the theories discussed in this chapter that hearers comprehend metaphorically used language by interpreting it literally.

Consider the following figurative utterance from a client in psychotherapy: 'bipolar illness is like being a balloon. Sometimes the balloon is so full of air that it is about to burst, and sometimes there's no air in the balloon at all, it's limp and not pretty' (Kopp, 1995: 29).<sup>40</sup> The client could have attempted to express her feelings literally, using language which coincides with the world in which we exist. For example, she could have said 'I have bipolar illness. This means that sometimes I have too much energy and do crazy things, and sometimes I have none at all and can hardly move, and it is unpredictable how I will feel from day to day'. While such an utterance is probably literally true, it is very limited in depicting the emotional state of the speaker as she experiences (and suffers) it. The point to note here (which resolves the apparent paradox) is the complete lack of correspondence between this literally intended utterance and the literal meaning of the speaker's actual metaphorical utterance (which is all about the properties of a balloon). What I hope to make clear by this point is that a focus on the literal interpretation of a metaphor does not consist in translating the metaphor into something that can be said to be true of the external world. Instead, literal interpretation of metaphors amounts to building imaginative worlds, worlds which defy impressions of 'literality', worlds in which an illness is conceived of as a balloon, has the rubbery texture and other properties of balloons, can be inflated and deflated, etc. and is as vulnerable and unpredictable as a balloon is when pushed to its limits. On Carston's account, taking the

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<sup>40</sup> Notice that this figurative expression initially appears in comparison, i.e. simile, form, and only later switches to categorical form. As noted in section 2.2, footnote 24, the differences between similes and metaphors on the imaginary world account are negligible, since both involve literal interpretation.

metaphorically used language literally takes place within a metarepresentational frame and is only a temporary stage in the comprehension process. Ultimately, implicatures that are literally applicable to the metaphor topic (e.g. bipolar illness) are inferred, and although the whole literal (imagined) scenario plays an important role in constructing the final interpretation, it is not a component of that interpretation.

## 2.6 APPLYING CARSTON, LEVIN AND CAMP TO PSYCHOTHERAPY

In their united focus on the rich, often perspective-shifting and insight-giving effects of metaphorical language, Carston (2010), Levin (1976, 1988) and Camp (2008, 2009) encourage us to relate their theories to the use of metaphor in psychotherapy – where metaphor is notably widespread, particularly among clients, and where its effects are highly valued. In this section, I highlight how certain aspects of the theories discussed in this chapter may be fruitfully applied to psychotherapy and, to some extent, may be used to inform psychotherapy practice (to be discussed at length in chapter 4). Broadly speaking, the psychotherapy related insights I derive from Carston, Levin and Camp fall into two categories: firstly, they shed light on why psychotherapy appears to be such fertile ground for generating metaphorical language; secondly, they validate the psychotherapeutic practice of taking seriously those metaphorical utterances that are generated by clients (practice which will be explored in detail, and demonstrated with examples from transcripts, in chapter 4, section 4.3).

The pragmatic theories of metaphor interpretation hitherto outlined all validate psychotherapeutic practice, in which the literal meaning of metaphorical utterances is deeply scrutinised; yet, they do so in subtly different ways. For Carston (2010), the recommendation that the literal meaning of a metaphor be sustained comes from her assertion that considered scrutiny of literal meaning leads to reflective processing that derives a wide array of weakly communicated implicatures. This idea hints at the potential power of metaphor to unearth, not just a focused, determinate meaning (that can be rejected and denied), but also a meaning that is more wide-reaching in scope (and thus, in its ability to inform the interpreter in a multitude of ways); this effect, as we shall see, is particularly sought after by clients and therapists. Essentially this aspect of Carston's theory points to metaphor's ability to widen our cognitive capacities and our ability to think about situations from a more flexible, less rigid viewpoint. For clients in psychotherapy, who may have become trapped in a maladaptive world-view that they cannot see out of, this is invaluable. Therapists, therefore, who wish that their clients

release the shackles of their maladaptive thoughts, may find it useful to offer metaphorical ways of expressing those thoughts thus broadening the range of directions and connections available to the client's mental processes. If the therapist can construct a suitably reflective space that guarantees careful consideration of the metaphor (in other words, if he/she can push her client to engage in Carston's imaginary world construction route), then any metaphorical offering may reveal a wealth of material for the interpreter, a wealth of derived implicatures. This material may then be productively analysed for insight into the client's beliefs and state of mind, an understanding of self that both client and therapist must attain in order for therapeutic change to occur. Sustaining the literal meaning of metaphorical language may thus 'set in motion a self-reflective process, by which, metaphorically speaking, brains come to understand themselves' (Pribram, 1990: 79).

An additional aspect of Carston's theory that speaks to the use of metaphor in psychotherapy comes from her focus on the role of imagery in the interpretation process. Carston claims that the imagery that accompanies the literal meaning of the metaphor plays an important role in the interpretation process and remains prevalent throughout. When combined with research that has demonstrated the memorability (as well as the rich density) of images (see Paivio 1983, to be discussed in chapter 4, section 4.3.4), this theoretical point becomes relevant for psychotherapy, as it increases the likelihood that any insights yielded during interpretation stay with the client beyond therapy. Imaginary world interpretation may be a way to promote this.

For Camp (2008, 2009), the recommendation that metaphorical language be deliberately recruited in psychotherapy is to be found in her attention to the perspective-shifting effects of such language. As we saw earlier in the story of Francesca, the recent PhD graduate, and her husband, it is not until Francesca's husband hears the metaphorical utterance 'that post viva dinner was my finishing line', that his understanding of the situation changes; according to Camp, aspectual thought goes far beyond the invitation to engage in a simple process of comparison. It follows that introducing non-literal uses of language may help clients to reveal their personal perspectives to therapists, and may be a means by which a therapist may induce a change in perspective for their client. Camp says, metaphor 'provide[s] hints of the truth which we could not envision if we relied only on the machinery of formal inference' (Camp, 2009: 128), echoing Thomas Kuhn's sentiments that 'you don't see something until you have the right metaphor to perceive it' (Kuhn, 1970: 48).

The relevance of Levin's (1988) theory to psychotherapy, and to practice that recommends serious consideration of metaphors, comes from his claim that the literal meaning depicts a reality (often a profoundly significant one) for the creator of the metaphor. If, and/or when, this is the case, it is evidently essential to take the content of the metaphorically used expression seriously (that is, to treat it as an interpreter following Levin or Carston's processing routes would), in order to grasp the full meaning behind the metaphorically used expression. To interpret the metaphor in any other way, for Levin, signals denial, or lack of interest in the speaker's experience from which the metaphorical expression is derived. If a client in psychotherapy makes use of metaphorical language, therefore, application of Levin's theory recommends that the therapist demonstrate respect for that utterance by taking it to be an accurate reflection of the speaker's inner experience (a reflection of some alternate reality that the client is experiencing). On this basis, it would be advised that the therapist's response to metaphorical language be one that displays engagement with the literal meaning of the metaphor, perhaps working with the client to extend/develop the metaphorical conception. As will be outlined in the next chapter, it is essential that a therapist conveys their commitment to their client, in order that the client feels 'seen' by the therapist, and senses that the therapist is invested in their case (see chapter 3, section 3.4, for discussion on how the relationship between client and therapist affects the outcome of therapy).

The theories outlined in this chapter, Levin's in particular, shed light on observations from writers in the field of psychotherapy that report the 'rich and disturbingly imaginative metaphoric articulations' generated by clients (Pollio et al., 1977: 104). As outlined, Levin's account of metaphor production focuses on the ineffable quality of experiences and feelings, and the inadequacy of literally used language to capture experiences of profound depth and complexity. While I do not believe that metaphor always arises due to the inadequacy of literal expression, I agree that this may sometimes (perhaps often) be the case. In psychotherapy, where feelings are the focal point of discussion, it is intuitive that the inadequacy of literal expression will often be the driving force of metaphor production. That this may be the case gives theoretical support to the observation that psychotherapy is fertile ground for metaphor, and explains why, in some situations, it may be so.

So far, I have presented a rather one-sided argument, one that supports the use of metaphor in psychotherapy in general and the serious consideration of the literal meaning of metaphorical utterances. However, it cannot be denied that Camp's theory hints at a certain danger inherent in the employment of metaphorical language in this

context. Her focus on the perspective shifting effects and emotive, persuasive force of metaphor serves to highlight the blinding force of metaphor – a force that has not gone unnoticed by psychotherapists (see chapter 4, section 4.4.2). As Moran notes, ‘part of the dangerous power of a strong metaphor is its control over one’s thinking at a level beneath that of deliberation or volition’; full interpretation of a metaphor ‘can make any subsequent denial of the point it makes seem feeble or disingenuous’ (Moran, 1989: 90). This idea is reminiscent of Carston’s observation, that in having a less definite propositional content, some metaphors are less apt to be denied or rejected. Needless to say, no therapist wishes to operate at a level that is beneath volition, nor to inspire a perspective that cannot be seen or questioned.

Metaphors create insight. But they also distort. They have strengths. But they also have limitations. In creating ways of seeing, they tend to create ways of *not* seeing.

(Morgan, 2006: 338)

The above quote underlines the importance of generating metaphors with care and presents a note of caution to any psychotherapist.

Still, Camp and indeed many psychotherapists do not allow the potency of metaphor to impede their use of this valuable and inevitable mode of expression. Rightly so, it would seem, since research has shown that our interpretations are always emotionally charged to some extent, whether the interpretation comes from metaphorically construed language or not (see Greene et al., 2007; Haidt, 2001; Nichols & Knobe, 2007). As Camp (2009: 128) says, while metaphor is no substitute for rational thought, ‘when we are otherwise groping in the dark’ it can provide valuable aid:

If we insist upon confining ourselves to scrupulously rational modes of thought and discussion, then this may well have the effect of granting inappropriate influence to pre-existing biases – especially given that these biases have been demonstrated to persist even after having been rationally acknowledged to be illegitimate. Against this, harnessing the power of imagination to reconfigure our thoughts by more intuitive means may enable us to counteract these biases in a more thoroughgoing way.

(*idem*)

## 2.7 CONCLUSIONS

I began this chapter by motivating an alternative account of metaphor interpretation that could apply to instances of more extended, creative and/or poetic uses of metaphorical expression – for which I suggested the *ad hoc* concept account was not well suited. In presenting some alternative frameworks that ascribe a more prominent role to the literal meaning of metaphorically used expressions during the interpretation process than the standard RT account does, I hope to have demonstrated the rewards that one stands to gain from engaging an alternative processing route.

There is much to offer from all of the accounts discussed in this chapter, both in terms of elucidating the interesting effects of metaphor and in terms of their application to psychotherapy. In comparing and contrasting each theory, I have tried to arrive at a richer understanding of each account of metaphor. It must be said, however, that I am chiefly drawn to Carston's imaginary world construction route as a pragmatic theory of interpretation; primarily, I am drawn to the way in which it is pitched as complementary to the *ad hoc* concept account. There seems no reason, to me, to do away with the latter account – for not only does it offer an elegant approach to the continuous nature of loose uses of language, but also it explains how we are able to process relatively simple or banal metaphors with total ease. The *ad hoc* concept account is, furthermore, capable of explaining how repeated exposure to common metaphors may lead a metaphorically used word to take on a new lexicalised sense, in order that it might be processed with even greater ease. It feels unfair to the interpreter to insist that *all* metaphors be comprehended via imaginary or metaphoric world construction; likewise, it is ill fitting to suggest that all metaphors may induce aspectual thought and dramatic shifts in perspective. Highly conventionalised metaphors like 'Martin is a pig' and 'Mary is a lion' do just as well to be comprehended via the construction of *ad hoc* concepts. Given my theoretical leaning towards Relevance Theory, I henceforth focus on Carston's pragmatically oriented account of metaphor interpretation, while bearing in mind the insights afforded by Levin and Camp.

In the final section of this chapter, I presented a number of ways in which the 'alternative' frameworks of metaphor interpretation might be applied to psychotherapeutic discourse. I tentatively suggested that in this domain, interpreters of metaphor often do better to proceed via imaginary world construction. In addition, I hinted that the idiosyncratic nature of the psychotherapy context might naturally push interpreters (clients and therapists) to process metaphors via this alternative route. In the

next chapter, I delve deeper into the psychotherapeutic domain, teasing apart the ways in which it is both distinct from and similar to everyday discourse contexts; in chapter 4, I return to metaphor with a richer understanding of how psychotherapeutic discourse may inform pragmatic theory, and vice versa.



## Chapter 3 · Psychotherapy: a special communicative context

### 3.1 INTRODUCTION

The next two chapters are dedicated to the presentation of psychotherapeutic discourse. Primarily, I am interested in what pragmatic theory stands to gain from an exploration of communication in this domain, specifically how the use of metaphor in psychotherapy may inform theories of metaphor comprehension. In so doing, I expand on the rich potential inherent in metaphorical language interpretation in terms of cognitive effects; potential, which I believe is best accounted for by Carston's imaginary world processing route. To date, research on the use of metaphor in psychotherapy has been almost exclusively used to inform therapeutic practice. The direction of inquiry in this thesis, using psychotherapy to inform comprehension theories, thus represents a new contribution to the field of pragmatics. At the same time, it is my hope that this research will also serve therapeutic ends, and at the least will inform the theoretical underpinnings concerning the use of metaphor in psychotherapy. However, this goal is more speculative in nature and of secondary importance to the thesis as a whole.

I begin this chapter with an introduction to psychotherapy, reviewing the diverse treatment methods within the field and surveying empirical research designed to evaluate the factors that influence 'success' in therapy. Understanding of these factors is essential in order to comprehend the ways in which metaphor may contribute to distinct psychotherapeutic objectives (to be discussed in chapter 4, section 4.3). In the final section of this chapter, I focus on communication in psychotherapy, noting the ways in which it is distinct from the everyday discourse which pragmatic theories are usually built to explain. At various points throughout this chapter, and the next, I will call upon my own experience of psychotherapy and, where relevant, will share personal details of these experiences.

### 3.2 INTRODUCTION TO THE DOMAIN OF PSYCHOTHERAPY

It is estimated by the World Health Organisation that one in four people experience a diagnosable mental health problem at some point in life and a staggering 450 million people worldwide are currently suffering with such difficulties. Psychotherapy essentially provides a safe and confidential space in which to discuss these problems. The primary mode of treatment is communication between therapist and client, and for this reason it

is often referred to as the ‘talking cure’<sup>41</sup>. It is defined in more detail by Meltzoff and Kornreich (1970: 4) as:

The informed and planful application of techniques derived from established psychological principles [...] with the intention of assisting individuals to modify such personal characteristics as feelings, values, attitudes, and behaviours which are judged by the therapist to be maladaptive or maladjustive.

This notion of ‘modifying feelings’ is apt, in that the ultimate goal of psychotherapy is often for the client to become more content with their situation and more at ease with their feelings. Meltzoff and Kornreich’s implication that it is the therapist’s judgment regarding what is maladaptive that counts, however, feels somewhat ill fitting. I would argue that it is just as much the clients’ experience of their own feelings and their ability or inability to cope with these feelings that drives the therapeutic process.

While the basic course of treatment in psychotherapy consists of talking by the client, the relationship between the client and therapist plays a critical role in the process. The quality of this relationship not only facilitates their communication with each other, but also fosters an understanding of him/herself that the client may then apply to his or her examination of other relationships (with family members, friends, colleagues, strangers etc.), which may be affecting the client’s state of mind. Establishing an effective therapeutic relationship is thus of paramount importance in using psychotherapy as a means of resolving emotional distress. As we shall see, different approaches to psychotherapy work with the therapeutic relationship in a number of different ways. A review of practices, also called ‘modalities’, and distinguishing differences between them constitutes the next section. Psychotherapeutic methods tend to fall into one of the following three categories: psychoanalytical and psychodynamic therapies, cognitive and behavioural therapies, and humanistic therapies. I shall focus on dominant practices within these categories.

### 3.3 OVERVIEW OF PSYCHOTHERAPEUTIC PRACTICES

#### 3.3.1 PSYCHOANALYTICAL AND PSYCHODYNAMIC THERAPIES

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<sup>41</sup> This expression was originally coined by Anna O. who was a patient of Dr Josef Breuer, a friend and colleague of Freud’s (see Breuer and Freud, 2000 for further information). Note how psychotherapy’s reliance on talking contrasts with a reliance on medication or physical therapy.

Psychoanalytical and psychodynamic therapies stem from Sigmund Freud's seminal work, developed in the late 19<sup>th</sup> century. Broadly speaking, these therapies subscribe to the idea that our behaviour and feelings are affected by our unconscious drives and are deeply rooted in our childhood experiences. According to Freud, aspects of ourselves that we find unacceptable become banished into our unconscious mind, leaving only the 'acceptable' to consciousness. Defence mechanisms such as denial, displacement and suppression assist this process of banishment, thereby easing anxiety associated with the unacceptable thoughts or feelings. However, these unacceptable feelings may be triggered and come to the surface later in life, influencing our thoughts and behaviours and causing inner conflicts which may make life very difficult and may motivate us to begin a course of therapy.

For Freud, the two principle forces governing our actions are the opposing drives of life and death. The life instinct, known as Eros or libido, is associated with hunger, thirst and sex and is referred to as the 'pleasure principle'. Conversely, the death instinct (sometimes called Thanatos) is associated with aggression (Freud, 1920). Freud proposed his theory of psychosexual development, in which he asserted that our individual personalities are shaped in early childhood and determined by other people's responses to our motivational drives of life and death. For example, according to Freud, if a caregiver fails to adequately gratify our basic needs, for instance by ignoring our cries for food during infancy, we may later become greedy or impatient in our adult life.

An additional cornerstone of Freud's work was his structural model of the mind, according to which there are different psychic levels. He suggests that the human psyche comprises three parts: id, ego and super-ego (Freud, 1923).<sup>42</sup> The id is the hedonistic component of mind with which we are all born and which operates on the pleasure principle; the id seeks immediate gratification with no consideration of reality, consequences or other people. This component of the psyche exists within the unconscious mind. The super-ego, on the other hand, roughly corresponds to our conscience. It is our moral component of mind, also largely based in the unconscious, which tells us what is right or wrong. This aspect of mind develops later in life and is the product of standards and restraints exerted upon us by our caregivers (for example, parental figures and teachers). The ego, which is part of the conscious mind, can be thought of as the rational mediator caught in between two, imperative, and often

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<sup>42</sup> Freud revised his theories several times. In earlier formulations of the psyche, Freud argued for conscious and unconscious levels, later suggesting the existence of conscious, preconscious and subconscious realms (see Freud, 1900 for further details).

competing, figures – id and super-ego. Conflict arises between the desires of the id and the strictures of the super-ego and it is the ego's job to negotiate these battles.

If the id becomes too strong, basic desires and self-gratification pervade the individual's life, leading to selfish and thoughtless behaviour. Conversely, if the super-ego becomes too strong, the individual is governed by a rigid code of ethics, which results in an overly judgmental character that is unforgiving of oneself and of others. For happy, contented people, the ego is said to be the strongest component of mind. A strong ego assesses the reality of every situation and manages to satisfy the instinctual needs of the id, whilst keeping the super-ego happy.

Psychoanalysis, psychoanalytical therapy and psychodynamic therapy are all based on these theories.<sup>43</sup> Psychoanalysis and psychoanalytical therapy are generally viewed as the more intense modes of treatment, distinguished from other therapies in terms of the delivery time frame. Both therapies represent a long-term investment, which involves high frequency of sessions over a long period of time. Psychodynamic therapy in contrast, while often open-ended and relatively long-term, focuses more on immediate problems and speedier solutions. The techniques across practices include dream analysis, free association and therapeutic transference. Since the notion of transference will be of relevance to the discussion of communication and metaphor in psychotherapy in section 3.5 of this chapter and 4.2 of the next, it is worth going into some detail on this theoretical construct.

Although the notion of transference may not be familiar to those outside of psychotherapy, it is claimed to be a phenomenon that pervades even the most pedestrian of exchanges and interactions. In the context of psychotherapy, transference may be loosely defined as:

The conscious and unconscious responses – both affective and cognitive – of the patient to the therapist.<sup>44</sup>

(Maroda, 1991: 66)

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<sup>43</sup> Jungian therapy or analysis also stems from the work of Freud, though it is based on the theories of founder, Carl Jung. Jung believed in a larger 'collective' unconscious that consists of archetypes, that is, innate cross-cultural projections which are common to all humanity (for further detail see Jung, 1964).

<sup>44</sup> It may seem somewhat excessive that *all* responses, even innocuous remarks about the weather, be considered as aspects of transference. However, this is truly the intended definition of the term. This idea merely reflects the belief that at some basic level all responses, no matter how banal, are a reflection of an individual's personality and may, therefore, be interesting in the context of psychotherapy.

These responses are said to be manifestations of clients projecting feelings that they have experienced in previous significant relationships onto the therapist; it is ‘the tidal wave of the past that washes over the present’ (Stolorow et al., 1995: 28). Looking beyond the relationship between client and therapist, transference can simply be seen as any repetition of relational patterns (i.e. any response that is grounded in the past). Countertransference, in the context of psychotherapy, refers to the *therapist’s* feelings and responses towards the client. While such feelings were historically seen as an obstacle to the therapeutic process, representing the therapist’s own unresolved conflicts transferred onto the client, countertransference is increasingly viewed as a useful tool in therapy (see Heimann, 1950, for discussion). Although transference and countertransference may be commonplace, relatively simple phenomena, how they come into play and are utilised in the context of psychotherapy is undeniably complex. As Maroda (1991: 66) says, the unfolding of transferences and countertransferences (client responses and therapist responses) and the interplay between those responses and ‘the manner in which they are (or are not) addressed – by either or both parties – leads to an intricate psychological dance between patient and therapist’.

To give a brief example of transference and countertransference, consider a client whose relationships, she reports, all end in abandonment. Maroda (2010) explains how this established ‘relational pattern’ permeates the relationship between client and therapist, such that the client both expects and in a sense primes the therapist to abandon her. By criticising and disappointing the therapist, expressing hopelessness and lack of gratitude, the client unconsciously creates a situation in which the therapist is left struggling to remain engaged in the relationship. Maroda conjectures that,

If the therapist has struggled with abandonment herself, she may be too quick to reject and distance from these troubled clients, or may guiltily overcompensate by absorbing blow after blow without wincing.

*(ibid: 34)*

It should be evident from this example how both parties, client and therapist, are in a sense conditioned by their past and, if you like, primed to respond in accordance with their established ways of being. Needless to say, the therapist has undergone extensive training in order to master the art of handling transference and countertransference.

Freud characterised psychoanalysis as an archaeological dig into the unconscious which consists in ‘tracing back one psychical structure to another which preceded it in

time and out of which it developed' (Freud, 1913: 183); this tracing back refers directly to the work of transference interpretation. Some believe that transference functions for defence purposes, while others view it as an attempt to resume a developmental process that stalled in infancy. Stolorow and colleagues reject the notion of transference as an act of regression, displacement, projection and distortion, suggesting instead that it is an instance of organising activity. They conceive of transference not as a biologically rooted compulsion to repeat the past, 'but rather as the expression of a universal psychological striving to organise experience and construct meanings' (Stolorow et al., 1995: 37). For many psychoanalysts, the purpose of analysis is to enable the client to know and see themselves as others do (see Hirsch and Roth, 1995; Sullivan, 1953, cited in Maroda, 2010); psychoanalysis works with transference on the assumption that it directly facilitates this goal. Through recognition and exploration of the dynamics in the relationship between the client and therapist, it is hoped that clients will reach an understanding of their feelings and motivating assumptions, thereby resolving conflicts with figures from early childhood.

The way in which psychotherapists handle transference (sometimes called transference communications, transference contents or transference projections) varies enormously. Deciding when to make a transference interpretation is always a complex matter, which requires great sensitivity. Wiener (2009) demonstrates this point most effectively in her chapter, 'working *in* and working *with* transference', which looks at a number of case studies and debates within the field. Transference interpretation is effectively an instance of the analyst articulating his or her reading or understanding of transference (her reading of how the past is affecting the present dynamic between client and therapist). To illustrate, imagine that a client who is learning to play the keyboard in his spare time mentions to his therapist that his keyboard has a recording device attached to it. As a result, he tells his therapist, he can listen to recordings of his own music and can thereby self-assess his progress. He explains that this recording device means that he has no need for a music teacher. The analyst in this situation may choose to offer a transference interpretation, commenting that in talking about his lack of need for a music teacher he, the client, is letting her know that he is capable of looking after himself and does not need her, or any analyst (Wiener, 2009: 52). The timing of this interpretation, and whether the client is ready to hear it (or whether it will fall on deaf ears so to speak) is evidently a delicate issue, which requires great skill. Yet, for many psychotherapists and psychoanalysts, working with transference is where the bulk of therapeutic change takes place. In my own experience of psychotherapy, I certainly found this to be the case. By

piecing together parts of my childhood and analysing my relationships with my parents, my therapist was able to offer timely, and highly insightful, transference interpretations. These enabled me to see that many of my routine, and seemingly insignificant, reactions (to her and to others) are conditioned responses, rooted in much earlier experiences. I came to understand why spending money on therapy provokes such conflicting feelings in me, why simple things like allowing someone to carry my bag or to pay for a meal are likewise deeply uncomfortable experiences, and why I find it difficult to let anyone worry about me. Transference interpretations helped me to understand these aspects of my personality and, for reasons still unknown to me, this proved to be incredibly liberating and calming. I believe that knowing and understanding oneself fosters acceptance of self, which in turn facilitates a sense of peace.

### 3.3.2 COGNITIVE AND BEHAVIOURAL THERAPIES

The range of approaches which rely on cognitive and behavioural theories includes: cognitive therapy, behavioural therapy, cognitive analytic therapy, cognitive behavioural therapy, acceptance and commitment therapy, and dialectical behavioural therapy. A selection of these therapies will be outlined below.<sup>45</sup> Cognitive and behavioural approaches are distinguished from psychoanalytic and psychodynamic therapies on a number of different dimensions; those with the most relevant implications for the way in which metaphor is utilised in therapy will be highlighted.

Behavioural therapy is based on the simple premise that our actions are conditioned responses to past experience (as opposed to products of unconscious urges, as maintained by psychodynamic therapies). The behavioural approach subscribes to the belief that since behaviour is conditioned, or learned, it can be re-conditioned (Pavlov, 1897; Skinner, 1948, 1971). This type of therapy is particularly attractive to clients wishing to change concrete aspects of their behaviour such as phobias or addictions.

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<sup>45</sup> Due to space constraints, my discussion of modalities in this section is restricted to cognitive and behavioural therapies. However, acceptance and commitment therapy (ACT) is noteworthy in the context of this thesis given its attention to metaphorical language. ACT is grounded in Relational Frame Theory (see Hayes, Barnes-Holmes and Roche, 2001) and believes that the root of human suffering is psychological inflexibility, which it is claimed, arises from our everyday language and conceptions. ACT endeavours to change clients' relationships with their internal experiences (their thoughts and feelings), by employing a number of 'experiential practices', one of which is the use of metaphorical language. ACT holds that metaphors act as 'experiential triggers' as a result of their emotional and perceptual qualities. Metaphors are thus thought to assist clients in reconnecting to their environment, fostering awareness of bodily experiences, which ACT sees as key to increasing cognitive flexibility. For a comprehensive overview of ACT and a guidebook for how to use metaphor, see Stoddard and Afari (2014).

Cognitive therapy, on the other hand, focuses on a client's thoughts and the manner in which those thoughts are affecting their behaviour (Beck, 1972). The underlying assumption of cognitive therapy is that scrutiny of thoughts can lead to more flexible and/or more positive modes of thinking which in turn will affect a person's feelings towards their own thoughts.

As one might expect, cognitive behavioural therapy (henceforth CBT) combines cognitive therapy and behavioural therapy into a unified method of treatment, which emphasises the mutually reinforcing nature of thoughts and behaviour. The practice relies on three core assumptions:

- i. Cognitive activity affects behaviour.
- ii. Cognitive activity may be monitored and altered.
- iii. Desired behaviour change may be effected through cognitive change.

(Dobson, 2001: 4)

According to cognitive behavioural therapists, changing the way we think and behave has the power to change how we feel about the world. When we recognise the two-way relationship between thoughts and behaviour and link this recognition to a view of thoughts and behaviour as both being flexible, we become empowered to make positive changes in our life. By highlighting the idea that problems are not necessarily a direct reflection of reality, CBT aims to assist clients in realising that their issues are not necessarily a result of a certain external situation, but rather a matter of their perception of that situation. In this sense, clients are often said to be 'the architects of their misfortune' (*ibid*: 28). The logic is as follows: if one has constructed his or her own misfortune, one has the ability to tear down that construction.

The first step of CBT is invariably the identification and recognition of automatic, negative thought patterns and negative behaviour. The client examines these negative patterns and is recommended practical exercises to be completed both inside and outside the therapy room. These exercises are designed to equip the client with the skills needed to recognise and cope with negative habits. CBT therapist Carol Vivyan specifies twelve unhelpful thinking habits: mental filter, judgments, mind-reading, emotional reasoning, prediction, mountains and molehills, compare and despair, catastrophising, critical self, black and white thinking, shoulds and musts, and, lastly, unhelpful memories (2009: 27). Mind-reading refers to the habit of assuming that we know what others are thinking, usually about us, while 'shoulds and musts' involve putting pressure on ourselves, thereby



setting up unrealistic expectations. Vivyan suggests that once an individual learns to identify his or her thinking style, they develop the ability to notice how these unhelpful thinking habits are colouring their view of the world. Noticing unhelpful styles of thinking is particularly useful in bringing about therapeutic change given that such habits often signal the onset of a distressing situation; indeed, they may be the catalyst for distress. Through practical exercises one can challenge unhelpful habits, thereby distancing oneself from negative thoughts. In time, the exercises become so commonplace and routine that they are no longer needed, having brought about real change in thinking and behaviour.

The beauty of these exercises is best illustrated with some working examples. Take, for instance, the simple 'automatic thoughts' diary exercise, where one makes a daily record of upsetting or challenging situations. For example, one might record having a fight with a bus driver, or having a sense of despondency at the gym. After documenting these experiences, the client is then required to identify the automatic thoughts that accompanied the events. For the client who felt despondent whilst at the gym, some associated thoughts might be: 'I'll never get fit', 'there's no point in trying' or 'I can't do anything'. The next step is to isolate the physical and emotional responses to these automatic thoughts; for example, eating ice-cream, crying, getting tense, feeling hopeless and frustrated. The client is then challenged to find the 'cognitive distortion' or unhelpful thinking habit that has resulted in the recorded automatic thoughts and responses. For example, catastrophising – imagining that the worst possible thing will happen, i.e. because I did not have a good experience in the gym today I'll never have a good experience in the gym. Or comparing – seeing only the positive aspects in others and comparing ourselves negatively against them, e.g. everyone else in the gym is finding this easy, they're all infinitely better than I am. This basic exercise compels the client to address their negative thought patterns, having highlighted the detrimental effects that they are enacting. Sometimes simply recording upsetting events and bringing them to the forefront of one's mind is enough to bring about positive change. At other times, a client may need to go one step further and replace the automatic negative thoughts with a more rational response. For example, 'I did not have a good experience at the gym today, but that is not to say that I won't have a good experience if I go tomorrow'. Cognitive behavioural therapists believe that engaging in this kind of structured activity on a daily basis will ultimately alter our cognition and, in the meantime, will enable us to cope with our negative thoughts better.

Another simple exercise prescribed in CBT is ‘the worst case scenario’ technique (Reivich & Shatté, 2002). This exercise involves first identifying a felt adversity. Using an example from my own experience as a client in group CBT, I once reported:

I thought I’d understood this theory, but I’ve realised that I don’t have an in depth handle on it at all.

The next step was to generate the worst-case beliefs that descended from that adversity, for example:

- (i) I will have to do more reading.
- (ii) I will lose lots of time.
- (iii) I will never be able to submit my thesis on time.
- (iv) I’ll fail my doctorate.
- (v) I’ll never find my way in life.

The subsequent step was to assess how likely those beliefs are based solely on the specific current adversity:

- |   |      |
|---|------|
| (i) I will have to do more reading.                     | 100% |
| (ii) I will lose lots of time.                          | 80%  |
| (iii) I will never be able to submit my thesis on time. | 40%  |
| (iv) I’ll fail my doctorate.                            | 0%   |
| (v) I’ll never find my way in life.                     | 0%   |

After working out the likelihood of the worst-case beliefs, the client then generates the best-case belief, which crucially must be as fantastical as the worst-case beliefs (here one adds a level of humour to the exercise). For example, best-case scenario for the adversity described above:

I will end up failing my doctorate, which will mean I can read for fun again and I can go away travelling, where I’ll meet the Dalai Lama who will show me my way in life.

Having taken a step back from the adversity, the next stage is to rationally identify the most likely outcomes of the original situation and to come up with some solutions for working with the adversity going forward. My most likely outcome was that I would have to do more reading, but that I could make that time up elsewhere. If I continued to not understand the theory after more reading, I would be comforted by the knowledge that I had worked hard and would have the option to speak to my supervisor about my difficulties. As for solutions: read more and reschedule workload. This final step, solution finding, stops the process of unhelpful thinking, and has the advantage of focusing the client on the present.

It is evident that the cognitive behavioural approach contrasts with psychodynamic methods in a number of interesting ways. CBT is primarily a solution-focused, goal-orientated mode of treatment, which necessitates proactive engagement from clients. Psychodynamic therapies, on the other hand, are more open-ended, with the goals being altogether less concrete and clearly defined. While CBT may involve some looking back over the past, sessions are primarily rooted in the present, focused on the here and now, and looking forward to the future. Psychodynamic approaches, on the other hand, require a substantial amount of looking back over the past. CBT may be delivered on a one-to-one basis, like psychodynamic therapy, though group work is also common. Treatment tends to last between six weeks and six months, significantly less time than is typical with psychodynamic therapy.

A natural consequence of these differences between psychodynamic approaches and CBT is a difference in the relationship between the client and the therapist. Cognitive behavioural therapists tend to talk more than in other therapies, 'perhaps as much as 50% of the time in the early stages' (Westbrook et al., 2011: 24). This active participation from the therapist is symptomatic of the therapist's role, which is analogous to a sports coach. Coaching can be defined as 'the art of facilitating the performance, learning and development of another' (Downey, 1999: 15). The CBT coach teaches skills and makes sure their athlete, i.e. the client, works out; but, in contrast to a sports coach, the ultimate goal in CBT is for the client to become his or her own coach. One can see here just how focused and goal driven the treatment is, unlike psychodynamic therapy which is focused more broadly on achieving insight (self-understanding). CBT does not openly engage in transference interpretation (examining the client-therapist relationship as a means of treatment).

### 3.3.3 HUMANISTIC THERAPIES

Within the humanistic movement, there are a variety of different approaches, which include: Gestalt therapy, person-centred therapy, psychosynthesis, Transactional Analysis and existential therapy. These modalities share an emphasis on self-development and growth, and like CBT, they maintain a focus on the here and now. Clients are given a weighty role and are regarded as the governors of change. They are encouraged to take responsibility for their own thoughts and behaviour and to help them do so, humanistic therapists foster clients' acknowledgement of their own strengths, facilitating the recognition that we all have free will. Humanistic therapies maintain a positive view of human nature and support an egalitarian position in which the therapeutic relationship is a joint collaboration between two equal parties.

Gestalt therapy was conceived by Fritz Perls in the 1940s and is guided by its experiential underpinnings (Perls, 1947; Perls, Hefferline & Goodman, 1951). The goal of Gestalt therapy is to foster self-awareness through phenomenological exploration, as opposed to interpretation. Therefore, one focuses on what is happening in the present moment, in terms of thoughts, feelings, sensations and actions, as opposed to dwelling on what has been, what was, what might be, could be or should be (notice the contrast with psychoanalytical therapies). This phenomenological feature of Gestalt therapy is often referred to as a distinction between process and content, or between the how and the what; Gestalt works with the how over the what, the process over the content.

The principle behind cultivating awareness through phenomenological exploration is to reduce the effects of bias. This idea is neatly explained by Buddhist philosophy and mindfulness meditation practice, which, like Gestalt therapy, advocates full engagement with each present moment (i.e. being present in both body and mind, cultivating what is known as 'wise attention') and surrendering to what takes place (i.e. not seeking to control the present, and metaphorically speaking, to bend it to your will). Buddhism, and so too Gestalt therapy, promotes a shift from trying to control the process through continuous interpretation, to surrendering to the process and merely noticing what happens when we do so. This 'noticing' is largely constituted by an awareness of bodily sensations and perceptions (Burgs, 2012).

Gestalt theory, which guides the practice of Gestalt therapy, is based on a number of additional constructs and methods (see Brownell, 2010). As in almost all forms of therapy, the dialogue and relationship between the client and the therapist is a critical aspect of treatment. The therapeutic relationship in this modality is characterised as

open, empathic and supportive. The therapist is committed to trusting in the process and to practicing inclusion with authentic presence thereby accepting the client as they are (Yontef, 2005).

In order to engage with the client in a meaningful way, a Gestalt therapist may suggest more creative methods and forms of expression to be collaboratively embarked upon. A common method of treatment is the exploration of dreams. In contrast to psychoanalysts who view dreams as disguised fulfilments of repressed wishes and compel their clients to recall dreams and submit them to interpretation, the Gestalt therapist employs an altogether different methodology. As part of their imaginative approach, Gestalt therapists are more likely to ask their clients to re-create their dream by role-playing as people or objects from the dream. Whilst doing so, the therapist may actively stimulate the client's state of presence by asking 'what are you aware of now?'

Two additional examples of creative 'experiments' used in Gestalt therapy are the two-chair and empty-chair dialogue techniques. The two-chair dialogue method is applicable when a client expresses an intra-personal split, for example by stating 'I despise myself for being so insecure'; these splits are defined as 'in-therapy statements of conflict' (Greenberg, 1980: 143). The client is invited to imagine the two different parts of him or herself, in this case the 'self-despising part' and the 'insecure part', in different chairs and to communicate to and from these different parts. Empty-chair dialogue is when clients engage in an imaginary conversation with a significant figure in their life, in order to settle unresolved issues. These 'potent form(s) of intervention' (Orlinksy et al., 2004: 323) are designed to deepen the client's level of experiencing and emotion processing, facilitating the client to vividly experience his or her inner feelings.

Due to space constraints and the desire to move onto a more focused exploration of communication in psychotherapy, I shall not elaborate in great detail on the intricacies of other humanistic therapies. As is suggested by its name, existential therapy is based on the work of existential philosophers such as Kierkegaard and Nietzsche (May, 1969; Tillich, 1952; Yalom, 1980) and person-centred therapy on notions of the individual's self-worth and unique values (Rogers, 1951, 1959). Psychosynthesis is grounded in psychiatrist Roberto Assagioli's theory, which incorporates a more spiritual view of humanity (Assagioli, 2000), and Transactional Analysis is based on Eric Berne's theory that we have three ego states: parent, adult and child that affect the manner in which we communicate (Berne, 1964). As previously stated, these therapies share an emphasis on the present moment and the client's ability to draw on his or her inner resources to effect self-development.

### 3.3.4 A COMPARISON OF PSYCHOTHERAPEUTIC APPROACHES

It is interesting to consider the lines along which the three aforementioned schools of psychotherapeutic practice diverge. The most significant contrast to me concerns their views on how to achieve positive therapeutic change in clients. According to CBT, therapeutic change is brought about by becoming aware of negative thought patterns and is a natural consequence of education and learning. For humanistic approaches, change occurs through empathy and the therapist's non-judgmental, non-critical attitude, which is believed to enable the client to reach their inherent potential, accessing new perspectives. Psychoanalytical and psychodynamic therapies, in contrast, maintain that change is the result of uncovering repressed feelings, which when brought to consciousness enable insight and understanding.

There exists a common thread among these approaches in that therapeutic change involves adoption of a new perspective on the part of the client. However, while a parallel *outcome* of change prevails across different practices, the *methods* by which one reaches that outcome are markedly dissimilar. CBT and, to a lesser extent, psychodynamic therapies, operate a 'directed' approach. In CBT, growth is *taught* by the therapist (through practical exercises), while in psychodynamic therapy it is *offered* (by way of interpretation from the therapist). In humanistic approaches, on the other hand, growth is self-directed and even therapist interpretation is resisted. Instead, clients engaged in humanistic therapies are encouraged to unearth the solutions that exist within them. These distinct methods for effecting change are indicative of a fundamental difference between humanistic therapies and other practices. While the outcome of therapeutic change may be insight and understanding, this is not the *goal* of humanistic practices. The real objective of humanistic therapy is self-actualisation, that is, for the client to reach their maximum potential.

I anticipate that different therapeutic approaches will influence the therapist's view on, and use of, metaphorical language (see section 4.2 in the subsequent chapter for elaboration and suggestions). To date, research on metaphorical language in psychotherapy has largely focused on its ability to contribute to positive therapeutic outcomes, and as such has neglected this interesting area of comparative study. Exploration of how theoretical orientation influences the use of metaphorical language thus represents new research territory. Given the primary research objective in this thesis, my analysis of how different psychotherapeutic practices use metaphorical language will be with a view to informing existing pragmatic theories of metaphor. For example, I will

suggest that therapists' use of metaphor in psychodynamic and humanistic therapies reflects an invitation to engage in deep processing of the type suggested by Carston's imaginary world construction route, with its emphasis on the literal meaning of a metaphor, while comprehension of metaphors deployed by cognitive behavioural therapists is better suited to the *ad hoc* concept construction route.

### 3.3.5 A FINAL NOTE ON THERAPEUTIC PRACTICES

Before evaluating the literature concerning factors that bring about therapeutic 'success' and productive change in clients, it is important to note that the broad categories of therapeutic orientation hitherto discussed do not exhaust the field. Many other methods of treatment exist, among which, the increasingly popular integrative approach is particularly noteworthy.

Essentially, an integrative framework entails a commitment to integrating different approaches together, thereby creating a new approach. This way of working is not to be confused with eclecticism, which uses different approaches in their original form. To clarify, an eclectic therapist may use CBT techniques and then, when he or she deems it appropriate, may switch to an alternative method of treatment. Fear and Woolfe describe 'hodgepodge' eclecticism as 'a bit of this, a bit of that and give it a stir' (2000: 332).<sup>46</sup> The integrative therapist, on the other hand, creates his or her own model of therapy that is based on a philosophy that, at its core, does not consider any one approach to be superior to another. In this respect, integrative practice contrasts with purist perspectives, which embrace one theoretical framework to the exclusion of all others.

In 1996 a mere 21% of therapists listed on the British Association for Counselling website identified themselves as integrationist. By 2008 this figure had sharply risen and was estimated to be between 30% and 50%, based on randomly chosen regions across the UK (Lapworth & Sills, 2010). The ideals of the integrative approach are nicely captured by Fear and Woolfe's analogy to visions of reality. They describe the integrative therapist as one who perceives the world from an ironic perspective (as opposed to a romantic, tragic or comic perspective). The ironic framework is characterised by:

A readiness to seek out internal contradictions, ambiguities and paradoxes [...] aiming at detachment, keeping things in perspective, taking nothing for granted,

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<sup>46</sup> The authors grant that this (rather negative) view of eclecticism does not pertain to more mature forms of eclectic practice.

and readily spotting the antithesis to any thesis so as to reduce the claim of that thesis upon us.

(Shafer, 1976: 50-1, as cited in Fear & Woolfe, 2000: 336)

Given the individualistic, wide-open nature of the integrative approach, it is difficult to assess how the integrative orientation bears on the use of metaphorical language in therapy. Nevertheless, the role of metaphor in integrative approaches remains a worthwhile topic of future research.

Furthermore, it would be interesting to explore how the process of integrative therapy is itself conceptualised and whether its distinct practices are reflected in different metaphorical conceptualisations to those exhibited by other modalities. Tay suggests that the process of therapy is metaphorically structured as a journey and that the therapist is conceptualised as the guide who selects the appropriate destination (see Tay, 2010, for further discussion). While the process of therapy will likely be conceptualised as a journey irrespective of the therapist's orientation, it is possible that there are subtle differences in the way the journey metaphor is developed across modalities. For example, cognitive behavioural therapy may be thought of as a guided journey, one that is led by a well-seasoned traveller, in contrast to psychodynamic therapy which may be conceptualised as more of a solo pilgrimage, and humanistic therapy, a collective expedition that one embarks on with a trusty companion.

#### 3.4 KEY MARKERS OF 'SUCCESS' IN THERAPY

Before investigating the special nature of psychotherapeutic discourse and the ways in which metaphorical language may advance the process of therapy (chapter 4, section 4.3), I first reflect on more general factors that govern therapeutic success. Given their opposing perspectives on the goals of psychotherapy and the process by which change occurs, what determines a positive therapeutic outcome will inevitably be disputed by psychotherapists of different orientations. As discussed in section 3.3.3, the goal of humanistic approaches is self-actualisation and change is said to occur through the empathic attitude of the therapist (when felt by the client), whereas the object of psychodynamic practice is insight and consequent change, a result of making the unconscious conscious. Humanistic practices, therefore, will naturally prize the cultivation of a supportive relationship between therapist and client, while



psychodynamic approaches are more likely to value the outcome of specific techniques, such as transference interpretations.

While a plethora of studies have found evidence of theoretical orientation and client and therapist factors affecting the therapeutic outcome, contemporary research emphasises the relationship between the client and therapist as the key determiner of success. Long before this recent ‘relational turn’, Carl Rogers (the founder of person-centered therapy) set out six core conditions, which he maintained were both necessary and sufficient for constructive personality change.<sup>47</sup> These conditions specify that two individuals be in contact with each other, and that while one individual (the client) is in a state of ‘incongruence’, the other (the therapist) is ‘congruent or integrated in the relationship’ (Rogers, 1957: 96). The fourth and fifth conditions stipulate that the therapist provide unconditional positive regard for the client and an empathic understanding of the client’s frame of reference. In addition, it is necessary for the therapist to attempt, and at least minimally achieve, communication of their attitude of unconditional positive regard to the client. Based on observations from his own clinical experience, Rogers hypothesised that therapeutic personality change was dependent on these fundamental conditions, and, moreover, that these conditions alone would suffice in bringing about change. Although the sufficiency of these criteria is contested, it is largely agreed that the therapeutic relationship, upon which Rogers’ conditions rest, is of vital importance for therapeutic change.<sup>48</sup>

The relationship between the therapist and client is referred to as the ‘working alliance’ or therapeutic alliance. This construct has been described as ‘the relatively non-neurotic, rational and realistic attitude of the patient towards the analyst’ (Greenson, 1967: 29), or, more broadly, as ‘the collaborative relationship between client and therapist’ (Horvath & Bedi, 2002: 41). When tested empirically, this relationship is typically measured on the basis of three components: agreement on the goals of therapy, consensus related to the tasks of therapy, and positive bond between therapist and client

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<sup>47</sup> Rogers defined psychotherapeutic change as ‘change in the personality structure of the individual, at both surface and deeper levels, in a direction which clinicians would agree means greater integration, less internal conflict, more energy utilizable for effective living; change in behavior away from behaviors generally regarded as immature and toward behaviors regarded as mature’ (1957: 95).

<sup>48</sup> Cooper (2011) points out that Rogers’ conditions may not be strictly necessary in view of the attested efficacy of self-help manuals and web-based therapies which do not exhibit any relational component (*ibid*: 100). Nonetheless, research has shown that interpersonal contact boosts the efficacy of these more remote therapies (van Boeijen et al., 2005, cited in Cooper, 2011), therefore the significance of relational factors remains. I would argue that in some sense, the reader of self-help therapies *is* relying on relational factors, having created a fictional, non-existent character (i.e. the author) with whom they suppose a relationship.

(Bordin, 1979, as cited in Cooper, 2011). Studies have demonstrated that clients themselves identify the therapeutic alliance to be an important aspect of their therapeutic outcome and that a positive alliance decreases the likelihood that clients will drop out of therapy (Piper et al., 1999). A word of caution, however: evidence suggests that the alliance must be established in the early stages of therapy, at least by the sixth session (Horvath & Bedi, 2002). Based on this finding, Horvath and Bedi advise development of the alliance as 'the highest priority in the early stages of therapy' (*ibid*: 60). One may, therefore, conclude that the therapeutic relationship facilitates a successful therapeutic outcome, though the window for constructing this relationship is limited.<sup>49</sup>

A significant aspect of the therapeutic alliance is the level of empathy perceived by the client; indeed, clients consistently rate this characteristic as one of the most helpful factors in therapy. Empathy is defined as the therapist's ability to 'enter the private perceptual world of the client' (Cooper, 2011: 106) and to be 'sensitive, moment by moment, to the changing felt meanings which flow in this other person' (Rogers, 1980, as cited in Cooper, 2011: 106). Paulson and Worth (2002) found that feeling understood by one's counsellor was regarded as one of the four most important aspects of therapy by clients with a history of suicidal thoughts; this 'empathic' attribute was selected from a total of 65 items. Similarly, research has demonstrated that a perceived lack of understanding from the therapist is strongly correlated with negative therapy outcomes (see Mohr, 1995).

Gelso and Carter (1985) remind us that the therapeutic relationship is not as simple as it might initially appear. While the working alliance refers to the explicit, verbal and conscious form of the therapeutic relationship, additional implicit forms exist, such as the transference and countertransference component. These implicit forms of relationship exert a significant influence on the therapeutic relationship as a whole and, therefore, are an important consideration when specifying what constitutes effective treatment. Through his work on attachment, Holmes (2010) observes that a major task of therapy is to assist clients with moving from insecure patterns of attachment to more secure styles of attachment. In this respect, psychotherapy is often viewed as a form of 're-parenting'.<sup>50</sup>

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<sup>49</sup> Though contemporary research emphasises the importance of the relationship between client and therapist, there is no doubt that certain modalities are more suitable for certain disorders than others. Working with personality disorders, for example, may be best treated by psychodynamic therapy (Leichsenring & Leibing, 2003), while anxiety disorders are well suited to the work of CBT (Gloaguen et al., 1998).

<sup>50</sup> A quote from Bergmann and Hartman seems particularly relevant to explain the basis for regarding psychotherapy as an act of re-parenting; they write 'following Freud's emphasis on archaeology as the model for psychoanalysis, psychoanalysts tended to see their work essentially as reconstruction of what has once existed and was buried by repression' (1976: 466). It is important

Holmes stresses the need for therapists to be securely attached themselves, in order to avoid reinforcing clients insecurities, as opposed to redressing them. This example highlights how implicit forms of communication between the client and the therapist, often in terms of countertransference, can affect the working alliance, and therefore the therapeutic outcome, as much as explicit forms of communication (such as openly empathic remarks).<sup>51</sup>

Corroboration of the impact of the therapeutic relationship on the efficacy of therapy is often taken as a criticism against non-relationally oriented modalities, such as CBT. Given that cultivation of this relationship, and a supportive empathic approach, is integral to humanistic therapies, the evidence in favour of the relational turn is habitually taken as evidence for this theoretical framework. However, research has demonstrated that the therapeutic relationship is equally important and determinant of success in technique-orientated approaches like CBT. In a retrospective survey on patients' experience of behavioural therapy for example, Ryan and Gizynski (1971) found that 'the most universally helpful elements of their experience were the therapist's calm, sympathetic listening, support and approval, advice, and "faith"' (*ibid*: 8, cited in Cooper, 2011: 100). These relational factors were consistently chosen over behaviour modification techniques.

Part of my motivation for this overview of the psychotherapeutic enterprise has been to give a flavour of the complexities of this domain. Through exploration of subtle differences between practices and the unique dynamic between a therapist and their client, I hope to have shed some light on the multifaceted nature of this context. In the next and final section of the chapter, I turn my attention towards the nature of the communication in psychotherapy and, above all, to the ways in which it is both distinct from and akin to everyday discourse.

### 3.5 DEFINING 'COMMUNICATION' IN PSYCHOTHERAPY

The study of communication in psychotherapy is pertinent, not only because of the objectives of this thesis, but also in view of the observations made in the preceding section. We have noted that the relationship between the client and the therapist is a key

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to note, however, that not all therapists see their work in such light: talking about transference interpretation, the authors conceive therapy 'not only, or even primarily, as that of reconstruction, but rather as the establishment of a new connection, and therefore as a new creation' (*idem*).

<sup>51</sup> I acknowledge a debt of gratitude to personal communication with training psychotherapist Robert Scaife, whose writings on attachment and affective neuroscience, and the interplay between the explicit and implicit forms of the therapeutic relationship inform this writing.

contributor to the outcome of the therapeutic process; communication is the essential means of fostering that relationship. Use of the word 'communication' by psychotherapists is predictably broader than the more restricted sense of the word employed by pragmaticists like Carston, Sperber and Wilson. In this section, I clarify my area of interest by unpacking the notion of communication as it is applied in each field of study. It is my hope that this will facilitate future dialogue between therapists and pragmaticists and that it will also go some way toward refining my use of the term metaphor (which, again, is distinct from psychotherapists' usage and which, I will clarify in the next chapter).

Communication in the broad sense refers to the transfer of information between two parties. For psychotherapists, this transfer or exchange may occur explicitly, through articulated speech and intentional bodily/facial gestures, and implicitly, through unintentional gestures, eye contact, tone of voice and transference/countertransference.<sup>52</sup> The existence of transference and counter-transference is considered a form of implicit communication, which of course may become explicit if openly expressed and interpreted. As used in psychotherapy, what is known as 'implicit communication' is unintentional in the sense that clients are assumed to not be conscious of their productions, be it raising their voice, shifting around uncomfortably in their seat, avoiding the therapist's eye gaze etc. Language too may fall under this characterisation of 'implicit' communication. For example, a client who persistently refers to her parents using their first names (as opposed to 'Mum' and 'Dad') may implicitly communicate a lack of affection for her parents. Similarly, a client who repeatedly refers to her behaviour as 'idiotic' (as opposed to simply 'naïve') unwittingly communicates a negative view of herself. Implicit communication by this characterisation is not communicatively intended in the relevance-theoretic sense; that is, there is no higher-order intention to make it mutually manifest to the hearer and speaker that the speaker intends the addressee to entertain a particular proposition/thought or set of propositions/thoughts (Carston, 2002).<sup>53</sup>

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<sup>52</sup> This classification does not take into account non-verbal behaviour which is deliberate and accompanied by a communicative intention, for example pointing or miming. If psychotherapists were to consider such communicative acts, I believe that they would categorise them firmly within the domain of explicit communication.

<sup>53</sup> This demarcation of explicit and implicit communication does not coincide with the relevance-theoretic notion of explicit and implicit content. For relevance theorists, both explicitly and implicitly communicated assumptions are speaker-meant or intentional (they both fall under a higher level communicative intention), differing only in how they are accessed by the addressee (see chapter 1, section 1.3.1 for further detail).

The importance of implicit forms of communication in psychotherapy is partly attributable to the role they play in indicating the therapist's empathy. Child development and affective neuroscience research has found that 'the mere perception of emotion in the partner creates a resonant emotional state in the perceiver' (Beebe & Lachmann, 2002: 43). Quite remarkably, Jung made this observation back in 1935 when he wrote that 'emotions are contagious, because they are deeply rooted in the sympathetic system' (1935: 138). Many psychotherapists attest to this observation, noting how a client's emotional state often has an effect on their own breathing and tone of voice. This continual process of mutual adjustment between a client and therapist, known as goal-corrected empathic attunement (GCEA), is recognised as a powerful form of implicit communication (McCluskey, 2005). GCEA is a powerful kind of empathy, which may also be a component of what Daniel Stern refers to as 'moments of meeting', 'authentic moments of person-to-person connection' (Stern et al., 1998: 904). Stern believed that moments of meeting create altered domains of 'implicit relational knowing' and may operate as vehicles for change.<sup>54</sup> He elaborates:

When we speak of an 'authentic' meeting, we mean communications that reveal a personal aspect of the self that has been evoked in an affective response to another. In turn, it reveals to the other a personal signature [...]. It is these stable, implicit knowings between analyst and analysand, their mutual sensings and apprehendings of one another, that we are calling their 'shared implicit relationship'.

(*ibid.*: 917)<sup>55</sup>

Stern suggests that it is in these implicit moments of meeting that the majority of therapeutic change takes place. In other words, implicit communication may determine the outcome of therapy as much as (or even more than) interpretation of explicitly communicated information, that is, verbally expressed thoughts. As Angus and Rennie wrote 'investigators who use client-therapist discourse as data are handicapped to the extent that verbal communication underrepresents subjective meaning' (Angus & Rennie,

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<sup>54</sup> Stern suggests that therapeutic change occurs in two domains: the declarative, verbal and conscious domain and the implicit, procedural and relational domain. The latter domain is represented in the form of implicit relational knowing and concerns knowledge of interpersonal and intersubjective relations (see Stern et al., 1998 for further discussion).

<sup>55</sup> While Stern and colleagues distinguish 'moments of meeting' from heightened affective moments, there is much similarity between the two and between moments of meeting and I-thou moments, conceptualised by existentialist philosopher Martin Buber (see Buber, 1970). Both require a deep attunement to explicit and implicit aspects of the therapeutic encounter, and both give rise to profound experiences of connectedness.

1988: 559). Given the great value of *unintended* implicit communication to the process of therapy, it is natural that psychotherapists rarely restrict their characterisation of communication to articulated speech or intentional forms only.

The recognition of both implicit and explicit forms of communication informs many psychotherapists' ways of interacting, as was implied at the end of section 3.3.1 in my description of countertransference as an obstacle. This brings us to our first line of comparison between psychotherapeutic discourse and everyday conversational exchanges. Due, in part, to consideration of the implicit levels of communication, therapists will often not outwardly engage with (not respond to) the recovered content of the client's communicative intention. For psychoanalytical therapists, for example, who are more interested in uncovering unconscious feelings, words may often be seen as superficial disguises for these feelings, or indeed a reflection of transference. In instances of this sort, therapists may choose to engage in transference interpretation, thereby ignoring both the explicature and implicatures (the communicatively intended content) of the client's utterance. For example, Cirillo and Crider (1995) reported a female client in her first session recounting instances of childhood sexual abuse, which took place at the hands of powerful men. The response of the male therapist was to comment on how the client was saying that it was frightening for her to enter into psychotherapy with an unfamiliar man such as him. This is a clear example of a psychotherapist focusing not on the explicitly communicated information, but instead on implicit information that has not necessarily been consciously produced. Here we see how the interest in 'implicit meanings' (what lies behind the client's consciously intended meaning, i.e. what may be motivating the utterance at a deeper level), which are not knowingly communicated by the client, influences the psychotherapist's interpretation 'strategies'. Use of these 'strategies', which are no doubt a consequence of training, represents a significant departure from the way in which addressees standardly engage in ordinary conversation. While therapists will inevitably (and automatically) also engage in standard pragmatic processing (assigning reference, enriching lexical concepts, recovering implicatures, etc. all of which are communicatively intended by the client), their more conscious attentional resources are likely to be concentrated elsewhere, that is, on implicitly communicated information (as defined above). One might say that this is where therapists seek relevance – in implicitly communicated information, as opposed to in content that the speaker intends to communicate. To clarify, according to pragmatic theories like Relevance Theory, the goal in processing utterances (and other ostensive stimuli) is to recover the communicatively intended content. However, for psychotherapists this comprehension

procedure is not the only, or perhaps even the primary, mode for interpreting their clients.

I believe that psychotherapy's broad definition of communication may be, in part, responsible for the apparent unwillingness of pragmaticists to conduct research in this field, since the disparity of definition may render discussions both confusing and frustrating. Yet, understanding how important implicit forms of communication are to the therapeutic process enables us to appreciate why the definition of communication in therapy is so broad. It is my hope that such an appreciation will foster understanding between parties and pave the way for further research between these two fields. In this thesis I am primarily concerned with ostensive inferential communication, as it is specified in pragmatics. So, in what follows in chapter 4, I do not consider unintended meanings, inferred by therapists, which, while potentially communicated by clients in the broad sense, either consciously or unconsciously, are not part of the speaker's intended meaning.

A further point of interest related to the distinctive quality of psychotherapeutic discourse concerns the roles of speaker and hearer in this context. Pragmatic theories like Relevance Theory adopt a clearly defined view of the roles of speaker and hearer: the speaker produces an utterance with the goal of affecting the mental state of a hearer in a particular way and the hearer, who is a distinct individual, interprets that utterance with the goal of recovering the speaker's intended meaning. While this is, undoubtedly, the way in which the majority of communication operates, it is less appropriate to view the communicative parties in psychotherapy along these lines. The speaker-hearer dynamic in the context of a therapeutic exchange is much more fluid. For example, in addition to generating utterances (thereby acting as speakers), clients are likely to perform the role of hearer/interpreter at the same time – submitting their own utterances to their own interpretative processes (recall, e.g., the two-chair technique mentioned above). This may be a consequence of psychotherapeutic techniques like free association, which encourages clients to say whatever comes into their mind without thinking beforehand. Interpretation of one's own utterances can thus be seen as a reflection of having bypassed the stage prior to speaking, where one more fully conceptualises one's thoughts. The convergence of speaker-hearer roles in psychotherapy is, furthermore, a reflection of the prescribed work of therapy; interpreting one's own speech is part of considering the deeper meanings that lie at the root of our utterances and which have the potential to elicit insight into our unconscious feelings and motives. From now on, I move from talking about 'speakers' and 'hearers' to 'speakers' and 'interpreters'. This move is

intended to reflect the fact that in psychotherapy the interpreter is not necessarily interpreting an utterance spoken by a different individual; we may hear our own utterances and interpret our own utterances.

Given my interest in theories of utterance processing, I am primarily concerned with the role of the interpreter. Nevertheless, my focus on psychotherapy calls for a brief discussion of the speaker's role as well. As noted above, psychotherapeutic techniques often encourage clients to articulate thoughts before they have been fully formulated. In part, this is to enable processing and interpretation to take place outside the censoring and distorting dimensions of the speaker's mind. The client is encouraged to relinquish the usual aspects of executive control and design, which almost always accompany our utterances. By allowing thoughts to naturally erupt, a person externalises their thoughts as directly as possible, and in so doing, exposes him or herself for analysis. In my own experience of psychodynamic therapy I found myself engaging in this practice frequently and with ease. On several occasions a thought or an image would come into my mind, and, driven partly by a sudden awareness of the therapist in the room and the silence between us, I filled that silence by articulating what had just come into my mind, stating "I just had an image of..." or "I was thinking of...". Often disclaimers, such as "I don't know why this came to mind", would accompany these utterances. These disclaimers served to illustrate a lack of communicative intention on my part. Of course, I was producing the words intentionally, but not in the standard RT sense. Blakemore defines *style* as a difference 'in the amount of help the hearer is given in recovering whatever is communicated' (1992: 8). Thinking about this quote, I began to wonder if psychotherapeutic exchanges exhibit a different style in the relationship between speaker and hearer. It is not so much that speakers give less help to their hearers in psychotherapy, but rather that the issue of helping the hearer (the therapist) does not always feature since clients may not always form communicative intentions when speaking, that is, the primary concern is self-expression rather than informing someone else.

The issue of implicit and explicit forms of communication and the roles of the speaker/hearer aside, in what ways is psychotherapeutic discourse distinct from everyday discourse (on which pragmatic theories of communication are typically built)? Recall that the relevance-theoretic comprehension heuristic states that hearers follow a path of least effort in deriving cognitive effects, accessing and testing interpretations until their expectation of relevance is satisfied, or abandoned (see chapter 1, section 1.3.1 for further detail). It is uncontroversial to suggest that interpreters in psychotherapy, be they client



or therapist, set their expectations of relevance significantly higher than do interlocutors engaged in ordinary conversations. As suggested above, interpretation will often continue outside the confines of the original communicative situation (that is, outside of the therapy session). This is the case for both clients and therapists. For the therapist, utterances may be subjected to further reflection during their own supervision sessions, and for the client, they will likely be reflected upon between sessions as part of the ongoing process of 'being in therapy'. Such reflective practices, which entail greater amounts of processing effort, are presumably engaged in on the assumption that the additional effort will eventually cash out in terms of insight and therapeutic change (i.e. particular kinds of cognitive effects).<sup>56</sup>

Of course, such reflective activity is not an exclusive property of the psychotherapeutic context. Indeed, the way in which psychotherapy may inspire one to go beyond commonplace interpretations bears an interesting resemblance to the way in which literary works often motivate readers to go beyond their initial readings of a text. In her research on interpretive strategies and literature, relevance theorist Anne Furlong has suggested a distinction between spontaneous and non-spontaneous interpretations. Spontaneous interpretations are fundamentally 'local' operations, taking place within the confines of a single communicative situation. Non-spontaneous interpretations, on the other hand, represent a more global operation in which the interpreter continues the process of interpretation beyond the confines of the communicative situation. The more evidence the interpretation takes into account, the less spontaneous it is (Furlong, 1996). In her efforts to explain, in relevance-theoretic terms, why one might engage in non-spontaneous interpretation, Furlong suggests that this might be due to the audience's goals (to find meaning beyond the initial interpretation), or to expectations raised or imposed by the text; what psychologists would refer to as either a top-down or bottom-up triggers, respectively. These possibilities are similarly plausible when applied to psychotherapy. In the sense that psychotherapy is work, it will often make greater cognitive demands than everyday conversations, which are engaged in for pleasure. Likewise, if one is feeling optimistic about the process of psychotherapy, the expectation of cognitive effects is likely to be raised.

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<sup>56</sup> Some therapists, as we shall see in section 4.4 of the next chapter, strive to manage their in-the-moment interpretations, viewing them as intrusions to the psychotherapeutic process. This position may pertain if an aspect of interpretation is tied up with countertransference and if countertransference is seen as an obstacle. For these therapists, reflective processing may be a result of earlier restrained processing, a delayed processing as opposed to enhanced processing.

Just as Furlong asks what characterises a literary interpretation, one may ask, what constitutes a non-spontaneous psychotherapeutic interpretation? Furlong's response to her question is to suggest that a literary interpretation is one which 'produces effects that are *typically*, but not necessarily, wide-ranging in variety and/or scope, intense: highly charged aesthetically, and productive' (Clark & Furlong, 2014). The same characterisation seems appropriate for many constructive psychotherapeutic interpretations. Non-spontaneous psychotherapeutic interpretations (whether by the client or the therapist) may lead to changes in perspective, a sense of full-bodied effects and wide-ranging insight. For example, an individual may feel as if a weight has been lifted from their shoulders and may experience a sense of opening their eyes fully for the first time when reaching an understanding of their anger. Such understanding may take place in a single session, but when it occurs over the course of long-term therapy, it is more likely that clients will have built a fuller picture of themselves, seeing the interrelatedness of a multitude of aspects of their lives (e.g. recognising that what they thought of as unrelated instances of anger and rejection, were in fact intrinsically connected instances of behaviour and self).

In suggesting that psychotherapy gives rise to interpretations that mirror our engagement with literary works, I do not assume that there is anything intrinsic to the psychotherapeutic domain that demands non-spontaneous interpretations. Parallel to literary texts, it is likely that some forms of psychotherapy will engage and provoke reflective processing more than others. CBT, for example, may not impose reflective demands on the client to the same extent as psychodynamic therapy, though that is not to say that continued processing of material from CBT sessions would not be worthwhile.

### 3.6 CONCLUSIONS

In this chapter, I have explored the domain of psychotherapy and described some of the ways in which it is communicatively unique (whilst also being sufficiently similar to everyday discourse to warrant discussion in this thesis). I hope to have demonstrated that the idiosyncratic nature of psychotherapeutic discourse may reward and so encourage engagement with processing strategies that are different from those typically engaged in during more commonplace exchanges, in much the same way that many literary works appeal to different interpretive processes.

In the chapter that follows, I consider the role of metaphor in the context of psychotherapy: firstly, how psychotherapists view this use of language; secondly, how

metaphor may contribute to the goals of psychotherapy; for example, by facilitating the therapeutic alliance on which successful therapy depends, and also by transcending limits of current understanding, in a bid to create meaning and insight in place of confusion and ignorance. Needless to say, my primary purpose here is to advance pragmatic theories of metaphor comprehension.

## Chapter 4 · Psychotherapy and the use of metaphor

### 4.1 INTRODUCTION

Having established my interest in ‘explicit’ forms of communication (i.e. those that come with a mutually recognised communicative intention, usually verbal utterances), and identified some of the idiosyncrasies of psychotherapeutic discourse, I now turn to the use of metaphor in psychotherapy. Many writers in the field of psychotherapy, and indeed many psychotherapists themselves, have identified metaphor as a particularly useful tool in their work. However, what is referred to as ‘metaphor’ does not always neatly mesh with pragmaticists’ use of the term. In the first section of this chapter, I consider the scope of the term as psychotherapists have applied it and define my specific region of interest (namely, spoken verbal metaphor and closely related tropes, e.g. simile and allegory). Subsequently, section 4.3, explores the notable functions of metaphor in psychotherapy, while section 4.4 looks at a number of therapeutic approaches to metaphorical language which aim to make use of these functions. I conclude this chapter by highlighting how well suited the metaphorical world route of interpretation (as discussed in chapter 2, section 2.2) is as an account of these functions of metaphor.

### 4.2 DEFINING ‘METAPHOR’ – PERSPECTIVES FROM PSYCHOTHERAPY

For an indication of the breadth of phenomena considered under the umbrella term of *metaphor*, consider the following sample of definitions and descriptions, taken from clinical literature:

- (i) ‘Metaphor, simply defined, is an indirect form of expression’.  
(Boone & Bowman, 1997: 313)
- (ii) ‘Metaphor involves a transfer of meaning from one element to another’.  
(Muran & DiGiuseppe, 1990: 70 and Robert & Kelly, 2010: 182)
- (iii) ‘Metaphors are mirrors reflecting our inner images of self, life, and others’.  
(Kopp, 1995: xiii)
- (iv) Metaphor is ‘an expression or action that represents one thing in terms of another’.  
(Cirillo & Crider, 1995: 512)

- (v) 'Metaphor is a pattern of images, symbols, words, emotions and actions which synthesizes, conserves, and represents experiences'.  
(Santostefano, 1984: 79)
- (vi) 'Metaphor is a form of verbal expression and cognitive structuring which invokes a transaction between differing contexts of meaning and construct systems'.  
(Angus & Rennie, 1989: 373)
- (vii) 'Metaphor is a nonliteral, verbal expression involving pictorial or verbal imagery'.  
(Suit & Paradise, 1985: 23)
- (viii) 'Metaphor involves active, partial transformation of one kind of thing (the topic) under the guidance of another kind of thing (the vehicle)'.  
(Dent-Read & Szokloszky, 1993: 227, cited in Boone and Bowman, 1997: 314)
- (ix) Metaphor 'straddles two different domains at once, providing a conceptual bridge from a problematic interpretation to a fresh new perspective that can cast one's experiences in a new light'.  
(Stott et al., 2010: 1)

These definitions/descriptions demonstrate the vast disparity in how clinical researchers construe the notion of metaphor. Primarily, divergence relates to the inclusivity of the term. For some, metaphor is described using vague and broad language (see (i), (ii), (iii) and (iv)), while for others, it is something altogether more specific (for example (vii) and (viii)). A palpable discrepancy relates to the extent to which metaphor is demarcated as a verbal phenomenon, versus a type of expression that may exist in the form of behaviour or action or thought.

In order to offset any qualms one may feel, as a pragmaticist, on reading the above descriptions of metaphor, it is wise to yet again consider the specifics of psychotherapy, and to once more invoke the notion of transference. During the early stages of this doctoral research, I conducted a number of interviews with psychotherapists in which I asked them about their experience and awareness of metaphor in psychotherapy. Much to my delight at the time, one therapist reported that metaphor was 'the bread and butter' of what she did as a therapist. It wasn't until much later, when I had developed a more sophisticated understanding of psychotherapy, that I fully understood what she had meant. She was, I now believe, referring to the work of transference and echoing

psychoanalyst Jacob Arlow's sentiments that 'psychoanalysis is essentially a metaphorical enterprise' (Arlow, 1979: 373).

Like many others, Arlow regards transference as Freud's most significant contribution to psychoanalysis. For Arlow, transference and metaphor are one and the same:

Transference, perhaps the most significant instrumentality of psychoanalytic technique, and metaphor both mean exactly the same thing. They both refer to the carrying over of meaning from one set of situations to another. [...] Transference in the analytic situation is a particularly intense, lived-out metaphor of the patient's neurosis.

*(ibid: 382)*

In the sense that psychotherapy is a form of re-parenting, the relationship between the psychotherapist and the client, and every exchange and act of communication that is contained within that relationship, is a metaphor for something else. As Fox says 'however clients breathe, laugh, sigh and move are metaphors' (1989: 236). For example, during the course of my psychodynamic treatment, I expressed a desire to terminate therapy and for my therapist to consent to letting me go. Although I sought the consent of my therapist, I also intended to force her hand on the matter, by listing a series of reasons, which were designed to (a) strongly support the termination of our relationship, and (b) reassure her that she needn't worry about letting me go. This feeling, of needing to be let go and needing approval, together with the feeling of obligation in managing the other person's emotions, was in fact an expression directed at an object from my childhood. In essence, it was an expression directed at my father, from whom I crave independence. The attainment of independence would serve to mark my father's acknowledgement of my reaching adulthood (which in turn constitutes approval and acceptance). In trying to gain this approval I habitually feel the weight of his anxiety, which motivates me to alleviate his worries by presenting a solid case for my independence. In Arlow's sense of the term, my behaviour towards my therapist is metaphorical.

Barker (1987) notes that transference is not the only type of therapeutic metaphor (cited in Boone & Bowman). Additional types include: (1) metaphors implying comparisons between two dissimilar objects, (2) analogies and similes, (3) major stories that offer perspective, (4) anecdotes aimed at limited goals, (5) 'rituals or other tasks that

have metaphorical meaning', (6) relationship metaphors that personify the problem enabling clients to relate to it, (7) metaphorical objects and (8) metaphorical creations such as drawings, clay models and poetry (Boone & Bowman, 1997: 317). In a similar vein, Bayne and Thompson distinguish 'verbal, behavioural, physical and physiological' metaphors (2000: 38). An example of a behavioural metaphor is compulsive eating, which can be seen as a metaphorical attempt to feed other appetites that do not concern hunger (for instance, a need for sex or for comfort). Likewise, body language can be a metaphorical manifestation of an inner process, such as attraction. Physical metaphors may, of course, become verbal metaphors over time. For example, consider a couple in relationship counselling being asked to bring concrete objects to therapy which represent the obstacles posed by their partners in the relationship. One party may bring a rock to signify their partner's inflexibility. The moment that individual begins to speak about their partner as this rock, the metaphor transforms from physical to verbal.

Focussing now on language use and returning to the nine characterisations of therapeutic metaphor cited at the beginning of this section, what seems noteworthy in the context of this thesis is the lack of distinction made between metaphor and other figurative forms of expression, such as simile, allegory, symbol, analogy, juxtaposition, etc. As McMullen (1996) points out, writers in the field of psychotherapy tend to equate metaphorical language with figurative language in general. In pragmatics, psycholinguistics and philosophy, on the other hand, many interesting differences between these figurative modes of expression (metaphor, simile, allegory, symbol, analogy, juxtaposition) are found, and duly noted. For instance, metaphor is clearly distinguished from simile: while metaphor involves a domain shift which is standardly expressed by a categorical statement of the structure *X is a Y*, a simile makes an explicit comparison using the words *like* or *as*, *X is like a Y*.<sup>57</sup> For myself, while I concede that metaphorical language and similes may not give rise to completely identical kinds of cognitive effects, nor be processed by the same mechanisms, my interests span both figures and on my preferred accounts of metaphor comprehension (e.g. Carston's imaginary world approach) the differences are largely erased. For the purposes of this chapter, I follow McMullen and other clinical researchers by widening my interests in 'metaphor' beyond the scope of categorical statements of the *X is a Y* form.

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<sup>57</sup> Metaphors may not always *appear* in the classical *X is a Y* form; take, for example, this extract from T.S Eliot's *The Love Song of J. Alfred Prufrock* 'I have seen the moment of my greatness flicker, and I have seen the eternal Footman hold my coat, and snicker, and in short, I was afraid' (Lakoff & Turner, 1989: 10). Though the *X* and the *Y* are not immediately obvious in this example, in the way that they are in the case of *John is a lion*, the metaphor can still be cashed out in terms of *X is a Y*; in other words, one can still identify the topic and vehicle. In this case, 'death is departure'.

Semino's definition of metaphor as a 'phenomenon whereby we talk, and potentially, *think* about something in terms of something else' (2008: 1, my emphasis) brings us onto the final comment on clinical characterisations of metaphor. Semino's definition explicitly leaves open the possibility that metaphor is a component of thought, an idea that recalls Lakoff and Johnson's notion of metaphorical cognition (1980). Clinical conceptualisations of metaphor also give credence to this idea, talking of metaphor as a 'conceptual bridge' and a form of 'cognitive restructuring'. It is natural that therapeutic accounts of metaphor have turned to Lakoff and Johnson's arguments, given that their interest in strengthening the therapeutic alliance finds support in statements by Lakoff and Johnson, such as: 'metaphorical imagination is a crucial skill in creating rapport' (1980: 151). Nevertheless, for reasons outlined in chapter 1, I do not take metaphor to be fundamentally a characteristic of thought. I return to this topic in section 4.4, where I explore systematic approaches to the (ostensive) communicative use of verbal metaphor in therapy and investigate how the adoption of different practices hinges on acceptance of Conceptual Metaphor Theory.

My focus henceforth is on verbal figurative expressions that arise in psychotherapeutic discourse, whether in simile form or categorical metaphor form. While my primary interest lies in novel and extended forms of figurative language, I do not completely exclude conventional forms of figurative expression from discussion. This inclusive policy is based on the belief that very few metaphors are truly dead, only sleeping (and so capable of being wakened).<sup>58</sup> As Evans wrote, 'the kiss of consciousness [explicit elaboration] begins the process of bringing one's dead metaphors back to life' (Evans, 1988: 549). To get a flavour of the range of metaphors found in therapy, consider the examples below:

1. My life is Groundhog Day.

(Bayne & Thompson, 2000: 40)

2. He walks all over me; I feel like a doormat.

(*idem*)

3. I'm following a path with no map.

(*ibid*: 41)

4. I feel like there's this dark cloud hanging over me that will rain AIDS down upon me.

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<sup>58</sup> For a discussion of *dead* or *sleeping* metaphors, contrasted with those that are *alive* or *waking*, see Müller (2008).



(Kopp & Craw, 1988)

5. I'm in a rowboat with no oars, in an ocean, being overwhelmed by the constant waves that rock the boat, I didn't know how to stay afloat.

(Robert & Kelly, 2010: 185)

6. My head is a chest of drawers, some drawers open, some shut but with things hanging out as though someone has been rummaging through. When on Prozac, the drawers are all closed, everything is tidied away and only one drawer opened at a time.

(Bayne & Thompson, 2000: 41)

These examples mirror the metaphorical expressions seen at the beginning of chapter 2, in terms of their breadth and diversity. Examples (1), (2) and (3) are notably short; (1) has a fairly determinate content, (2), which appears in simile form, is highly familiar and conventional, and (3) makes use of a common metaphorical scheme (that life is a journey). Example (4) is slightly more extended, markedly more novel and personalised to the speaker, while (5) and (6) are considerably extended, with (5) also displaying a certain poetic quality.

Research on the use of figurative language in psychotherapy has been largely concerned with specifying the role that this language can have in facilitating therapeutic change. One noteworthy exception to this is the work of discourse analyst Dennis Tay, whose interest lies more with understanding the nature of metaphor and how metaphorical meaning is modulated in different contexts of use, rather than the extent to which it is therapeutically beneficial (see Tay, 2013).<sup>59</sup> Tay's work, however, is in the minority. As McCurry and Hayes (1992) note, psycholinguistic theories of metaphor comprehension have had little impact on such applied uses of metaphor. Similarly, research on the applied uses of metaphor in psychotherapy has not informed current debates in psycholinguistics or pragmatic theory. The purpose of the next three sections is not merely to highlight the therapeutic effects and utility of metaphor, as others have done before me, but more centrally, to consider the implications that those attested effects have for the pragmatic theories of metaphor comprehension discussed in chapters 1 and 2.

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<sup>59</sup> Although Tay focuses on the contextually modulated nature of metaphor, over its therapeutic functions and effects, a number of recommendations for psychotherapeutic practice fall naturally out of his work (for further detail see Tay, 2013: 171-173).

### 4.3 THE FUNCTIONS OF METAPHOR IN PSYCHOTHERAPY

#### 4.3.1 METAPHOR AS A COMBATANT OF RESISTANCE

One of the most widely attested uses of metaphorical language in the context of psychotherapy concerns its service to material that is particularly sensitive for the client. 'Like the dream, the metaphor enables the patient to maintain the necessary distance from content [...] only gradually is the meaning accepted as part of the inner reality' (Caruth & Ekstein, 1966: 36). While literal language is characteristically direct, metaphorical language is characteristically indirect and open-ended, and, because it is open-ended, it is often deemed to be less hard-hitting. When broaching delicate (potentially painful) issues, as one often does in psychotherapy, any tool that enables one to tread more gently is valuable – metaphor does just this.

As has already been discussed, psychotherapists are often faced with a tricky decision relating to transference interpretations; as we saw, deciding whether or not a client is ready to hear such interpretations is of utmost importance. In fact, the same can be said of every interpretation or comment that a psychotherapist makes, as the issue of timing is ever present; thus, how clients will take and interpret interjections is always an essential consideration. As psychotherapists have observed from their clinical practice, metaphor serves two noteworthy functions with regard to discussing sensitive material. Firstly, since metaphor is a less direct form of communication it can be easier for psychotherapists to offer their insights using figurative language. Literal language, in contrast, is more likely to provoke resistance given that it is more confrontational. Secondly, in the face of resistance that has already arisen (for example, rejection of an interpretation or a refusal to discuss a particular issue), metaphor can be used to soften resistance. As Arlow said, metaphor 'enables the patient to maintain the necessary safe distance from content' (1979: 370) and to discuss 'topics that would otherwise be too painful for self-examination' (Cirillo & Crider, 1995: 512).

In order to fully appreciate how metaphor fosters less confrontational, more therapeutic exchanges, let us consider an example. For instance, imagine a client suffering from depression, who, despite medication and months of therapy finds himself unimproved; frustrated by his situation, he says "I really *should* be feeling better by now". This thought, that he should be feeling better, has led him to push himself, by returning too soon to work full-time, so rather than being invigorated as he had hoped (by renewed social contact and having a 'purpose'), it has exhausted him and he has since been in bed

for days. CBT therapists attest to the enlightening effect that a simple figurative expression induces in this scenario: “think of your depression as a broken leg”; which invites the client to engage in a metaphorical conceptualisation that her depression is a broken leg. Elaborating on this figurative expression, the therapist asks their client “would you be so harsh and demanding on yourself after a broken leg?” The therapist further explicates the metaphor/analogy, “a broken leg needs time to heal, you need to walk on it gradually to build up your strength, you can’t run before you can walk, and if you try to, you’re likely to cause further injury to yourself” (adapted from Stott et al., 2010: 1). Many psychotherapists attest to the therapeutic utility of this simple metaphorical offering, which they say enables their clients to see the symptoms of depression not as a sign of laziness or worthlessness, but rather as an understandable part of their illness, one which they can accept and forgive themselves for. The acceptance and forgiveness that is provoked by this metaphor is essential to the client’s wellbeing, and so too, to their recovery. It is difficult to see what parallel expression, in literal language, could have an equivalent effect. Those that come to mind feel more accusatory somehow, and too close to the harsh reality of depression, to be easily integrated into the client’s thinking. Consider, “you’re unwell” or “you need to rest more”. The metaphor of (or analogy to) a broken leg creates a certain distance between the client and their experience of their illness, a distance that enables the client to consider and take on the painful and disappointing reality that they ‘cannot run before they can walk’.

Psychologists Caruth and Ekstein note how the distancing function of metaphor is particularly useful in working with borderline and schizophrenic patients, ‘who are constantly in danger of being inundated by a break-through of primary process material’ (Caruth & Ekstein, 1966: 35), that is, illogical and irrational impulses (distinguished from secondary process material, which ‘involves ordinary ways of reasoning that respect rational logic’ (Yeomans, Clarkin & Kernberg, 2002: 237)). Consider Teresa, an adolescent schizophrenic client, who says ‘I’m in the middle of an island, Doctor’ (*ibid*: 37). Working with her metaphorical expression, her therapist says:

We say you keep your island and I try to build a bridge to the island ... then you won’t be on an island any more, but from the island there will be a bridge; and if you want to walk on the bridge, you will; and if you don’t want to walk on the bridge, you won’t ... no one wants to be on an island all by herself.

(*idem*)

The authors recount how the therapist continued to work with this metaphor later on in the session, thereby respecting the client's need to maintain a distance from the content of her conflict. The therapist explained how Mexico City was originally an island:

At first the Aztecs were isolated and alone and do you know why they were alone, why they preferred to live on islands? ... It was safer ... in those days the tribes used to fight each other and on an island in the middle of the lake it was easier to defend it, because the enemies could not get to the island. And only later when the tribes around them became all their friends, then they slowly built bridges from the island to the mainland and after a while the islands were not needed any more.

(*ibid*: 39)

For Caruth and Ekstein, metaphor is a 'preliminary approximation to the final therapeutic act', which necessarily consists of explicit interpretations made in the literal domain. It is during this final therapeutic act that the safe distance created by the metaphor is broached and the gap between the figurative description and the literal reality is closed. The necessity of closing this gap is a sentiment echoed in many models of metaphor use in psychotherapy, which will be discussed in section 4.4.

As is implied in Caruth and Ekstein's writing, the distancing function of metaphor is useful, but only to an extent. I believe that this so-called distancing function is responsible for some psychotherapists' distrust of the medium. Indeed, some therapists express unease in working with their clients' metaphors. On the one hand, a metaphor may serve to maintain a safe distance from content (as it can do when a therapist offers a metaphor or when a schizophrenic client talks in metaphors); on the other hand, it may serve a defensive function, reinforcing too great a distance, a distance which as previously stated needs to be closed if any real therapeutic change is to be achieved. In this sense, clients' use of metaphor may represent an attempt, conscious or unconscious, to keep their therapist at bay. This idea is reminiscent of philosophers' Thomas Hobbes and John Locke view that metaphor is no more than ornamental rhetorical flourish which creates deception:

The art of rhetoric is 'for nothing else but to insinuate wrong ideas, move the passions and thereby the judgement, and so indeed [metaphors] are perfect cheats'.

(Locke, 1975: 508)

Metaphors ‘openly profess deceit; to admit them into counsel, or reasoning, were manifest folly’.

(Hobbes, 1651: 17)

It is possible that metaphor may, therefore, sometimes be an obstacle to therapeutic change. Speaking metaphorically, Caruth and Ekstein note how clients may employ metaphor ‘as a sort of alibi [...] a way of simultaneously keeping and revealing a secret’ (*ibid*: 38). Throughout these next two sections, I emphasise that although there are inherent dangers in working with metaphorical language, their deceitful potential being one of them, there are a number of ways to mitigate these dangers. Some of these ways, or if you like ‘tactics’, have been specifically designed by practicing psychotherapists who, like me, believe that the benefits of working with metaphor outweigh its difficulties.

#### 4.3.2 METAPHOR AS A SERVICE TO THE THERAPEUTIC ALLIANCE: A SIGNAL OF EMPATHY

As discussed in section 3.4 of the previous chapter, the relationship between the client and the therapist is a key determinant of therapeutic success, so if the use of metaphor can facilitate the therapeutic alliance this is too important a function to ignore. *That* metaphorical language does support the therapeutic alliance is extensively confirmed in the literature by psychotherapists. Yet, *how* and *why* metaphorical language serves this function are complex questions, which need some unpacking.

Metaphorical language shared between two interlocutors has several beneficial dimensions. At the root of this is the fact that the collaborative activity of building and extending a metaphorical expression takes more time and effort than the interpretation and construction of more literal language (or simpler lexical/phrasal metaphors), which is relatively rapid. Any psychotherapist’s willingness to interpret, or jointly construct, an extended metaphor represents a willingness to expend a level of effort above that which is typically expended during exchanges that involve literal language. A therapist’s willingness to put in this additional effort and to, as it were, enter the client’s metaphorical world in order to understand him/her signals the therapist’s commitment to the client. In turn, the client’s perception of this commitment fosters his or her sense of the therapist’s empathy, which is essential to establishing a positive therapeutic alliance. Philosopher Ted Cohen (1978) echoes this idea by claiming that metaphors issue a concealed invitation to derive meaning, and that a hearer’s special effort to interpret a

speaker's metaphor brings the two (metaphor maker and appreciator) into a deeper, more intimate relationship.

Again, it is useful to illustrate this therapeutic function of metaphor with an example from clinical practice. Consider a client telling his therapist how he struggled to 'unpack his thoughts from their knapsack and arrange them neatly so that we can discuss them in here' (Stine, 2005: 541). This initial metaphorical expression uttered by the client was extensively dissected during the course of therapy. While it might not seem particularly informative to the layperson, the therapist's close attention to the metaphor enabled him to understand that it epitomised an important belief of the client's. Namely, the client felt a need to keep his mental life contained ('concealed in a sack') and to be ready for flight, in case he was suddenly abandoned (*idem*). Exposure of these beliefs led the client to consider his adoption and to recall how as an infant in the nursery he was told that he'd been chosen as the 'special child'. Stine reports on how the client, in the midst of this discussion, suddenly said "maybe I can write a musical comedy for my wife and daughter" (both of whom were performers), an idea that he dismissed almost immediately after suggesting it. The therapist immediately returned to the metaphorical expression of the knapsack; he suggested that his client must have longed to be creative as a child, but at the same time, that he must have feared any creative, unconventional thoughts in case they jeopardised his status as a 'special child'. The therapist then offered the following interpretation: 'all spontaneous thoughts, feelings and creative urges would have to be kept in a mental knapsack, concealed and ready to be transported at a moment's notice in case he was abandoned' (*ibid*: 542). Stine credits the moment of articulating this interpretation with marking a dramatic shift in the client's level of comfort and in his cognitive style. It was, he believes, his 'empathic interpretation' and close attention to the metaphor that facilitated this change.

It is precisely this shared, specially evolved dialect of shared metaphor that contributes to the sense of a private, dyadic psychological community that provides the intimacy necessary for the analyst to listen to the patient's metaphors and, reciprocally, to forge those metaphors that will enlist the patient's involvement and the intimacy necessary for the patient to make the special effort to accept and creatively react to those interpretations.

(*ibid*: 535)

The claim that metaphors benefit the therapeutic alliance is not only supported by anecdotal evidence in the form of single case studies, but also by empirical analysis. Suit and Paradise (1985), for example, examined how counsellor-offered metaphors affect clients' perception of the counsellor, specifically investigating five core counsellor attributes: perceived empathy, regard, expertness, attractiveness and trustworthiness. In this study participants were asked to carefully listen to excerpts from counselling sessions and to put themselves in the position of the client. The dependent measures of empathy, regard, expertness, attractiveness and trustworthiness were then assessed using subjects' responses to standardised questionnaires (the Barrett-Leonard Relationship Inventory (BLRI) and the Counsellor Rating Form-Short Version (CRF-S)). Suit and Paradise found that the use of moderately complex metaphors enhanced subjects' perception of the counsellor's empathy, level of regard and expertness (more so than the use of analogies, clichés and literal language to express the same point). Though the authors concede various limitations of their study, it provides encouraging support for the notion that metaphorical language can enhance the therapeutic alliance by strengthening many characteristics on which that alliance is based (most notably, empathy).<sup>60</sup>

#### 4.3.3 METAPHOR AS A SERVICE TO THE THERAPEUTIC ALLIANCE: CREATION OF SHARED SHORTHAND

An additional way that metaphor may strengthen the therapeutic alliance is to be found in metaphor's ability to act as a kind of shorthand between interlocutors. This is a distinct psychotherapeutic function of metaphor that is worthy of note and stems from the compactness element of metaphorical language.

According to Relevance Theory, the more poetic a metaphor is, the wider the range of potential implicatures and the greater the hearer's responsibility for deriving them (Sperber & Wilson, 1995: 236). This notion reflects a frequently observed feature of metaphorical language, namely, its ability to imply a wide range of meanings in a succinct way. It is for this reason that metaphorical language is often thought of as an economical mode of expression. When Ortony (1975) championed the claim that metaphor was 'necessary and not just nice', he developed a series of hypotheses, one of which speaks to this condensed quality of metaphor. Ortony's 'compactness thesis' suggests that in many contexts metaphorical language represents the most economical way of expressing

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<sup>60</sup> Suit and Paradise emphasise the need for additional empirical studies, for example to examine subjects' perceptions of counsellors at multiple stages of the therapeutic process.

something and that this economy of expression enables even relatively short metaphors to convey a great wealth of information (*ibid*: 47).<sup>61</sup>

Ortony's compactness thesis relies on a reconstructionist view, which suggests that language comprehension involves hearers 'reconstructing' (that is, enriching or amplifying) described scenarios using their existing knowledge of the world (*idem*). Imagine for example that I read about a woman jumping off Beachy Head cliff.<sup>62</sup> I build a representation that invokes what I know about women, the act of jumping off a cliff and what I know or believe to be true about Beachy Head. Ortony notes that what I invoke will be 'largely experiential, perceptual and cognitive' (*idem*). However, there will, of course, be details unique to my subjective experience. I may infer that the woman was in a distressed state of mind at the time, that the sea beneath was very cold; perhaps I imagine the wind to have been fierce and the sky to have been dark and dramatic. It is possible that I also invoke thoughts about her family's reaction of sadness to her death, based on my knowledge of human feelings and responses to such events. Ortony suggests that the most efficient manner in which to construct such a representation is 'to form a mental image' (*idem*) and he labels the overall process 'particularisation'.<sup>63</sup>

As well as ensuring that language comprehension can take place without a speaker having to explicitly state this amount of detail, Ortony suggests that this process of particularisation serves as a listener's 'digital to analogue converter: it takes him nearer to the continuous mode of perceived experience by taking him further away from the discrete mode of linguistic symbols' (*idem*). For Ortony, metaphors constrain and guide this process, they 'allow large "chunks" to be converted or transferred' (*idem*). For example, with the aforementioned scenario in mind, imagine a report in a newspaper: 'she stepped off the cliff edge and fell like a *punctured balloon*'. What we know about punctured balloons includes abstract characteristics such as damage, emptiness and failed containers. The figurative expression is said to focus our attention on a subset of these characteristics. This subset includes features that are conceivably compatible with the topic (the woman who is killing herself). The resulting interpretation is thus extremely rich, with 'punctured balloon' being the condensed meaning for something like 'the woman stepped off the cliff edge, her body limp as she fell, she was physically present, but

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<sup>61</sup> It is not clear if Ortony proposed the compactness thesis as a reason for using metaphors, or merely, as a consequence and advantage of the figure.

<sup>62</sup> Beachy Head is a famous cliff in Southern England which sits 162 meters above sea level; it is a notorious suicide location.

<sup>63</sup> Ortony's process of 'particularisation' is in some respects similar to Relevance Theory's notion of pragmatic enrichment; through enrichment, an utterance's encoded meaning, which is highly schematic, is developed into fully propositional content (on the basis of highly accessible conceptual material). See Carston (2002: 22-28) for further detail.



there was life, no emotion, left within her, her spirit was irreparably damaged, all sense of hope gone, and so on'. Trying to express the idea depicted here by using literal language rather than metaphor evidently involves a far lengthier description, which even when developed may not be sufficient to capture its full meaning. As Sperber and Wilson (1995: 236-237) wrote,

The surprise or beauty of a successful creative metaphor lies in this condensation, in the fact that a single expression which has itself been loosely used will determine a very wide range of acceptable weak implicatures.<sup>64</sup>

Metaphor, therefore, 'is the power whereby language, even with a small vocabulary, manages to embrace a multimillion things' (Langer, 1948: 141). When metaphorical language is elaborated during the course of therapy, particularly when it is elaborated over the course of multiple sessions, that metaphor may become a sort of shorthand – a way of expressing a wealth of meaning. Co-creating this shorthand (a kind of additional shared sublanguage) consequently creates an intimacy between the client and the therapist that strengthens the alliance, and may, therefore, contribute to psychotherapeutic success.<sup>65</sup>

Naturally, as with all things, there are two sides to the coin. Just as an apt metaphor may strengthen the therapeutic alliance, the *wrong* metaphor offered at the wrong time may weaken the therapeutic alliance.

A metaphor not understood by a listener is likely to increase his sense of estrangement from the speaker, while a metaphor understood by the listener is likely to lessen his sense of isolation.

(Lenrow, 1966: 147)

At the end of Suit and Paradise's (1985) experiment, which was mentioned in the previous section, subjects were asked to summarise what they thought the counsellor's intent was. While the authors did not provide any concrete details to illustrate their

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<sup>64</sup> Recall that weak implicatures (weakly intended by the speaker) shade off into unintended implications (see chapter 1, section 1.3.1, footnote 16).

<sup>65</sup> For metaphorical expressions that end up serving as a kind of shorthand between client and therapist, it may be that the metaphor is initially interpreted through a process of metaphorical world construction (particularly likely if the metaphor is collaboratively extended by client and therapist over a number of sessions). However, I speculate that in order to act as shorthand the metaphor would, at some point, have to be interpreted through the construction of an *ad hoc* concept (e.g. KNAPSACK\*, or PUNCTURED BALLOON\*).

findings, they advise that their results demonstrate ‘the potential for misunderstanding by the client when complex metaphors were used’ (Suit & Paradise, 1985: 27). On this basis, they recommend caution with regard to counsellor’s use of overly complex metaphors or metaphors which are very subtle in their implications. As we shall see in section 4.4, the risk that a therapist’s use of metaphorical language may lead to misinterpretation and so-called ‘ruptures’ in the therapeutic alliance is a significant concern for some psychotherapists. How seriously this concern is taken affects the ways in which therapists choose to use metaphor.

#### 4.3.4 MNEMONIC FUNCTION OF METAPHOR

An additional, widely attested benefit of using metaphor in psychotherapy is its ability to increase our memory for the ideas it depicts. Increasing one’s ability to recall thoughts and insights that arise during psychotherapeutic exchanges is useful in that doing so can lead to increased impact of those ideas and insights as they are more likely to permeate the client’s daily life and bring about real therapeutic change. Perhaps unsurprisingly, interest in the mnemonic function of metaphor has not been restricted to researchers in the field of psychotherapy alone; many philosophers and psychologists have sought to theoretically develop and test the mnemonic function of metaphor. Reviewing the plethora of research on this topic reveals the mnemonic function of metaphor to be a complex characteristic, which seems primarily to be the result of metaphor’s imagistic component. Metaphor aids recall of information because it facilitates construction of rich, detailed mental imagery. In this section, I expand on the theoretical underpinnings of this claim and subsequently, turn to its empirical validation.

Ortony’s ‘vividness thesis’ speaks explicitly to the imagistic component of metaphor, and therefore, to metaphor’s mnemonic function. Since, in Ortony’s view, metaphors evade ‘discretization’ and maintain a greater proximity to perceived experiences, they facilitate a richer, more detailed picture (mental imagery) that cannot be easily, or perhaps ever, achieved through literal use of language. ‘The emotive as well as the sensory and cognitive aspects are more available, for they have been left intact in the transferred chunk’ (Ortony, 1975: 50). Camp echoes Ortony’s sentiments that metaphors are closer to perceptual reality and, therefore, more vivid. To illustrate her point, she discusses a metaphor in which a drunken man’s talk is described as a ‘wheezing bagpipe’. As she aptly notes, this metaphor vehicle allows one to capture the drunk’s tone of voice: ‘loud, braying, continuous, nasal’ (2006: 10). ‘The metaphor is considerably more

vivid and precise, because it exploits your specific, experiential knowledge of the sound that bagpipes make' (*idem*).<sup>66</sup> Being highly vivid, the metaphor is also highly memorable.

In his work on mental imagery, psychologist Allan Paivio attests to the mnemonic value of images. Paivio explains how images are particularly memorable as a result of their density of information – that is, their ability to represent a lot of information in a compact format:

When you dip down into your memory well, if you pull up an image, it is a simultaneous bundle of complex information; if you pull up a word, however, it represents only one bundle of information. It may have other words strung out after it in a chain, but you have to keep pulling up the links one at a time.

(Paivio, 1983: 9)

For images, Paivio explains, complex information is available simultaneously, so that 'two units of information in one image take up the same amount of space in the memory well as one word without an image' (*idem*). That an image requires less storage space ensures that it is more memorable, and as such that it is an economical way of representing information. The fact that images are highly memorable relates to metaphor since, if Ortony is right, comprehension of metaphorical language necessitates construction of mental images.<sup>67</sup> Paivio writes, 'novel metaphors in particular appear to need imagery for interpretation, especially vehicle imagery' (Sadowski & Paivio, 2001: 87).

While many psychotherapists have shown an interest in the mnemonic function of metaphorical language, few have sought to validate this function with empirical research. One notable exception is Martin, Cummings and Halberg's analysis of psychotherapeutic interactions in which therapists were trained to introduce and elaborate metaphors in a 'purposeful manner' (1992). After each psychotherapy session, both clients and therapists were told to 'relax and think back to the session in which you just participated'; they were then asked to complete Episodic Memory Questionnaires (EMQs), which consisted of five

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<sup>66</sup> Notice how this vivid metaphor, of a drunk as a 'wheezing bagpipe', communicates a wealth of information. Metaphors may, therefore, feel compact (i.e. may imply a wide range of meanings using a small vocabulary) as a result of their interpretation having involved the construction of an image.

<sup>67</sup> The claim that metaphors necessitate the construction of mental images is not to suggest that metaphors involve the representation of *pictorial* information alone. In other words, the term 'mental imagery' is neutral in terms of sensory modalities. While the visual modality is often fairly dominant during metaphor interpretation, mental images contain information from the full range of perceptual modalities. Camp's demonstrates that this is the case through her metaphor of a 'wheezing bagpipe'; this metaphor requires construction of a 'mental image', in which information from the auditory modality is dominant.

basic questions:

- (i) Try to remember some of the specific phrases or sentences that were spoken, what were some of these phrases or sentences?
- (ii) What was the most memorable event that occurred in this session? (Try to remember exact words, phrases or sentences spoken during the event).
- (iii) Why do you remember this event?
- (iv) What was the next most memorable event?
- (v) Why do you remember this event?

Participants were then asked to rate the helpfulness of the session on a scale of 1-5 (1 being *not at all helpful* and 5 being *extremely helpful*) and to rate the session overall on a 6 point scale (from *very poor* to *very good*). Though intentional therapeutic metaphors accounted for less than 10% of the total dialogue in any given psychotherapy session, Martin and colleagues found that clients recalled therapists' intentional use of metaphor in 66% of the sessions.<sup>68</sup> The authors, furthermore, found that the sessions in which clients recalled events associated with the therapist's intentional use of metaphor were judged to be significantly more helpful than those sessions in which events other than the therapist's intentional use of metaphor were recalled. Overall, these findings support the claim that discussing events using metaphorical language enhances clients' memory for them. This result reinforces the view that metaphor has a positive function in the context of psychotherapy: enhancing clients' recall of psychotherapeutic material increases the likelihood that clients will be able to apply insights revealed in psychotherapy to their daily life, thereby effecting real change.

#### 4.3.5 HEURISTIC AND EPISTEMIC FUNCTION OF METAPHOR

A fifth function of metaphorical language in the context of psychotherapy is its ability to facilitate the construction of new perspectives, to make the unfamiliar more familiar. As Evans (1988: 550) elegantly (and metaphorically) notes:

The client lives at the centre of a world formed completely by his or her own experiences, the therapist offers healing not primarily by being an expert in the

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<sup>68</sup> Clients were judged to have recalled a therapist's intentional use of metaphor if their answer to question (i), (ii) or (iv) contained any of the exact metaphor vehicles used by the therapist, or obvious synonyms for these vehicles.

various forms of pathology and adaptation, but rather by forming a bridge to this world and seeing the unrealised possibilities within it. This bridge is erected from the metaphors of both the therapist and the client.

Recall how we have already considered figurative language's ability to reveal 'unrealised possibilities' from a theoretical standpoint in chapter 2, in which I explored Camp's (2008, 2009) suggestion that metaphor fosters insight by highlighting or foregrounding previously unconsidered meanings. In this section, I consider how metaphor's ability to highlight and suppress properties of a topic and thereby facilitate insight is of use in the context of psychotherapy.

An example from clinical practice clearly illustrates this function of metaphor. Imagine two individuals in couples' therapy being asked to articulate the obstacles in their relationship that were presented by their partner. The husband spoke of his wife as a rock, a metaphor that was intended to convey her inflexibility and rigidity. For her husband, the wife chose a closed door, which symbolised her feelings that he had closed off parts of himself from her (Coombs & Freedman, 1990, cited in Cirillo & Crider, 1995). While the clients were initially focused on the negative aspects of their respective metaphorical vehicles, their relationship with these vehicles transformed through exploration of the metaphors. The husband appeared to shift his focus from the inflexible feature of the rock to positive aspects of it, for instance, how the rock was stable and organised. In fact, his relationship with this object transformed to the extent that he would carry a rock in his pocket to remind himself that he appreciated the stability that his wife provided. Similarly, the wife's perspective changed, from seeing her husband as closed off she moved to seeing him as independent and self-reliant. This example neatly demonstrates how the complexity of figurative language can foster insight and aid clients to consider previously unconsidered views. As Petrie and Oshlag (1993: 582) note:

The very possibility of learning something radically new can only be understood by presupposing the operation of something very much like metaphor. This is not just the heuristic claim that metaphors are often useful in learning, but the epistemic claim that metaphor, or something very much like it, is what renders possible and intelligible the acquisition of new knowledge.

As with the other functions of metaphorical language, it is not difficult to see how this characteristic of metaphor may pose a danger in psychotherapy. As Paivio puts it,

metaphor is 'a solar eclipse [that] hides the object of study and at the same time reveals some of its most salient and interesting characteristics when viewed through the right telescope' (1979: 150); psychotherapy is about looking through the right telescope. When left to their own devices, the metaphors of a rock and a closed door promoted each party's anger and resentment towards each other, thereby fostering discontent within the marriage. It was only when the couple worked with this metaphor with the guidance of a therapist that another frame of reference was considered. While this example demonstrates the effectiveness of metaphor, it also reveals how metaphors can cement beliefs that are maladaptive. An essential part of psychotherapy, therefore, should be to reveal the metaphors that underpin clients' beliefs and subsequently, to dissect these metaphors and thereby grant clients greater cognitive flexibility (an increased ability to see things from multiple perspectives).

#### 4.3.6 THE DANGER OF METAPHOR IN PSYCHOTHERAPY

Throughout this section, I have tried to emphasise that, although metaphor may be of significant therapeutic utility, it should be used with caution. As was noted in section 4.3.2, comprehension of metaphor places a high degree of responsibility on the interpreter. Given this interpreter responsibility, and the fact that metaphor communicates a wide array of weak implicatures, predicting how a metaphor will be interpreted is arguably less straightforward than predicting how literal language will be interpreted. Schizophrenic individuals, in particular, may be prone to unpredictable idiosyncratic interpretations, given their inability to form abstract relationships between objects (McCurry & Hayes, 1992). Naturally, it is of paramount importance in psychotherapy that misinterpretations between client and therapist are minimised. Any miscommunication between the two parties will likely lead the client to feel misunderstood and, in so doing, will disrupt the therapeutic alliance, which is essential to a positive therapeutic outcome. As Muran and DiGiuseppe note, given the ambiguity and frequent obscurity of metaphors the 'possibility of mistakes abound' (1990: 72). Using metaphorical language, and in particular offering metaphors to clients, may therefore lead clients to feel 'at best unsure and confused, and at worst resentful and distrustful' (Small & Manthei, 1986: 410).

In an interesting study Angus and Rennie examined clients' and therapists' experiences and recollections of 'metaphoric events' in psychotherapy. Four pairs of psychotherapists and clients, who had been in therapy together for at least 12 sessions,

were recruited for the study. Each therapist in the four pairs recorded one of their sessions, and from these recordings the authors identified metaphor sequences (in total, five client-produced metaphors and six therapist-produced metaphors were identified). The selected instances of metaphorical exchanges were replayed to both parties within 24 hours of the therapy session. Each participant was asked to recall the thoughts, images, emotions and feelings that they had been experiencing when the segment they listened to took place. It was emphasised to subjects that they should 'discriminate between actual recall of their experiences and construction of what they were likely experiencing in the light of their reflection' (Angus & Rennie, 1989: 373).

Among other things, the authors found discrepancies in interpretation of the metaphors between client and therapist; 'it was striking how therapists and clients generated distinctly different private imaginal representations of the same metaphor spoken in the session' (*ibid*: 378). Yet, Angus and Rennie do not use this result to oppose the use of metaphor in psychotherapy. Quite the opposite, in fact, they advocate working with figurative language on the basis that achievement of a shared understanding through metaphor (though it may not often occur) fosters the therapeutic alliance (by creating a deep connection and shorthand for communication). What Angus and Rennie appear to be suggesting is that whether or not client and therapist achieve complete shared understanding of a metaphor is of secondary import; perfect duplication of meaning between interlocutors is not necessary. What makes metaphor so valuable in the context of psychotherapy is the sense of collaboration between client and therapist that emerges during interpretation. Engagement in this joint project, whether it results in complete sharing of content or not, achieves a precious sense of connectedness between the two parties.

Despite Angus and Rennie's conclusion in favour of using metaphorical language in psychotherapy, their study reiterates the importance of psychoanalysts clarifying the meaning that metaphors evoke for clients, and avoiding 'substituting an unwitting projection of their own understanding of what phrases must mean' (*idem*). In the next section, I consider a number of psychotherapeutic approaches, which have been specifically designed to make use of metaphorical language. These approaches set out concrete instructions for the use of metaphor, and in so doing, seek to manage any detrimental effects that its use may have.

## 4.4 SPECIALISED APPROACHES FOR THE USE OF METAPHOR IN PSYCHOTHERAPY

### 4.4.1 INTRODUCTION

Approaches that make explicit use of metaphorical language in psychotherapy diverge in terms of the roles they ascribe to client and therapist. At the extreme end of the scale are those who believe that metaphor construction should be left solely to the client (Grove & Panzer, 1989; Sullivan & Rees, 2008), and, at the less extreme end, those who grant linguistic freedom to both parties, thereby accepting that both therapists and clients use metaphorical language (Kopp, 1995; Sims, 2003; Strong, 1989). In this section, I consider some of these approaches and reflect on the implicit theoretical assumptions that underpin the adoption of different strategies of metaphor use.

### 4.4.2 CLEAN LANGUAGE AND SYMBOLIC MODELLING

'Clean Language' is effectively a method of questioning, which is purposefully designed to elicit metaphors from clients. Though the approach was developed by the humanistic counselling psychologist David Grove, who sought to aid his clients with resolving traumatic memories, it is now utilised in a range of settings; for example, in education, marketing and business practice. While many psychotherapists before Grove had noticed the abundance of rich metaphorical expressions articulated spontaneously by clients, Grove came to realise the therapeutic benefit of clients immersing themselves in these metaphorical articulations. Echoing the sentiments of Lakoff and Johnson (1980), Grove maintained that attention to clients' metaphors provided the key to understanding their 'symbolic world' (that is, the way in which they viewed, and had constructed, their reality). In order to facilitate immersion in this symbolic world, Grove devised a series of questions, which encouraged clients to explore and elaborate their metaphorical conceptions. For Grove, it was important to use clients' *exact* words when elaborating metaphors, in order to avoid contaminating or distorting the client's symbolic world. His questions, therefore, are constructed so that the therapist (or practitioner) can 'clean' their own language, making it as devoid of metaphors as possible. Using only the clients' words ensures that any presuppositions and prejudices on the part of the therapist do not interfere with the clients' construction of their own 'metaphor landscape' (Lawley & Tompkins, 2000: 17).



The 12 basic questions, which are used 80% of the time in the practice of Symbolic Modelling, form the method that is known as 'Clean Language'. While these questions were specifically designed to explore client-generated metaphors, in principle they can be asked about anything a client says. First, there are the six 'developing questions' as below:

1. And is there anything else about X?
2. And what kind of X is that X?
3. And where/whereabouts is X?
4. And that X is like what?
5. And is there a relationship between X and Y?
6. And when X, what happens to Y?

In accordance with Grove's initial observation, X and Y represent direct quotations of the client's original words, which may or may not be metaphorical. Using a question like that in (4), as opposed to something like 'what's that like to you?' is intended to ensure that the client maintains a direct relationship to their expression, which is said to underpin their thinking. The next set of three questions, which create the context for the scenario being developed, are labelled 'moving time' questions:

1. And then what happens? / And what happens next?
2. And what happens just before X?
3. And where could/does X come from?

Needless to say, these questions will not all work for every topic (X); it is up to the Clean Language practitioner to select the appropriate question that flows naturally from their client's expression. Lastly, there are 'intention questions' whose purpose is to direct the metaphor to the client's actual experience and desired outcome.

1. And what would you/X like to have happen?
2. And what needs to happen for X to [achieve what X would like to have happened]?
3. And can X [achieve what X would like to have happened]?

In any course of therapy, it is essential that the client remains focused on their own metaphorical map and does not allow themselves to be misled by any unwarranted

assumptions and interpretations from their therapist. By cleansing the therapist's language the possibility of unintentionally influencing a client through language is reduced to a minimum.

To see Symbolic Modelling and the Clean Language approach in action, consider the short extract below taken from a transcript of a participant engaged in a Clean Language interview:

Practitioner: When your work-life balance is at its best it's like what?

Client: Um, I think when, when, when my work-life balance is at its best, um, I, I think I, I'd be feeling really energized and that um, and that things are sort of under my belt that I can, I'm sort of juggling things and it, I don't think it's necessarily based on how busy I am but it's that sort of feeling that, that there is a sort of sense of balance and...

Practitioner: OK, so energized and things are under your belt, juggling, and a sense of balance

Client: Mm-hmm...

Practitioner: And what kind, what kind of juggling is that when it's like that?

Client: Um, you, I mean if you'd maybe feel that you're holding quite a few things at the same time but they're still within your reach, you're not – they're not sort of – I suppose the image of juggling is that you're.... throw balls into the air but you're also catching them

Practitioner: Yes

Client: And, yes, so it's a... and also that sort of sense that there's an ease which... I mean if you see a really competent juggler, there's a real ease in what they're doing, they, that looks, I mean it may be very, very difficult but it looks really easy.

(Tosey, Lawley & Meese, 2014: 14-15)

Notice how the Clean Language practitioner attends to the client's metaphors and invites the client to extend their initial metaphor by asking 'what kind of juggling is that?' As the session continued, the client and practitioner discussed how work-life balance related to feeling at ease with reaching targets, returning to the image of juggling:

- Client: Um, yes I suppose – going back to the image of juggling, it sort of, you're tossing the balls up into the air and then they, they're kind of almost falling back into your hands without you sort of having to strain and struggle to kind of catch them again.
- Practitioner: Mm, when they're falling into your hands, is there anything else about that...?
- Client: Um, well I was just sort of going on with the image of juggling, it sort of, it has a sort of playful feel about it, um, and...
- Practitioner: When it's a playful feel and... is there anything else about that?
- Client: Um, the s-, I suppose it's, it, I mean I, you think of a juggler as an entertainer but um, I sort of think of, I mean... the playfulness is... there's kind of an enjoyment in what you're doing and um, there's kind of a pleasure in, in just being skilful and being able, and actually doing something that's quite hard but doing it with ease.

*(ibid: 15)*

The practitioner's questions here ('is there anything else about that?') invite the client to further develop their symbolic world, to flesh it out in greater detail if you like. Again, notice how the therapist does not introduce any language that has not already been offered by the client. This practice enables the client to get in touch with her own unique idea of what constitutes work-life balance, by developing her metaphorical conception that underpins this idea and exploring the feelings it evokes.

Lawley and Tompkins, who have studied Grove's work for many years, ground the approach in Lakoff and Johnson's theory of metaphor. The underlying theoretical assumption behind Clean Language is, therefore, that cognition is fundamentally metaphorical. This conception is prevalent across many approaches to metaphor use in psychotherapy and has done great service in aiding understanding of the use of metaphor in this context; it was for this reason that a significant part of chapter 1 was dedicated to its discussion. To explain how Clean Language interacts with Conceptual Metaphor Theory, consider the assertion from Lakoff and Johnson that 'metaphorical thought is unavoidable, ubiquitous, and mostly unconscious' (Lakoff & Johnson, 1980: 272). Adoption of this view validates the use of metaphor in psychotherapy by suggesting that articulating metaphors will reveal an individual's tacit assumptions; assumptions which, in the case of therapy, may be contributing to a person's maladaptive behaviour or unease. That metaphor serves this function has been supported by many writers in the

field of psychotherapy (for example, Goncalves and Craine, 1990). It is this aspect of the theory that supports purposeful elicitation of metaphors from clients, which is the primary objective of the Clean Language questions. The utility of CMT in grounding the use of metaphor in psychotherapy is, however, jeopardised by the inherent problems with the theory, discussed in chapter 1 (for example, the lack of concrete evidence in support of the claim that verbal metaphors reflect an underlying metaphorical fabric of the mind). That CMT's claims are not well supported calls into question, not the practices of Clean Language, but rather the usefulness of CMT in supporting those practices.

Conceptual Metaphor Theory, if it is believed (as it is by followers of Clean Language), not only validates the use of metaphor in psychotherapy by supporting its ability to reveal clients' tacit assumptions, but also supports the specific Clean Language approach's requirement that therapists 'cleanse' their speech. This argument naturally falls out of the theory, given its claim that many seemingly literal expressions, such as 'let's spend more time together', are in fact metaphorical (since they are grounded in conceptual mappings, in this case TIME IS MONEY). For Clean Language practitioners, as for conceptual metaphor theorists, even simple, seemingly literal questions such as 'what *compelled* you to get involved in this work?' or 'what *gives* you hope?' are seen as metaphorical (Tosey, Lawley & Meese, 2014: 5). Though these expressions are clearly dead, or least heavily sedated, metaphors, they are nonetheless metaphorical (in origin, at least), so that adoption of CMT leads to the position that they have the potential to reveal hidden cognitive assumptions, when revived. Widening the definition of metaphor in this way, so as to take seriously the figurativeness of very conventional, even dead, metaphors, entails that almost all utterances involve some components of metaphorical mapping, and therefore, virtually every word is seen as a reflection and an indication of a speaker's tacit assumptions. As previously stated, it is these tacit assumptions that Clean Language seeks to (a) elicit from clients and (b) silence from therapists. When one considers the definition of metaphor adopted by Clean Language practitioners, one appreciates the necessity of using the client's exact words, and only those words. Eradicating evidence of tacit assumptions from a therapist's language enables clients to be undisturbed when articulating their own metaphorical landscape. Looking at transcripts that utilise Clean Language does indeed reveal this method to be a successful means by which participants get in touch with their most deeply rooted beliefs. Intuitively, being undisturbed in this process guarantees that a client will feel a powerful sense of responsibility for uncovering these beliefs, and for attaining insight into their own behaviour and the feelings that accompany this discovery.

Although subscribing to the notion of metaphoric cognition validates the utility of metaphor in psychotherapy, in the case of Clean Language it has also instilled a certain fear with respect to *therapists* using metaphorical language (perhaps as a result of the broad definition of metaphor adopted). A consequence of the belief that language reflects and influences cognition is to see the power of language and so too the power of metaphor. Clean Language theory appears to take this aspect of Conceptual Metaphor Theory very seriously and, in doing so, adopts great caution with regard to therapists influencing clients through language.

There is an extent to which this very safe approach could be seen as representing a lack of faith in a therapist's ability to judge whether and when such caution is necessary. As we saw in the previous chapter, for many therapists, making considered judgments and delivering timely comments and interpretations is considered the main area of a therapist's expertise. Furthermore, for many clients, being privy to these expert interpretations constitutes the primary motivation for embarking on a course of therapy. No doubt, there is a time and a place for some form of Clean Language in almost all cases of therapy. For example, when a client is demanding more direction than the therapist deems appropriate, Clean Language may provide a useful tool for the therapist to insist on more of a back-seat role. It may also be a particularly helpful technique to employ when clients, to their detriment, do not give themselves any credit for their progress. Showing a client that a revelation has come squarely from words that they themselves have uttered will likely serve to empower them, which in turn may effect therapeutic change.<sup>69</sup> In the following sections, I consider two other approaches to metaphor in psychotherapy that, in contrast to Clean Language, do not advocate therapists eradicating metaphors from their speech.

#### 4.4.3 KOPP'S METAPHOR THERAPY

In the mid-90s, Kopp proposed a structured interview protocol for psychotherapists, which was designed to assist clients with exploring and transforming their metaphorical articulations. The seven-step approach, which includes questions for therapists to ask, is as follows:

- (i) Notice metaphors.

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<sup>69</sup> For a discussion of how Clean Language techniques may serve to make qualitative research practices more standardised and rigorous, see Tosey, Lawley and Meese (2014).

- (ii) “When you say [repeat the metaphor], what image or picture comes to mind?” alternatively, “what image or picture do you see in your mind’s eye?” or, “what does the [metaphor] look like?”
- (iii) Explore the metaphor as a sensory image:
  - Setting (e.g. “what else do you see?” or, “describe the scene or some aspect of the scene [associated with the metaphoric image]”);
  - Action/Interaction (e.g. “what else is going on in [the metaphoric image]?” or, “what are the other people [in the metaphoric image] saying/thinking/doing?”);
  - Time (e.g. “what led up to this?” or, “what was happening just before [the situation in the metaphor]?” or, “what happens next?”)
- (iv) “What is it like to be [the metaphoric image]?” or, “what is your experience of [the metaphoric image]?” or, “what are you feeling as you [the metaphoric image]?”
- (v) “If you could change the image in any way, how would you change it?”
- (vi) “What connections (parallels) do you see between your image of [repeat the metaphor] and [repeat the original situation]?”
- (vii) “How might the way you changed the image apply to your current situation?”

Like Clean Language, Kopp’s protocol does not treat metaphorical utterances as if they were disguising some important truth. Instead, Kopp advocates deeply attending to metaphors on the assumption that they represent the speaker’s reality. For Kopp, the literally nonsensical content represents a mental reality for the speaker and denotes some genuine experience for the client. Thus, clients are encouraged to further develop metaphorical meaning, in order to attain deeper understanding of their own thoughts and feelings.

Mirroring ‘Clean Language’, Kopp’s protocol is also intended to ensure that therapists do not interrupt the ‘client’s process with interpretations, empathic reflections, comments, questions (other than those in the protocol), conclusions and so forth’ (Kopp & Crow, 1998: 307-308). This can be seen as a parallel attempt to cleanse the therapist’s language of metaphors, which may colour the client’s thinking. Admittedly, however, the questions in Kopp’s protocol are slightly more directive and certainly less ‘clean’ than those in Clean Language. In fact, despite initial appearances the two approaches do clearly diverge with respect to their views on how active the therapist may be in terms of intervention. While Kopp’s protocol is relatively non-directive, he does not intend

therapists to limit themselves to the above questions alone (as is the case with Clean Language practitioners). Kopp grants that after the final, seventh step, therapists introduce all manner of interpretations and comments.

In order to fully appreciate Kopp's method, it is useful to reflect on one of his case studies: this involves a 38-year-old male client who presented with suicidal thoughts, symptoms of depression and problems with anger management. He was HIV positive and because he experienced severe side effects from medication was unable to take the favoured drug. He did not have blood work for his HIV for several years and thus, was relatively in the dark with regard to his health.<sup>70</sup> He was very concerned that the disease would take over his life and in one therapy session spontaneously produced a novel figurative utterance: "I feel like there is a dark cloud hanging over me that will rain AIDS down upon me". Upon noticing this metaphor, the therapist enacted Kopp's protocol, thereby assisting the client to explore and transform this metaphorical utterance. The following dialogue ensued:

- Therapist: When you think of feeling like there is a large cloud hanging over you that will rain AIDS down upon you what image comes to mind?
- Client: I am walking along and there is a dark cloud that follows me wherever I go. I cannot escape it.
- Therapist: What else is happening?
- Client: If I stop it will shower me with AIDS.
- Therapist: What would that look like?
- Client: The AIDS are individual raindrops that glisten like water, but they are deadly. They shower down upon me with great force. I am swept away by them, and I have no control over my body against the force of the torrent of AIDS.
- Therapist: What do you feel as you are followed by the cloud that rains AIDS down upon you?
- Client: I am feeling hopelessness, depression, that I am totally out of control. I have no identity. My life is totally taken over by the disease.
- Therapist: If you could change the image in any way how would you change it?

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<sup>70</sup> 'Blood work' generally refers to two tests which measure, firstly, the viral load of HIV in a patient's blood and secondly, the patient's CD4 cell count, which reveals how well the immune system is functioning.

- Client: The cloud would clear up and the sun would shine. I would see blue sky all around me. There is no dark cloud.
- Therapist: What parallels do you see between your image of the cloud following you and your struggle with HIV?
- Client: The dark cloud that follows me represents my struggle of feeling overwhelmed by the disease. Like it is going to take over my life and take over my identity.
- Therapist: Does the way in which you change the image give you any clues about how to handle your HIV status?
- Client: I must learn to control how I feel about the disease, that it does not have to take over my life unless I let it. I must find ways to preserve my identity and control aspects of the disease.

(*ibid*: 308)

Immediately following the above exchange, the client, who up until this point had always been devoid of emotion, openly sobbed and acknowledged his illness, expressing his emotional distress at being unwell. In the subsequent sessions, he started devising a plan to manage his HIV and, after blood tests, he began a new treatment of medication. His feelings of despair and hopelessness decreased significantly and his anger management improved. Kopp credits these profound shifts in the client as resulting from the client's metaphor 'transformation'.

Reflecting on the differences between Kopp's method and the Clean Language techniques, notice how much more instructive the therapist in Kopp's session is, compared to the Clean Language practitioner. For example, he asks "does the way in which you change the image give you any clues about how to handle your HIV status?" This question jolts the client out of the metaphorically constructed world, in which he has a dark rain cloud following him, which may shower him with deadly droplets of HIV. While the purpose of this question appears to be much like the purpose of Clean Language questions (to direct the client to relate the metaphor to his actual experience and a desired outcome), it is far from 'clean' in its delivery. From the point of view of Clean Language, use of the word *handle* here reflects an underlying conceptual metaphor, such as PSYCHOLOGICAL IS PHYSICAL. Kopp's approach is, furthermore, significantly different from Clean Language in that it does not seek to actively elicit metaphors from clients; recall how the first step of the approach is to notice metaphors. Kopp works with metaphors that *spontaneously* arise from clients, but does not strive to create the



circumstances in which metaphors will be produced (as is the case in Symbolic Modelling).

It is not a goal of this thesis to argue in favour of one approach to the use of metaphor in psychotherapy over another, an argument I am not qualified to make. What is interesting for my purposes is simply *that* such views about the utility of metaphor exist. Also of interest are the purported effects that these approaches have. Before considering how these effects may inform pragmatic theory, I dedicate the next section to a brief discussion of approaches that suggest that therapists should generate metaphors (in contrast with the two approaches discussed so far, which focus on client-generated metaphors).

#### 4.4.4 PRESCRIPTIVE APPROACHES

The picture presented in the previous sections of models of metaphor use in psychotherapy is, in fact, not at all representative of the clinical literature on the topic. Though there are a number of approaches to metaphor in psychotherapy that focus on client-generated metaphors, two of which I have discussed, the more common trend is advocacy of therapist-generated metaphors and interventions (see for example, Barker, 1996; Burns, 2001, 2007; Goncalves and Craine, 1990; Lankton and Lankton, 2000; Stoddard and Afari, 2014). Recall the example discussed in section 4.3.1, where the CBT therapist offered the metaphor (or analogy) of a broken leg to the depressed client. There is a multitude of guidebooks containing such metaphors and metaphorical stories, which, the guidebooks say, can be learnt and subsequently recalled for use with a number of different clients in different scenarios. I call these approaches ‘prescriptive’, as they *prescribe* metaphors to clients. Kopp and Crow use slightly more loaded language when they say that these approaches ‘implant’ metaphors into clients.

Drawing on the pioneering work of psychologist and hypnotherapist Milton Erikson, Goncalves and Craine propose some loose strategies to assist therapists in their employment of metaphors. They recommend that metaphors offered by therapists be derived from clients’ own metaphors, for, in their opinion, ‘completely different metaphors do not take into account clients’ level of conceptual development and therefore will be either ignored or not fully elaborated’ (Goncalves & Craine, 1990: 141). In addition, they advise introducing metaphors that are sufficiently flexible to assure viability and development. For example, imagine that a client views reality as a threatening and violent creature. Rather than substituting this metaphorical view of the

world with the opposite view (that reality is a friendly, benevolent creature), the authors recommend offering a more 'flexible' metaphorical expression, for instance, one that reflects the conceptual metaphor REALITY IS FOOD. Expressions that depict reality as friendly, they say, perpetuate a dichotomous viewpoint and do not enable the client to conceptualise experiences that are not friendly. Metaphorical expressions that are rooted in a notion of 'reality as food', on the other hand, are flexible in that they allow the client to consider how reality is sometimes delicious food (i.e. good), sometimes disgusting (i.e. bad), sometimes bland and flavourless (i.e. uninteresting), but fundamentally it is always necessary (i.e. inevitable). The authors, furthermore, recommend that therapeutic metaphors have a 'gestalt', integrative capacity, such that their different elements fit together and make sense as a whole. Lastly, they advise that metaphors 'find some validation through the viability of client's action' (*idem*). That is to say, the therapeutic metaphor should provide a basis for the client to act on. For example, a therapist might advise a client who is feeling uneasy about finding a new job to *taste* a few dishes, get the *flavour* of some work, if the flavour doesn't *agree with their stomach* the client can always *spit out the food*, though ultimately, they will have to find some substance with which to *feed* themselves.

Goncalves and Craine explicitly acknowledge the benefit of metaphors growing from clients' own conceptualisations. Yet, this is not the approach taken by all prescriptive models. Indeed, as previously stated, many handbooks simply detail and list metaphors that a therapist may use with a number of different clients. Rather than endowing therapists with specific techniques and strategies for tailored use of metaphor, these guides provide them with a ready-made stock of metaphors to deploy in therapy. While a stockpile of neat analogies and metaphors might be a nice thing for a therapist to have up his or her sleeve, research has shown that clients remember their *own* metaphors much better (Angus & Rennie, 1988; Martin, Cummings & Halberg, 1992).

It is interesting that these therapist-generated metaphor guides are so often used and recommended in cognitive and behavioural therapies, less so in more psychodynamic and humanistic practices. This is hardly surprising given the more active role ascribed to therapists in CBT. In addition, the primary focus in these approaches is to bring about cognitive restructuring and ensure behaviour modification. In the Oxford guide to metaphors in CBT it is written that metaphor provides 'a conceptual bridge from a problematic interpretation to a fresh new perspective that can cast one's experiences in a new light' (Stott et al., 2010: 1). CBT therapists often suggest metaphors in order to redirect and restructure the client's conceptualisations in a more functional and adaptive

manner. It seems natural that psychodynamic and humanistic therapies would be more drawn to working with client-generated metaphors, given their interest in clients' unconscious thoughts, which provide the basis for therapeutic insight. For less directive psychotherapeutic practices it is more likely that the role of the therapist will not be 'to interpret the client's metaphors or to directly modify the client's belief system but to facilitate, guiding the client's exploration and meaning in a supportive but challenging manner' (Lyddon, Clay & Sparks, 2001: 271). In the next, and concluding, section I consider how the different models of metaphor use in therapy relate to pragmatic theories of metaphor comprehension.

#### 4.5 THE USE OF METAPHOR IN PSYCHOTHERAPY: IMPLICATIONS FOR PRAGMATIC THEORY

In order to demonstrate how both theoretical positions on metaphor use in psychotherapy and actual specific instances of metaphor use may provide material to help in assessing pragmatic theories of metaphor comprehension, it is useful to consider an example taken from a psychotherapy transcript. This example is taken from Kopp's metaphor therapy approach. The client in this extract is suffering from bipolar illness, and during the session she attempts to express her experience of this mental illness:

- Client: Bipolar illness is like being a balloon. Sometimes the balloon is so full of air that it is about to burst, and sometimes there's no air in the balloon at all, it's limp and not pretty.
- Therapist: What does it feel like to be the balloon?
- Client: It's scary because when I wake up in the morning I don't know if my balloon is going to be inflated or not, and not being stable feels terrible.
- Therapist: If you could change something about this balloon, how would you change it? Do you even want to change it?
- Client: Yes, of course I do. I guess I could tie the knot on the bottom of the balloon tighter, to make sure nothing leaks out.
- Therapist: So then you would be completely stable, with no movement of your thoughts in and out?
- Client: Well... I guess that's not right, I should expect that my moods will be a little different everyday... like normal people, right?

Therapist: Do you feel that your thoughts should be able to roam freely in and out of the balloon?

Client: I'd like to have greater control over this process and not just let my thoughts run away with themselves, like they seem to be doing all the time!

Therapist: So how could you regulate that flow?

Client: Maybe I could hire a guard to stand at the foot of the balloon and watch to see that the air in the balloon is flowing freely.

Therapist: You said you would "hire" a guard?

Client: Well, there's always a price to pay.

Therapist: Can you afford that price?

Client: I can't afford *not* to!

Therapist: So what will the guard be doing?

Client: I guess she'd stand there and either hold open the end or shut it tight, depending on what was happening.

Therapist: So who is this guard anyway?

Client: Um... I don't know.

Therapist: You said "she"... Is it a female?

Client: Well, right now it's the medication, but I guess when it comes down to it, the ultimate guard is really myself.

(Kopp, 1995: 29-30)

The client's figurative expressions, which appear in both comparison form (bipolar illness is *like* being a balloon) and categorical form (I don't know if my balloon is going to be inflated or not), are indications of how bipolar illness feels to her; that is, how she experiences her depression and her manic phases. As such, they assist the therapist in understanding the client's current emotional state. Arguably, they also assist the client in understanding herself, in the sense that she may not have fully grasped her emotions and understood the implications of her thoughts at the moment of expression. Through articulating her thoughts via metaphor and subsequently working with the therapist on the meaning of her utterances, which is achieved initially by a process of extending and developing the balloon metaphor, both client and therapist attain insight into the client's emotional experiences.

One can see how the initial conception, 'bipolar illness is like being a balloon', evolves over the course of the exchange. At the beginning, the client sees herself (or her

mental-emotional life at least) as a balloon; sometimes her mind is so full of air that she feels ready to burst and sometimes she's entirely deflated, 'limp and not pretty'. Yet, as this metaphorical idea is extended, the client comes to see herself as quite separate from the balloon, no longer identified with it or wholly contained within it; notice how she speaks of 'watching' the balloon and later 'standing at the foot of the balloon, guarding it'. Insight is apparent when, in the final line, the client says 'the ultimate guard is really myself'. This utterance represents the powerful realisation that she, the client, is ultimately responsible for and in charge of her alternating highs and lows. The exchange demonstrates how our metaphorical conceptions are malleable, and how skilled guidance from a therapist facilitates development and modification of metaphorical meaning, which in its initial undeveloped state may be the root of maladaptive thinking.

Reflecting on how this exchange may be used, albeit speculatively, to inform pragmatic theory, recall the relevance-theoretic *ad hoc* concept account of metaphor comprehension outlined in chapter 1. According to this account, comprehension of the metaphorical expressions in this exchange involves constructing multiple *ad hoc* concepts in a rapid, on-line fashion; for example, BALLOON\*, SO-FULL-OF-AIR\*, BURST\*, INFLATED\* etc. So, although the literal meanings of the expressions would be initially activated, they would be swiftly replaced by these occasion-specific pragmatically derived senses (Sperber & Wilson, 2008). According to Carston's imaginary world construction route, on the other hand, comprehension of the metaphorical expressions involves entertaining and sustaining the internally consistent literal meaning as a whole, metarepresenting that meaning and its accompanying imagery as descriptive of an imaginary world and subjecting it, as a whole, to reflective inferential processing (Carston, 2010). It appears, at least on the surface, that both client and therapist in this exchange are engaged in this alternative route of processing. Indeed, the therapist's questions almost demand that the client sustains the literal meaning of her metaphorical expressions. For example, the therapist asks, "what does it feel like to be the balloon?" and "how could you regulate that flow?" These questions may be seen as an invitation or request for the client to engage in the metaphorical world route of processing. Note also how, towards the end of the extract, the therapist says "so who is this guard anyway?" This question invites the client to 'bridge back' to her life (the cognitive reality she has been describing metaphorically) and to consider who the guard in the metaphorical world represents in 'real-life'. In light of Carston's theory, this question may be seen as an explicit prompt to begin the process of subjecting the metarepresented literal meaning to the kind of reflective inferential processing which will lead to 'real world' implications. At this stage, the client may derive

implications which can be integrated with her existing (non-metaphorical) beliefs about her depression and which may even lead to the elimination of some of them (e.g. 'I can't do anything to control my manic phases') if the new insights she has gained indicate that they are incorrect or unhelpful.

The approach of metaphor therapist Kopp can be interpreted as inviting clients to entertain, develop and engage with the metaphorical world for two reasons. Firstly, so that clients may bring their unconscious thoughts (reflected by their metaphorical expressions) to the surface and, secondly, so that they may attain therapeutic insight, which is derived from accessing deep-rooted assumptions. Related to this first point, Kopp states that 'the fact that a metaphor is false as a literal statement does not address or pertain to the way in which it is true as a correspondence of similar pattern or organisation' (Kopp, 1995: 99). Here Kopp echoes Gregory Bateson's view of metaphor as a phenomenon by which 'the whole fabric of mental interconnections hold(s) together' (Capra, 1988: 77). For Bateson, and for Kopp, metaphors are logically and literally false, yet at the same time, they may be apt representations of experience. That is, metaphors identify and point to an important structural resemblance between an imaginative conception and a concrete experience ('a correspondence of similar pattern', e.g. between the inflation/deflation of a balloon and the phases of bipolar illness).<sup>71</sup> Only by encouraging clients to extend their metaphors and to develop conceptually rich metaphorical scenarios can this structural resemblance, and its resulting insight, come to light. To immediately replace metaphorically used expressions with rapidly constructed *ad hoc* concepts would be inadequate as a representation of the client's conceptualisation of their experience.

As suggested in chapter 2, the process of constructing multiple local *ad hoc* concepts in the case of extended metaphors may also be overly demanding on our cognitive resources, given the high activation of the literal meaning of the whole metaphor, reinforced as it is by forwards and backwards priming between the literal meanings of specific words and phrases which depict a scenario with its own internal coherence. Yet, more to the point, in the context of psychotherapeutic exchanges, *ad hoc* concept construction is unlikely to reveal comparable effects to those elicited by the metaphorical world construction route. Specifically, it is unlikely to reveal the kinds of effects and insights that are so essential to therapeutic success and change. When one

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<sup>71</sup> This view of metaphor as non-linear correspondence mirrors that of Dedre Gentner who 'unifies metaphor with processes of analogy and similarity' (Gentner et al., 2001: 199). Gentner and colleagues argue that metaphor comprehension is a process of structural alignment, alignment of relations as opposed to attributes (see Gentner and Bowdler, 2008).

engages in the more reflective, imagistic processing that takes place on the metaphorical world construction route, the literal meanings, and all their associations, work together to form a coherent scenario. This interim rich literal representation enables the ultimate derivation of an interpretation of much greater depth and insight, one which, in accordance with the aims of therapy, may shed light on our maladaptive thoughts.

Thinking back to the therapeutic functions of metaphor cited in section 4.3, it is difficult to see how these effects could arise on the *ad hoc* concept construction route. The four primary uses of metaphorical language in psychotherapy were: (i) as a means to maintain safe distance from content and combat resistance, (ii) as a service to the therapeutic alliance, (iii) as a way to increase memorability and (iv) as a tool to generate new perspectives. Presumably, there is no safe distance from content if metaphors are continually interpreted via *ad hoc* concept construction. Likewise, the therapeutic alliance relies on the therapist outwardly engaging with and sustaining the literal content of the client's metaphor, in a way that is suggestive of their having comprehended it via metaphorical world construction. As Sims says, 'prematurely arriving at a solo interpretation of the metaphor's meaning' (as would be more likely if one had comprehended the metaphor via *ad hoc* concept construction) is the 'chief pitfall' to employing metaphor effectively (Sims, 2003: 535).<sup>72</sup> Given the greater role afforded to imagery on Carston's account, it is furthermore likely that interpreting metaphors via construction of metaphorical worlds will guarantee greater memorability of metaphors, which, as discussed above, is conducive to the resulting insight being retained and so implemented in the client's daily life. Lastly, though comprehending metaphors via local *ad hoc* concept construction may facilitate new perspectives, these perspectives will be fairly shallow in comparison to those derived from the kind of holistic engagement required by the metaphorical world processing route. Needless to say, it is not possible to definitively verify that clients and therapists do indeed comprehend metaphorical utterances via the construction of metaphorical worlds. However, it seems reasonable to suggest that doing so would greatly strengthen the therapeutic effects that support psychotherapists' use of metaphor.

As was suggested in section 3.5 of the previous chapter, the expectation of

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<sup>72</sup> Of course, it is possible that a therapist may comprehend metaphorical language via the *ad hoc* concept construction route, and that their continued elaboration of metaphorical meaning be a mere pretense at engaging in a process such as Carston's. In other words, a therapist's extension of metaphorical meaning may not reflect their pragmatic processing. What is important, however, is that the client assumes the therapist is engaging in this route of processing. It is the client's belief that the therapist is attending deeply to the literal meaning of his or her metaphors which guarantees the therapeutic effect of the strategy in terms of servicing the therapeutic alliance.

relevance in the context of psychotherapy (at least in the context of psychodynamic and humanistic therapies) may be calibrated at a much higher level than is typical of most conversational exchanges. It follows that both parties involved in this process will be willing to engage in deeper levels of processing, for example in constructing and developing (impossible) imaginary worlds corresponding to the literal meaning of metaphors instead of immediate on-line local formation of *ad hoc* concepts descriptive of the actual world. I suggested that this high expectation of relevance might not be present to the same extent in instances of cognitive behavioural therapy. Therefore, accordingly, it may be the case that interpreters engaged in CBT will choose to comprehend metaphorical utterances by constructing *ad hoc* concepts, as opposed to metaphorical worlds.

As emphasised in chapter 3, section 3.3.2, CBT is a largely solution-focused and goal-oriented approach; furthermore, it is a shorter process than psychodynamic and humanistic therapy. From my own experience, I found both CBT and psychodynamic therapy to be hugely effective. Nevertheless, I was able to distinguish a clear difference in terms of the effects of each method. While CBT afforded me valuable immediate coping skills that served to change my behaviour, it was in psychodynamic therapy where I attained a deeper understanding of the root of my maladaptive thoughts and behaviour, the how and the why of their existence. I believe that these distinct effects may be attributable to the pragmatic processing strategies that I was engaged in during the respective practices. When I spontaneously produced a figurative expression in psychodynamic therapy, my therapist would encourage me to reflect on that utterance and, if you like, to 'run with it', thereby entertaining and exploring its associated literal meanings. The metaphors that I recall from my experience of CBT, on the other hand, were all generated by the therapist, for example, he/she suggested that I was setting myself up to be a *doormat*. These therapist-generated metaphors were intended to provide a quick route to understanding my situation, and did not, it seemed, necessitate sustaining or developing the literal meaning of the metaphor vehicle. Instead, deriving an occasion-specific, albeit pretty conventional, sense of *doormat* was sufficient for generating the level of understanding required. In contrast to my own, ultimately extended metaphorical expressions from psychodynamic therapy, the therapist-offered metaphors in CBT served to provide a quick, snappy route to understanding and reframing my thoughts; they did not serve to foster deep insight.

Since therapist-generated metaphors may not reflect the underlying beliefs of a client, it is not necessary to reflect on their literal meaning in the same way that it is



necessary to reflect on the literal meaning of client-generated metaphors, which typically arise during the course of psychodynamic and humanistic therapies. That different approaches to metaphor exist in CBT and insight-orientated therapies, speaks to the different interpretive effects that one may derive from interpreting metaphorical language. This, in turn, suggests that there is more than one route by which to interpret and appreciate metaphors. One could speculate that the different effects of client-generated metaphors and therapist-generated metaphors reflect the different processing routes that the interpreter takes to comprehend the metaphors. Of course, this is not to suggest that therapist-generated metaphors are incapable of producing parallel effects to client-generated metaphors. To the contrary, an apt therapist-generated metaphor is perfectly capable of being highly evocative and accurate for the client; when this is the case I would conjecture that the client be moved to explore the metaphor, and its associated literal meanings, in depth (potentially indicative of their engagement in imaginary world construction).

#### 4.6 CONCLUSIONS

In this chapter, I have explored the rich therapeutic potential of metaphorical language, explicitly acknowledged and exploited by many psychotherapists. I have found support here for Carston's imaginary world processing route and shown that the *ad hoc* concept construction route is not the only method by which metaphors may be interpreted. The effects sought during certain psychotherapeutic practices, I argue, may be best derived from interpreting metaphorical language via a process of imaginary world construction. As Lenrow (1966: 145) says,

The wide range of connotations provided by metaphor [particularly metaphor whose literal meaning is sustained and scrutinised (my gloss, N-D)] stimulates the greater variety of associations in the client and thus helps make available the greatest variety of experiences from which the client may create new thoughts or interpretations of his behaviour.

In the next chapter, I report on an empirical investigation of the imaginary world processing route that I have carried out in order to further assess its explanatory validity.

## Chapter 5 · Empirical testing of the dual processing view

### 5.1 INTRODUCTION

In the preceding chapters I have argued that the relevance-theoretic *ad hoc* concept theory of metaphor comprehension may not be the only processing route available to hearers when interpreting figurative utterances. In describing approaches that advocate a greater, more sustained role of literal meaning in the comprehension procedure, I have sought to validate the existence of an alternative course by which we may process metaphorical language. I have argued that this may be a more appropriate path along which to travel in the case of certain metaphors (especially extended ones) and in certain contexts. As was demonstrated in chapter 2, the two processing routes are likely to yield different effects, which may be more or less desirable in different scenarios (recall the discussion of Karla's depression as a toad, chapter 2, section 2.2). For example, if one wishes to develop rich, detailed images (as in interpretive contexts with a high expectation of cognitive effects, such as reading poetry or psychotherapy), it may be worthwhile processing metaphorical language by metarepresenting its literal meaning and engaging in reflective inferential processes. If the desired effect or outcome of interpretation is a more limited and more quickly yielded meaning, on the other hand, then constructing an *ad hoc* concept is likely to suffice.

The imaginary world processing route, in which the literal meaning of metaphorical expressions plays a greater role in the interpretation process, is of particular relevance to this thesis given the focus on psychotherapeutic discourse. As has been discussed, in many therapeutic approaches clients are actively encouraged to work with their own metaphorical expressions. They may be invited to reflect upon and extend their metaphors, thereby entertaining far-reaching literal associations of those expressions. Such an approach would seem to require, or at least invite, the literal meanings of the metaphorical expressions to be sustained in the manner in which Carston (2010) suggests. The deep attention to one's utterances that often takes place in psychotherapy, psychodynamic practices in particular, is recommended in the hope that it will invoke insight and changes in perspective. The implicit assumption of this approach is that suppressing related but irrelevant meanings, while potentially beneficial in terms of processing effort, will not yield the same effects as sustaining those meanings.

Evidently, the theoretical arguments for the imaginary world processing route would be greatly boosted if they could be supported by empirical data. As of yet, no

studies have directly assessed this alternative mode of interpretation. In this chapter, I present two experiments in which I tried to test the predictions of the theory to see if I could find processing evidence to support it. Before that, though, I first survey some existing empirical findings on metaphorical language comprehension, the initial aim being to investigate the varied support for the *ad hoc* concept account. In my exploration of empirical research, I assess the *ad hoc* concept theory's entailed claims that (a) we can be as quick to process metaphorical language as we are to process literal language, and that (b) activation of literal meaning is rapidly suppressed after the recovery of a metaphorical interpretation; in each case I focus on the empirical findings related to these proposals. In the subsequent section, 5.3, I outline the alternative predictions made by the imaginary world account of processing and suggest a number of paradigms which could shed light on the hypotheses made. The final section of this chapter is dedicated to my own empirical studies which investigate the claim that extended metaphors may be processed via a different mechanism from that of simple, lexical/phrasal metaphors, which I take to be understood via *ad hoc* concept construction.

## 5.2 KEY FINDINGS FROM EXISTING EMPIRICAL RESEARCH

### 5.2.1 COMPREHENDING LITERAL AND METAPHORICAL LANGUAGE: DISTINCT OR PARALLEL PROCESSES?

As discussed in chapter 1, relevance theorists claim that metaphor is not a special category of language use, that it is continuous with other kinds of loose use of language and that, therefore, metaphorical language requires no special interpretive mechanisms. It is proposed that comprehension of metaphorical utterances proceeds in much the same way as that of literal language (see section 1.3.2 for further detail). The relevance-theoretic position leads to two interesting claims that have been widely tested using empirical means. Firstly, if metaphorical language interpretation makes use of the same pragmatic mechanisms as literal language interpretation, then it should not be necessary to access a literal interpretation of an utterance before deriving metaphorical meaning.<sup>73</sup> It follows that metaphorical interpretations should be available from the beginning of

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<sup>73</sup> Note the distinction between literal *meaning* and literal *interpretation*. In a sense, it is inevitable that interpretation proceeds via the literal *meaning* of a word (i.e. via the decoded concept). However, that literal meaning is not inevitably adopted as the interpretation. Whether the decoded concepts form part of the interpretation ultimately depends on the mutual parallel adjustment process (which considers literal meaning, context and cognitive effects in parallel).

processing. Secondly, the RT account entails that deriving the metaphorical meaning of an utterance need not be systematically either more complex or more costly than deriving literally intended meaning; in other words, metaphor comprehension need not always take longer than comprehension of literally used language. These claims stand in stark contrast to Grice's theory of pragmatics, mentioned in section 1.3.1 of chapter 1, which entails a sequential model of communication in which figurative interpretations are only derived following rejection of default literal interpretations. According to this literal-first view, literal interpretations have unconditional priority over alternative, figurative interpretations. It is, therefore, assumed by Gricean models that the literal interpretation of an utterance is automatically derived first and, inevitably, is quicker to process than figurative interpretations.

Let us first explore the empirical evidence brought to bear on the non-sequential aspect of the relevance-theoretic model (that is, research designed to test whether or not hearers are obliged to start with a default literal interpretation before deriving a metaphorical interpretation). Glucksberg, Gildea and Bookin (1982) tackled this issue by adapting Stroop's (1935) task, which demonstrates that linguistic meanings are automatically activated during reading and cannot be easily ignored or suppressed. Stroop presented participants with colour words that were printed, either in ink of the colour which was denoted by the word, or in ink of a colour which was not denoted by the word; for example, *red* or *red*. When the word is printed in a colour other than the one it refers to, e.g. *red*, the stimulus is said to be incongruent. Participants' task was to name the colour the words was printed in, i.e. to name the ink, e.g. to name *red* as green. Stroop found that subjects experienced difficulty with this task; they were both prone to errors and also slower to respond (compared to when naming congruent stimuli, e.g. *red*). Stroop's study is taken as evidence that reading linguistic items is automatic and difficult to inhibit – if subjects were able to ignore linguistic items when reading, they would experience no difficulty with naming *red* as green.

In their study, Glucksberg and colleagues investigated the automaticity of metaphorical interpretations, and considered whether figurative interpretations are, like the reading of linguistic items, automatic and difficult to inhibit. Their experiment employed a standard sentence verification task in which participants were presented with a number of sentences and asked to judge whether or not the sentence was literally true or literally false. Sentences belonged to one of five categories, detailed below:

- i. True, high-typical (*Some birds are robins*)

- ii. True, low-typical (*Some birds are penguins*)
- iii. Standard false (*Some birds are apples*)
- iv. Metaphor (*Some hearts are closets*)
- v. Scrambled metaphor (*Some flutes are jails*)

The metaphors were all literally false category membership statements, easily interpretable and clearly meaningful in the case of (iv) and difficult to interpret in the case of (v). It was predicated that if participants are capable of ignoring metaphorical meanings then it should not take them any longer to reject meaningful metaphors than scrambled metaphors, since the true non-literal meaning of the metaphor would not interfere with recognition of the falsity of the literal statement. Remember that participants' only task is to judge whether or not the sentences are literally true (both (iv) and (v) are patently not literally true, though in some sense (iv) is figuratively true). If, on the other hand, metaphorical interpretations are automatic and difficult to inhibit, a difference in reaction time between meaningful metaphors and scrambled metaphors will be manifest, since the true non-literal meaning in the case of meaningful metaphors (iv) will have been automatically registered by the interpreter and will interfere with the literal truth judgement.

Glucksberg and colleagues (1982) found that the availability of true metaphorical interpretations did indeed interfere with participants' judgements of literal truth and falsity. Subjects were significantly slower to judge meaningful metaphorical statements as literally false, as compared to scrambled metaphors. This result was taken to support the claim that metaphorical interpretations are automatic and not optional: 'people can no more easily refuse to understand statements such as *Sam is a pig* than statements such as *tomatoes are red*' (*ibid*: 94). For Glucksberg, the accessing and rejection of literal meaning cannot be a necessary condition as figurative interpretations are, in principle, always available.

McElree and Nordlie (1999) set out to provide further support for the non-sequential model of figurative language comprehension. In their first experiment, participants were required to judge the 'meaningfulness' of sentences, while their second experiment replicated that of Glucksberg and his colleagues, which asked participants to judge the literal truth of sentences. In a modification of Glucksberg's design, McElree and Nordlie set a response time limit for participants' judgements, which enabled them to measure (a) the probability of participants converging on a literal or figurative interpretation and (b) the time course for each interpretation. Each experiment involved

three conditions, figurative (*some mouths are sewers*), literal (*some tunnels are sewers*) and nonsense (*some lamps are sewers*).

In the first experiment, they found no difference between literal and figurative conditions, in terms of participants' judgements of meaningfulness; interestingly, it took participants no longer to judge metaphorical statements as meaningful, than it did to judge literal sentences as meaningful. The authors use these findings to argue in favour of a non-sequential model of metaphor interpretation, on the basis that if literal meanings took priority in interpretation, then literal falsehood (in the case of metaphorical sentences) would interfere with participants' meaningfulness judgements. As predicted, participants were significantly less likely to judge nonsense sentences as meaningful compared to metaphorical sentences. However, it was revealed that the temporal dynamics of figurative sentences and nonsense sentences were indistinguishable, i.e. the former took no longer to reject as literally true than the latter. The lack of distinction between figurative sentences and nonsense sentences in terms of the time course of literal truth verification might imply that figurative interpretations are not as automatic as Glucksberg and colleagues suggest. If figurative interpretations were automatic, one would expect participants to take longer in rejecting figurative utterances as literally true, compared to nonsense sentences. Still, McElree and Nordlie (1999: 492) stress that 'time-course profiles do not, of course, uniquely specify the type of mental processes that underlie the construction of a figurative or a literal interpretation'. They maintain that figurative processing is not contingent on an initial assessment of literal plausibility, taking as their primary evidence the finding that metaphorical sentences and literal sentences are equal in terms of meaningfulness judgements. Similar studies from Keysar (1989) and Ortony, Schallert, Reynolds and Antos (1978) have supported this same argument: namely, that metaphorical and literal interpretations are 'functionally equivalent' in terms of comprehension (Keysar, 1989: 385).

In summary, there is a wealth of data in support of the argument that metaphorical interpretations are not dependent on prior literal interpretations. Together these studies give weight to the claim that derivation of figurative meaning is neither optional nor necessarily more complex than derivation of literal meaning. These findings pose a problem for any 'literal first' sequential model of utterance comprehension, such as processing models based on Grice's (1989).<sup>74</sup> The findings, however, are in line with the relevance-theoretic account, which argues against the literal first view, proposing instead

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<sup>74</sup> It is important to note that Grice himself did not make any predictions concerning processing; he described his account as a matter of 'rational reconstruction', and not as a psychologically accurate description of actual cognitive processes.

that mutual adjustment of explicit content and contextual implications takes place in parallel and may result in either a literal or figurative interpretation, depending on which items of encyclopaedic information are most highly accessible in the context and so employed in the derivation (Carston, 2002; Sperber & Wilson, 2008).

It is important to acknowledge that the claim that metaphorical interpretations take no longer to process than comparable literal interpretations does come with certain provisos. Effects of familiarity, aptness and context, for example, have been found to affect the relationship between metaphorical and literal language processing. With respect to metaphor, 'aptness' is defined as 'the extent to which the [metaphor] vehicle's figurative meaning expresses an important [i.e. salient and relevant] feature of the topic' (Jones & Estes, 2006: 19; for additional research related to aptness see Chiappe and Kennedy, 1999 and Pierce and Chiappe, 2009). Blasko and Connine (1993) studied the effects of familiarity and aptness using a cross-modal priming paradigm, which makes use of multiple (in this case two) sensory modalities. Participants were presented with metaphorical sentences, which did not have rich supporting contexts, for example 'the belief that *hard work is a ladder* is common to this generation'. Subjects were first presented with this metaphor through headphones (auditory modality), and subsequently, were presented with a target word on the screen (visual modality); target words were either presented at the offset of the metaphor vehicle or 300ms later. The target word either bore no relation to the metaphor (thereby acting as a control target, e.g. 'pastry'), a literal relation to the metaphor (e.g. 'rungs') or a metaphorical relation to the metaphor (e.g. 'advance'). The participants' task was to judge as quickly and as accurately as possible whether or not the target word was a word of English (a lexical decision task, in which some of the word strings presented were not words of English, e.g. 'gloj').

Blasko and Connine found that subjects were faster to respond to metaphor-related targets than to controls, both when the target was presented immediately and at the 300ms delay. However, this effect depended on both the familiarity and aptness of the metaphors, such that the metaphor-related target (e.g. 'advance') was only facilitated in the case of highly familiar metaphors. Metaphorical targets were not facilitated by low familiarity metaphors, indicating that the figurative meaning of these metaphors was not immediately available. However, in the case of low familiarity metaphors that were highly apt (e.g. 'they were warned that *perjury is a boomerang* many times'), figurative meanings were immediately available (i.e. the metaphor-related target 'backfires' was facilitated, even though the metaphor was not familiar). These findings indicate that both familiarity

and aptness affect the availability of metaphorical interpretations, and that aptness (or relevance) seems to contribute to availability of meanings to a greater extent than familiarity.

Ortony, Schallert, Reynolds and Antos (1978) claim that it is necessary to place a condition on the assertion that figurative interpretations are automatic and do not require a prior rejection of literal meaning. The authors found a significant effect of context that mediates the speed with which metaphorically used language is interpreted. Metaphors that were preceded by a short context took participants significantly longer to read than literally used sentences. However, this difference disappeared when a longer context preceded the metaphor; in such cases, metaphors were once again readily comprehensible. These results indicate that while it is not necessary to derive a literal interpretation *before* deriving a metaphorical interpretation, the time course of the two meanings is not always the same; rich contextual preparation for a metaphorical meaning is often necessary, and without it, figurative interpretations may be delayed.

It is worth noting that all the studies discussed in this section have tested the comprehension of relatively short metaphors, which typically conform to the standard *X is a Y* structure. Their findings, therefore, cannot, inform us of the relative speed with which extended metaphors are processed, compared to extended literal passages. Nor do they indicate anything about whether or not such language is processed via the same mechanism. It is interesting to consider whether extended metaphors would incur greater processing effort than their literal counterparts, as Carston's (2010) account certainly seems to suggest: the literal meaning is metarepresented as a whole and engages more attentive (reflective) processing. The multitude of factors at play in such lengthy passages makes this a difficult issue to investigate empirically. The longer a passage is, for example, the harder it becomes to control for effects of word familiarity and complexity. Furthermore, it is not entirely clear whether a finding of longer reading times for extended metaphors would constitute a challenge to the standard relevance-theoretic approach or support for Carston's alternative route. Any interpretation that involves the derivation of more implicatures will (other things being equal) incur more processing cost. While there is no reason to suggest that extended metaphors will always give rise to more implicatures than extended literal passages, it seems likely that they often will, given the well-attested open-endedness of metaphorical interpretation. It is possible that extended metaphors may take longer to process simply because interpreters are deriving more implicatures. If this were indeed the case, finding longer reading times for extended



metaphors would neither challenge the *ad hoc* concept account, nor support Carston's imaginary world account.

Whilst the aforementioned studies do not speak to our comprehension of extended metaphors, they provide stable evidence that simple metaphors at least are processed by comparable means to literal sentences, as the *ad hoc* concept account proposes. I turn now to an additional feature of the *ad hoc* concept account that pertains to the activation of metaphor inconsistent features of the literal meaning. This claim draws us closer to the differences between the standard RT proposal and Carston's dual processing account, which make concrete and opposing predictions on this matter.

### 5.2.2 PROCESSING METAPHOR: HOW LONG DOES LITERAL MEANING REMAIN ACTIVE?

As discussed in chapter 1, the pragmatic process of lexical concept adjustment (broadening and narrowing) by which metaphor is understood, entails that properties of lexically encoded concepts are either demoted or promoted. In the case of metaphor, features of literal meaning that are inconsistent with the metaphorical interpretation are dropped during comprehension (hence broadening of the lexical concept) while other features that are consistent with and relevant to the metaphorical interpretation are promoted (hence narrowing of the lexical concept). These relevant features which become central components of the derived concept (i.e. the metaphorical meaning) are accessed from the encyclopaedic entry of the metaphor vehicle (see chapter 1, section 1.3.2 for further detail). Recall that promotion and demotion of features occurs as part of the process of constructing an *ad hoc* concept. When interpreting the metaphor 'my marriage is a prison' for example, properties of the lexically encoded vehicle concept 'prison', which are not relevant to the metaphor, become 'demoted' (Carston, 2002). In particular, the logical (or defining) property, i.e. 'means of incarceration of criminals', is dropped and some encyclopaedic properties, such as 'hard to escape', 'lack of freedom' and 'punishment', become elevated to the status of content-constitutive components. Rubio-Fernández (2007, 2008) suggests that the promotion/demotion of properties manifests itself in degrees of activation of the properties in question.

Whether or not demotion (or deactivation) is the result of passive decay or active suppression is not explicitly specified in the RT account. However, a number of studies have set out to test these two possibilities and, in doing so, have supported the claim that irrelevant properties of lexically encoded concepts are actively suppressed during language comprehension. In this present section, I first outline the difference between

passive decay and active suppression, and then survey two studies that relate to the distinction.

Suppression is characterised as an active process in which the degree of activation of a given representation is reduced; decay, in contrast, is a passive process by which activation simply drops off. Gernsbacher and Faust (1991) distinguish suppression from other inhibitory mechanisms such as decay, on the basis that suppression requires a trigger, unlike other mechanisms of activation loss. In language processing, incoming information that is consistent with information already represented in the system is mapped onto the structure under construction, whereas inconsistent, irrelevant or confusing information gets actively suppressed. Decay, on the other hand, is a passive process, which does not require a trigger. Any mental representations that do not receive activation, due to being irrelevant in the context, decay automatically.

In an effort to distinguish between decay and suppression during metaphorical language interpretation, McGlone and Manfredi (2001) conducted a lexical priming study in which participants were presented with prime sentences before being asked to interpret a metaphor. Prime sentences belonged to one of seven categories, detailed below, where the corresponding metaphor is 'my lawyer is a shark':

- (i) topic concept alone (*Some lawyers are \*\*\*\**)
- (ii) vehicle concept alone (*Some \*\*\*\* are sharks*)
- (iii) metaphor-relevant property to the topic concept (*Lawyers can be ruthless*)
- (iv) metaphor-relevant property to the vehicle concept (*Sharks can be ruthless*)
- (v) metaphor-irrelevant property ascribed to the topic concept (*Lawyers can be married*)
- (vi) metaphor-irrelevant property ascribed to the vehicle concept (*Sharks can be blue*)
- (vii) baseline prime (*Some \*\*\*\* are \*\*\*\**)

Participants were instructed to read the primes (which were presented as above, asterisks included) 'so that they might gain a head start in interpreting the subsequently presented metaphor' (*ibid*: 1212). The prime sentences remained on the screen for 2000ms, after which the metaphor was shown and participants were asked to press the spacebar when they felt they had understood the metaphor (my lawyer is a shark). To motivate full understanding of the metaphors and discourage premature pressing of the spacebar,

participants were told that they would be asked to recall information about the primes and metaphors, and to answer questions about the meaning of the metaphors.

The authors found that participants were quicker to respond to metaphors following the primes that belonged to categories (i) to (v). McGlone and Manfredi argued that the fact that the metaphor-irrelevant property 'blue' impeded comprehension of the metaphor (my lawyer is a shark) was indicative that the inconsistent literal interpretation of the metaphor vehicle (shark) had been suppressed during interpretation of the metaphorical sentence, i.e. 'blue' had been suppressed during interpretation because it was not relevant to a figurative interpretation of 'my lawyer is a shark'. According to McGlone and Manfredi, the prime 'lawyers can be married' does not impede participants' comprehension of the metaphor (my lawyer is a shark), since 'married' does not interfere with the identification of the metaphor topic's intended referent (literal lawyers). Their results support the RT claim that irrelevant properties of a metaphor vehicle become demoted during language processing. Furthermore, their findings suggest that demotion is not merely the result of decay, that is irrelevant properties do not simply "drop out" of the discourse representation' (*ibid*: 1216); rather, demotion is the result of suppression, as evidenced by the negative effect that the prime 'blue' had on the interpretation of the metaphor 'my lawyer is a shark'.

In a bid to further test the activation of meaning properties associated with a word and to measure the point at which suppression of metaphor-irrelevant properties takes place, Rubio-Fernández (2007) employed a cross-modal lexical priming method similar to Blasko and Connine (1993). Participants in this study listened to a series of passages through headphones, each of which ended with a metaphor. For example:

*John doesn't like physical contact. Even his girlfriend finds it difficult to come close to him. John is a cactus.*

After listening to this passage, participants saw a string of letters on the computer screen (e.g. 'plant') and were asked to judge whether or not the string in question corresponded to a word of English or not (a standard lexical decision task). This string was presented either at 0, 400 or 1000ms after the acoustic input.

Rubio-Fernández found that both 'distinctive' properties of the metaphor vehicle 'cactus', which related to the metaphorical interpretation (e.g. *spike*) and 'superordinates' (e.g. *plant*) which were not relevant to the metaphorical interpretation, remained active up to 400ms. This result is somewhat surprising from a relevance-theoretic perspective,

indicating that irrelevant literal meaning lingers beyond the point at which a relevant interpretation has been reached. Between 400ms and 1000ms, however, irrelevant meanings, such as *plant*, lost their activation. On the basis of previous findings, which indicate that superordinates remain active up to 1000ms in neutral contexts (Rubio-Fernández et al., 2003), it is argued that the deactivation of superordinates is due to suppression, and not to decay. The ‘loss of activation [of superordinate properties of the metaphor vehicle, such as *plant*] could not, therefore, have been the result of passive decay but has to be due to active suppression’ (Rubio-Fernández, 2007: 360).

McGlone and Manfredi’s and Rubio-Fernández’ research provides evidence in favour of the RT account, supporting the claim that irrelevant features of metaphor vehicles become demoted during the interpretation process. This claim is in line with the *ad hoc* concept construction theory, which asserts that logical and encyclopaedic properties that are irrelevant to the figurative interpretation are ultimately demoted, and do not feature in the *ad hoc* concept. However, Rubio-Fernández’ results suggest that irrelevant literal meanings may not be quite so quick to fall away as is implied by the *ad hoc* concept account. RT predicts that as soon as an *ad hoc* concept has been constructed, i.e. as soon as a figurative interpretation has been derived, properties that are inconsistent with or irrelevant to that interpretation, although central to the literal meaning (e.g. *plant* in the case of metaphorically used ‘cactus’), will lose activation. Rubio-Fernández demonstrates that this is not quite the case; figurative interpretations are often immediate, yet irrelevant (and even inconsistent) components of meaning remain active up to 400ms. The fact that literal, yet irrelevant, components of meaning remain active beyond the derivation of figurative interpretations could be taken as tentative support for Carston’s (2010) imaginary world construction proposal; intuitively, if the literal meaning of a metaphorically used expression stays active, even when irrelevant, then that meaning is available for additional processes (i.e. more reflective inferential processes) to act on and utilise. In the section that follows, I consider the empirical implications that fall out of Carston’s alternative processing route, thereby clarifying the aims of my own empirical investigation.

### 5.3 EMPIRICAL PREDICTIONS OF THE ‘IMAGINARY WORLD’ ACCOUNT

According to the dual processing view, when the accessibility of the literal meaning of a metaphor starts to heavily outweigh that of the metaphorical *ad hoc* concepts, the literal meaning ‘wins out’ for a period of time. In such cases, it is suggested that hearers

'entertain the internally consistent literal meaning as a whole' (Carston, 2011) and represent it as descriptive of an imaginary world. In order to derive the meaning intended by the speaker, this representation of literal meaning is metarepresented (hence kept apart from factual belief representations) and subjected as a whole to additional reflective inferential processing.

Carston's account implies that the literal meaning of metaphorical expressions comprehended via this route will remain active for longer than is standard on the *ad hoc* concept account. Therefore, if one were to construct a cross-modal priming study, like that of Rubio-Fernández's (2007) study, one would expect that metaphor-irrelevant properties such as 'plant' for the example discussed above ('John doesn't like physical contact. Even his girlfriend finds it difficult to come close to him. John is a cactus') would continue to be activated up to and perhaps beyond the 1000ms mark. In fact, it is hypothesised that the priming results for this target word in the case of an extended metaphor will converge with results from a wholly literal passage and be distinguished from the same word used to communicate an *ad hoc* concept, where, as mentioned previously, the literal meaning is suppressed before 1000ms. Such a finding would not only validate the dual processing view, but also inform the use of metaphor in psychotherapy – for such results could be used to recommend both the judicious use of metaphors and caution in doing so, as it demonstrates that they may have far-reaching, lingering consequences for clients' thinking.

#### 5.4 EMPIRICAL INVESTIGATION INTRODUCTION

The studies outlined herein are intended to explore Carston's (2010) dual processing route and to explore whether extended metaphors trigger a distinctive mode of processing, one that is distinguished from the interpretation of simple metaphors and literal language. I aimed to test the following two claims in parallel:

- (i) Simple metaphors (when properly contextualised) and literal language correspond, in terms of the effort required to process them;
- (ii) Extended metaphors are distinct from both literal language and simple metaphors, in terms of processing (because their literal content is metarepresented).

These hypotheses were tested using a simple self-paced reading time paradigm, which compares the comprehension of the same expression preceded by three distinct contexts (three distinct conditions and types of passages): an extended metaphorical context, an extended literal context in which the final sentence is a phrasal metaphor and an extended literal context which is entirely literal. In all cases, the target expression, which is a literal sentence, appears after the context passages. The following sample items, with the target expression in bold and the phrasal metaphor in italics, illustrate the three different conditions:

Condition A: Extended metaphorical context + target sentence

Shirley's cancer had broken into her life and stolen all her hopes for the future. Her sickness was a fierce dictator. She longed to emigrate and escape his clutches, but he had closed all the borders. As she plotted their reopening, determined to overthrow his controlling regime, he violently trampled on her soul, suffocating her beneath his heavyweight boots. *This illness was a merciless tyrant.* **Shirley considered her funeral arrangements.**

Condition B: Extended literal context, with phrasal metaphor at the end + target sentence

Shirley had been unexpectedly diagnosed with cancer six months ago and told that her chances of recovery were very low. She was determined not to die and was desperate to get well again by any methods. As she researched alternative treatments, the sickness continued, making her feel weak and disheartened, both her energy and hope diminished. *This illness was a merciless tyrant.* **Shirley considered her funeral arrangements.**

Condition C: Extended literal context + target sentence

Shirley had been unexpectedly diagnosed with cancer six months ago and told that her chances of recovery were very low. She was determined not to die and was desperate to get well again by any methods. As she researched alternative treatments, the sickness continued, making her feel weak and disheartened, both her energy and hope diminished. The illness appeared to be incurable. **Shirley considered her funeral arrangements.**

These materials were constructed so as to distinguish between the predictions of the relevance-theoretic *ad hoc* concept account of metaphorical language comprehension and Carston's (2010) proposal of extended metaphor interpretation. The reading times of the target sentences in these three different conditions were recorded, and used to clarify whether (i) simple metaphors involve the same pragmatic processes as literal language, and (ii) extended metaphors require distinct pragmatic processes from simple metaphors and literal language.

It was hypothesised that if extended metaphors do trigger a different style of processing from literal language and simple metaphors, as Carston (2010) suggests, then switching from the extended metaphorical passage to the literal target sentence in condition A will incur additional processing effort, as compared to the simple metaphor condition and the literal condition, which presumably do not involve a shift in processing routes at the target sentence stage, since the target sentence is literal and, therefore, makes use of the same pragmatic process as the passage that precedes it. It is assumed that additional cognitive effort will be manifested by an increase in reading time. Consequently, it is predicted that the reading times of target sentences that follow a metaphorically extended passage (i.e. condition A) will be greater than the reading times of target sentences that follow extended literal passages (both those which have a phrasal metaphor at the end, condition B, and those without, condition C). In other words, the presence of a phrasal metaphor in condition B is not expected to affect the reading time of the target sentence, given the strong supporting context for that metaphor; reading times of target literal sentences in conditions B and C are, therefore, expected to converge. This hypothesis is based on Relevance Theory and the empirical work outlined in section 5.2.1, which supported the RT claim that processing simple metaphorical language and literal language involves the same mechanisms (and therefore, the presence of a lexical/phrasal metaphor should not disrupt the interpretation process).

To summarise, only Carston's (2010) account of imaginary world interpretation predicts that the target literal sentence will take longer to comprehend in condition A (after the reader has interpreted an extended metaphorical passage), compared to conditions B and C. According to the standard relevance-theoretic account of metaphor comprehension (Sperber & Wilson, 2008), literal language, simple metaphors and extended metaphors involve the same processing mechanisms. Therefore, the relevance-theoretic account predicts no differences in the reading time of the target sentence across the three conditions, as the reader does not have to switch processing strategies in any condition (it should, in other words, be just as easy to read a literal sentence after an

extended metaphor, as it is to read a literal sentence after a phrasal metaphor or a literal passage).<sup>75</sup>

## 5.5 PRELIMINARY OFF-LINE RESEARCH

### 5.5.1 INTRODUCTION

Preliminary research was carried out in order to validate the materials constructed for this experiment, in which, as outlined above, I compared reading times of target sentences which are either preceded by extended metaphorical passages, extended literal passages which have a phrasal metaphor at the end or extended literal passages with no metaphors. Due to the sensitive nature of reading time tasks, it was essential that the materials were completely novel and designed specifically for the experiments discussed in this chapter. In addition, it was necessary that the experimental items adhered to a specific set of criteria in order to guarantee accurate, direct comparison between the processing of metaphorical and literal passages (see details below). Preliminary offline research was intended to establish the following:

- (i) All experimental items, context passages and target literal sentences, are readily comprehensible by readers;
- (ii) Target literal sentences cohere or fit (i.e. bear sufficient relation) to their preceding contexts in all three conditions.

### 5.5.2 METHOD

#### *Participants*

60 native English speakers between the ages of 18 and 45 completed the pre-test questionnaire. Participants were recruited via the psychology subject pool database Prolific Academic and received £4 compensation for their time.

#### *Materials*

21 extended metaphorical passages were constructed, together with 21 corresponding literal passages with a phrasal metaphor appearing as the final sentence of the context and

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<sup>75</sup> In accordance with standard regulatory practice, ethical approval was sought (and granted, reference LING-2013-06-23) for the experiments outlined herein.



21 passages that were entirely literal (i.e. no metaphorical uses of language); the target literal sentence was the same across these three conditions. The literal contexts in condition B and C, as can be noted from the sample items in section 5.4 above, are entirely the same, apart from the presence of a phrasal metaphor in the case of condition B. In order to match word length across conditions a single sentence was added to the extended literal passages (condition C), one that replaced the phrasal metaphor that appears as the final sentence in conditions A and B. Target sentences were constructed using only literal language; any loose uses that were included were highly conventionalised. Special attention was paid to target sentences to ensure that the link between them and their preceding passages was similar in all three conditions. In other words, the target sentence was constructed so as to flow as naturally as possible from the preceding context passages in all three conditions and not to be expected to any greater or lesser degree in any one condition.

The extended context passages ranged between a minimum of 60 words and a maximum of 78 words. The average number of words in condition A (extended metaphorical context) was 69.33, range 61-78 (SD 4.43), while the average number of words in condition B (extended literal with one phrasal metaphor) was 68.52, range 60-78 (SD 5.02), and for condition C (extended literal passage) the average number of words was 68.24, range 60-76 (SD 4.34). All target literal sentences were between 4 and 8 words long, with an average length of 5.71 words, and a standard deviation of 0.96. The most important consideration was that variances between conditions *within each item* were low. While as mentioned above the standard deviation of word length for each condition was 4.43, 5.02 and 4.34, for condition A, B and C respectively, the average standard deviation between conditions for *any one item* was significantly lower at 1.40. The phrasal metaphors that appeared in conditions A and B were on average 6.81 words in length, ranging between 5-12 (SD 1.97).

The contexts, which preceded the target sentences, were all written with the following considerations in mind:

- (i) In the case of the extended metaphorical passages (condition A), an initial sentence employing literal language was sometimes necessary to introduce the figurative passage and facilitate comprehension (this is based on Ortony, Schallert, Reynolds and Antos' (1978) work discussed in section 5.2.1 of this chapter, which demonstrates that metaphor interpretation requires contextual preparation). Consider for example:

Condition A: Extended metaphorical context + target sentence

*Chris found everyday life hard to cope with and felt an overwhelming sense of emotional frailty.* His psyche was an intricately complex crystal, a rare and fine mineral that needed to be handled with sensitivity and caution. Chris was all too aware of the shattering effect other people's careless handling might have. And so, he decided to lock himself away for fear of breaking entirely. *His soul was a brittle shard.* **Chris' social life was non-existent.**

Notice that the first sentence (shown in italics) is literal and eases the reader into the subsequent metaphorical descriptions. When such an introductory sentence was necessary, all efforts were made to ensure that the passage overall maintained a distinctly metaphorical feel, which was made possible by the length of the passages.

- (ii) Figurative expressions in the extended metaphorical passages were always in categorical form; therefore, no simile markers (such as 'like' or 'as') were used in the construction of these passages.
- (iii) The phrasal metaphor in the extended literal condition B was the same as the final metaphor used in the extended metaphorical condition. Like the target sentences, care was taken to ensure that this phrasal metaphor exhibited a similar degree of relation to the sentences that preceded it, in both the metaphorical condition and the literal condition.

The offline questionnaire, to be outlined below, was intended to pre-test the experimental materials and to ensure that the contexts and materials constructed did indeed adhere to the guidelines above.

*Procedure*

The aims of the pre-test questionnaire were twofold: in the first instance, it was intended to establish whether the items made sense and secondly, whether the experimental items constructed (the literal target sentences) had a clear relation to the preceding context in each condition. The questionnaire, therefore, consisted of two different tasks:

- (i) Rating the comprehensibility of the contextual passages and their literal target sentences;
- (ii) Rating how well the target sentences fitted their preceding contexts.

In the first task, contextual passages were not distinguished from target sentences, unlike in the second task where the literal target sentences were underlined and, therefore, marked out for attention.

Each participant was presented with 21 target sentences, 7 of which appeared after extended metaphorical contexts, 7 after extended literal contexts, which had a phrasal metaphor at the end, and 7 after wholly literal contexts. Which target sentences appeared in which condition was counterbalanced across participants. Participants were asked to rate, firstly, how much sense the passages made on a scale of 1 – 7 (1 = *makes no sense whatsoever* and 7 = *makes perfect sense*). The notion of ‘sense’ was elaborated as follows:

In judging how much sense passages make, please consider how well you feel you have understood what the author is attempting to communicate. Understanding the content of the passage well indicates that it makes sense to you.

Secondly, participants were asked to rate how well the target sentence fitted to the preceding context on a scale of 1 – 7 (1 = *does not fit at all* and 7 = *fits perfectly*), recall that the target sentences in this second task were underlined. This task was spelled out as below:

If the underlined sentence seems to bear little relation to the preceding context, one would say that it does not fit that context well. On the other hand, if there is a comprehensible link between the passage and the underlined sentence, one would say that the underlined sentence fits the preceding context well.

Note that the passages were the same in the two tasks; therefore, each participant saw the same 21 items twice. The questionnaire was built using the online survey software Survey Monkey, and was administered through a psychology subject pool database, Prolific Academic. For each task the materials were presented in a fixed random order.

### 5.5.3 RESULTS

For the overall comprehensibility ratings (whether the items ‘made sense’), mean item ratings for the extended metaphor passages (condition A) ranged from 4.3-6.4, with a global mean of 5.4 (SD 0.55). The mean item ratings for the extended literal passages with phrasal metaphor (condition B) ranged from 5.1-6.5, with a global mean of 6.0 (SD 0.32), for the extended literal passages (condition C) comprehensibility ratings ranged from 5.3-6.6, with a global mean of 6.2 (SD 0.32). Therefore, participants considered that the literal passages made the most sense, followed by the passages with a phrasal metaphor, followed by the extended metaphor passages.

When judging how well the target sentences fitted their preceding passages ratings were slightly lower. The average rating of target sentences following an extended metaphorical passage ranged from 3.2-6.0, with a global mean of 4.9 (SD 0.91), for literal passages with a phrasal metaphor ratings ranged from 4.1-6.3, with a global mean of 5.3 (SD 0.63) and for literal passages ‘fit’ ratings were between 3.7-6.5, with a global mean of 5.2 (SD 0.87). Therefore, participants considered that the target sentences fitted better after the literal passages and literal passages with a phrasal metaphor, compared to the extended metaphor condition.

#### 5.5.4 DISCUSSION

It was concluded from the pre-testing of materials that all contextual passages were sufficiently comprehensible. Following standard practice in experimental pragmatics (see Deamer, 2013), if an item had been found to have a mean score of below 3 on the ‘make sense’ scale it would not have been included in the experimental materials. However, items across all conditions had a mean rating of above 3, and as a result, none of the passages were rejected on that basis.

In addition, it was concluded from the ‘fit’ results of the off-line questionnaire that the target sentences bore sufficient relation to their preceding passages in all three conditions. Again, if a target sentence had had a mean score of below 3 on the ‘fit’ scale it would not have been included in the experimental materials. Items across all conditions were consistently rated above 3, and were therefore not included in the on-line experiment, to be outlined below.

### 5.6 ON-LINE EXPERIMENT 1: SELF-PACED READING TIME STUDY

#### 5.6.1 INTRODUCTION

As outlined in section 5.4, this experiment contrasts the processing of extended metaphors, simple metaphors and literal language using a self-paced reading paradigm. It was hypothesised that the reading times of the target literal sentences would be comparable when these sentences appeared after context passages that employed either wholly literal language or literal language with one phrasal metaphor. This hypothesis is based on the relevance-theoretic account of metaphor comprehension, which suggests that simple (i.e. lexical or phrasal) metaphorical language and literal language are comprehended via the same mechanisms, and that neither type of language requires more processing effort than the other.

It is, furthermore, predicted that the reading times for target literal sentences that follow extended metaphorical passages will be slower (i.e. the reading times will be greater) than reading times of target literal sentences that are preceded by contexts which make use of literal language with one phrasal metaphor (condition B) and entirely literal language (condition C). This prediction is rooted in Carston's (2010) proposal that extended metaphors inspire a different route of interpretation, distinguished from that applied to literal language and simple metaphorical language.

## 5.6.2 METHOD

### *Participants*

60 native English speaking adults aged between 18 and 45 took part in this study. Participants were recruited via the University College London psychology subject pool and received £4 compensation for their time.

### *Materials*

As discussed above, all stimulus materials were specifically devised for the purposes of this experiment and were thus completely novel.<sup>76</sup> 21 extended metaphorical passages were constructed, together with 21 corresponding literal passages with a phrasal metaphor appearing as the final sentence of the context (the same phrasal metaphor that appeared in the extended metaphor condition) and 21 passages that were entirely literal (i.e. no metaphorical uses of language); the target literal sentence was the same across these three conditions. The extended context passages ranged between a minimum of 60

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<sup>76</sup> The process of creating these materials took several weeks of intensive work and consultation with my supervisors and others. See appendix I for the full list of experimental items.

words and a maximum of 78 words. The average number of words in condition A (extended metaphorical context) was 69.33, range 61-78 (SD 4.43), while the average number of words in condition B (extended literal with one phrasal metaphor) was 68.52, range 60-78 (SD 5.02), and for condition C (extended literal passage) the average number of words was 68.24, range 60-76 (SD 4.34). All target literal sentences were between 4 and 8 words long, with an average length of 5.71 words, and a standard deviation of 0.96. The average standard deviation between conditions for *any one item* was 1.40. The phrasal metaphors that appeared in conditions A and B were on average 6.81 words in length, ranging between 5-12 (SD 1.97).

See below for a complete set of contexts for the target sentence: 'Dan was forever complaining'. The target sentence appears at the end of each condition and is presented here in bold; the phrasal metaphor appears here in italics. Note that, in the experiment, the target sentences and phrasal metaphors were not marked in any way.

#### Condition A: Extended metaphorical context + target sentence

Dan tried everything he could to be optimistic, reciting positive mantras and forcing a smile. Yet, his bleak outlook remained, pessimism continued to invade his mind and body. No emotional antibiotics were strong enough to control the violence and strength of this poison that tormented him day and night. Hoping to prevent its toxicity from spreading to those around him, Dan shut himself away from the world. *His negativity was a rampant infection.* **Dan was forever complaining.**

#### Condition B: Extended literal context, with phrasal metaphor at the end + target sentence

Dan was always in a bad mood and appeared to be incapable of seeing the good in anything or anyone. Though he tried to be more positive, his bleak outlook on life remained. No amount of forced smiling helped. He knew that other people could sense his pessimism and worried about making them feel bad through his behaviour. This fear led Dan to isolate himself. *His negativity was a rampant infection.* **Dan was forever complaining.**

#### Condition C: Extended literal context + target sentence

Dan was always in a bad mood and appeared to be incapable of seeing the good in anything or anyone. Though he tried to be more positive, his bleak outlook on life

remained. No amount of forced smiling helped. He knew that other people could sense his pessimism and worried about making them feel bad through his behaviour. This fear led Dan to isolate himself. He hated his negative attitude. **Dan was forever complaining.**

### *Counterbalancing*

3 lists of materials were created, each list containing 21 passages and their 21 corresponding target sentences. Each list contained 7 items from each experimental condition (7 passages from the extended metaphor condition, 7 from the extended literal passage with a phrasal metaphor condition and 7 passages from the extended literal condition); no target sentence was seen twice by a single participant, i.e. target sentences were counterbalanced across the three lists. For example, if a target sentence (e.g. *Alan was 90 years old*) was preceded by an extended metaphorical passage (*As he grew older Alan knew it was only a matter of time until death came barging into his home, uninvited, of course. Every day he listened closely for the loud sound of knuckles rapping callously against the door. He wished someone could bail him out, but death accepted no bribes. The grave, God's bankruptcy court, would clear him of his debts. Dying is the final tax paid to the world*) in the first list, then it was placed in an extended literal with phrasal metaphor context in the second list (*With every year that passed, Alan became increasingly aware that his time on earth was limited. Despite being healthy and in good condition for his age, he was still expecting to die soon. His fear of death stopped him from leaving the house and enjoying his life. Desperately he wished for immortality, though he knew no such thing would be possible. Dying is the final tax paid to the world*) and an extended literal context in the third list (*With every year that passed, Alan became increasingly aware that his time on earth was limited. Despite being healthy and in good condition for his age, he was still expecting to die soon. His fear of death stopped him from leaving the house and enjoying his life. Desperately he wished for immortality, though he knew no such thing would be possible. Dying is an inevitable part of life*), and so on. The order in which the experimental items appeared was randomised and participants were randomly allocated to one of the 3 lists.

### *Procedure*

The experiment measured the time it took participants to read the target sentence that followed the different types of passages (extended metaphorical, literal with phrasal metaphor and wholly literal). A now standard method of measuring reading times was

used in which the reading times of sentences are recorded from the onset of the sentence on the screen until the participant hits a designated key on the keyboard.

The experiment began with subjects reading a set of instructions in which they were told what buttons to press and what they would see on the screen. They were told that the experiment was a simple, computer-based study interested in how people process language. No information about the exact relationship between the context and the critical target sentence was provided. Subjects were instructed to read the passages at a normal rate, making sure that they understood each passage.

After reading through the instruction page participants were told to press the spacebar to begin a series of practice trials. Passages were then presented on the computer screen in an adaption of a moving window display (Just, Carpenter & Wooley, 1982). At the start of each trial, the display showed lines of dashes that represented all non-space characters of the passages. All sentences were read word-by-word, with participants hitting the spacebar to reveal one word at a time. After the first press of the spacebar the first word in the passage appeared at the left margin on the top line, replacing the dashes that corresponded to that word. In order to advance the moving-window display and reveal the next word in the passage, participants pressed the spacebar again; words were revealed one at a time. When the second word was revealed (by participants hitting the spacebar), the first word was replaced again by dashes. After 6 familiarisation trials, the participants were asked to press the spacebar when they were ready to start the main experiment; at this point they were also invited to ask the experimenter any questions if they did not understand the procedure. The press of the spacebar initiated the first screen of the first trial and the same procedure was followed for all 21 experimental items. Context sentences were displayed on the same screen as target sentences and therefore, not clearly distinguished by the experimental design.

### *Apparatus*

The experiment was carried out using a small laptop computer, which was positioned on a table. Participants sat on a chair, in the same room as the experimenter, and operated the computer. The sentences were presented in lower case, font size 24. The experiment was programmed using self-paced reading time software Linger.

### *Data analysis*



The dependent variable in this experiment was sentence reading time. The independent variable was type of preceding context. The sentence reading time was calculated by the length of time from the onset of the target sentence text to the response on the keyboard.

### 5.6.3 RESULTS

Results were analysed from 59 participants, with one set of results discarded on the basis of the reading times being unfeasibly long. The raw data comprised 413 reading times per condition (7 each from 59 participants). Analysis was conducted on the last word in the target sentence. The mean reading time for this word in condition A (the extended metaphor condition) was 639ms (SD 111ms), in condition B (the extended literal condition with phrasal metaphor condition) the mean reading time was 607ms (SD 89ms), and in condition C (the literal condition) it was 604ms (SD 121ms). Analysis of variance in reading times within subjects was analysed using a one-way ANOVA (with participants as the random variable ( $F_1$ ) and items as the random variable ( $F_2$ )), and condition as the within subjects factor. There was no main effect of condition ( $F_1(2, 174) = 0.192, p = 0.825, F_2(2, 60) = 0.677, p = 0.512$ ), indicating that there was no significant difference between reading times in the three conditions.

Further analysis was conducted removing outlier data points that were more than 2.5 standard deviations from the mean for each participant. This resulted in a total of 12 data points being discarded from condition A, 9 from condition B and 11 from condition C). For the resulting 1,207 data points, the mean reading time for the final word in the target sentences was 608ms (SD 87ms) in condition A, 595ms (SD 76ms) in condition B, and 576ms (SD 98ms) in condition C. Analysis of variance in reading times within subjects was analysed using a one-way ANOVA (with participants as the random variable ( $F_1$ ) and items as the random variable ( $F_2$ )), and condition as the within subjects factor. There was no main effect of condition ( $F_1(2, 174) = 0.162, p = 0.851, F_2(2, 60) = 0.701, p = 0.5$ ), indicating that there was no significant difference between reading times in the three conditions.

### 5.6.4 DISCUSSION

The first comparison, between reading times of the target expression (e.g. 'Dan was forever complaining') which followed the extended literal passage with phrasal metaphor (condition B), on the one hand, and the wholly literal passage (condition C), on the other

hand, supported the view that there is no processing distinction between literal language and metaphorical language, as predicted by the relevance-theoretic *ad hoc* concept account. That reading times of the literal target sentences between these two conditions were comparable is suggestive that, as RT claims, lexical and phrasal metaphors are interpreted with the same ease as literal language. Furthermore, the lack of distinction in terms of reading times in conditions B and C implies that interpreting these two types of language (metaphorical and literal) does not require dramatic shifts in processing routes (i.e. shifting between metaphorical language interpretation and literal language interpretation does not incur additional processing effort).

The second comparison revealed that, contrary to what seems to be predicted by Carston's imaginary world account, literal expressions that follow extended metaphorical uses of language do not take longer to comprehend than literal expressions that follow literal uses of language and simple metaphorical uses of language. The lack of significant difference between condition A on the one hand, and B and C on the other, suggests that interpreting extended metaphors may not involve processes radically different from those enacted in literal language and simple metaphorical language comprehension. Participants demonstrated no difficulties with switching from extended metaphor processing to literal language processing (as is evidenced by the lack of increased reading time of the literal expressions that followed extended metaphorical passages). This lack of a significant difference implies that subjects were able to switch from processing extended metaphorical language to processing literal language with ease. This latter result is in line with the relevance-theoretic account of communication, which assumes that interpretation of extended metaphors proceeds in much the same way as interpretation of literal language and simple metaphorical language.

Although the results are *prima facie* disappointing for the metaphorical world account, it may be that there were problems with the experimental design. Firstly, there is the question of whether or not the paradigm did, in reality, as was intended, measure participants' comprehension of the passages. Though participants were instructed, and reminded, to make sure that they understood the passages that they were reading, this instruction was not incentivised by the experimental design. For example, there were no follow up questions at the end of the experiment, nor were there any questions *during* the experiment, which tested participants' comprehension. On this basis, it is difficult to apply the results of this experiment to any model of language comprehension – it is possible that participants were pressing the spacebar somewhat robotically, and therefore, that their reading times are not representative of comprehension. Seen in this light, the

results can neither be used to support the relevance-theoretic account, nor to undermine Carston's (2010) account of imaginary world interpretation. That is, the results and lack of significant differences between conditions need not be taken as an indication that extended metaphors are comprehended via the same mechanism as literal language and simple metaphors. In order to make such a claim it is necessary to conduct a follow-up study, which explicitly measures *comprehension* of passages and not just reading of passages. Such an experiment could use the same materials and roughly the same design as employed in the present study, adding a simple measure of comprehension to a third of the trials. For instance, after the extended metaphorical passage and literal target sentence below, participants could be asked to respond true or false to the statement: Hannah was underweight (the correct answer here is 'false').

Hannah had become addicted to chocolate and was habitually over-eating. Her extra weight was an ugly blanket which shrouded her in heavy shame. When she first tried it on its warm thick fabric had seemed so comforting, but after a while its synthetic fibres began to irritate her. It was harder to tolerate, more and more uncomfortable, yet she wasn't sure she could survive the cold without it. *Obesity is an ungainly overcoat.* **Hannah tried to get more exercise.**

Supplementing the current experimental design with this measure of comprehension would make the results more informative for pragmatic theories, as was intended.

A further criticism of the experimental design employed in the present study pertains to the presentation of items, which was word-by-word. It is possible that the very practice of pressing the spacebar to reveal each word, one at a time, may have encouraged participants to keep their reading time consistent and to get into a steady rhythm, which would minimise any variations in reading times (variations that the experiment was intended to reveal). It is made more likely that this occurred by the length of the materials in this experiment. All 21 experimental items were considerably extended (between 60 and 78 words); each passage, consequently, required many spacebar presses, which is fairly demanding on the reader. The demands of the task may, therefore, have led participants to engage in a less natural style of reading, a kind of 'keep going' mentality, pressing the spacebar at a steady rate in order to minimise processing effort. If this did indeed occur, as the lack of significant differences between reading times suggests it did, then yet again, the reading times cited above cannot be taken as an indication of natural reading. Instead, the results reported reflect artificial reading that cannot be applied to

theories of pragmatic processing. Not only may the word-by-word presentation of items have encouraged participants to read in a steady, measured fashion, but also, the instruction to read at a 'natural' rate may have likewise been interpreted as instruction to read in a steady, measured manner – not to pause for longer periods of time, even when that felt appropriate for some items. By presenting passages sentence-by-sentence, as opposed to word-by-word and modifying the instructions slightly, it might be possible to remove this possible confound and, in theory at least, to achieve reading time measures that more accurately reflect natural reading and comprehension.

As discussed, the results of the experiment do not demonstrate that comprehension of extended metaphorical passages necessarily involves a different processing route to comprehension of literal language and simple metaphors, since no significant differences in reading times were found between conditions. However, it remains possible that extended metaphors are indeed comprehended in a manner distinct from simple metaphors and literal language, not least because the experiment did not explicitly measure comprehension. It may be that reading times are simply an inappropriate measure to reveal the distinctive quality of extended metaphorical language interpretation.

Recall that the experiment hypothesised a significant result between the reading time of the literal target in condition A, on the one hand, and conditions B and C on the other hand. It was suggested that the reading time of the literal target sentence in condition A would be significantly longer than the reading time of the literal target sentence in conditions B and C. This was predicted on the basis of switches in processing routes incurring additional processing effort, which would manifest in longer reading times. However, it may be that interpreters are simply adept at switching out of the imaginary world processing route and back into the literal processing route. Therefore, the change of interpretation route that may be required when switching from extended metaphorical language interpretation to literal language interpretation may simply be imperceptible to reading time data. Likewise, it is possible that reflective, inferential processing begins in parallel or overlaps with the constructing of an imaginary world (based on the literal meaning). By the time interpreters reach the end of the extended metaphorical passages they may, therefore, have already begun deriving real world, factual implications, which mesh closely with the meaning of the target literal sentence. If this were the case, one would not expect that shifting from imaginary world processing to literal processing would take any extra effort. Nevertheless, one would still hope to find a difference between literal language and extended metaphorical language in terms of the

lingering of widely spread-out literal associates. In other words, one would expect that an experiment designed to measure the *effects* (rather than the costs) of each processing route (the imaginary world processing route and the *ad hoc* concept construction route) might be better suited to reveal any differences that may exist, and thereby to support Carston's imaginary world proposal. As mentioned earlier, a cross-modal lexical priming study, which measures the activation of literal associates at various temporal intervals, would be suitable for this endeavour.

It is worth noting that when the aims of the study were explained to participants, many subjects estimated that they had behaved as the experiment predicted (i.e. that it had taken them significantly longer to read the target sentences after reading an extended metaphorical passage). One participant, however, remarked that he probably read the target sentences the same in all of the conditions, but that he took longer breaks after the extended metaphorical passage condition, contemplating a little further during these breaks. 'Linger', in which the reading time experiment is programmed, does not measure the time that each participant takes to move onto the next item, i.e. it does not measure the breaks that participants take between items. It would be interesting to observe the points at which participants decided to take breaks and to test whether they were more or less likely to do so after extended metaphorical items or items that employed literal language.

If one was to find that participants were (i) more likely to take a break after extended metaphorical passages and/or (ii) to take *longer* breaks after extended metaphorical passages, it could be argued that, as Carston (2010) suggests, extended metaphors provoke more reflective processing (since breaks might indicate moments of reflection). Unfortunately, implementing this measure is somewhat problematic from an empirical point of view. After each passage, participants could be presented with an intermediary screen (before the presentation of the next passage). This intermediary screen could ask participants to press the spacebar when they felt ready to start the next passage. This would provide a measurement of the time taken to respond to this question, from which one could determine whether participants were more likely to delay pressing the spacebar, i.e. delay proceeding to the next passage, after reading extended metaphors (as opposed to passages which employ literal language or just one phrasal metaphor). However, posing this question might not test the presence of reflective processing as intended, since being presented with the question may inhibit any reflective processing that might have naturally taken place. Imagine that after an evocative, extended metaphor you are asked 'press the spacebar when you feel ready to read the next passage'. This

instruction immediately takes you away from the extended metaphor that you have just interpreted, and thereby immediately interrupts any process of reflective interpretation.

In the next section, I present an additional study designed to remedy some of the shortcomings that are manifest in the present experiment and that have been discussed in this section. This follow-up study was intended to provide a more realistic measure of comprehension time (as opposed to a measure of reading time) and also to reveal the divergent effects hypothesised to be involved in the interpretation of extended metaphors and simple metaphors.

## 5.7 ON-LINE EXPERIMENT 2: SELF-PACED READING TIME STUDY AND FREE RECALL

### 5.7.1 INTRODUCTION

Parallel to the experiment described in the preceding section, this experiment contrasts the processing of extended metaphors, simple metaphors and literal language using a self-paced reading paradigm. The predictions of this experiment mirror those of experiment 1 (see section 5.6.1). To briefly summarise: (a) it is hypothesised that the reading times of target literal sentences in conditions B and C will converge; (b) it is predicted that the reading times for target literal sentences in condition A will be greater than those of condition B and C.

The experiment to be discussed in this section is distinguished from experiment 1 by virtue of five discrete design features:

1. Items are presented sentence-by-sentence, as opposed to word-by-word.
2. 'True' or 'false' comprehension questions follow experimental items.
3. 7 items (i.e. passages) are added; these items act as fillers.
4. The literal target sentence appears as the penultimate sentence, as opposed to the final sentence.
5. A memory questionnaire follows the main reading-time experiment.

The modification to sentence-by-sentence design is intended to lighten the cognitive load placed on participants and to minimise the chances of participants engaging in robotic, steady reading, as opposed to natural comprehension. Likewise, the 'true' or 'false' statements that followed just over a third of contextual passages is further intended to

ensure that participants engage their comprehension processes fully, and that reading time measures are reflective of interpretation. The 7 additional filler items, which appear in extended metaphorical form (much like condition A) are intended to balance the weightings of metaphorical and literal language items, such that participants read 14 items that are largely literal and 14 items that are metaphorical. Since the literal target sentence appears as the penultimate sentence an additional, literal, sentence is added to the materials in this experiment. If there is a shift from the imaginary world route to the literal language route it is possible that it is not felt for some time, i.e. it is delayed. If this were indeed the case, analysis of an additional literal sentence would stand a better chance of revealing the processing shift effect.

The offline memory questionnaire that followed the on-line reading time experiment served two functions: firstly, it was intended to strengthen the claim that participants' reading time data are truly indicative of comprehension (and not shallow reading); secondly, it was intended to inform the imaginary world construction route and to reveal whether passages that make use of metaphorical language are more memorable than those that make use of more literal language. Since the imaginary world construction route is a more effortful process, it is predicted that when asked to recall stories from the reading time experiment, participants will be more likely to recall passages that appeared in extended metaphorical form (i.e. they will be more likely to recall passages from condition A, than conditions B and C). As well as asking participants to recall two passages from the on-line reading time experiment, the memory questionnaire, which will be outlined in the method section that follows, also probed for participants' personal judgements concerning the stories that they remembered. For each story recalled, participants were asked: *why do you remember this story?* This was an exploratory question, for which I had no formal predictions concerning participants' answers. The addition of the off-line memory questionnaire in this experiment adds a further hypothesis, namely:

- (i) Passages that employ extended metaphorical language are more memorable than those that make use of literal language or an occasional lexical/phrasal metaphor.

This hypothesis is rooted in Carston's (2010) imaginary (literal) world construction route, which implies that extended metaphors require deeper global levels of interpretation and

engage more imagistic representation, from which it should follow that they are more memorable, compared to passages that engage more local and immediate processing.

### 5.7.2 METHOD

#### *Participants*

Thirty native English speaking adults aged between 18 and 45 took part in this study. Participants were recruited via the University College London psychology subject pool and received £5 compensation for their time.

#### *Materials*

The materials used in this experiment were largely the same as those used in experiment 1, with the exception of a few modifications, which resulted from the revised experimental design.

As mentioned in the introduction to this experiment, 7 metaphorical fillers were added to the existing 21 items. The length of these 7 metaphorical fillers ranged between 63 and 77 words, with an average length being 67.86 words (SD 4.74).

A few minor changes to the contextual passages in condition C were made, to ensure that the previous-to-critical sentences were of comparable length in all three conditions (A, extended metaphor condition; B, extended literal with phrasal metaphor condition and C, extended literal condition). Recall that in conditions A and B the previous-to-critical sentence is the same phrasal metaphor. It was only in condition C therefore, that a few adjustments to the previous-to-critical were made. In total, 4 previous-to-critical sentences were modified (to ensure that they were of comparable length to the phrasal metaphors that preceded the critical sentences in conditions A and B). It was necessary that previous-to-critical sentences were comparable in length across conditions, since the items in this study were presented sentence-by-sentence. Had the previous-to-critical sentence been of different length in condition C, compared to conditions A and B (as was sometimes the case in experiment 1), any significant difference in the reading time of the critical target sentence could have been due to the differing length of the sentence that preceded the target. The lengths of previous-to-critical sentences were, therefore, kept constant across conditions. This was intended to guarantee that any differences in reading times of the target sentences was a result of the *type* of language used in the preceding contextual passage, and not a result of the complexity of language used in the preceding contextual passage.



As an example of one change that was made, consider the sample item below. The full contextual passage is not provided; only the previous-to-critical sentence, the target sentence and the final literal sentence (added in this second experiment) are shown. As before, the phrasal metaphor appears in italics and the target sentence in bold:

Condition A: Extended metaphorical context + target sentence

*Writing the concluding chapter was the final ascent to the mighty summit.* **Melanie was dreading the examiners' report.** She couldn't wait for the viva to be over.

Condition B: Extended literal context, with phrasal metaphor at the end + target sentence

*Writing the concluding chapter was the final ascent to the mighty summit.* **Melanie was dreading the examiners' report.** She couldn't wait for the viva to be over.

EXPERIMENT 1: Condition C: Extended literal context + target sentence

Her dissertation would be a great achievement. **Melanie was dreading the examiners' report.**

EXPERIMENT 2: Condition C: Extended literal context + target sentence

Writing the concluding chapter of her dissertation would be a great achievement. **Melanie was dreading the examiners' report.** She couldn't wait for the viva to be over

*Counterbalancing*

Materials were counterbalanced as in experiment 1, with the same 3 lists utilised and randomly administered. The 7 metaphorical filler items were randomly added to each list, such that each participant saw 28 passages: 7 from condition A (extended metaphor), 7 from condition B (extended literal with a phrasal metaphor), 7 from condition C (extended literal) and 7 metaphorical fillers.

*Procedure*

The first half of this experiment proceeded in much the same fashion as experiment 1, which was outlined in section 5.6.2, but, in contrast to experiment 1, passages and their target sentences were revealed sentence-by-sentence, as opposed to word-by-word. Therefore, every press of the spacebar revealed a new sentence. The experiment was set

up such that the target literal sentence of interest was always positioned in the same place on the screen, and importantly, this sentence never crossed a line boundary.

In addition to reading 28 passages, participants in this study were also required to respond 'true' or 'false' to 12 statements. The correct answers for these statements were evenly distributed between 'true' and 'false', i.e. 6 statements required a 'true' response, and 6 statements required a 'false' response. Comprehension questions were also evenly distributed across conditions, i.e. 3 comprehension questions followed items from condition A, 3 from condition B, 3 from condition C and 3 from filler items.

In the second part of this study, participants were handed a 2-page booklet. On the first page was an intermediary 'distractor' task, on which was a table with 4 rows and 6 empty cells per row. Participants were asked to count backwards in 3s from the number on the first cell (e.g. 75 – 72 – 69 – 66 – 63 – 60 – 57). The purpose of this task was to prevent participants from responding to the memory questionnaire from short-term memory, i.e. to guarantee that participants did not just remember the last passage that they had read. On the second page of the booklet was a memory questionnaire, based on Martin, Cummings and Halberg's (1992) study. For this task, participants were asked to answer the following 4 questions:

- (i) What was the most memorable story that you read during this experiment?  
Please try to remember specific details, exact words, phrases or sentences.
- (ii) Why do you remember this story?
- (iii) What was the next most memorable story? Again, please try to recall specific details, exact words, phrases or sentences.
- (iv) Why do you remember this story?

Participants were instructed at the beginning of the experiment that statements to be verified as true/false would follow some passages, and also that the computer-based task would be followed by a short memory questionnaire. It was emphasised to participants that they should try to comprehend the passages in the experiment, in order to be able to perform on these two tasks.

### *Apparatus*

The first part of the experiment was carried out as before, using a small laptop computer, which was positioned on a table. Participants sat on a chair, in the same room as the experimenter, and operated the computer. The second part of the experiment was

administered using pen and paper. Participants were given a two-page booklet; the first page contained the 'distractor' task (of counting backwards in 3s), while the second page consisted of the memory questionnaire.

### *Data analysis*

The dependent variable in this experiment was sentence reading time. The independent variable was type of preceding context. The sentence reading time was calculated by the length of time from the onset of the target sentence text, to the response on the keyboard.

### 5.7.3 RESULTS

Results of both the target literal sentence and the literal sentence that followed this target were analysed from all 30 participants. The raw data comprise 210 reading times per condition for each sentence (7 each from 30 participants). To remove outliers, data points that were more than 2.5 standard deviations from the mean for each participant were discarded. For the target literal sentence a total of 18 data points were discarded, 4 from condition A, 7 from condition B and 7 from condition C. For the resulting 612 data points, the mean reading time for the target sentences was 1650ms (SD 377ms) in condition A, 1625ms (SD 275ms) in condition B, and 1577ms (SD 276ms) in condition C. Analysis of variance in reading times within subjects was analysed using a one-way ANOVA (with participants as the random variable ( $F_1$ ) and items as the random variable ( $F_2$ )), and condition as the within subjects factor. There was no main effect of condition ( $F_1(2, 87) = 0.125, p = 0.882, F_2(2, 60) = 0.298, p = 0.743$ ), indicating that there was no significant difference between reading times in the three conditions.

For the final sentence, that followed the target sentence and that was also literal, a total of 17 data points were discarded, 6 from condition A, 6 from condition B and 5 from condition C. For the remaining 193 data points, the mean reading time for the target sentences was 1859ms (SD 449ms) in condition A, 1871ms (SD 466ms) in condition B, and 1898ms (SD 382ms) in condition C. Analysis of variance in reading times within subjects was analysed using a one-way ANOVA (with participants as the random variable ( $F_1$ ) and items as the random variable ( $F_2$ )), and condition as the within subjects factor. There was no main effect of condition ( $F_1(2, 87) = 0.023, p = 0.977, F_2(2, 60) = 0.044, p = 0.957$ ), indicating that there was no significant difference between reading times in the three conditions.

Analysis of responses from the memory questionnaire, in which people were asked to recall two stories that were particularly memorable to them, was also conducted. As instructed, each participant provided details of 2 passages, all of which were easily identifiable; as a result 60 passages in total were recalled and coded with respect to the condition from which they had come. The results are summarised below:

Condition	1 <sup>st</sup> Story Recalled	2 <sup>nd</sup> Story Recalled	1 <sup>st</sup> & 2 <sup>nd</sup> Stories Combined
Extended Metaphor (A)	40%	53.34%	46.67%
Phrasal Metaphor (B)	16.67%	36.6%	26.67%
Extended Literal (C)	43.34%	10%	26.67%

When passages from condition B were recalled, 18.75% of responses mentioned the phrasal metaphor of the passage. When recalled stories were derived from the extended metaphorical condition, responses were often striking, in terms of the level of detail recalled, compared to stories from other conditions. Participants were asked to ‘try to remember specific details, exact words, phrases or sentences’. When the story had come from condition A, the language of the passage was often remembered almost verbatim. Analysis of participants’ responses revealed that of the 28 passages from the extended metaphorical condition, 60.71% (i.e. 17) of responses explicitly referenced the metaphorical vehicles of the passages (for the 11 remaining participants recalled only general features of the stories, which they reported using literal language). For stories from conditions B and C, responses were markedly shorter, with participants recalling less specific details and fewer exact words, phrases and sentences.

All participants bar one provided reasons for why they had remembered each story (i.e. they answered the question ‘why do you remember this story?’ as instructed). Of the 29 participants who gave reasons for their recalled stories, many participants provided multiple responses (i.e. multiple reasons). In total, 71 reasons were recorded; 35 for the first story and 36 for the second story. Coding of these reasons revealed 5 main categories, which all but 5 responses clearly belonged to; the 5 responses that could not be categorised as belonging to one of these 5 categories were labelled ‘miscellaneous’. See below, the 5 main categories identified:

- (i) Content of passage resonates with self.
- (ii) Content of passage is affective/emotional.

- (iii) The language/imagery of the passage is notable.
- (iv) Passage uses name of friend/relative/self.
- (v) Passage was read more recently.

Of these 5 categories, responses were distributed as follows:

	1 <sup>st</sup> Story Recalled	2 <sup>nd</sup> Story Recalled	Total %
Resonates with self	13	10	32.39%
Affective/emotional	5	5	14.08%
Language/imagery	9	9	25.35%
Name (friend/relative/self)	4	6	14.08%
Recent	2	3	7.04%
Misc.	2	3	7.04%
	35	36	

2 of the 5 miscellaneous responses noted that the passages were memorable as the reader felt like they had learnt something. The other 3 responses pertained to an opinion on the content of the story: (i) it was interesting; (ii) it was nice; (iii) it portrayed a bad scenario (of a woman who had cheated); arguably, these responses could have been coded as 'affective/emotional', since the reader expressed an opinion on the text, which was presumably grounded in an emotive reaction to the content of the story.

Of the 18 stories that participants recalled on the basis of the language used in the story, or the images evoked by that language, only 2 of these stories came from the extended literal condition (condition C), 2 from the phrasal metaphor condition (condition B) and the remaining 13 from items that had appeared in extended metaphorical form (either from condition A, or from the extended metaphorical fillers, 7 were from the former, 6 from the latter). Out of the 30 participants, there were just 3 subjects whose recalled stories *both* appeared in extended metaphorical form (the other 27 participants recalled stories from a mixture of conditions). The 3 participants that recalled both their stories from extended metaphorical conditions (either filler items, or experimental items from condition), all reported doing so on the basis of the language used in those items.

#### 5.7.4 DISCUSSION

The lack of significant differences in reading time data across conditions mirrors the results from experiment 1, and is indicative that switching from interpreting either extended or simple metaphors to interpreting literal language does not present a serious cost to the interpreter. This finding may be taken as evidence against Carston's imaginary world account, which as outlined, might seem to predict that target sentences that followed extended metaphors would take longer to read than target sentences that followed extended literal passages or simple metaphors. As was suggested in section 5.6.4, however, different processing routes for extended metaphors and literal language may exist, and it may simply be that interpreters are highly adept at switching between these different strategies.

In addition, and as mentioned in section 5.6.4, since reflective inferential processing may begin in parallel with imaginary world processing, it is possible that participants derived real world, factual implications whilst processing the extended metaphorical passage (i.e. well before reaching the target literal sentence). If this is indeed the case, it becomes much less likely that shifting to literal sentences (i.e. to the target sentence in this experiment) would have imposed any additional processing effort on participants. It seems, therefore, that there are two ways to interpret the lack of significant differences in the experiments presented in this chapter. On the one hand, it may be that shifting between imaginary world processing and ordinary language processing is incredibly easy for interpreters, and therefore, imperceptible to reading time measures. On the other hand, it may be that shifting between these processing routes does not pose any significant cost to processing effort, since factual implications are derived *during* imaginary world interpretation. Evidently, neither of these interpretations calls for abandonment of the imaginary world processing route.

In chapter 2, and also 4, I pointed out that the imaginary world construction route is claimed to be triggered not only by the use of extended metaphorical language. I proposed that certain communicative contexts and individual cognitive styles might likewise spark the shift from *ad hoc* concept construction to this more reflective inferential style of processing. It is possible that despite being highly extended, the metaphors in this experiment failed to induce imaginary world interpretation due to the experimental set-up itself, which intuitively, does not inspire reflection in the same way that, for example, poetry or psychotherapy does. A more appropriate experimental paradigm might, therefore, seek to induce imaginary world construction, not through the

use of extended metaphorical materials, but through the manipulation of the participant's affective state. Still, inducing a reflective state (with high calibration of expectations of relevance) is no simple feat, and represents uncharted empirical territory, which as a result would be highly speculative.

In the same vein of enquiry, that is testing whether different cognitive styles influence processing strategies, one could adopt a more passive experimental paradigm – not seeking to manipulate an individual's affective state, but instead to observe their natural cognitive style. For example, one could combine the experiment described in this section with a psychometric questionnaire, which measures how people perceive the world and make decisions. Among other things, these questionnaires indicate how introverted versus extraverted a person is; that is, the extent to which they are 'action' versus 'thought' oriented, drawn towards 'breadth' of knowledge, or 'depth' of knowledge. The idea of such an exploratory experiment would be to see if the effects of extended metaphors, discernible from memory questionnaires, correlate with distinct personality types. For example, to see whether introverted people, who favour quiet reflection over interaction, are significantly more likely to recall extended metaphors than extraverted people. If interesting, and significant, correlations between memory questionnaire results and personality types were found, I believe that this would strengthen the claim that distinct processing strategies are available to interpreters.

Regardless of the insignificant results reported in this chapter, I am inclined to hold onto the claim that extended metaphors may, in certain contexts at least, prompt distinct mechanisms of interpretation to those involved in the comprehension of phrasal metaphors and literal language. Indeed, the results from the memory questionnaire are very encouraging for Carston's imaginary world route and indicate that extended metaphors do provoke different effects. That these passages were more likely to be remembered than passages that employed more literal language, particularly as time went on (i.e. particularly in the case of the second passage that was recalled), is suggestive that metaphorical language is often highly memorable. Recall that, of the thirty stories remembered second by participants, 53.34% of them appeared in extended metaphorical form, and only 10% in purely literal form. This finding is not only interesting in the context of Carston's imaginary world route of interpretation, but also in the context of psychotherapy. These results support the use of metaphorical language in psychotherapy, where long-lasting effects, and insight, are widely sought.

## Chapter 6 · Cognition and communication: disembodied (amodal) and embodied (modal) views

### 6.1 INTRODUCTION

This thesis, so far, has explored cognitive accounts of metaphor interpretation, and the role of metaphor in psychotherapy. In chapter 1, I compared Conceptual Metaphor Theory to the relevance-theoretic account of communication, arguing that the latter provides a superior account of how metaphorical language is interpreted and how metaphorical meaning is derived on-line. No current investigation of CMT, however, would be complete without an exploration of more up-to-date research from within the discipline. In recent years, those within the CMT community have taken up work from the proliferating field of ‘grounded cognition’ to explain how language comprehension takes place. This move is intended to make the conceptual metaphor approach better equipped to provide an explanatory model of metaphor interpretation.

Grounded cognition relies on an embodied view of the mind, which stands in stark contrast to the relevance-theoretic framework, which takes a disembodied, amodal stance. In this chapter, I outline the embodied (modal) view of the mind, on which CMT has recently come to rely and clarify how this view of cognition contrasts with that adopted by RT (and most other post-Gricean pragmatic theories). In the chapter that follows, chapter 7, I consider how the embodied cognition approach has been applied to theories of metaphor comprehension, and furthermore, explore how these updated views of metaphor comprehension from conceptual metaphor theorists affect the relationship between RT and CMT.

While RT’s classic *ad hoc* concept account of metaphor comprehension has been compared to CMT (both by myself, in chapter 1, and by others), the more recent proposals from conceptual metaphor theorists, which rely on the embodiment literature, have not yet been considered in relation to RT. As well as considering the relationship between the embodiment account of metaphor and the *ad hoc* concept account of metaphor, I also consider the relationship between the embodiment account and the metaphor interpretation theories outlined in chapter 2 (all of which emphasise the role of sustained literal interpretation). Ultimately, I shall argue that while RT and CMT remain fundamentally distinct (and to some extent opposed) models of metaphorical communication, the recent developments from within each theory (from Carston (2010)



in the RT community, and work on embodiment in the CMT community) shift the alignment of the two theories, and bring RT and CMT into greater congruence.

## 6.2 GROUNDED COGNITION

Proponents of the grounded cognition approach profess a tight coupling of sensory-motor and conceptual systems. According to this view, our conceptual resources are established in the brain's systems of action, perception and emotion (Barsalou et al., 2003). To say that conceptual representations and processes are grounded in sensory-motor systems is to assert that knowledge about the world, which makes up the conceptual system, is grounded in the modalities (that is, our various sensory-perceptual and kinesic-motor capacities). As such, concepts, 'the basic unit(s) of knowledge', are multimodal and non-arbitrary (*ibid*: 84). This view stands in stark contrast to theories which assume that concepts are amodal (see Fodor, 1975, whose 'language of thought' is a central exemplar of this position). In order to connect concepts to perception and action, those who take the grounded approach seriously have emphasised the role of the body in cognition, thereby subscribing to an *embodied* account of cognition, in which the mind is taken to be embedded in the body. Concepts are related to (instantiated in) those brain regions which govern the body's functioning in the world; that is to say, they are structured by encounters and interactions with the world, which take place via our bodies and brains. In this sense, 'we do not simply inhabit our bodies; we literally use them to think with' (Seitz, 2000: 23).

While the embodied cognition view has received significant positive attention and considerable empirical backing in the last decade, there remain many unconvinced parties. Before evaluating its claims, I first consider the amodal view of concepts against which it is proposed. After this, I outline the central tenets of the multimodal approach, its entailed theory of language comprehension, and the empirical work cited in its favour. Ultimately, I intend to use my analysis of this empirical work as a springboard to suggest that embodied cognition may complement the seemingly disembodied amodal stance of the relevance-theoretic account of utterance interpretation (Sperber & Wilson, 1995). In the subsequent chapter, I return to the processing of figuratively used language and demonstrate how the multimodal approach may shed some light on recent theories of metaphor comprehension developed within the relevance-theoretic framework, specifically the imaginary world processing route, and may even be recruited into them. I conclude the next chapter by exploring how embodied aspects of figurative language play

an important role in therapeutic practice, thus demonstrating that the theoretical account developed neatly applies to the use of figurative language in psychotherapy.

### 6.3 AMODAL THEORIES OF MENTAL REPRESENTATION AND UTTERANCE INTERPRETATION

#### 6.3.1 FODOR'S LANGUAGE OF THOUGHT

The most notable advocate of an amodal theory of concepts is philosopher Jerry Fodor and it is against his work that embodied approaches to meaning are usually pitted. In concerning himself with how the human mind works, Fodor takes seriously the intuitive folk psychology that we all employ, that is, we humans routinely explain and predict each other's behaviour in terms of mental states like beliefs, desires and intentions. In this respect, we are all folk psychologists. In Fodor's view, the 'folk' are essentially right about the human mind and a scientific psychology will have much in common with these folk ideas. That is, he takes it that we really do have beliefs, desires, etc. and that they enter into our behaviour in the way that we folk psychologists assume, so that such ordinary reasoning about the mind as, for instance, 'If X wants P, and believes that not-P unless Q, then, other things being equal, X tries to bring it about that Q', is a valid scientific generalisation.

As Fodor and many others insist, mental states such as beliefs and desires are *intentional*, by which is meant that they are *about* possible states of affairs in the world, that is, they refer (they have a semantics). This raises the big issue of how these intentional states are manifest in our minds and how they interact with each other in thinking, planning, making decisions, etc. Fodor's answer to this question is his computational theory of mind (CTM), which is a version of the age-old view that human minds are representational. According to the CTM view, thinking is a kind of computing and the representations over which the computations operate are language-like, that is, they are syntactically structured and compositional. It is these formal structural properties of representations that enable us to make inferences and entertain trains of thought. This, in extremely short outline, is the view of the mind that has led Fodor to develop an amodal account of concepts, where concepts are the basic constituents of the structured sentences comprising the 'language of thought' (LOT or 'mentalese').

In order for perceptual information to be usable by the mind, it must be represented in a way that is accessible to the computations that comprise thinking. In

other words, it must be represented in a format or 'language' that the system can recognise and so use in its computations. Fodor refers to this requirement as the 'format constraint'. As he says, there must be what he calls 'mechanisms of transduction' if the mind (or a computer) is 'to interface with the world at all' (Fodor, 1983: 42). The function of these 'interface systems' is to register information about the world and to transform that input into a representational form which the central computational system can interpret and use. The input to these 'subsidiary' systems is therefore some kind of sensory-perceptual representation (auditory, visual, etc.) and the output is a conceptual representation, that is, a common amodal format which enables the computational integration of information from a range of modality-specific sources. 'What perception must do is to so represent the world as to make it accessible to thought' (*ibid*: 40). It is the form, and not so much the quality or content, of the representation that is paramount here since the computational processes are syntactic (that is, they operate on the formal properties of representations). The idea is that the semantic properties of conceptual representations are, for the most part, reflected in their syntactic properties.<sup>77</sup>

As already mentioned, according to Fodor, the mental representations that make up our beliefs, intentions, etc. belong to the language of thought (LOT) or mentalese and it is this common language that ensures their common form and thus their ability to interact with each other, so that, for instance, the desire that Q and the belief that (P is necessary in order for Q to occur) interact inferentially to yield the intention to bring about P. Crucially, what makes LOT like natural languages is that it has a combinatorial syntax and semantics. It has a finite set of basic symbols and a finite set of syntactic rules for combining those symbols to form an infinite number of sentences (that is, to account for the productivity of thought). The meaning of any sentence in LOT is determined by the meanings of its primitive elements (i.e. atomic concepts) and its syntactic structure.

In his comprehensive exposition of Fodor's work, Cain writes that 'understanding a sentence of English involves tokening a belief about the meaning of that sentence' (Cain, 2002: 54). By this, Cain refers to the fact that comprehension of a sentence in natural language entails generating a corresponding 'sentence' in LOT. It follows that LOT is capable of expressing everything that natural language can. In other words, believing, for

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<sup>77</sup> Of course this is not always the case. To illustrate, consider co-referring expressions, which have the same semantics but a different syntax, i.e. expressions that refer to the same referent, but have a different form. For example, 'Professor Dust' and 'The best saxophone player in London' might refer to one and the same person but it doesn't follow that they can occur in the same linguistic/conceptual contexts, e.g. 'Mary believes Professor Dust is shy and retiring' may be true while 'Mary believes the best saxophone player in London is shy and retiring' may be untrue. So syntactic distinctions are more fine-grained than semantic ones and these two co-referring expressions can give rise to different (formally-driven) inferences in Mary's mind.

example, that Alice is pretty, involves tokening a sentence in LOT which is the conceptual analogue of the English sentence 'Alice is pretty'. Intentional states, such as beliefs, desires, etc., those mental states in which Fodor is so interested, are said to bear distinct computational relations to sentences in the language of thought.

Let me now return to the key point, which is a comparison of amodal concepts and multimodal concepts. For Fodor, concepts are amodal because integrating auditory, visual, linguistic, and other sources of information requires a modality-neutral system whose inputs (and outputs) are in a common format. Consider the following exchange between Nicola and Jane:

Nicola: What shall we do now?

Jane: We could walk up on the ridge if it's not raining.

They both look out the window and across the fields to the hill ridge Jane is referring to; they see black clouds and a wet sheen on the ridge, and conclude that it's not a good idea to walk on the ridge and they'll have to think of something else to do. Reaching these conclusions depends on integrating information that comes from language (Jane's utterance), visual perception (of the state of the ridge and the sky in that region), and general knowledge stored in memory (about what black clouds usually indicate, etc.). Only when these three inputs appear in the same format can they be integrated with each other, and used by Nicola to reach the conclusion that they should not go for a walk up on the ridge. In other words, it is only when the visual perceptual representation, acoustic-phonetic representation and existing belief representations are couched in the same symbolic format that they can be brought together as premises in the inference. For Fodor, the format of this representational language is thus inherently non-perceptual as the different perceptual formats cannot, as it were, talk to each other (or function as premises in inferences or other mental computations). Unlike multimodal concepts, the structure of an amodal concept bears no resemblance to the perceptual state from which it was produced. In other words, while we might be able to retain a percept of the barking sound that a dog makes in the absence of a dog, that percept would be not be able to interact directly with the amodal concepts of the central system of thought. For percepts to interact with amodal concepts, the former need to be converted into the system's common amodal format.

### 6.3.2 SPERBER AND WILSON'S RELEVANCE THEORY

It is important to note that Relevance Theory subscribes to Fodor's computational view of the mind and so to his amodal view of concepts. Following from this, concepts are considered at the abstract level and are viewed much like the address of a file. A concept's address, or label, is responsible for ensuring two things: firstly, it provides the location at which various types of information can be stored in memory and secondly, it may appear as a constituent of a logical form. Information stored at the conceptual address, in the file if you like, falls into three distinct categories: logical content, lexical properties and encyclopaedic information. The logical content is made up of a set of deductive rules, which capture analytical implications of the concept, so this information is computational in form. For example, the logical content for the concept MONKEY contains an inference rule whose output is ANIMAL OF A CERTAIN TYPE. The lexical entry specifies linguistic properties, including syntactic, semantic and phonological properties, of the lexical form which encodes the concept. The encyclopaedic entry is representational and can be thought of as general knowledge about the denotation or referent of the concept in question. Simply put, it encompasses the set of assumptions for that category, and thus provides details about the 'objects, events and/or properties which instantiate it' (Sperber & Wilson, 1995: 87). Sperber and Wilson note that encyclopaedic entries are open-ended, varying across speakers and times, and are continually being added to as a result of our experiences. They say, 'there is no point at which an encyclopaedic entry can be said to be complete' (*ibid*: 88). Seemingly, relevance theorist Carston goes some way in extending the scope of the encyclopaedic entry by stating that it can also contain personal experiences and 'idiosyncratic observations' (Carston, 2002: 321). It is, furthermore, noted that this entry may be formatted in various ways, and that it may include mental images as well as amodal conceptual propositional representations. Nevertheless, an abstract level of representation remains fundamental to the view of concepts in RT, with sensory and motor content yet to be fully incorporated in the picture.

While the amodal approach to meaning and Fodor's computational theory of mind were most dominant in the 1970s, the early nineties saw a move away from this frame of thinking. In 1990, Harnad raised the 'symbol grounding problem': how, he asked, do these 'free floating' symbols and words get their meaning and how are they connected to perception and action? Grounded cognition, which posits multimodal concepts, is an attempt to answer these questions.

## 6.4 MULTIMODAL THEORIES OF MENTAL REPRESENTATION AND UTTERANCE INTERPRETATION

### 6.4.1 BARSALOU'S PERCEPTUAL SYMBOL SYSTEMS THEORY

At the heart of the grounded cognition view is the claim that the conceptual system is made up of multimodal concepts (that is, concepts which originate in all the modalities of perceived experience: vision, audition, haptics, olfaction, gustation) without any need for an amodal counterpart. This assumption entails that such concepts are capable of supporting cognitive processes such as those involved in memory, language and thought. Advocates of the amodal view, such as Fodor, take issue with the grounded cognition approach and call into question the role of sensory-motor information in the formation and constitution of our concepts. These theorists reject grounded cognition's assumption that modal concepts are capable of supporting the full range of cognitive functions, such as those involved in comprehending verbal utterances, solving abstract problems, drawing inferences, making decisions and planning future actions.

Barsalou believes that amodal theorists' scepticism stems from a potentially misguided equation of modality-specific representations with 'undifferentiated holistic recordings, such as those captured by a camera' (Barsalou et al., 2003: 88). As opposed to capturing dynamic images, which might interpret the types of entities within a scene, recording systems capture only static images, representing 'physical information by creating attenuated copies of it' (Barsalou, 1999: 581). For example, if one takes a photo of a classroom, the photo merely records the light at each point in the scene, thereby creating a copy of it. It does not and cannot perform the type of functions that our conceptual system does. For example, a static image cannot register (categorise) the scene as a classroom and in so doing identify instances of *student, table, chair, learn, sit, etc.* Our conceptual system, on the other hand, is capable of such a feat: by binding 'specific tokens in perception to knowledge for general types of things in memory (i.e. concepts)' (*idem*). Similarly, no camera could provide categorical inferences the way that our conceptual system does, going beyond the photo and enabling the perceiver to infer for instance that the classroom exists in a primary school that is state-run.

In order to differentiate simple holistic recording systems from perceptually based theories of knowledge, Barsalou developed his perceptual symbol systems theory (henceforth PSS). Perceptual symbols are not like photographs or images, they are 'records of the neural states that underlie perception' (*ibid*: 582). Through PSS, Barsalou

sought to demonstrate that modality-specific symbols could indeed implement essential conceptual functions. His introduction of the theory, therefore, emphasises modal concepts' ability to distinguish types and tokens, generate categorical inferences, combine concepts productively and construct propositions that interpret the world (*idem*). PSS relies on a number of key theoretical principles and mechanisms to explain how modality-specific approaches represent knowledge and are capable of achieving full conceptual functionality: re-enactment, selective attention, memory integration, simulator, frame and simulation. In what follows I outline these constructs and their utility with respect to implementing a fully functioning conceptual system, after which I consider Barsalou's response to Fodor's 'format constraint'.

Like virtually all accounts of the mind, including amodal theories of representation, PSS assumes that when a physical stimulus enters our perceptual field and we attend to it, information concerning this stimulus travels via our sensory channels. Physical stimuli cause or induce neural activations, so when we experience any event or entity, feature-detecting neurons in the relevant neural system are automatically activated.<sup>78</sup> For example, when visually processing a car, neurons fire for edges and surfaces, while others fire for colour and motion (Barsalou, 2009). The overall pattern of activation represents the entity in vision. Similarly, representations of how the car feels and sounds will be represented in other sensory modalities. Naturally, different entities will exhibit different profiles of activation across the six modalities (vision, audition, action, touch, taste and smell) and not all will demonstrate activation in each area of experience. Where PSS diverges most clearly from classical amodal theories is in its description of how these neural activation profiles become available to and utilised by cognitive processes. Crucially, it is claimed that the same neural systems that underlie perception also underlie conceptual knowledge.

Amodal theories maintain that neural representations of stimuli are 'transduced' into an amodal 'language' (see, e.g., Fodor, 1983), such as atomic symbols (Fodor), feature lists or semantic networks (see, e.g., Shapiro, 1979). In contrast, PSS 'bypass[es] this costly transduction into an amodal code' (Prinz & Barslous, 2000: 73) and, instead, cognitive processes operate on memories of the original sensory-motor states. In large part, the proposal relies on a connectionist view of the mind, which uses 'neural networks' to explain cognition (see Clark, 1993 and Chalmers, 1990 for further detail). In particular, Barsalou relies on Damasio's 'convergence zone' theory (Damasio, 1989). Convergence

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<sup>78</sup> A feature is defined as 'a meaningful sensory aspect of a perceived stimulus' (Smith & Kosslyn, 2007: 162).

zone theory (CZT) hypothesises a particular neural architecture in which convergence zones, also known as association areas, integrate operations performed in a number of different locations into a single gestalt through temporal binding. The simultaneity, or synchronisation, of neural activity is the mechanism by which widely distributed memory traces are bound into unified concepts. As already discussed, when an object is perceived, relevant feature detectors in sensory motor areas are automatically activated. These initially activated neural features become stored in memory by neurons in association areas (conjunctive neurons), which code the pattern of activation and integrate activation patterns across different modalities. Convergence zones located near specific sensory-motor areas capture patterns of activation relevant to that modality (e.g. binding information about shape, colour, size in vision), while convergence zones that are further away from specific sensory-motor areas capture higher level patterns of activation, integrating information across modality-specific convergence zones (e.g. binding the visual image of a dog with the simultaneous auditory image of barking). Once feature maps have been established, conjunctive neurons can partially re-activate the original set of feature detectors in the absence of bottom-up sensory input. This re-activation, or re-enactment, of the earlier perceptual states contributes to the knowledge that supports memory, language and thought.<sup>79</sup>

As Barsalou points out, re-enactment simply implements a ‘recording system’ that enables partial replication of experienced states. However, it is insufficient in executing a fully functional conceptual system since it does not *interpret* what each part of a recording represents, and so it is overly simplistic and incapable of supporting an account of inference. As previously mentioned, a recording or photograph of a classroom cannot interpret the entities in that classroom as belonging to the categories of *student*, *teacher*, etc. Barsalou thus proposes two additional mechanisms: selective attention and memory integration. When combined with Barsalou’s notions of a simulator and a simulation, the latter of which can be thought of as a partial re-enactment of sensory-motor states (to be discussed below), these mechanisms enable modal symbols (memories of sensory-motor states) to perform cognitive functions, such as interpreting entities as belonging to particular categories.

Selective attention ensures that conjunctive neurons in association areas capture only selected aspects of a given scene; that is, restricted aspects of visual representations. To use Barsalou’s terminology, selective attention guarantees that *components* of

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<sup>79</sup> For further information on CZT, including empirical support taken from lesion studies, see Damasio (1989) and Bechara, Damasio, Damasio and Anderson (1994).



perceptual states are captured, as opposed to entire states. To illustrate, consider being in a classroom at school. In observing and attending to the classroom environment, the brain does not capture the entire visual scene; instead, selective attention guarantees focus on a component of the scene, such as the teacher. Conjunctive neurons in local association areas integrate the neural features that represent this component, for example neural representations of the teacher, while neural features of other components in the perceptual state, such as the blackboard and students, are not included. During this integration stage, patterns of activation are coded to form 'representations'. The operation is local in that visual association areas capture patterns of visual features, while auditory association areas capture patterns of auditory features and so forth. Patterns of activation *across* modalities are integrated further along the processing stream in higher association areas, in the temporal, parietal and frontal lobes, so that, for instance, a visual-auditory representation of the teacher speaking is formed. The purpose of convergence zones, according to Damasio, is to 'enact formulas for the reconstitution of fragment-based momentary representations of entities or events in sensory and motor cortices' (Damasio, 1989: 46).

Memory integration then plays a crucial role. When selective attention focuses on a component, e.g. the teacher, a memory of that component becomes integrated with memories of similar components, i.e. similar teachers or people in authority, perhaps in education. This occurs as a result of conjunctive neurons being aligned to specific feature sets and, consequently, the same neurons are likely to capture the same visual experiences. Multimodal representations of categories, e.g. teachers, or cars, develop because 'conjunctive areas are organised hierarchically to integrate information across modalities' (Barsalou, 2003: 88). Selective attention and memory integration, as I have outlined them, clearly involve the visual and auditory modalities. Moreover, it is intended that modality-specific representations capture more general knowledge about entities also. For example, knowledge about teachers: how they prepare lessons, set homework, mark exams, have low wages, act as parental figures in students' lives, etc. According to Barsalou, 'perceptual symbols' (defined as 'neural representations in sensory-motor areas of the brain' (Barsalou, 1999: 582)) arise across the sensory modalities, *and* two other modalities of experience: proprioception and introspection.<sup>80</sup> Proprioception gives an awareness of one's own body states (e.g. an awareness of hunger and tiredness) and introspection gives an awareness of one's thought processes, which includes

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<sup>80</sup> Barsalou (1999) acknowledges that his use of the word 'perceptual' does not equate to the standard sense of the word. For Barsalou, 'perceptual' refers not only to the sensory modalities, but also 'much more widely to any aspect of perceived experience' (585).

representations of emotional states. Barsalou says little about these modalities of experience and notes that the latter, in particular, is poorly understood compared to sensory-motor processing. It seems likely that at least some of the aforementioned information is captured by these additional modalities of experience. However, it remains unclear exactly how 'functional' information arises out of multimodal concepts. For example, where our knowledge regarding the purpose of teachers, their role in society, how they behave, what they sound like, how to interact with them etc., comes from.

Barsalou goes on to introduce the terms *simulator*, *frame* and *simulation*, which, together with the concepts of re-enactment, selective attention and memory integration, enable a fully functioning conceptual system with multimodal representations of knowledge. A simulator is defined as 'a distributed collection of modality-specific memories captured across a category's instances' (*idem*). Whenever a component of experience is repeatedly processed by attention, a simulator develops. Likewise, when a *configuration* of components of experience is processed numerous times a simulator is established for that configuration. Barsalou asserts that we have simulators for 'objects, actions, events, settings, mental states, features, relations, and so on' (*ibid*: 89). PSS refers to information accumulating *in* a simulator; in other words, simulators hold and contain information about components. On this way of viewing cognition, simulators simply are concepts. When we process a certain category, such as *teacher*, on a given occasion, a selected subset of information *in* the *teacher* simulator becomes active. The active subset of information in the simulator which is being processed at any given moment, that is, the specific components of integrated sensory representations across the category's instances, is then 'run as a simulation that functions as one of infinitely many conceptualisations for the category' (*idem*).

PSS accounts for the potential infinity of conceptualisations by enabling simulations to embed in one another, i.e. existing simulators (concepts) can productively combine to create new complex simulators (concepts). As Fodor has emphasised and Barsalou endorses, productivity (the ability to construct an unlimited number of representations from a finite number of symbols, using combinatorial and recursive mechanisms) is an essential property of the human cognitive system. Productivity naturally falls out of PSS, and can be thought of as the symbol formation process in reverse. For example, imagine a schematic perceptual symbol for *ball* in which only the shape is represented. Since the process of symbol formation establishes representations for colours and textures, these representations can be productively combined with those symbols for shapes to produce complex simulations such as *red ball* or *deflated white*

*ball*. Barsalou, furthermore, maintains that productivity can transcend experience. ‘By searching through the combinatorial space of possibilities, one can construct many similar simulations’ (Barsalou, 1999: 594). It is noted, however, that though productive potential is extensive in PSS, it is by no means a simple process. Constraints on the process exist and arise when a perceptual symbol cannot be applied to a simulated entity because it lacks a vital feature. To use Barsalou’s example, he notes that it is difficult to construct a simulation of a *running watermelon* because for something to run it is required to have legs.

In his 1999 paper, Barsalou describes how simulators contain two levels of structure: ‘an underlying frame’ that integrates the record of neural activation that arises during perception across category instances and ‘the potentially infinite set of simulations that can be constructed from the frame’ (*ibid*: 586). The simulations are context-specific representations of a category and are multimodal. Given that they are constrained by past and present bodily experiences, they are often labelled ‘embodied simulations’. A simulation is constrained by bodily experiences in the sense that all information within the simulator, from which it comes, is based on an experience that has taken place within our bodies. We cannot experience any entity or event separately from how it makes us as individuals with distinctive bodies feel. For example, my simulator for *teacher* consists of a collection of modality-specific memories captured across my interactions with teachers and those memories and interactions are formed and affected by my body, by my existence as a female who cowers in the presence of authority, is hard of hearing, has a keen sense of smell, etc. Every memory is rooted in my body.

It is important to note that simulations are never complete re-enactments of the modality-specific states, that is to say, a simulation is ‘not necessarily identical to the neural states that underlie perception, but they are cut from the same cloth, running the same systems in a similar manner’ (Prinz & Barsalou, 2000: 71). Presumably, the way in which a simulation differs from the neural states that underlie perception will vary depending on the simulation. One way in which the two may differ is in their level of detail; intuitively, a simulation will re-enact a smaller, perhaps more focused subset of neural states than perception that is often, but not always, less detailed than perception. In the case of certain experiences, the simulations of modality-specific states may be quite distinct, that is, quite far from the neural states that characterised the original experience. The simulation of pain is a clear case of this, e.g. recalling having burned one’s hand or broken a bone will, no doubt, be significantly less intense, and significantly less embodied, than the original experience.

Having outlined the central tenets of PSS, it is now possible to assess the system's capability in terms of implementing a fully functional conceptual system. One necessary function of cognition is the ability to distinguish what's known as *types* and *tokens*. Types refer to categories and tokens to instances of categories. For example, the sentence 'the wine is in the fridge' refers to a token of the type of thing known as 'wine' (i.e. a token of the category 'wine'); whereas the sentence 'wine is very expensive these days' refers to the type 'wine' (i.e. to the category of 'wine'). The distinction between types and tokens corresponds neatly to simulators and simulations, respectively. Types are categories, just as simulators, which integrate conceptual content of a given category across instances, are. As Barsalou notes, 'a concept is equivalent to a simulator' (Barsalou, 1999: 587). Tokens represent the objects which are particular instances of a category, and, analogously, simulations represent a particular form that a category can take. 'The simulator is a type that construes a perceived token as having the properties associated with the type' (*ibid*: 596). For example, from having multiple experiences with a particular kind of entity, for instance *cars*, a simulator (hence a concept) for that category develops. This simulator contains multimodal information within it, which is subsequently activated upon future experiences with cars. The theory implements type-token mappings through the process of simulation (specific conceptualisations or ways of thinking about the concept (*ibid*: 587)). When using the simulator *car*, in order to categorise and identify an entity, for example, one takes the integrated perceptual information in the simulator (the type) and re-enacts experiences of the object by producing a simulation (a token). The resemblance between the incoming sensory-perceptual information and the component parts of the simulator, which become simulated are said to guarantee that the right simulator is activated.<sup>81</sup> Such a type-token mapping also demonstrates PSS's ability to construct simple propositions, since the aforementioned mapping constitutes the proposition 'the perceived entity is a *car*' (i.e. belongs to the category of 'car').

Barsalou believes he can account for categorisation and categorical inferences by making use of the simulator-simulation distinction. Recall that the simulator of a category can produce an indefinite number of simulations for different instances of that category,

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<sup>81</sup> Philosopher Mark Siebel contests that resemblance is capable of effectively identifying objects as instances of categories. Siebel illustrates his point by inviting us to consider 'someone who sees a horse that looks like a donkey to him' (1999: 632). He points out that the horse will activate 'a neural representation that resembles the impressions he normally has when he sees a donkey' (*idem*), ergo the best-fitting simulation for that impression will be derived from the donkey simulator and not the horse simulator. This in turn will lead to misidentification of the object. Seen in this light, there are significant gaps within PSS, specifically with regard to demonstrating type-toking mappings.

so, on any particular occasion of use, the simulator activates the 'best fitting' simulation available from its resources. It is suggested that one can determine whether or not a perceived entity belongs to a particular category by virtue of whether the simulator is able to produce a simulation for the given entity. If the simulator is *not* able to produce a satisfactory simulation then the entity in question is not a member of the category represented by that simulator. This account has an advantage over amodal theories, in that it does not have to explain how two different types of representation (amodal features and perceived entities) are compared in the categorisation process. However, Barsalou concedes that 'the criteria for a simulation providing a satisfactory fit to a perceived entity remain unresolved' (*ibid*: 609). The process of making predictions about an entity based on knowledge associated with that entity is what Barsalou refers to as categorical inferencing. As previously outlined, simulators contain a vast amount of multimodal information and as a result, the active simulation carries implications that go far beyond the information presented by the perceived instance. To use Barsalou's example, if a car is perceived from the side, a simulation could generate inferences about unperceived components through 'pattern completion' (e.g. *headlights, engine, the sound the car will make when turned on, how it feel to hold the steering wheel*). Such information enables us to infer how to interact with objects and how to anticipate their behaviour.<sup>82</sup>

Lastly, PSS is argued to be capable of constructing propositions, which describe and interpret the world, as a result of the binding of simulators and perceived category instances. Binding the *car* simulator to a percept of a car thereby maps a type to a token which implicitly constitutes a proposition, such that the perceived car is an instance of the *car* category. Complex hierarchical propositions, for example, *it is true that there is a book on the table*, are attained by embedding simulations in one another (by embedding the simulations of *book, table* and *on*) (*ibid*: 596).

It is not entirely clear that Barsalou directly addresses Fodor's format constraint (discussed in section 6.3.1 of this chapter), apparently assuming that it poses no threat to the explanatory adequacy of PSS. Barsalou's failure to explicitly engage with Fodor's format constraint may be a consequence of his adoption of a connectionist view of the mind, which denies the need for a centralised representational processor. Connectionism appeals to 'neural networks', which are models of the brain that consist of the analogues

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<sup>82</sup> Barsalou briefly mentions introspective processing, by which he refers to the mechanism by which we represent entities or events in the absence of any incoming physical stimuli. He suggests that this ability involves 'rehearsal, elaboration, search, retrieval, comparison and transformation', though he notes that 'much remains to be learned about the neural bases of introspection' (Barsalou, 1999: 585).

of neurons and ‘weights’, which measure the strength of connections between neurons, i.e. weights generate statistical models of the effects of synapses which link neurons. In a sense, neural networks store activation patterns of sensory-motor information in a common format – they store such information in a statistical format. Barsalou (2008) argues that the mind is ‘sensitive to the statistical structure of experience’ (632). One might, therefore, conjecture that key cognitive functions, such as inference, operate not on multimodal concepts per se, which are represented in different formats, but rather on statistical models of multimodal information. Since my ultimate position is that the multimodal approach to cognition (see section 6.5) currently lacks conclusive empirical evidence in its favour, I shall not delve deeper into the complex debate between connectionism and more traditionalist views of the mind. However, lack of empirical evidence aside, more general problems with connectionism may give sufficient cause to reject the PSS modal account. (For arguments against connectionism, see Davies, 1991, Fodor and McLaughlin, 1990 and Fodor and Pylyshyn, 1988).

#### 6.4.2 LANGUAGE COMPREHENSION IN GROUNDED COGNITION

##### 6.4.2.1 ZWAAN’S ‘IMMERSED EXPERIENCER’ FRAMEWORK

Barsalou’s theory of cognition offers a compelling characterisation of knowledge representation based on the key idea that concepts are rooted in perceptual, and potentially also motor and affective, experiences (i.e. that they are inherently embodied). It is interesting to consider one of the various approaches to language comprehension which have implemented this grounded cognition view in modelling the mechanisms of utterance interpretation; namely, Zwaan’s Immersed Experiencer Framework (henceforth IEF) (Zwaan, 2004).

The ‘immersed experiencer’ of Zwaan’s framework refers to the hearer or reader who is immersed in discourse in the sense that he or she is richly engaged in a vicarious experience of the described situation. In keeping with the grounded cognition view of perception, IEF relies on the basic assumption that reading or hearing a word involves the activation of multimodal, as opposed to amodal, representations. More specifically, Zwaan claims that written text and speech activate both experiential representations of words (such as lexical, grammatical and phonological representations, which are of course themselves, sensory-motor representations on this account) and experiential representations of a word’s referents (for example, motor, perceptual and affective

representations). Seen in this light, language comprehension takes place via ‘the integration and sequencing of traces from actual experience cued by the linguistic input’ (*ibid.*: 38).<sup>83</sup>

In building a computational account of language understanding, the IEF appeals to three general processes involved in the comprehension procedure: activation, construal and integration. ‘Activation’ refers to the stage at which incoming words *activate* ‘functional webs’. Functional webs are networks of neurons located throughout the cortex which are activated both during perception of a word and during our experience of objects and activities in the world which are the referents of words (Pulvermüller, 1999). In other words, they are the experiential traces associated with both the word itself and with the word’s referent, which according to Barsalou would be contained within a simulator. Imagine, for example, the utterance below:

1. Mary visited the monkeys in the zoo.

The activated functional webs will be those previously activated when we have come into contact with Mary, visited places, seen monkeys and been in zoos. As one would expect, the activated representation for Mary provides the context for the pattern of activation for the next functional web, thereby constraining the subsequent webs. If we know Mary very well, her functional web will exert a strong constraint on subsequent activation; conversely, if she is a stranger to us then the activation will not be strongly biased towards a specific representation. Since we may have a number of experiences with monkeys, having seen them from a number of different perspectives, the word will diffusely activate multiple overlapping functional webs; for example, a functional web encoding experiences of seeing monkeys in cages, and others that represent experiences of monkeys in the wild. ‘Construal’ refers to the process in which ‘initially activated functional webs are integrated to yield a representation of an event’ (*ibid.*: 40). Zwaan focuses on the product of construal being ‘the appropriate visual representation’, thereby indicating that the outcome of the interpretation process on his account is something like an image. Note that Zwaan assumes that representations from modalities other than vision also contribute to construal. One can assume, therefore, that the outcome of

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<sup>83</sup> There is an issue in Zwaan’s account, and in the embodied cognition approach in general, concerning interpreters’ first encounters with an object or a word. It is interesting to consider how processing works in such instances, where no ‘traces from actual experience’ exist. Bergen (2005) acknowledges this issue and suggests that while language comprehension is constrained and informed by past experiences, ‘combinatorial and other creative capacities allow departures from them [i.e. from previous percepts, actions and feelings]’ (*ibid.*: 262).

interpretation for Zwaan is a mental image, which depicts information from a range of modalities (perceptual, motor, affective etc.). Naturally, the process of construal is constrained by grammar, with grammatical factors such as word order and case markers signifying what should be construed as the focal entity and what should be construed as background. The focal entity is often the subject of the clause, but in some cases, as in (1) it may be the object (the monkeys). Background entities are usually signalled by prepositional phrases (for example, 'in the zoo') and features referred to by adjectives (for example 'Mary visited the *endangered* monkeys in the zoo').

To return momentarily to Barsalou's theory of cognition, Zwaan's construal process is akin to his account in terms of re-enacting the active subset of modality-specific representations in the simulator, i.e. running a simulation. As previously outlined, the initially diffuse activation of multiple overlapping functional webs becomes constrained and integrated during construal, a mechanism which Zwaan refers to as 'articulation'. Articulation ensures that the appropriate visual representation (i.e. the appropriate mental simulation) results from the construal process. Returning to example (1), the prepositional phrase, *in the zoo*, acts as a constraint on the functional webs and guarantees that visual representations consistent with the description, of monkeys in a zoo, receive more activation than inconsistent visual representations, for example, of monkeys in the wild. The initially diffuse visual representation of monkeys is thus said to be articulated.

The third process in the comprehension procedure put forward by Zwaan is integration: the 'experiential' move from one construal to the next. To put it differently, integration is the process by which transitions between construals, i.e. integrated functional webs that have yielded a mental simulation of an event, occur. Naturally, components of previous construals influence subsequent construals. Zwaan refers to the move between construals as 'experiential' since transitions are typically perceptual and often involve a visual aspect of 'zooming, panning, scanning and fixating' on the event depicted by the language. Zwaan's example from *The Hound of the Baskervilles* illustrates this point most clearly: describing the house of the Baskervilles, Doyle writes:

2. [...] and the house lay before us. [...] the centre was a heavy block of building from which a porch projected. The whole front was draped in ivy, with a patch clipped bare here and there where a window or a coat of arms broke through the dark veil.



The beginning of the sentence establishes the house as the focal entity, from which the reader then zooms in on 'the centre' of the house, and then further in on 'a porch'. Constructing a construal of the sentence that begins 'the whole front', our attention spans from the porch of the house to its greater frontage, which is covered in ivy. It is evident that the initial construals affect the subsequent ones; for instance, since the house is described as 'lying before us', when we zoom in on the centre of the house and later on the porch we continue to view it as if we were standing in front of it, as opposed to being in the porch for example. Zwaan outlines a number of factors that affect the ease of integration (the ease of transitioning between construals): concordance with human experience, degree of overlap between results of consequent construals, predictability and linguistic cues, e.g. when construals accord with our experience, or when neighbouring construals overlap and are predictable or familiar, they are easier to integrate and therefore, to process (see Zwaan, 2004 for further detail).

It is interesting to note how different Zwaan's account of utterance interpretation is from that of Relevance Theory. As previously outlined, the ultimate outcome on the relevance-theoretic account is a set of explicatures (inferentially developed from the logical form encoded by the utterance) and implicatures (contextual implications derived solely on the basis of pragmatic inference), both of which are representations in the Fodorian amodal language of thought. For Zwaan, on the other hand, the outcome of the construal process, that is, the process by which we interpret utterances, is presumably not a set of amodal conceptual representations, but a representation which is more like a mental image (or set of mental images).

The hearer's process of constructing an explicature on the RT account is geared to recovering the propositional thought intended by the speaker. Therefore, any misunderstanding between parties is manifested in a mismatch of propositional content. It is interesting to consider what a disparity between speakers and hearers looks like on Zwaan's account. Perhaps the two mental images (of speaker and hearer), when placed one on top of the other (as it were), would reveal differences in form. Without a common code between speakers and hearers, however, it is difficult to see how images would ever strongly correlate between individuals. Furthermore, without explicitly building any pragmatic principles into the interpretation procedure, we have no account of how hearers decide that they have arrived at a correct or appropriate understanding/interpretation. What constitutes even an *adequate* interpretation, and what criteria are involved for reaching said interpretation, remains unclear. This omission may be attributable to Zwaan's theoretical focus, which unlike relevance-theorists' seems

to be not much concerned with a view of communication as the expression and recognition of intentions.

According to Zwaan, language comprehension ‘occurs with a specific purpose in mind: to perform an action’ (Zwaan, 2014: 229). He describes how the action may not always be immediate, for example, sometimes it will be an act of committing information to memory to be used at a later stage; equally the act may be to ‘escape into a fictional world’, where matching propositional content with the writer is not the objective (*idem*). While there is no doubt that these are actions which may be performed as part of the overall comprehension process, Zwaan’s attention to these acts, over the more basic comprehension process of speaker intention derivation, is telling and possibly indicative of the way in which he has composed his theory. A fundamental requirement of any theory of language comprehension, as emphasised in chapter 1, is to explain speakers’ communicative intentions. *Before* one decides whether or not to commit communicated content to memory (to believe that content), it is essential to understand what the speaker is attempting to communicate, i.e. to derive communicated content (one cannot commit to memory what has not yet been properly understood). Zwaan’s attention to ‘actions’ appears to overlook the fact that verbal utterances are first and foremost ostensive stimuli (which come with a special kind of intention and which raise certain expectations for their audience). As a result of such oversight, IEF falls far short of the required model of any pragmatic theory of interpretation.

Nevertheless, Zwaan’s Immersed Experiencer Framework presents an interesting attempt to extend the grounded cognition view of concepts as multimodal and embodied in order to provide a theory of language comprehension. In order to cement the multimodal concept account, to which many cognitive scientists are now committed, a number of experimental paradigms have been devised with a view to testing the account and providing it with empirical support. I review some of this empirical work in the next section.

## 6.5 EMPIRICAL SUPPORT FOR A MULTIMODAL EMBODIED THEORY OF MEANING

The empirical findings cited in support of the embodied approach to meaning are plentiful. There exists a wealth of data, gleaned from both behavioural and neural studies, which demonstrates activation of sensory and motor systems during conceptual processing. Nevertheless, the extent to which this activation data signifies the existence of

so-called embodied concepts remains highly questionable. In order to make an informed judgment on the topic, it is necessary to review the existing literature with a mind that is open to both modal and amodal approaches to meaning.

Inspired by Barsalou's thought experiment, Zwaan and colleagues conducted a number of experiments to test the claim that multimodal simulation is involved in language comprehension (Stanfield & Zwaan, 2001; Zwaan, Stanfield & Yaxley, 2002). Barsalou (1999) had conjectured that systematic interaction between perceptual and conceptual (or cognitive) processes entails distinct visual representations for the two sentences: 'the pencil is in the cup' and 'the pencil is in the drawer'. According to Barsalou, although the amodal account of representation recognises that these lexically distinct sentences encode or enact different conceptual representations, they cannot do so as easily as a mental simulation account of interpretation. The amodal account gives distinct representations for these two sentences, yet the orientation of the pencil is not directly encoded. Instead, it is inferred on the basis of what the interpreter knows about how a pencil is oriented in a cup and how a pencil is, most likely, oriented in a drawer (i.e. it is inferred from the encyclopaedic entries of the (amodal) concepts PENCIL, CUP and DRAWER). Barsalou argued that representation of the orientation of the pencil, vertical in the former sentence and horizontal in the latter sentence, is not a natural consequence of an amodal view of mental representation, which takes the two sentences to be represented as [IN[PENCIL, CUP]] and [IN[PENCIL, DRAWER]] respectively. He writes 'in an amodal representation, such inferences would not be made, or they would require cumbersome logical formulae' (*ibid*: 605), whereas they follow directly from a PSS account because they are a component part of those representations.

In order to test the claim that utterance interpretation involves mental simulation, an experiment was devised in which participants first read a sentence which implied a particular orientation of an object (for example, *he hammered the nail into the floor* versus *he hammered the nail into the wall*) (Stanfield & Zwaan, 2001). After reading these sentences subjects were presented with pictures and asked if the object depicted was mentioned in the sentence or not. It was found that pictures of the object that matched the orientation implied in the sentences were recognised faster than pictures that did not match the implied orientation. Sensitivity to the difference in orientation was taken as indicative of participants performing multimodal mental simulations during language comprehension. However, strictly speaking, and as previously emphasised, the amodal account makes the same prediction as mental simulation does in this experiment. Inferential processes, which form a central component of any amodal account, take 'nail

into the floor' as a premise rendering one conclusion about the orientation of the nail, and 'nail into the wall' as a premise that renders another conclusion. The results of this experiment are, therefore, far from definitive evidence in favour of the multimodal view.

The 'match effect' was later demonstrated in other dimensions of visual experience. Employing the same paradigm, Zwaan, Stanfield and Yaxley (2002) found that participants routinely simulated the shape of entities. Therefore, after reading sentences that implied a particular shape of an animal or object, for example *the ranger saw the eagle in the sky* and *the ranger saw the eagle in the nest*, participants responded faster (e.g. in a naming task) to line drawings of the entities which matched the shape of the entity as described in the sentence just read (e.g. an eagle with spread wings or an eagle with folded wings). The authors emphasise that the propositional representations of the two sentences on an amodal account are largely identical, [[saw [ranger, eagle]], [[in [eagle, sky]]] and [[saw [ranger, eagle]], [[in [eagle, nest]]] respectively, and in so doing, they take their study as further support for the role of embodied simulation in language comprehension. Like Stanfield and Zwaan (2001), Zwaan and colleagues' interpretation of their results fails to acknowledge that an amodal account makes parallel predictions, i.e. the same difference between response times to the two different shapes of the eagle is predicted by the amodal view, as a result of inferential processes which are not particularly cumbersome. These experiments, therefore, do little to boost the validity of the embodied simulation account.

Independent work by Glenberg and Kaschak (2002) backs up Zwaan's findings and brings to light the 'action-sentence compatibility effect' (ACE), which has since been used to argue for the embodied theory of meaning. In this simple lexical decision task, participants were asked to judge the well-formedness of sentences by making a hand movement, either away from or towards their body (in one condition, a pushing action signified a nonsense judgement, while a pulling action signified a meaningful judgment). Subjects were presented with sentences which denoted an 'away' action, as in 'close the drawer', or a 'toward' action, for example 'open the drawer', or a nonsense sentence such as 'boil the air'. It was found that the meaning of the action sentences interacted with the type of responses participants made. For example, when interpreting the sentence 'close the drawer' which denotes an away action, participants were slower to make a response which involved an incompatible movement, that is, moving the hand towards the body compared to the time it took to make a response consistent with the action described by the language, away from the body. This work has been used to corroborate the embodied theory of meaning and to suggest that processing language about actions or movements

involves motor simulations. That is, the longer response times are taken to indicate the interference of the motor schema activated in the process of comprehending the language, e.g., 'close the drawer' (pushing) on the motor schema involved in performing the action of pulling (as required in the experiment).

Interesting data indicating the somatotopic activation of the motor system, from experiments by Hauk et al. (2004), has been used to make a similar point. In brief, this work demonstrates that action verbs associated with different effectors (e.g. hand, foot, mouth) are processed in different regions of the motor cortex. Participants in the study were asked to perform a lexical decision task, deciding as quickly as possible whether a sequence of letters constituted a word of their language. It was found that processing verbs referring to actions involving the mouth (e.g. 'chew'), the leg (e.g. 'kick') or the hand (e.g. 'grab') activated the motor cortex areas responsible for the various areas. Again, such findings would seem to support an embodied simulation account of utterance interpretation and to indicate that an aspect of understanding action verbs, such as 'chew', 'kick' and 'grab', involves re-activating the same neural substrates that underlie performance and perception of the sensory-motor activity depicted by the respective verbs.

While these studies present a compelling case for the activation of sensory-motor areas during language comprehension, it is not clear that these results are incompatible with an amodal account of concepts. The case *against* the strong embodied theory of meaning is made by Mahon and Caramazza (2008), who make a different proposal of 'grounding by interaction', which grants an important role in cognition to sensory and motor information but insists also on the existence of abstract symbolic representations. An outline of Mahon and Caramazza's theory comprises the next section of this chapter after which I will conclude by suggesting how embodied cognition may complement the seemingly disembodied amodal stance of the relevance-theoretic account of utterance interpretation.

## 6.6 UPDATING THE EMBODIMENT VIEW: MAHON & CARAMAZZA'S 'GROUNDING BY INTERACTION' PROPOSAL

In their comprehensive 2008 paper, Mahon and Caramazza take a critical stance towards the interpretation of the vast amount of empirical work which has been used to argue in favour of what they term 'the embodied cognition hypothesis', which states that 'conceptual content is reductively constituted by information that is represented within

the sensory and motor systems' (*ibid*: 59). Effectively, they demonstrate that empirical findings which allegedly reveal embodiment effects can be just as easily explained in a way that is compatible with the disembodied cognition hypothesis, which views concepts as symbolic, abstract and, most importantly, set apart from sensory and motor information. Their line of argument results in the proposal of a middle ground position, between the two theories (the amodal and the multimodal concept positions), which they call 'grounding by interaction'.

The 'grounding by interaction' position gives credit to the work that shows the activation of sensory and motor information during language comprehension and other conceptual processes, but does not agree that the results show that such information is constitutive of a concept. Much like the disembodied or amodal theory of meaning, grounding by interaction assumes that concepts comprise an abstract or symbolic level of representation, which is entirely distinct from sensory-motor information. However, both the abstract representation of a concept and the sensory-motor information associated with that concept contribute to the full account of concepts, with the latter complementing the former. As Mahon and Caramazza note, there is a large body of work that has demonstrated that the motor system in the cortex is automatically activated when subjects perform a wide range of conceptual and perceptual tasks; these findings are typically used in support of the embodied cognition hypothesis. However, they see no threat to the disembodied theory of cognition in this finding. They suggest that an amodal theory of concepts can account for this result, provided it recognises that concepts are not represented independently of (unconnected to) motor information and provided it does not exclude the possibility of activation of conceptual representations spreading (or cascading) to the motor system.

Recall Glenberg and Kaschak's experiment that brought to light the action-sentence compatibility effect and was used to support the embodied cognition hypothesis. Mahon and Caramazza reframe their results in accordance with a disembodied (but interactive) picture. They suggest that, rather than activation of the motor system signifying that the system is involved in the semantic analysis of the sentence, the observed activation could be a result of information spreading throughout the system, that is, from the abstract amodal concept encoded by a verb, e.g. 'kick', to the sensory-motor regions involved in performing the action it denotes. Mahon and Caramazza systematically go through a number of experiments and reframe them in this manner, concluding that:

Those findings do demonstrate that the motor and sensory systems are activated but they do not demonstrate that activation of motor and sensory information constitutes the semantic analysis of the sentence.

(Mahon & Caramazza, 2008: 63)

It is interesting to consider how Mahon and Caramazza's proposal could be incorporated into the relevance-theoretic framework, thereby enabling it to account for the plethora of embodiment effects evinced by the cited empirical work.<sup>84</sup>

## 6.7 EMBODIMENT EFFECTS AND THE RELEVANCE-THEORETIC AMODAL ACCOUNT OF MEANING

This section is intended to move towards the accommodation of the 'embodiment data' within Relevance Theory, with the ultimate aim of considering how such a move might affect accounts of metaphor processing (to be discussed in the next chapter). It seems evident that, as Mahon and Caramazza suggest, amodal theories of representation need do very little in order to incorporate the data which has been taken to support the embodied cognition hypothesis; they need only acknowledge that activation of (amodal) conceptual representations may result in activation spreading to the sensory-motor system. Work in Relevance Theory does not preclude the possibility that activation spreads from the conceptual system to the sensory and motor systems; however, relevance theorists have certainly not sought to actively incorporate such a notion or to discuss how such sensory-motor effects might enter into the interpretation of an utterance.

One way for RT to do this would be to include affective, imagistic and kinesic content in the encyclopaedic entries associated with conceptual addresses. It would not follow that this sizeable body of information is inevitably accessed and deployed whenever we come into contact with a lexically encoded concept, but rather it would acknowledge that it is stored, and activated (to some degree) whenever the concept is accessed. Take the example sentence below:

3. She wore a beautiful coat made of fox fur.

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<sup>84</sup> Note that Zwaan has recently adopted a similar perspective to Mahon and Caramazza, arguing in favour of a 'pluralist view of cognition' (2014: 229), which makes use of both abstract (i.e. amodal) symbols and grounded (i.e. modal) symbols.

If sensory-motor information is available during utterance interpretation, it follows that, upon reading or hearing the above sentence, an interpreter would be able to activate detailed perceptual information associated with 'fox fur', for example. Therefore, one might have a sense of the texture of the coat in question, vaguely entertaining a sense of its softness and warmth, perhaps. This information is not necessarily essential to the recovery of the speaker's communicative intention, but it may be automatically activated anyway and simply linger in the background of the interpreter's mind.

Such a proposal raises many important questions. For example, how is the encyclopaedic entry formatted? If it is to include sensory and motor information distributed across varied neural channels, then presumably, it cannot continue to be represented only in terms of an abstract set of assumptions. I initially conjectured that perhaps the encyclopaedic entry is simply the pattern of activation in the sensory and motor systems, situated in a different neural location from the lexical entries. However, this proposal neglected the fact that the encyclopaedic entry necessarily contains general knowledge in amodal conceptual format also. It is essential that both these types of information are stored – general knowledge pertaining to the concept and sensory-motor information associated with the concept. An alternative solution is for the encyclopaedic entry to be a set of assumptions about the denotation of the category, i.e. for the encyclopaedic entry to be formatted as RT suggests, and for sensory-motor information to also be represented as a set of assumptions. For example, the encyclopaedic entry for CAT would look something like the following, where 'x' is a sensory perceptual representation:

CATS ARE FURRY  
CATS HAVE FOUR LEGS  
CATS FEEL LIKE *x*  
CATS SOUND LIKE *x*

An alternative, seemingly viable, solution is for the encyclopaedic entry to contain a set of assumptions about the denotation of the category (as per RT), together with a link of sorts that connects the encyclopaedic entry located in the conceptual system to sensory-motor and affective experiences located in the perceptual system (experiences which have been recorded and stored as neural patterns of activation). Essentially, this proposal would entail that activation in the conceptual system spreads to the perceptual system, by way of the encyclopaedic entry. It was suggested in chapter 1, footnote 12, that



if encyclopaedic entries contained conceptual metaphors (or conceptual schemes as Carston (2002) called them), then it would be necessary for these schemes to be sealed off from encyclopaedic information somehow (since unlike encyclopaedic information, conceptual metaphors are patently false). It is interesting to consider how the 'link' in the encyclopaedic entry that provides access to associated perceptual information would, or indeed could, be formatted and stored. If the link is to be included in the encyclopaedic entry, either it has to be formatted in the same way as general knowledge (i.e. in an amodal conceptual format) or it has to be sealed off or metarepresented somehow. For now, I leave these alternative options open and merely commit myself to the idea that affective, imagistic and kinesic information is accessed via the encyclopaedic entry. How these different representational types interact with each other is evidently an important topic for further research.

If we take the broad suggestion seriously, that the encyclopaedic entry includes or is somehow linked to affective, imagistic and kinesic content, what impact might this have on the *ad hoc* concept construction route of metaphor comprehension outlined in chapter 1? It holds that the lexically encoded concept, which may now include (or at least give access to) a range of sensory and motor information accessed via the encyclopaedic entry, will be replaced by the pragmatically derived *ad hoc* concept, which is rapidly constructed in on-line interpretation. Given this rapid construction, it is unlikely that any sensory and motor information will play a major role in the process of interpretation. Arguably, the addition of sensory and motor information into the encyclopaedic entry will have little impact on this component of the theory. However, for the more recent account of metaphor processing proposed by Carston (2010), and outlined in chapter 2, I believe that it may provide some interesting insight and a way of reframing the distinction between the two modes of metaphor processing proposed within RT. The chapter that follows, which looks at embodied accounts of metaphor processing, will delve deeper into this idea. Essentially, I suggest that perceptual information plays a more prominent role in the imaginary world interpretation process, as a result of the quality of attention given to the encyclopaedic information during this process, attention that occurs as a result of the interpreter slowing down (i.e. engaging in more reflective processing).

## 6.8 CONCLUSIONS

In this chapter, I have attempted to demonstrate that a purely embodied view of concepts, whilst interesting, is not justified by current empirical findings. Likewise, a purely amodal

view of concepts, which does not incorporate the notion of activation spreading from the conceptual system to sensory and motor systems, can no longer be taken seriously, given the mass of research findings which demonstrate activation in these areas during conceptual processing. I have suggested that Relevance Theory, which subscribes to an amodal view of concepts, is able to account for these findings either by broadening its notion of the encyclopaedic entry or by incorporating a more comprehensive account of spreading activation than it currently has.

In the next chapter, I explore the embodied account of metaphor processing, which fits closely with the CMT view of Lakoff and others, that is, abstract concepts (e.g. life, love, psychological traits), which so often feature as the topic of metaphorical language use, are taken to be structured by conceptual metaphors. I set this embodied account of metaphor processing against Carston's (2010) imaginary world account, which, being grounded in RT, is based on an amodal view of cognition, and does not support the notion of underlying metaphorical thought. Ultimately, I reject the embodied theory of metaphor processing and CMT's claim that abstract concepts are structured metaphorically in cognition. Nevertheless, I try to hold onto the insights afforded by embodied theories of language comprehension and use them to explain the rich, imagistic and full-bodied effects that are derived on Carston's (2010) imaginary world construction route.

## Chapter 7 · Metaphor and embodied cognition

### 7.1 INTRODUCTION

Having explored two different approaches to utterance interpretation, embodied and amodal, I now consider how the embodied approach to meaning has been applied and developed within an account of figurative language processing. Most notable in this field is the account proposed by Bergen (2005), and endorsed by Gibbs (2006), developed in the framework of ‘simulation semantics’, which draws on Barsalou’s ideas about sensory-motor simulation reviewed in the previous chapter. I begin this chapter with an outline of the simulation semantics approach, after which I consider the entailed theory of metaphor interpretation and, in section 7.3, the empirical research brought to bear on its hypotheses. To some extent, embodied theories of metaphor processing rely on Conceptual Metaphor Theory (outlined in chapter 1). As a result, I once more return to CMT and re-evaluate the theory’s arguments concerning conceptual structure.

Section 7.4 clarifies the parallels and differences between the embodied approach to metaphor interpretation and the approach of amodal theories to metaphor interpretation, both that of the standard relevance-theoretic *ad hoc* concept account and Carston’s (2010) imaginary world construction account. As suggested in the previous chapter, it is possible to modify the relevance-theoretic notion of a concept, either by enriching encyclopaedic entries with modality-specific components or by incorporating a more comprehensive notion of spreading activation (from amodal concepts to sensory-motor information). With the idea of this ‘upgraded’ amodal concept in mind, section 7.5 is dedicated to a more focused comparison of Bergen’s modal embodied simulation theory and Carston’s (2010) amodal imaginary world route of interpretation. I conclude this chapter by revisiting the role of metaphor in psychotherapy, discussed at length in chapter 4, and considering how the embodied approach to meaning and utterance interpretation is reflected in work in this field.

### 7.2 A MULTIMODAL ACCOUNT OF METAPHOR INTERPRETATION: BERGEN’S SIMULATION SEMANTICS

Bergen defines simulation semantics as,

The study of how different aspects of language contribute to the construction of mental imagery, and the corresponding theory of linguistic meaning as linguistic specifications of what and how to simulate in response to language.

(Bergen, 2005: 262)

While it might initially appear that this approach would amount to little more than Zwaan's Immersed Experience Framework, it does, in fact, bring to light some subtle gaps in Zwaan's theory. Simulation semantics is, furthermore, notable for Bergen's explicit application of the framework to figurative language, which I shall present after a brief outline of the general theory. Like Zwaan's IEF, the simulation semantics approach to meaning comprises three central processes: constructional analysis (which results in a semantic specification), simulation and inference propagation. While simulation is akin to Zwaan's stage of construal, constructional analysis and inference propagation bear little resemblance to his stages of activation and integration.

Bergen's account of constructional analysis, which gives rise to semantic specifications of utterances (to be defined below), reveals his underlying theoretical commitment, which is to the broad linguistics framework of 'construction grammar' (see Goldberg, 1995). Construction grammar maintains that any grammatical construction (e.g. word, phrase, clause) is based on 'form-meaning pairings', and so linguistic knowledge is represented as constructions or form-meaning mappings (rather than as a 'generative' grammar). The form aspect of a construction consists of its syntactic and phonetic aspects, while the meaning aspect of a construction covers its semantic and pragmatic content. These form-meaning pairings are referred to as schemas, 'mental representations that generalise over instances' (Butler & González-García, 2014: 97). For Bergen, who, together with computer scientist Nancy Chang, has proposed 'Embodied Construction Grammar' (henceforth ECG), constructions are considered as 'pathways' or 'pointers' to detailed, modality-specific knowledge that is activated during language comprehension.<sup>85</sup>

During constructional analysis, a 'parameterized set of instructions for subsequent simulation' is constructed on the basis of the words' meaning parameters and constraints provided by the grammar of the utterance (Bergen, 2005: 262). It is at this stage that interpreters determine the relationships between words in an utterance, thereby building 'a set of instructions' (a semantic specification) for simulation. Needless to say, nouns and

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<sup>85</sup> For a detailed exposition of Embodied Construction Grammar see Bergen and Chang (2005) and Chang, (2008).

verbs (i.e. content words) contribute directly to the content of the simulation, as do some function words, such as prepositions, and phrasal patterns, such as the ditransitive, a clausal pattern with subject, verb and two objects. The preposition in ‘the ball rolled *down* the hill’, for example, indicates a path of motion, which is decoded during constructional analysis and thereby contributes to the simulated content; while the preposition in the sentence, ‘Annabel sat *behind* David on the flight’, conveys a spatial relation between two individuals, which likewise, is decoded and subsequently forms part of the embodied simulation.

The constructional analysis stage is notably different from Zwaan’s activation stage during which functional webs (networks of neurons) are activated. What Bergen is suggesting is an intermediary stage, between hearing an utterance and activating the corresponding perceptual and motor content. According to Bergen, ‘linguistic units seem to encode only generalisations [also known as schematizations or parameterizations] over aspects of the perceptual and motor content they trigger in simulation’ (*ibid*: 264). For Bergen, these generalisations (which are tightly linked to the simulative details that they are schematised over) guarantee that comprehension is not an overly taxing task. Their existence ensures that interpreters do not need to access the detailed perceptual and motor content of each possible interpretation of an utterance.

Simulation, the second component of language understanding, mirrors Barsalou’s notion of the same name and proceeds in much the same way as Zwaan’s (2004) construal stage. The hearer performs a dynamic mental simulation of the content of the utterance and, in so doing, imagines the scenarios described by the language.<sup>86</sup> Since the content of the utterances consists of multimodal concepts, this simulation involves re-enacting the original perceptual, motor, social and affective stimuli through the activation of neural structures responsible for experiencing them in the first place.<sup>87</sup> As Gibbs notes, ‘the main point of constructing an embodied simulation is to create a sense of what it must be like for others, such as speakers or writers, to have the specific thoughts they do during communication’ (2006: 442). Gibbs hereby implies that the purpose of simulation is for

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<sup>86</sup> The use of the word ‘imagine’ here is not intended to suggest that simulation on Bergen’s account of interpretation is a conscious process. Although simulation *may* be conscious and deliberate, it may also be unconscious and automatic.

<sup>87</sup> Bergen states that a number of dimensions of experience may be utilised in the process of simulation construction, for example ‘affect, social interactions, subjective judgments’ (Bergen, 2005: 261). As he notes ‘motor and perceptual experiences hold a privileged position in the study of mental simulation, only because their basic mechanisms and neural substrates are relatively well understood’ (*idem*). The interaction between these different dimensions of experience, how each is brought to bear on the comprehension process, is an interesting topic for future research with the potential to reveal significant differences between literal and figurative language processing.

the interpreter to enter into the mind frame of the speaker, whose utterance they are attempting to comprehend.

The third component of Bergen's approach to language understanding is inference propagation, which is the process of propagating the knowledge gained from the simulation process throughout the hearer's wider system of knowledge and beliefs. The mental experiences gained from the utterance may be employed in a number of ways: 'according to what the understander believes he is supposed to do with them (examples might be enacting the content of the simulation, in the case of imperatives, storing the results for continued discourse, or updating beliefs about the speaker's (or someone else's) beliefs)' (Bergen 2005: 262). Inference propagation appears to be an open-ended process, with no limit on the numbers of inferences that an interpreter can draw. As previously mentioned, simulations are run in order to derive a speaker's intended meaning. However, Bergen does not distinguish between inferences that constitute a speaker's intended meaning and those that go beyond the intended interpretation and fall outside pragmatics proper. For relevance theorists, updating beliefs occurs separate from, and subsequent to, comprehension (and is subserved by distinct mechanisms that assess the believability of the pragmatically derived content). It is not clear whether, on Bergen's account, inference propagation is seen as part of the comprehension procedure per se or whether intended meaning is derived via simulation, with the inference propagation stage lying strictly outside utterance understanding.

Although an interpreter's goal is to recover the meaning intended by the speaker, a natural consequence of the simulations being re-enactments of our personal embodied experiences is that the simulations are based on our *own* bodies. Without incorporating pragmatic principles into the picture, it is difficult to see how speaker meaning is derived. Gibbs' emphasis on imagining what it must be like to be the speaker is key, however, and ties in nicely with work on theory of mind, which confirms a key role for the ability to attribute mental states to others in language comprehension (see, e.g., Frith and Happé, 1994). By running a simulation, which will include imagining what it must be like to be the speaker, we are more able to comprehend the speaker and so fulfil our role as hearers.<sup>88</sup>

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<sup>88</sup> It should be noted, however, that Griceans and relevance theorists would not find 'imagining what it is like to be the speaker' adequate to the task of recovering the meaning communicatively intended by a speaker. There are a number of complex technical issues here, but a first problem is simply that the speaker does not necessarily intend that a hearer should grasp anything about her sensory-motor experience.

Bergen suggests that figurative language comprehension employs the same set of comprehension mechanisms as literal language. For this to be possible, given that understanding figurative language so often involves abstract concepts, Bergen has to subscribe to a strong view of embodiment; namely, that sensory-motor systems play an integral role across all components of language comprehension (and are not limited to the interpretation of concepts which are unmistakably related to the perception of concrete objects/activities and physical action). In choosing to adopt this stronger view, that abstract concepts engage sensory-motor systems, Bergen adopts a notion of 'metaphorical extension'. That is to say, abstract concepts are rooted in perception to the same extent as concrete concepts, albeit less directly, because they are understood via conceptual mappings to/from concrete concepts (i.e. abstract concepts are understood *metaphorically* through concrete sensory-motor domains of the familiar sort: being physically upright or down, moving forward or backwards through space, visually perceiving objects, actions, events, etc.). In other words, Bergen endorses Lakoff and Johnson's CMT (Lakoff & Johnson, 1980).<sup>89</sup>

As conceptual metaphor theorist Ray Gibbs points out, making the case for embodied metaphor is the necessary preliminary in arguing for a simulation semantics account of metaphorical language comprehension. The idea is that just as literal language and concrete concepts are rooted in 'bodily processes' (i.e. perceptual and motor processes), so too are metaphorical language and abstract concepts. Recall how, according to CMT, abstract concepts such as LOVE and WAR are structured by various patterns of our perceptual experiences. Repeated aspects of experience, for example experiences connected to embarking on journeys, give rise to 'image schemas' that become mapped onto different abstract domains (e.g. love relationships, careers, life) in order to establish concrete understanding of these abstract concepts.

While Bergen concedes that the nature of the simulation in metaphorical language processing is 'still very much at issue', he puts forward an intuitive characterisation of how it might proceed. To use Bergen's example, consider the sentence below:

1. The judge put my rendition of Ave Maria under a microscope.

It should be clear that this sentence is intended metaphorically: the speaker's rendition is considered in great detail by the judge, but not put under a literal microscope. The author

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<sup>89</sup> It is worth noting that Barsalou (1999: 600) does not subscribe to CMT. While he grants that metaphor may play a role in 'elaborating and construing abstract concepts' he maintains that 'it is not sufficient for representing them.'

describes this sentence as making use of the conventional conceptual metaphor UNDERSTANDING IS SEEING (Lakoff & Johnson, 1980). According to conceptual metaphor theorists, comprehension of this sentence entails constructing a simulation that calls on elements of the concrete source domain (visual inspection) and then maps this source domain to the target domain (assessing a musical performance). Bergen does not address the validity of this claim in great detail, except to mention that it has some standing empirically, being corroborated by work which demonstrates that thinking about target domain concepts involves activating source domain imagery (see Boroditsky, 2000 for further detail). In seeking to expound the role of source-domain simulation in a simulation semantics account of metaphor, Bergen leans on Fauconnier and Turner's conceptual integration account (2002). It is there suggested that metaphorical simulation involves constructing a single 'hyper-literal' simulation, which incorporates features of both the source and target domains; so, for the above sentence, for example, what we imagine or simulate is a scenario in which 'the judges are using a microscope to visually inspect something, which is a miniature me, performing my Ave Maria' (Bergen, 2005: 268). This idea has interesting resonances with the philosopher Donald Davidson's position that what metaphor involves is 'seeing as', discussed briefly in chapter 2. It might be possible to view Bergen's 'hyper-literal' simulation as a psychological implementation of Davidson's idea, which in the example amounts to 'seeing the singing judge as a scientist with a microscope'. For Davidson, this image would cause a number of further effects including further images (of details or flaws coming into view via the microscope) and perhaps thoughts about the intensity of the judge's attention to the speaker's singing and/or how it felt for him to be so forensically scrutinised.

At this point, having outlined Bergen's account of simulation semantics with respect to metaphor, we have an overview, albeit a somewhat sketchy one, of how an embodied, multimodal view of concepts can be incorporated into a comprehensive account of figurative language processing. As we have already seen in chapter 1, the legitimacy of the claims put forward is somewhat threatened by Bergen's reliance on the existence of conceptual metaphors. Nevertheless, there exists an interesting, small but growing, body of empirical work cited in its favour, a review of which follows. Subsequent to an analysis of the embodied metaphor data, I shall re-consider the relevance-theoretic accounts of metaphor comprehension, which are grounded in a view of concepts that has not (yet) engaged with the embodiment literature.



### 7.3 EMPIRICAL SUPPORT FOR A MULTIMODAL ACCOUNT OF METAPHOR INTERPRETATION

Research into embodied simulation during metaphor interpretation is limited, with just a handful of studies offering empirical research designed to corroborate claims. Since the embodied theory of metaphor processing relies on CMT, studies cited in favour of this theory tend also to be grounded in CMT and to advocate the existence of conceptual metaphors. This section reviews just two such studies, one psycholinguistic, one neurocognitive, and evaluates the extent to which they support the embodied simulation account of metaphor interpretation.

In an endeavour to test people's embodied understanding of metaphorical utterances, Gibbs (2013b) constructed a number of extended narratives, which were either described metaphorically (based on a conventional conceptual metaphor) or described literally. For example, a romantic relationship was either described as 'moving along in a good direction' (a metaphorical description, which makes use of the conceptual metaphor RELATIONSHIPS ARE JOURNEYS), or it was described as being 'very important' (a literal description, which is not grounded in any cross-domain mappings). These narratives were, furthermore, constructed so as to either depict a successful relationship, or an unsuccessful relationship. After listening to one of these stories, participants were blindfolded and asked either to walk, or to imagine walking, to a marker that was 40 feet away (a marker which they had seen at the beginning of the experiment); participants were also instructed to think about the story that they had just heard whilst engaging in the walking exercise. When participants imagined walking to the marker, as opposed to actually walking, they pressed a stopwatch as soon as they imagined having reached the marker. After completing this task, participants were asked to rate, on a 7-point scale, their mood and the extent to which they had been thinking about the story in question.

Gibbs found that participants who had heard the story about the successful relationship 'moving along in a good direction' walked further than those who had heard the story about the unsuccessful relationship. Most importantly, this difference collapsed in the non-metaphorical condition, where the relationship (successful or unsuccessful) was not described using metaphorical language. In other words, when participants had not activated, and simulated, the conceptual metaphor RELATIONSHIPS ARE JOURNEYS, no differences in walking (real or imagined) were found after reading stories about successful and unsuccessful relationships. Gibbs uses this result to suggest that comprehension of

metaphorical language involves simulating the embodied content of underlying conceptual metaphors, in this case of RELATIONSHIPS ARE JOURNEYS.

Gibbs conducted two additional studies that used metaphorical materials derived from two contrasting conceptual metaphors: RELATIONSHIPS ARE JOURNEYS and RELATIONSHIPS ARE MANUFACTURED OBJECTS. Pairs of stories depicted a successful relationship and were exactly the same, save for the final statement, which in the case of the aforementioned conceptual metaphors was either, 'you and your friend are moving along in a good direction' or 'you and your friend are building a solid foundation' (motivated by the contrasting conceptual metaphors respectively). In the first experiment that used these materials, Gibbs was interested to see whether participants would draw different metaphorical inferences from these two contrasting statements. Participants, therefore, saw both endings and were subsequently asked:

- (i) Which relationship progressed further?
- (ii) Which relationship was progressing faster at the beginning?
- (iii) Which relationship is progressing faster at present?
- (iv) Which relationship progressed more along a straight line?
- (v) Which relationship were the individuals heading in the same direction?

Gibbs found that participants' answers to these questions were significantly more likely to select the story that had ended with the metaphorical statement 'you and your friend are moving along in a good direction', as opposed to the story that had ended with the statement 'you and your friend are building a solid foundation'. He interprets this finding as evidence that participants had activated the conceptual metaphor RELATIONSHIPS ARE JOURNEYS, given that their inferences (evidenced by their answers to the above questions) were all in line with this conceptual metaphor.

In Gibbs' second study, the same materials were used (i.e. stories whose final sentence was motivated by two contrasting conceptual metaphors) and participants once again engaged in a walking task (real and imagined) after listening to said stories. It was predicted that when participants had heard a story that ended with a metaphorical statement derived from the RELATIONSHIPS ARE JOURNEYS conceptual metaphor, they would walk further than after having listened to a story whose final sentence was motivated by the conceptual metaphor RELATIONSHIPS ARE MANUFACTURED OBJECTS. Indeed, these predictions were borne out. The results, according to Gibbs, strengthen the claim that metaphorical language comprehension involves simulation of the movement

that is associated with the specific conceptual metaphor that motivates a particular metaphorical use of language. Even though relationships are not, in fact, physical entities that travel along paths, Gibbs' findings are consistent with the claim that they are conceived as such and that comprehension of the linguistic manifestations of this conception involves engaging in congruent embodied simulations. The results are, therefore, in line with predictions made by the embodied simulation account of metaphor processing, and indicative that sensory-motor information plays an equally important role in metaphor interpretation as it does in literal language interpretation.

Neural data, in the form of imaging studies and EEG analyses, have presented additional evidence in support of the claim that sensory and motor systems of the brain are activated during figurative language comprehension. Desai and colleagues conducted an fMRI study comparing neural responses across three conditions: literal action sentences, metaphorical action sentences and literal abstract sentences, all of varying familiarity. For an example of each, see below (Desai et al., 2011):

1. The daughter grasped the flowers (*literal action*).
2. The public grasped the idea (*metaphorical action*).
3. The public understood the idea (*abstract*).

The authors found that, in line with the embodied picture, understanding metaphorical action (e.g. grasping an idea) involves activation of sensory-motor systems indicative of simulating the (literal) physical action described (e.g. the action of grasping something with one's hands).

In a significant twist to the story, however, Desai and colleagues also discovered that the supposed simulation process decreased as a function of metaphorical familiarity. That is to say, more familiar metaphors gave rise to less detailed simulations and a decreased involvement of primary sensory-motor systems. These findings led to the conclusion that, although embodied simulations are an aspect of metaphor comprehension, the process is additionally reliant on abstract lexical-semantic codes. This conclusion, and in particular the authors' apprehension with respect to the strong embodiment view of meaning, is representative of the cautious stance taken by many. Their results, therefore, support the position reached at the end of chapter 6: that amodal concepts are essential to cognition, but not independent from sensory-motor information (developed, in particular, by Mahon and Caramazza (2008)).

In the section that follows, I revisit the relevance-theoretic accounts of metaphor comprehension, the classic *ad hoc* concept account (Sperber & Wilson 1995, 2008) and Carston's (2010) imaginary world account, both of which are grounded in an amodal view of concepts. This section clarifies the role of sensory-motor information in disembodied amodal approaches to metaphor, which thereby paves the way for more detailed comparison between Bergen's embodied account and Carston's disembodied account.

## 7.4 AMODAL APPROACHES TO UTTERANCE INTERPRETATION AND METAPHOR COMPREHENSION

### 7.4.1 SPERBER AND WILSON'S RELEVANCE THEORY

Given RT's foundation in Fodor's amodal view of concepts, affective, sensory and motor information does not explicitly feature in the construction of metaphorical meaning on the classic RT *ad hoc* concept construction account. The approach, therefore, stands in stark contrast to Bergen's simulation semantics theory, in which embodied content plays a significant role in the interpretation of metaphorical language. For RT, there is no explicitly stated role for sensory and motor information in the process of utterance interpretation. The literal encoded meaning of the words in question quickly falls away and becomes replaced by *ad hoc* concepts. In fact, a fully-fledged proposition containing the encoded concept is never processed. The input to the utterance interpretation process is a set of logical forms decoded by the language processing system; these logical forms are 'highly schematic conceptual structures, functioning as mere templates for the construction of fully propositional forms' (Carston, 2002: 64). The output of the process consists of amodal conceptual representations, 'a set of assumptions or propositional forms, explicatures, and implicatures, which constitute 'what is communicated' (*idem*). In fact, Sperber and Wilson (1995) are adamant that the output of even the most poetic metaphorical uses is to be thought of as a set of (weakly communicated) implicatures: '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' (*ibid*: 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' (*ibid*: 224).

In contrast, the inputs on Bergen's account are multimodal, embodied concepts or embodied conceptual metaphors and the output, presumably, is something equally multimodal, perhaps imagistic in nature. While Carston's account of metaphor

processing also relies on an amodal view of concepts, I shall argue that it is quite compatible with the embodied picture outlined in section 7.2 and that Carston herself paves the way for this development with her emphasis on the significance of imagery in her literal meaning/imaginary world account (Carston 2010).

#### 7.4.2 CARSTON'S IMAGINARY WORLD CONSTRUCTION ROUTE

As already discussed in chapter 2, Carston's account of metaphorical language interpretation is not intended to replace the *ad hoc* concept construction account. Rather, she puts forward the idea that an optional, alternative mode of metaphor processing is available to interpreters and exists alongside the lexical adjustment mode of the standard RT account.

Carston's suggestion of the imaginary world route, in which the literal meaning of the metaphorically used expression plays a greater role in the interpretation process, stemmed from a number of observations: firstly, that the folk intuition (endorsed by many metaphor theorists) of metaphor being special and distinct from other figurative uses of language remains widespread and, secondly, that the *ad hoc* concept account does not seem to fully capture the rich full-bodied effects that certain metaphors evoke, in particular extended and/or novel creative metaphors, typical of literary cases but not confined to that field. Focusing her attention on these extended metaphors, Carston notes how the literally encoded meaning is often highly active, being played upon extensively in the metaphor itself.

Consider once again the extract from Zoë Heller's novel *The Believers*:

2. 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.

(Zoe Heller, *The Believers*, p. 263. Cited in Carston, 2010: 309)

The *ad hoc* concept account outlined in chapter 1 maintains that we replace each of the lexically encoded meanings of TOAD, CREATURE, FISTS, FANGS, etc. with pragmatically modulated *ad hoc* concepts, TOAD\*, CREATURE\*, FISTS\*, FANGS\*, etc., that is, more general

concepts which include the denotation of the lexical concepts but also go well beyond it, e.g. the denotation of TOAD\* would include instances of psychological stasis or catatonia as well as the physical animals. Carston suggests, however, that such a process entails an excessive expenditure of cognitive effort, since the literal meanings of the metaphorically used expressions are so highly accessible (having been reinforced by forwards and backwards semantic priming). The *ad hoc* concept account fails to take into account the empirically supported fact that literal meaning in these cases is highly activated (see Giora, 1999). In addition, it cannot explain why such meaning remains active, even when the metaphorical interpretation has been derived (Rubio-Fernández, 2007).

Carston thus proposes that hearers take the literal meaning as a whole and metarepresent it as descriptive of an imaginary world. This results in a representation of the literal interpretation of the entire passage, a representation which is initially entertained in a way that keeps it apart from factual belief representations but is ultimately subjected to inferential pragmatic processes, which may, however, be applied in a more reflective less automatic way than typical fast local on-line processing. Thus, from the patently false representations of depression as a sluggish toad and grief, in contrast, as a vicious animal, we derive implications that can be integrated with our existing beliefs about the kind of negative mental states that humans have. The outcome of this alternative processing route is an interpretation that consists of a dense array of weak implicatures concerning the emotional and physical pain that Karla is experiencing. However, as Carston points out towards the end of her paper, it may well be that the most memorable and striking effects of the metaphor are the details of the imaginary world (comprising literal meaning and accompanying imagery) rather than the meaning recovered as implicatures (amodal conceptual representations).

It is useful to reiterate the differences between this imaginary world route and the *ad hoc* concept account. On the *ad hoc* concept account, the literal meaning of the metaphorical expression simply provides access to the materials for constructing the intended *ad hoc* concept. That is to say, it provides access to the logical and encyclopaedic information associated with that concept. However, the lexically encoded concept relatively quickly falls away, having been replaced by the *ad hoc* concept, which is rapidly formed in an on-line local process. The proposition explicitly communicated (the explicature) contains the *ad hoc* concept as a constituent, which has been semantically composed into the (truth-conditional) content of the utterance. On the alternative imaginary world account, there is no proposition explicitly communicated, since the speaker does not endorse the imaginary world as a description of the actual world.

Instead, the outcome of the interpretation process is an array of implicatures, which the speaker does endorse and which are to be integrated with the hearer/reader's overall representation of the world. In addition, the literal meaning of the metaphorical expression and the imagery it evokes play a significantly more important role in the comprehension procedure on the imaginary world account; it is maintained, developed and represented as material for a reflective pragmatic process. This reflective pragmatic process scrutinises that literal meaning and extracts from it relevant implications that are taken to comprise the metaphor's meaning. Having considered the linguistically encoded meaning *en masse*, the implicatures derived exhibit a richer, more profound quality than those derived on an *ad hoc* concept construction route.

## 7.5 RELATING AMODAL AND MODAL ACCOUNTS OF METAPHOR PROCESSING

I suggest that the process of constructing an imaginary, metaphoric world, of taking extended passages of 'literal' meaning as a whole, will inevitably include activation of more sensory and motor information. This, of course, is only made possible by upgrading the amodal concept, as was suggested in section 6.7 of the previous chapter, so that the concept includes such multimodal information, either contained within the concept's encyclopaedic entry, or accessible through that entry, by spreading activation. The idea that imaginary world construction engages more sensory and motor information than *ad hoc* concept construction is in line with Desai and colleagues' neural findings mentioned in section 7.3. These findings demonstrate that unfamiliar metaphors give rise to more detailed simulations and an increased involvement of primary sensory-motor systems compared to more familiar metaphors. Although Carston's theory is not designed as an account of unfamiliar metaphors, it is to some extent proposed as an account of extended, creative and poetic uses of metaphor, which will often be less familiar and more novel. The *ad hoc* concept account, on the other hand, seems to be more suited to the understanding of simple, conventional metaphors (i.e. more familiar metaphors), so it follows from Desai's results that comprehension of metaphors interpreted via this route would not involve so much activation of sensory-motor systems, although, as Zwaan et al. (2002) have shown, there may be some (automatic, unconscious) activation of sensory-motor regions in language comprehension quite generally.

Given the greater amount of time and attention paid to each individual lexical concept on the imaginary world route, it follows that a hearer will have access to a greater range of information associated with each concept, much of which may be affective and

imagistic. The nature of this attentive processing may be such that a threshold of awareness is reached which accounts for the conscious experience that readers often report of rich imagery and sensory effects. Recall that during *ad hoc* concept construction, the lexically encoded concept is quickly replaced by the *ad hoc* concept, so that interpreters have little time or opportunity to access and register the multimodal information associated with the concept (through its encyclopaedic entry or through spreading activation). The idea that imaginary world construction engages more sensory-motor information has the advantage of explaining the intuition that metaphors, particularly the extended and creative kind, are often deeply moving and have the potential to give rise to more visual and kinesic effects.

To reframe Carston's proposal in Bergen's terminology, one could say that taking the literal meanings as a whole is akin to running a simulation, or perhaps to running a simulation several times over before moving to the stage of inference propagation. As Carston has always argued, an important difference between the imaginary world account and the *ad hoc* concept route lies in our engagement with the literal meaning. This can be seen as a difference in the simulation process. It is possible that the rapid local process of constructing *ad hoc* concepts bypasses the simulation process altogether and skips ahead to inference propagation, while taking the encoded literal meaning of the extended metaphor as a whole involves staying longer in the simulation stage of interpretation, constructing more detailed simulations.

A minor ambiguity of Bergen's simulation semantics account pertains to the optionality of the simulation process. I have suggested that constructing *ad hoc* concepts is a procedure that calls on the simulation process to a much lesser extent. However, it is not clear if Bergen himself would endorse this idea. Although he writes, 'inference propagation could in principle proceed without first engaging the simulation mechanism' (Bergen, 2005: 266), his discussion of examples in which hearers may bypass the simulation process is limited to phrases such as 'yeah' and 'sure'. Given their frequency of use, we have a clear understanding of these phrases and know to update our beliefs in a particular way, having learnt to do so through associative learning, so that there is 'no need to wait for the simulation'. Therefore, it appears that for Bergen, we may only bypass the simulation process so long as it has been engaged in previously.

It seems advantageous, however, to maintain that simulation is in fact an optional process or at least a 'more or less' process, given that there are many contexts in which it will not be necessary or appropriate to access the range of sensory and motor information of a concept that is potentially available to us and stored in memory. This idea mirrors



that of David Ritchie who, like Bowdle and Gentner (1999: 91) views metaphor as a 'pluralistic' phenomenon, which engages different processes in different contexts. For Ritchie (2008), simulation is involved in comprehension to varying degrees. He suggests that while some metaphors will evoke full imaginative reconstructions of experience that call upon a range of perceptual simulators, other metaphors will trigger much more limited simulations, that perhaps barely register in the addressee's consciousness. Ritchie claims that the intensity of a simulation is moderated not only by the linguistic expression, but also by the context in which that expression appears: e.g. the social and cultural function of the conversation, the level of intimacy between the speaker and hearer etc.<sup>90</sup>

Ritchie's suggestion that simulation is to some extent a more or less process resonates with Carston's theory of imaginary world construction, which is set up as an optional processing route, designed to complement the existing *ad hoc* concept construction route. Carston believes that while the literal processing route is an important one, which is always available to us, there are some contexts in which it is more likely to be employed. For example, the imaginary world construction route may be more appropriate, or indeed appealing, in the interpretation of literary works: e.g. in reading certain genres of poetry, a reader expects to achieve a qualitatively different, richer and more insightful, interpretation than the quick-fire basic meaning expected for more utilitarian communication, and so is prepared to expend more effort and engage reflectively or imaginatively with the poetic 'utterance'. Likewise, it may be a preferable mode of processing for more novel metaphors, which require additional processing effort to interpret. Since concepts on the simulation semantics account are *always* and *only* embodied and multimodal, it is difficult to posit activating these concepts without activating sensory and motor information and running a simulation. Herein lies an advantage of maintaining an amodal representation of knowledge, which is, nevertheless, neurally connected to sensory-motor representations. Doing so allows one to explain how conventional and familiar language may continue to be comprehensible, even when the sensory-motor system has not been engaged.

A further advantage of Carston's account of imaginary world construction is its independence from Conceptual Metaphor Theory. In chapter 1, RT was favoured over CMT as an account of metaphor comprehension largely on the basis that CMT's account of metaphorical language interpretation was not sufficiently developed; in addition, it did

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<sup>90</sup> For interesting discussion on how different metaphorical descriptions of pain elicit simulation see Semino (2010).

not appear to be adequately supported by empirical research. Framing CMT within the field of simulation semantics certainly provides the theory with a more comprehensive account of on-line language interpretation. However, there remain significant drawbacks with positing the existence of conceptual metaphors, in terms of the implications for conceptual structure.

Nowhere are these drawbacks more definitively covered than in Murphy (1996, 1997). A significant difficulty that arises from the assertion that abstract concepts are metaphorically structured is to be found in the problem of expounding exactly how conceptual metaphors are coordinated. As we have seen in this chapter, CMT suggests that multiple, sometimes conflicting, conceptual metaphors can structure the same target domain. Recall that relationships are conceptualised both in terms of journeys, and also in terms of manufactured objects (e.g. buildings). This immediately raises the question, how can one concept be both? That is, how can radically different conceptual metaphors structure the same concept? As Murphy points out, one would expect on this basis to find conflicting results *within* subjects in terms of entailments, and confusion with regard to categorisation of abstract concepts. One may not be able to explicate, in literal terms, exactly what LOVE is. However, one can surely make inferences indicative of some coherent structure for the abstract concept. Furthermore, it seems illogical to suppose that only certain concepts, usually abstract concepts, are metaphorically structured. This claim entails strict demarcation between abstract and concrete, which is not adequately motivated. CMT claims that only abstract concepts are metaphorically structured because we cannot understand them otherwise. But it takes only a few readily available examples for it to be immediately obvious that the topic (target domain) of a metaphor can be just as 'concrete' as the metaphor vehicle (source domain), e.g. 'That surgeon is a butcher', 'That butcher is a surgeon', 'The actor spoke his lines with dexterous topspin', 'The petals of the cyclamen are white moths, with wings lifted over dark water' (adapted from R. S. Thomas's poem 'cyclamen').

Given the inherent difficulties of CMT, the embodied simulation account of metaphor processing, which relies on CMT's notion of metaphorical cognition, is itself somewhat limited. Carston's imaginary world account, in contrast, exhibits no obvious drawbacks and, with an updated view of RT's amodal concepts as appropriately connected to relevant sensory-motor information, is equally able to account for the embodied data discussed in this chapter and in chapter 6.

## 7.6 PSYCHOTHERAPEUTIC USES OF METAPHOR AND THE ROLE OF EMBODIMENT

Revising the relevance-theoretic notion of a concept so as to incorporate multimodal information, not only serves accounts of metaphor processing, but also, it informs the use of metaphor in psychotherapy. It was argued in chapter 4 that, for a multitude of reasons, intentional use of metaphorical language in psychotherapy may often benefit psychotherapeutic objectives: by fostering the therapeutic alliance, by helping clients reach insights about themselves, by increasing memory for discussed material, etc. The idea that extended and creative uses of metaphorical language engage sensory-motor systems to a greater extent than literal language or simple lexical metaphors, lends further support to therapists' practice of elaborating and extending metaphors. As Lakoff and Johnson (1980: 53) claim 'metaphor is one of our most important tools for trying to comprehend partially what cannot be comprehended totally: our feelings, aesthetic experiences, moral practices and spiritual awareness'. Metaphor may help clients to understand their feelings, since comprehension of such language involves accessing more affective, embodied content, which is inevitably deeply personal and gives rise to deeply felt cognitive and affective effects. As author and civil rights activist Maya Angelou said:

I've learnt that people will forget what you said, people will forget what you did, but people will never forget how you made them feel.

Metaphor, extended metaphor at least, makes people feel. It puts them in touch with their bodily senses, and in so doing, is more memorable and often more profound. In the context of psychotherapy, where the primary goal is to achieve beneficial insight and effects, metaphor is thus an invaluable resource for effecting long-lasting change.

That extended metaphors give rise to deeply felt experiences appears to be a basic assumption of the psychotherapeutic practices discussed in chapter 4, section 4.4. I believe that this is clearly evidenced by the practices themselves, which show therapists inviting clients to access and work with the sensory content of figurative expressions. Recall the client who spoke of his wife as a rock (Cirillo & Crider, 1995). Initially, the client in this scenario viewed his wife as a rigid, inflexible and unyielding person. However, by scrutinising the image of a rock the client was able to transform this conception and shift his attention to the solid and enduring aspects of the rock (i.e. his wife). This shift in perspective is, in some sense, reliant on the client experiencing the

sensory-perceptual components of his use of language. It seems that one of the reasons why this metaphor was so productive is because the process of developing it activated sensory-motor content. In other words, the process of developing an imaginative metaphorical world, in which the conception of a person as a rock is embedded, encouraged the client to simulate affective sensory-perceptual details, which in turn lead to deeply felt therapeutic insight. Therapists who work with metaphor in this way seem to recognise that 'the power of metaphor lies in its ability to touch an affective component of the individual's experience' (Marlatt & Fromme, 1987: 22); either consciously or unconsciously, these therapists use metaphor in their practice in order to exploit this power.

To further illustrate, consider a client who is experiencing a lot of physical pain, particularly around his neck and shoulders. At the end of the client's first session, the therapist tells the following story:

Once upon a time, there was a traveller who had a long way to go. He was carrying a huge rucksack. As he travelled, the rucksack became heavier and heavier because he had the curious habit of putting a stone in his sack whenever he encountered any difficulty. The further he went, the more he felt the painful weight of the sack on his shoulders, and the sooner he became exhausted and had to rest. People who saw him stumbling commented on the heavy load he carried, but this only offended him. When he finally realized that resting did not mitigate his pain, he took off his rucksack. After much hesitation, he opened the sack and looked at everything he had collected. He removed the stones one by one, examined them and felt their weight in his hands. When all the stones were lying on the ground, he decided to build a statue as a memorial to all the difficulties he had encountered and survived on his journey. When he finished building the statue, he realized that it also symbolized his ability to continue on his travels in a much better and lighter manner than before.

(Witztum, van der Hart & Friedman, 1988: 284)

The stones in this metaphorically intended narrative clearly symbolise the emotions that the client is carrying around, emotions which the therapist assumes are causing the client physical pain. Again, the therapeutic impact of this metaphorical story is partly reliant on the client experiencing the embodied aspects of the story. Or at the very least, the impact of the story is heightened by the client's ability to imaginatively simulate the burden of the

heavy rucksack and to experience the weightlessness and relief of pain that the character in the story experiences when he takes off the rucksack. The therapist's use of this story can be seen as an invitation to engage in imaginary world construction and a request to simulate the sensory-perceptual elements of this world. The implicit assumption behind this practice being that doing so will inspire therapeutic insight, since it will result in deeply felt cognitive and affective effects.

For Bryant and colleagues a 'therapeutic metaphor' is defined as 'any verbal or concrete illustration, description or reference designed to bring about perceptual and/or behavioural change' (Bryant et al., 1988: 113). This characterisation of metaphor ties into the idea that a key component of working with metaphor in psychotherapy involves engaging sensory-perceptual systems. Therapeutic practice, both observations of what therapists do and observations of what clients experience, thus meshes with the theoretical account developed in this thesis, which has advocated incorporating sensory-perceptual content, and the embodiment view, into Relevance Theory.

## 7.7 CONCLUSIONS

This chapter has looked at ways in which a multimodal view of concepts might bear on the interpretation of metaphor. In addition to an assessment of the very strong embodied view of Bergen, which is hampered by its dependence on Conceptual Metaphor Theory, I have followed through with the suggestion made in chapter 6 that the RT view of concepts be upgraded so as to incorporate sensory-motor components associated with concepts. I have argued that doing so reframes the distinction between the classical RT *ad hoc* concept account of metaphor understanding and Carston's alternative route to metaphor comprehension: the latter involves more extensive (conscious) engagement with sensory-motor content, hence the more profound effects often derived from metaphors comprehended via the imaginary world route. A further advantage of adopting a view of concepts which more explicitly incorporates embodied information is the additional weight that this move gives to the use of metaphorical language in psychotherapy, particularly to the purposeful use of metaphor in psychotherapy to enable clients to reach beneficial insight into their condition. In the short chapter that follows, I briefly summarise the ideas developed in this thesis and suggest some avenues for further research.

## Chapter 8 · Concluding remarks and future directions

### 8.1 SUMMARY

This thesis has explored various accounts of metaphor comprehension, in an effort to find a theory which may be applied to all instances of metaphorical expression. Chapter 1 began by assessing two opposing theories: Conceptual Metaphor Theory (CMT) (Lakoff & Johnson, 1980) and the relevance-theoretic *ad hoc* concept account (Sperber & Wilson, 2008). It was noted that many psychotherapists working with metaphor have endorsed CMT; these therapists believe that the theory corroborates their assumption that attention to language has the power to reveal the underlying fabric of a speaker's unconscious thoughts. However, after unpacking CMT's theoretical underpinnings and implications, I showed that, in fact, CMT does not support therapeutic practice in the way that psychotherapists maintain. CMT was ultimately rejected in favour of RT, primarily on the basis of the lack of evidence in support of CMT's claim that verbal metaphors originate in cognition (as opposed to communication). RT was subsequently applied to psychotherapy and the Cognitive Principle of Relevance used to explain why psychotherapists' attention is often focused beyond communicatively intended meaning.

In chapter 2, my focus shifted from relatively simple metaphors to more complex and creative uses of metaphorical language. It was suggested that extended metaphors, in particular, were ill suited to analysis via RT's *ad hoc* concept theory, and that their effects are better explained by accounts of metaphor which ascribe a more prominent role to the literal meaning of metaphorical language during the interpretation process. On Carston's (2010) imaginary world account of metaphor interpretation, the literal meaning of a metaphorical expression is metarepresented and subjected as a whole to more reflective inferential processes. Since a metaphor's literal meaning and accompanying imagery is maintained and scrutinised on this account, the overall effect of interpretation is richer than that derived during local on-line *ad hoc* concept construction, where literal meanings are immediately adjusted and replaced with more abstract concepts. I concluded chapter 2 by suggesting that together the RT account of *ad hoc* concept construction and Carston's imaginary world interpretation theory could account for the full range of effects achieved by metaphorical uses of language.

Chapters 3 introduced the special communicative context that is psychotherapy and clarified how (and indeed why) psychotherapists' definition of communication is distinct from (and much broader than) that of pragmaticists. In chapter 1, I had briefly

mentioned that psychotherapy engenders a unique style of discourse. I built on this idea in chapter 3 by investigating the distinct goals of psychotherapy and considering how those goals affect the dynamics of communication between clients and therapists. Chapter 4 explored the role of metaphorical language in psychotherapy. It was noted that metaphor can serve a number of functions in this context, contributing to therapeutic ends by: (i) combating client resistance, (ii) acting as a signal of empathy, (iii) serving as a shared shorthand between client and therapist (thereby, supporting the therapeutic relationship), (iv) making insights more memorable and (v) generating fresh perspectives. These functions, or if you like, these effects, of metaphor may be inspired by relatively simple, short metaphors; however, a number of therapy models advocate generating extended metaphors as a means of guaranteeing the aforementioned effects. Support for Carston's (2010) imaginary world processing route was found in such approaches to metaphor, which invite clients to sustain and develop the literal meaning of their metaphorical expressions, on the assumption that such practice may ultimately yield therapeutic insight.

Chapter 5 sought empirical support for Carston's alternative mode of metaphor interpretation and further explored the distinctive effects of extended metaphors. It was hypothesised, on the basis of memory questionnaire results, that the interpretation of extended metaphors might have more lasting impact than the interpretation of literal language and simple metaphors. Although the empirical validity of these questionnaires is limited, largely by the size of the population tested, the results, nonetheless, add some weight to the claim that metaphor is a fruitful tool in the context of psychotherapy in terms of boosting therapeutic impact and enacting long-lasting change.

In Chapters 6 and 7, I returned to theories of cognition and communication, exploring the multimodal approach to concepts, which underpins current CMT and contrasts with the amodal stance adopted by both the *ad hoc* concept account of metaphor and Carston's imaginary world theory. Chapter 6 laid the theoretical foundations for an embodied account of meaning, while chapter 7 explored how such an account might be fruitfully incorporated into the theory of metaphor comprehension. In chapter 6 I suggested that the relevance-theoretic view of concepts be enriched so as to more actively incorporate sensory-motor content. This move not only enables Relevance Theory to account for the mass of research findings that demonstrate activation of sensory-motor areas during conceptual processing (i.e. to account for the 'embodiment data'), but it also brings RT into further alignment with psychotherapeutic practice. As such practice takes for granted an individual's ability to activate and play with the

associated sensory-motor content of language, it is essential that our model of cognition and communication recognises this content and allows it to be exploited during conceptual processing (and so during metaphorical language processing).

## 8.2 FUTURE DIRECTIONS

### 8.2.1 IMPLICATIONS FOR RELEVANCE THEORY

In chapters 6 and 7 of this thesis, I highlighted the need for Relevance Theory to engage with the large body of work on embodied cognition. In so doing, I suggested that RT incorporate imagistic and affective effects that result from a great many metaphors (and utterances more generally) into its theoretical framework. The theoretical implications of such an undertaking are plentiful and mark an important topic for further research. For example, exactly how can imagistic and affective effects be built into RT? What would such a move mean for RT's existing definition of 'cognitive effects'? Likewise, what would it mean for RT's definition of 'relevance', which as Carston (2002: 44) notes is 'a positive function of cognitive effects and a negative function of the processing effort expended in deriving those effects'?

Recall that Relevance Theory defines cognitive effects as the result of a relevant interaction between new stimulus and existing assumptions. Such an interaction may lead either to existing assumptions being supported and thereby strengthened, or to existing assumptions being contradicted and thereby eliminated. In addition, it may lead to the derivation of contextual implications (i.e. new assumptions which are inferentially derived). It is interesting, and indeed pertinent, to consider whether and how imagistic and affective effects fit into this picture. Furthermore, there remains the question of whether embodied effects fall under the relevance-theoretic notion of a speaker's 'communicative intention'. In other words, to what extent is the derivation of imagistic and affective effects a part of the intended meaning of an utterance, be it metaphorical or literal? This question harks back to Ritchie's work on embodied simulation, which describes the simulation process as a 'more or less' phenomenon, thus implying that embodied effects lie outside the domain of communicatively intended meaning, at least in some contexts. As was mentioned in the preface to this thesis, setting up a dialogue between Relevance Theory and embodied cognition marks the first stage of a potentially important development for RT. The theoretical repercussions of this union, however, are yet to be fully realised.



More generally, this thesis reinforces the need for RT to engage with real-world instances of language use and to broaden the range of empirical data it considers when advancing accounts of metaphor comprehension. Future work in Relevance Theory ought to make use of corpora, rather than relying on made-up examples of language use. I believe that doing so might enable relevance theorists to better understand the effects of context on metaphor interpretation, and indeed utterance interpretation generally. In turn this understanding may foster an appreciation for metaphor as a ‘pluralist’ phenomenon that, as Bowdle and Gentner, Carston, Gibbs and Steen recognise, can be comprehended via a number of different processing routes.

### 8.2.2 RELATED TROPES: SIMILE

At various points throughout this thesis, I have touched on metaphor’s relation to other forms of figurative language, in particular simile. Recall that according to the relevance-theoretic *ad hoc* concept account, metaphors and similes are distinct in terms of comprehension: metaphors are interpreted via *ad hoc* concept construction, while similes are interpreted literally with the key content recovered as implicatures (see chapter 1, section 1.4). Glucksberg and Haught’s (2006) psycholinguistic research supports RT’s distinctive treatment of metaphor and simile. These authors found that when interpreting categorical metaphors (e.g. ‘some ideas are diamonds’) participants tended to mention properties that were not typically true of the metaphor vehicle in isolation (e.g. ‘insightful’, ‘creative’ and ‘unique’). In contrast, when interpreting corresponding similes (e.g. ‘some ideas are like diamonds’) participants were more likely to mention properties that were true of the metaphor vehicle in isolation (e.g. ‘rare’ and ‘valuable’). The distinctive effects of metaphor and simile have long supported the claim that the form of a figurative expression (categorical or comparison) affects an interpreter’s route of processing.

Since similes give rise to fewer emergent properties than metaphors, the prevailing opinion amongst linguists is to see simile as the ‘poor sister of metaphor, who cannot have the same creative force of her more fashionable sibling’ (Bridgeman, 1996: 65). However, as O’Donoghue points out the ‘longer, less conventional and more poetic a metaphorical use becomes, the less appreciable the difference in effect between metaphor and [corresponding] simile’ (O’Donoghue, 2009: 135). This idea neatly coincides with Carston’s (2010) imaginary world account, which, as noted in chapter 2, brings metaphor and simile closer together. On this account, the literal meaning of a metaphor plays a

more sustained role in the interpretation process, just as it does during simile interpretation. It is possible, therefore, that the aforementioned differences between metaphors and similes largely evaporate when metaphors (and similes) are sufficiently extended. It would be most interesting to conduct further empirical research into the relationship between metaphor and simile, and, more specifically, to test whether the attested differences between these uses of language prevail at the extended level.

### 8.2.3 RELATED TROPES: ALLEGORY

Carston's (2010) imaginary world account has implications for allegory, also (as noted by Carston herself). Although some scholars view allegory as no more than a 'super-extended metaphor' (Crisp, 2008: 291), the two are importantly distinct: only in extended metaphor is a figurative target explicitly mentioned. As Cohen (2008: 10) notes:

In a metaphor A is said to be B [...] In allegory typically only B is mentioned and it is left to the reader to understand that B stands for, or represents, or "allegorizes" A.

Despite the fact that allegories are fully interpretable at the purely literal level (and this literal meaning may achieve a degree of relevance), it is intended that a reader will go beyond the literal meaning and derive the intended figurative sense of the allegory (that is, that he or she will derive 'what B stands for'). Carston and Wearing (2011: 308) acknowledge that allegorical interpretation is likely to be 'very similar' to the imaginary world interpretation of extended metaphors:

An account of how allegory is processed when it is fully understood will no doubt include a phase in which the literal meaning is metarepresented and a further interpretive process undertaken of deriving the parallel deeper meaning.

*(idem)*

However, the authors suspect that the interpretation of allegories and extended metaphors exhibits subtle differences due to the simultaneous presence in metaphor of literally intended meaning (the metaphor topic) and non-literally intended meaning (the metaphor vehicle).

Speculating on what these interpretive differences might be led me to consider how the implications derived from these different forms of expression might diverge. For example, does allegory give rise to more 'big picture' type reflections and implications, ones that bear little relation to the metarepresented content from which they are derived? Conversely, is the metarepresented literal meaning of an allegory maintained in parallel alongside the figurative meaning (unlike in extended metaphor, where the metarepresented content is ultimately replaced by a mass of weak implicatures)? In extended metaphors, properties of the literal content of a metaphor that are ultimately irrelevant to the figurative interpretation are expected to lose activation around 1000ms – is this the case with allegory also? Assuming that language comprehension may activate sensory-motor content, one might ask whether allegory would do so more or less than extended metaphor; to put it differently, does allegory give rise to more detailed embodied simulations than extended metaphors? Certainly, the relationship between allegory and extended metaphor remains a worthwhile topic for future research.

Interestingly, storytelling is a popular and recognised tool in child psychotherapy (Burns, 2005; Golding, 2014) and, in effect, these therapeutic stories work like fables or allegories – they present a complete picture on a literal level, and a deeper meaning (usually in the form of a lesson) when one looks beyond the literal meaning. Therefore, just as psychotherapy was fertile ground for extended metaphor research, it might also be a relevant test-bed for allegory research.

#### 8.2.4 METAPHOR IN DIFFERENT DOMAINS

During the course of this thesis, I have shown that metaphorical language is widespread in psychotherapy and suggested that this is due to the complex nature of people's emotional experiences, which are often very difficult to express using literal language. Needless to say, however, psychotherapy is not the only domain in which metaphorical language is prevalent. Communication of scientific theories, like education in general, also gives rise to a rich number of figurative expressions. As Semino (2008: 131) notes, scientists use metaphor to explain 'phenomena that are not just poorly (or partially) understood, but also complex and often inaccessible to the senses'.

While there exists a wealth of research on metaphor in the context of science, such research has not yet been applied to Carston's imaginary world account of metaphor interpretation. It's possible that, like psychotherapy, the functions of metaphor in different domains such as scientific writing or teaching, may add further support to the

claim that *ad hoc* concept construction is not the only mechanism of metaphor interpretation.

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## APPENDIX I

### *Experiment 1 Materials*

#### **Experimental Items (target sentence in bold)**

1. Condition A (Extended metaphorical passage)

Chris found everyday life hard to cope with and felt an overwhelming sense of emotional frailty. His psyche was an intricately complex crystal, a rare and fine mineral that needed to be handled with sensitivity and caution. Chris was all too aware of the shattering effect other people's careless handling might have. And so, he decided to lock himself away for fear of breaking entirely. His soul was a brittle shard. **Chris' social life was non-existent.**

Condition B (Extended literal passage with phrasal metaphor)

Chris was a complicated and sensitive person. He often felt misunderstood by people who didn't take the time to get to know him, people who didn't understand his vulnerability. He feared coming into contact with these people, knowing how they could upset him. This fear led him to be careful about who he let into his life, as he felt almost on the brink of psychological collapse. His soul was a brittle shard. **Chris' social life was non-existent.**

Condition C (Extended literal passage)

Chris was a complicated and sensitive person. He often felt misunderstood by people who didn't take the time to get to know him, people who didn't understand his vulnerability. He feared coming into contact with these people, knowing how they could upset him. This fear led him to be careful about who he let into his life, as he felt almost on the brink of psychological collapse, he was emotionally frail. **Chris' social life was non-existent.**

2. Condition A (Extended metaphorical passage)

Becky hated the pressure of exams and never seemed able to recall her revision. As soon as she entered the examination hall, she felt the contents of her mind turn into noodles. Every strand of consciousness, every piece of revision, was chaotically matted together in a thick dry clump. Her attempts to separate out a clean line of reasoning completely failed. Her thoughts were hopelessly knotted. **Becky needed to see a tutor.**

Condition B (Extended literal passage with phrasal metaphor)

Becky was very hard working and put a lot of effort into her studies. Sadly, her grades did not reflect this. Though she always prepared extensively for any test, she struggled to stay calm under the pressure of exams. As soon as she opened up a question paper she became totally confused and was incapable of recalling her revision. Her thoughts were hopelessly knotted. **Becky needed to see a tutor.**

Condition C (Extended literal passage)

Becky was very hard working and put a lot of effort into her studies. Sadly, her grades did not reflect this. Though she always prepared extensively for any test, she struggled to stay calm under the pressure of exams. As soon as she opened up a question paper she became totally confused and was incapable of recalling her revision. She felt wholly incompetent. **Becky needed to see a tutor.**

3. Condition A (Extended metaphorical passage)

Hannah had become addicted to chocolate and was habitually over-eating. Her extra weight was an ugly blanket which shrouded her in heavy shame. When she first tried it on its warm thick fabric had seemed so comforting, but after a while its synthetic fibres began to irritate her. It was harder to tolerate, more and more uncomfortable, yet she wasn't sure she could survive the cold without it. Obesity is an ungainly overcoat. **Hannah tried to get more exercise.**

Condition B (Extended literal passage with phrasal metaphor)

When Hannah and her ex broke up she started eating copious amounts of chocolate for comfort. Now she really regretted it. Initially, she had loved the sugar-y fix of calories, but soon the weight that she gained only made her feel worse. But by that point, she was addicted to over-eating. She had lost all her shape, and despised her appearance when she looked in the mirror. Obesity is an ungainly overcoat. **Hannah tried to get more exercise.**

Condition C (Extended literal passage)

When Hannah and her ex broke up she started eating copious amounts of chocolate for comfort. Now, she really regretted it. Initially, she had loved the sugar-y fix of calories, but soon the weight that she gained only made her feel worse. But by that point, she was addicted to over-eating. She had lost all her shape, and despised her appearance when she looked in the mirror. She was diagnosed as obese. **Hannah tried to get more exercise.**

4. Condition A (Extended metaphorical passage)

Mary found it impossible to get through the day without a drink and was completely dependent on alcohol. Her addiction was a demanding creature; he refused to be ignored and sapped all her strength with his unrelenting need for attention. Too weak to fight him off, she indulged his demands and in turn, he tore her limb from limb. Her dependency was a biting animal. **Mary finally checked into rehab.**

Condition B (Extended literal passage with phrasal metaphor)

Mary was incapable of making it through the day without a drink and was wholly dependent on alcohol. The constant cravings she experienced were relentless and exhausting. Sadly, she could never find the strength of mind to suppress these desires. Nor was she capable of enjoying just one drink, a glass always turned into a bottle, and it always ended in misery. Her dependency was a biting animal. **Mary finally checked into rehab.**

Condition C (Extended literal passage)

Mary was incapable of making it through the day without a drink and was wholly dependent on alcohol. The constant cravings she experienced were relentless and exhausting. Sadly, she could never find the strength of mind to suppress these desires. Nor was she capable of enjoying just one drink, a glass always turned into a bottle, and it always ended in misery. Her dependency was incredibly draining. **Mary finally checked into rehab.**

5. Condition A (Extended metaphorical passage)

Mike was overwhelmed with grief after the death of his daughter. Though family and friends had been supportive, he felt very distant from them. The world was now a play, one he had no interest in watching, let alone participating in. He had once been part of these scenes, but now he sat passively in the audience, watching every trivial



plot line in silence. His life was a closed down theatre. **Mike couldn't even speak to his wife.**

Condition B (Extended literal passage with phrasal metaphor)

Mike was inconsolable after the death of his daughter who had tragically died of leukaemia at a very young age. Despite the love and support from friends and family, he was finding it hard to cope. Everything seemed so futile and irrelevant; he couldn't bear to take part in anything, and so instead he passively watched events unfold, interacting less and less. His life was a closed down theatre. **Mike couldn't even speak to his wife.**

Condition C (Extended literal passage)

Mike was inconsolable after the death of his daughter who had tragically died of leukaemia at a very young age. Despite the love and support from friends and family, he was finding it hard to cope. Everything seemed so futile and irrelevant; he couldn't bear to take part in anything, and so instead he passively watched events unfold, interacting less and less. His life felt empty and meaningless. **Mike couldn't even speak to his wife.**

6. Condition A (Extended metaphorical passage)

Nick had been struggling at work for some time, his boss was dragging him down into a suffocating sea of to-do lists. He wished someone would throw him a float so he could get to the surface and scream out for rescue. He felt himself sinking, deeper and deeper, unable to tread water, he was drowning. His job was a voyage to the bottom of the ocean. **Nick prepared to resign.**

Condition B (Extended literal passage with phrasal metaphor)

Nick was not doing well at work. His boss was very demanding and gave Nick more work than he could manage. He felt totally overwhelmed and under immense pressure. He was unable to finish the tasks that had been set for him and had no opportunity to ask for help from anyone. The situation was getting worse and worse. His job was a voyage to the bottom of the ocean. **Nick prepared to resign.**

Condition C (Extended literal passage)

Nick was not doing well at work. His boss was very demanding and gave Nick more work than he could manage. He felt totally overwhelmed and under immense pressure. He was unable to finish the tasks that had been set for him and had no opportunity to ask for help from anyone. The situation was getting worse and worse. He was afraid of having a complete nervous collapse. **Nick prepared to resign.**

7. Condition A (Extended metaphorical passage)

Their relationship was comfortable, but unexciting. It was a mug of watery fruit tea. Holding it tight in her hands Amy felt safe in its familiarity, reassured by its warmth. Yet, whenever she took a sip, a wave of disappointment washed over her and she registered its lack of real flavour. She craved a drink with a little more flavour. Her boyfriend was no espresso. **Amy knew they had to break up.**

Condition B (Extended literal passage with phrasal metaphor)

Amy's relationship was companionable but lacking some excitement. She had been with her partner for many years and he was a great support to her, calming her down when she needed it. People looked at them in admiration – they seemed so well adjusted and stable. But she wanted something more, someone new and challenging,

someone who would stimulate her mind. Her boyfriend was no espresso. **Amy knew they had to break up.**

Condition C (Extended literal passage)

Amy's relationship was companionable but lacking some excitement. She had been with her partner for many years and he was a great support to her, calming her down when she needed it. People looked at them in admiration – they seemed so well adjusted and stable. But she wanted something more, someone new and challenging, someone who would stimulate her mind. Her boyfriend was a bit boring. **Amy knew they had to break up.**

8. Condition A (Extended metaphorical passage)

Emma had never had any luck making friends. She was a forgotten football left on the side-lines, waiting to be picked up and put back into play. But having been battered by frost and storms, there was now no air left within her. She was useless and no one could be bothered to pump her back up again. She lay, neglected on the ground without purpose, abandoned and untouched. Her heart was punctured beyond repair. **Emma joined the local church.**

Condition B (Extended literal passage with phrasal metaphor)

Emma's feelings of loneliness were awful. She longed to make some new friends, or at least be reunited with her old friends and family. They had given up on her years ago when, in a fragile state, she had been unable to take part in their lives. It seemed that society had forgotten about her, as if no one would notice whether she was dead or alive. Her heart was punctured beyond repair. **Emma joined the local church.**

Condition C (Extended literal passage)

Emma's feelings of loneliness were awful. She longed to make some new friends, or at least be reunited with her old friends and family. They had given up on her years ago when, in a fragile state, she had been unable to take part in their lives. It seemed that society had forgotten about her, as if no one would notice whether she was dead or alive. She was completely isolated in life. **Emma joined the local church.**

9. Condition A (Extended metaphorical passage)

Alex had been determined to succeed at any cost. His ambition was a soaring tower, reaching high above all the other buildings around him with their more modest three or four levels. He was indifferent to the bleak shadow it cast over the lowly masses in its proximity. Yet, standing on its roof, peering down at the world below, its creator suddenly felt a desperate need to tear down the ugly edifice. His success was a vacant skyscraper. **Alex signed up for charity work.**

Condition B (Extended literal passage with phrasal metaphor)

Alex was very ambitious, an attitude which had enabled him to accomplish a great deal. But he was also very ruthless. When he started his company he cared only about himself and was not affected by thoughts of the people he'd put out of business. Yet, later on in his career, he started to feel guilty about his behaviour; he considered quitting his job and trying to restore small businesses. His success was a vacant skyscraper. **Alex signed up for charity work.**

Condition C (Extended literal passage)

Alex was very ambitious, an attitude which had enabled him to accomplish a great deal. But he was also very ruthless. When he started his company he cared only about himself and was not affected by thoughts of the people he'd put out of business. Yet,

later on in his career, he started to feel guilty about his behaviour; he considered quitting his job and trying to restore small businesses. He was full of regret. **Alex signed up for charity work.**

10. Condition A (Extended metaphorical passage)

Emily's infidelity was an awful sin against her marriage. With great pain, she carried her guilt about with her, chaining shackles around her ankles. These cold metal fastenings enslaved her to the past and imprisoned her heart. Yet with the help of a therapist, she finally broke free. Releasing the cruel irons of self-loathing she ran back towards her life. Forgiveness was the key that unlocked her. **Emily began to love herself again.**

Condition B (Extended literal passage with phrasal metaphor)

Emily was experiencing overwhelming guilt and regret having been unfaithful to her husband of many years. She found it very hard to think of anything except her infidelity and hated herself for what she had done to their relationship. As she started seeing a therapist, however, things slowly began to change. She started to accept what had happened. Forgiveness was the key that unlocked her. **Emily began to love herself again.**

Condition C (Extended literal passage)

Emily was experiencing overwhelming guilt and regret having been unfaithful to her husband of many years. She found it very hard to think of anything except her infidelity and hated herself for what she had done to their relationship. As she started seeing a therapist, however, things slowly began to change. She started to accept what had happened, which gave her a great sense of relief. **Emily began to love herself again.**

11. Condition A (Extended metaphorical passage)

Shirley's cancer had broken into her life and stolen all her hopes for the future. Her sickness was a fierce dictator. She longed to emigrate and escape his clutches, but he had closed all the borders. As she plotted their reopening, determined to overthrow his controlling regime, he violently trampled on her soul, suffocating her beneath his heavyweight boots. This illness was a merciless tyrant. **Shirley considered her funeral arrangements.**

Condition B (Extended literal passage with phrasal metaphor)

Shirley had been unexpectedly diagnosed with cancer six months ago and told that her chances of recovery were very low. She was determined not to die and was desperate to get well again by any methods. As she researched alternative treatments, the sickness continued, making her feel weak and disheartened, both her energy and hope diminished. This illness was a merciless tyrant. **Shirley considered her funeral arrangements.**

Condition C (Extended literal passage)

Shirley had been unexpectedly diagnosed with cancer six months ago and told that her chances of recovery were very low. She was determined not to die and was desperate to get well again by any methods. As she researched alternative treatments, the sickness continued, making her feel weak and disheartened, both her energy and hope diminished. The illness appeared to be incurable. **Shirley considered her funeral arrangements.**

12. Condition A (Extended metaphorical passage)

So often Louise felt her spirits soaring. Her happiness was a helium balloon lifting up, rising far above the earth. She let go, allowing it to fly free. But as it reached dizzying heights, the elements always worked to untie the knot she had so carefully tied at its base so every time it would plummet down to earth, deflated. Her joy was gone, a burst bubble. **Louise's parents found her behaviour unpredictable.**

Condition B (Extended literal passage with phrasal metaphor)

Louise tried to regulate her moods and maintain a healthy balance of emotions. Recently, however, she had become deliriously happy and had lost that sense of being in control of her mental state. She became more and more elated, full of excited plans and bordering on mania. Then suddenly Louise's mood changed totally and depression took over. Her joy was gone, a burst bubble. **Louise's parents found her behaviour unpredictable.**

Condition C (Extended literal passage)

Louise tried to regulate her moods and maintain a healthy balance of emotions. Recently, however, she had become deliriously happy and had lost that sense of being in control of her mental state. She became more and more elated, full of excited plans and bordering on mania. Then suddenly Louise's mood changed totally and depression took over. Her state of mind was not stable. **Louise's parents found her behaviour unpredictable.**

13. Condition A (Extended metaphorical passage)

In our pressured modern lives it is hard to take a few minutes just for oneself. When we do manage to find time to pause and reflect, it is the taste of vintage red wine. Those fortunate enough to have drunk this soothing substance will know that it is a liquor to be savoured and appreciated, the elixir of life. Spare time is the nectar of the Gods. **Meditation holidays are becoming increasingly popular.**

Condition B (Extended literal passage with phrasal metaphor)

Modern life is so busy and pressured that we rarely have a moment to reflect on ourselves. We spend our lives rushing about and even when a spare minute comes our way, though we might recognise its value, we do not enjoy it as we should; indeed we often opt to save it for another occasion. Spare time is the nectar of the Gods. **Meditation holidays are becoming increasingly popular.**

Condition C (Extended literal passage)

Modern life is so busy and pressured that we rarely have a moment to reflect on ourselves. We spend our lives rushing about and even when a spare minute comes our way, though we might recognise its value, we do not enjoy it as we should; indeed we often opt to save it for another occasion. This approach to life, and to time, seems foolish. **Meditation holidays are becoming increasingly popular.**

14. Condition A (Extended metaphorical passage)

Dan tried everything he could to be optimistic, reciting positive mantras and forcing a smile. Yet, his bleak outlook remained, pessimism continued to invade his mind and body. No emotional antibiotics were strong enough to control the violence and strength of this poison that tormented him day and night. Hoping to prevent its toxicity from spreading to those around him, Dan shut himself away from the world. His negativity was a rampant infection. **Dan was forever complaining.**

Condition B (Extended literal passage with phrasal metaphor)

Dan was always in a bad mood and appeared to be incapable of seeing the good in anything or anyone. Though he tried to be more positive, his bleak outlook on life remained. No amount of forced smiling helped. He knew that other people could sense his pessimism and worried about making them feel bad through his behaviour. This fear led Dan to isolate himself. His negativity was a rampant infection. **Dan was forever complaining.**

Condition C (Extended literal passage)

Dan was always in a bad mood and appeared to be incapable of seeing the good in anything or anyone. Though he tried to be more positive, his bleak outlook on life remained. No amount of forced smiling helped. He knew that other people could sense his pessimism and worried about making them feel bad through his behaviour. This fear led Dan to isolate himself. He hated his negative attitude. **Dan was forever complaining.**

15. Condition A (Extended metaphorical passage)

Melanie felt that her PhD dissertation was taking up too many years of her life and too much of her energy. It was an arduous trek to Everest, the steep daily trudge too painful to bear. Then, at the last stage, eager for it to be over, she rushed ahead, risking collapse and, sadly, missing the beauty of the terrain she was travelling through. Writing the concluding chapter was the final ascent to the mighty summit. **Melanie was dreading the examiners' report.**

Condition B (Extended literal passage with phrasal metaphor)

Melanie was finding her degree extremely difficult. Although she was quite close to finishing it, she considered giving it up. She couldn't stop thinking about finally completing her studies, so much so that she failed to enjoy the interesting theories she was learning about. She began to rush her work, eager for it to be over. If she wasn't careful, she was going to burn out. Writing the concluding chapter was the final ascent to the mighty summit. **Melanie was dreading the examiners' report.**

Condition C (Extended literal passage)

Melanie was finding her degree extremely difficult. Although she was quite close to finishing it, she considered giving it up. She couldn't stop thinking about finally completing her studies, so much so that she failed to enjoy the interesting theories she was learning about. She began to rush her work, eager for it to be over. If she wasn't careful, she was going to burn out. Her dissertation would be a great achievement. **Melanie was dreading the examiners' report.**

16. Condition A (Extended metaphorical passage)

As he grew older Alan knew it was only a matter of time until death came barging into his home, uninvited, of course. Every day he listened closely for the loud sound of knuckles rapping callously against the door. He wished someone could bail him out, but death accepted no bribes. The grave, God's bankruptcy court, would clear him of his debts. Dying is the final tax paid to the world. **Alan was 90 years old.**

Condition B (Extended literal passage with phrasal metaphor)

With every year that passed, Alan became increasingly aware that his time on earth was limited. Despite being healthy and in good condition for his age, he was still expecting to die soon. His fear of death stopped him from leaving the house and enjoying his life. Desperately he wished for immortality, though he knew no such

thing would be possible. Dying is the final tax paid to the world. **Alan was 90 years old.**

Condition C (Extended literal passage)

With every year that passed, Alan became increasingly aware that his time on earth was limited. Despite being healthy and in good condition for his age, he was still expecting to die soon. His fear of death stopped him from leaving the house and enjoying his life. Desperately he wished for immortality, though he knew no such thing would be possible. Dying is an inevitable part of life. **Alan was 90 years old.**

17. Condition A (Extended metaphorical passage)

Rob found himself getting increasingly frustrated with the stupidity of everyone around him. His anger was a dormant volcano, which could erupt at any moment. He sensed the hot magma bubbling beneath his scalp, and felt the pressure building up inside of him. He knew it was only a matter of time before he burst, pouring out red-hot lava, viciously burning those around him. His temper was a blistering fire. **Rob tried to take deep breaths.**

Condition B (Extended literal passage with phrasal metaphor)

From Rob's behaviour one would judge him to be an easy-going contented sort of guy. However, his outward conduct did not reflect how he felt. He was constantly annoyed and frustrated with people. Somehow he managed to conceal his anger, but this repression of his feelings only made matters worse. He knew he wouldn't be able to hide his irritation forever. His temper was a blistering fire. **Rob tried to take deep breaths.**

Condition C (Extended literal passage)

From Rob's behaviour one would judge him to be an easy-going contented sort of guy. However, his outward conduct did not reflect how he felt. He was constantly annoyed and frustrated with people. Somehow he managed to conceal his anger, but this repression of his feelings only made matters worse. He knew he wouldn't be able to hide his irritation forever, but he didn't want to upset his friends. **Rob tried to take deep breaths.**

18. Condition A (Extended metaphorical passage)

Whenever Laura spoke on a topic, her friend Tom was struck by her remarkable insight. Her remarks were rough cut diamonds. They may not have had the polished shine of stones exhibited in fancy jewellery shops, but they held a precious element within them, a hidden gem of beauty. With proper care and the knowledge of skilled cutting techniques, this sparkling brilliance might one day be visible to all. Her ideas were valuable jewels. **Laura was studying philosophy at university.**

Condition B (Extended literal passage with phrasal metaphor)

Whenever Laura spoke, those who were smart listened intently. Her friend Tom for example always paid close attention to what she said. Though the way she put forward and constructed her arguments was not fully expert, the content of what she said was truly insightful, she had a unique vision and intellect. With the right training and supervision she might one day become a distinguished thinker, whom many would admire. Her ideas were valuable jewels. **Laura was studying philosophy at university.**

Condition C (Extended literal passage)

Whenever Laura spoke, those who were smart listened intently. Her friend Tom for example always paid close attention to what she said. Though the way she put forward and constructed her arguments was not fully expert, the content of what she said was truly insightful, she had a unique vision and intellect. With the right training and supervision she might one day become a distinguished thinker, whom many would admire. Her words were worthy of appreciation. **Laura was studying philosophy at university.**

19. Condition A (Extended metaphorical passage)

Although they were very independent people, Nicola dearly missed Jane, her oldest acquaintance, when they were parted. For her, Jane was a bunch of sunny daffodils in constant bloom, impervious to the seasons. Whenever the darkness was setting in, Nicola sought out these vividly coloured blossoms of springtime to brighten her life. A best friend is a beautiful bouquet of flowers. **Nicola spoke to Jane as often as possible.**

Condition B (Extended literal passage with phrasal metaphor)

Nicola and Jane had known each other since childhood, despite leading fairly separate lives they had somehow managed to stay close all throughout their adult life. Whenever Nicola felt upset, she would turn to Jane, who was always positive and able to give her a sense of hope for the future. A best friend is a beautiful bouquet of flowers. **Nicola spoke to Jane as often as possible.**

Condition C (Extended literal passage)

Nicola and Jane had known each other since childhood, despite leading fairly separate lives they had somehow managed to stay close all throughout their adult life. Whenever Nicola felt upset, she would turn to Jane, who was always positive and able to give her a sense of hope for the future. A best friend makes daily life easier to bear. **Nicola spoke to Jane as often as possible.**

20. Condition A (Extended metaphorical passage)

After being alone for many years, Liz was finally rescued from perpetual singledom by Tom. She had been tossed about for so long on the cold ocean praying for that saving torch to find her. At long last she spotted it from afar and swam desperately towards it, until eventually she was within its warm beacon of light and was dragged safely to shore. His love was a lighthouse. **Liz and Tom quickly got engaged.**

Condition B (Extended literal passage with phrasal metaphor)

Liz had been single for many years and was desperate to find a boyfriend. She never seemed to meet anyone, let alone connect with anyone. She felt totally alone. But finally when she met Tom, she instantly knew that he could save her from her lonely life. He was the kindest, most generous man. He looked after her so well and made her feel completely safe. His love was a lighthouse. **Liz and Tom quickly got engaged.**

Condition C (Extended literal passage)

Liz had been single for many years and was desperate to find a boyfriend. She never seemed to meet anyone, let alone connect with anyone. She felt totally alone. But finally when she met Tom, she instantly knew that he could save her from her lonely life. He was the kindest, most generous man. He looked after her so well and made her feel completely safe. His love made her very happy. **Liz and Tom quickly got engaged.**

21. Condition A (Extended metaphorical passage)

Isabelle never failed to spend the holidays with her family – the excitement of their crazy amusement park was simply too hard to resist. On her way home, she always felt a sense of anticipation – she was a child again, eagerly awaiting entry to a fun-filled playground. There would be soaring highs and dangerous dives, but she couldn't wait. Christmas dinner was a rollercoaster ride. **Isabelle had lots of siblings.**

Condition B (Extended literal passage with phrasal metaphor)

Isabelle loved going back to her home town during the holidays. It was always so much fun seeing all her family and returning to the house she grew up in. Though she was now thirty years old, she felt herself instantly regressing to her childhood. She anticipated numerous arguments, but with these came equally happy times. Christmas dinner was a rollercoaster ride. **Isabelle had lots of siblings.**

Condition C (Extended literal passage)

Isabelle loved going back to her home town during the holidays. It was always so much fun seeing all her family and returning to the house she grew up in. Though she was now thirty years old, she felt herself instantly regressing to her childhood. She anticipated numerous arguments, but with these came equally happy times. Christmas dinner was a series of highs and lows. **Isabelle had lots of siblings.**



## APPENDIX II

### *Experiment 2 Materials*

#### **Experimental Items (target sentence in bold)**

1. Condition A (Extended metaphorical passage)

Chris found everyday life hard to cope with and felt an overwhelming sense of emotional frailty. His psyche was an intricately complex crystal, a rare and fine mineral that needed to be handled with sensitivity and caution. Chris was all too aware of the shattering effect other people's careless handling might have. And so, he decided to lock himself away for fear of breaking entirely. His soul was a brittle shard. **Chris' social life was non-existent.** His parents couldn't understand where it had all gone wrong.

Condition B (Extended literal passage with phrasal metaphor)

Chris was a complicated and sensitive person. He often felt misunderstood by people who didn't take the time to get to know him, people who didn't understand his vulnerability. He feared coming into contact with these people, knowing how they could upset him. This fear led him to be careful about who he let into his life, as he felt almost on the brink of psychological collapse. His soul was a brittle shard. **Chris' social life was non-existent.** His parents couldn't understand where it had all gone wrong.

Condition C (Extended literal passage)

Chris was a complicated and sensitive person. He often felt misunderstood by people who didn't take the time to get to know him, people who didn't understand his vulnerability. He feared coming into contact with these people, knowing how they could upset him. This fear led him to be careful about who he let into his life, as he felt almost on the brink of psychological collapse. He was emotionally frail. **Chris' social life was non-existent.** His parents couldn't understand where it had all gone wrong.

Question: Chris had too many friends.

Answer: False

2. Condition A (Extended metaphorical passage)

Becky hated the pressure of exams and never seemed able to recall her revision. As soon as she entered the examination hall, she felt the contents of her mind turn into noodles. Every strand of consciousness, every piece of revision, was chaotically matted together in a thick dry clump. Her attempts to separate out a clean line of reasoning completely failed. Her thoughts were hopelessly knotted. **Becky needed to see a tutor.** Luckily her school offered discounted private tuition.

Condition B (Extended literal passage with phrasal metaphor)

Becky was very hard working and put a lot of effort into her studies. Sadly, her grades did not reflect this. Though she always prepared extensively for any test, she struggled to stay calm under the pressure of exams. As soon as she opened up a question paper she became totally confused and was incapable of recalling her revision. Her thoughts were hopelessly knotted. **Becky needed to see a tutor.** Luckily her school offered discounted private tuition.

Condition C (Extended literal passage)

Becky was very hard working and put a lot of effort into her studies. Sadly, her grades did not reflect this. Though she always prepared extensively for any test, she struggled to stay calm under the pressure of exams. As soon as she opened up a question paper she became totally confused and was incapable of recalling her revision. She felt wholly incompetent. **Becky needed to see a tutor.** Luckily her school offered discounted private tuition.

Question: Becky found school difficult.

Answer: True

3. Condition A (Extended metaphorical passage)

Hannah had become addicted to chocolate and was habitually over-eating. Her extra weight was an ugly blanket which shrouded her in heavy shame. When she first tried it on its warm thick fabric had seemed so comforting, but after a while its synthetic fibres began to irritate her. It was harder to tolerate, more and more uncomfortable, yet she wasn't sure she could survive the cold without it. Obesity is an ungainly overcoat. **Hannah tried to get more exercise.** She preferred exercise classes like aerobics to the gym.

Condition B (Extended literal passage with phrasal metaphor)

When Hannah and her ex broke up she started eating copious amounts of chocolate for comfort. Now she really regretted it. Initially, she had loved the sugar-y fix of calories, but soon the weight that she gained only made her feel worse. But by that point, she was addicted to over-eating. She had lost all her shape, and despised her appearance when she looked in the mirror. Obesity is an ungainly overcoat. **Hannah tried to get more exercise.** She preferred exercise classes like aerobics to the gym.

Condition C (Extended literal passage)

When Hannah and her ex broke up she started eating copious amounts of chocolate for comfort. Now, she really regretted it. Initially, she had loved the sugar-y fix of calories, but soon the weight that she gained only made her feel worse. But by that point, she was addicted to over-eating. She had lost all her shape, and despised her appearance when she looked in the mirror. She was diagnosed as obese. **Hannah tried to get more exercise.** She preferred exercise classes like aerobics to the gym.

Question: Hannah was underweight.

Answer: False

4. Condition A (Extended metaphorical passage)

Mary found it impossible to get through the day without a drink and was completely dependent on alcohol. Her addiction was a demanding creature; he refused to be ignored and sapped all her strength with his unrelenting need for attention. Too weak to fight him off, she indulged his demands and in turn, he tore her limb from limb. Her dependency was a biting animal. **Mary finally checked into rehab.** She would have to stay for at least a month.

Condition B (Extended literal passage with phrasal metaphor)

Mary was incapable of making it through the day without a drink and was wholly dependent on alcohol. The constant cravings she experienced were relentless and exhausting. Sadly, she could never find the strength of mind to suppress these desires. Nor was she capable of enjoying just one drink, a glass always turned into a bottle,

and it always ended in misery. Her dependency was a biting animal. **Mary finally checked into rehab.** She would have to stay for at least a month.

Condition C (Extended literal passage)

Mary was incapable of making it through the day without a drink and was wholly dependent on alcohol. The constant cravings she experienced were relentless and exhausting. Sadly, she could never find the strength of mind to suppress these desires. Nor was she capable of enjoying just one drink, a glass always turned into a bottle, and it always ended in misery. Her dependency was incredibly draining. **Mary finally checked into rehab.** She would have to stay for at least a month.

Question: Mary was an alcoholic.

Answer: True

5. Condition A (Extended metaphorical passage)

James was overwhelmed with grief after the death of his daughter. Though family and friends had been supportive, he felt very distant from them. The world was now a play, one he had no interest in watching, let alone participating in. He had once been part of these scenes, but now he sat passively in the audience, watching every trivial plot line in silence. His life was a closed down theatre. **James couldn't even speak to his wife.** Their daughter had always looked so much like her.

Condition B (Extended literal passage with phrasal metaphor)

James was inconsolable after the death of his daughter who had tragically died of leukaemia at a very young age. Despite the love and support from friends and family, he was finding it hard to cope. Everything seemed so futile and irrelevant; he couldn't bear to take part in anything, and so instead he passively watched events unfold, interacting less and less. His life was a closed down theatre. **James couldn't even speak to his wife.** Their daughter had always looked so much like her.

Condition C (Extended literal passage)

James was inconsolable after the death of his daughter who had tragically died of leukaemia at a very young age. Despite the love and support from friends and family, he was finding it hard to cope. Everything seemed so futile and irrelevant; he couldn't bear to take part in anything, and so instead he passively watched events unfold, interacting less and less. His life felt empty and meaningless. **James couldn't even speak to his wife.** Their daughter had always looked so much like her.

Question: James was always jolly.

Answer: False

6. Condition A (Extended metaphorical passage)

Nick had been struggling at work for some time, his boss was dragging him down into a suffocating sea of to-do lists. He wished someone would throw him a float so he could get to the surface and scream out for rescue. He felt himself sinking, deeper and deeper, unable to tread water, he was drowning. His job was a voyage to the bottom of the ocean. **Nick prepared to resign.** He might have to sign on for a while.

Condition B (Extended literal passage with phrasal metaphor)

Nick was not doing well at work. His boss was very demanding and gave Nick more work than he could manage. He felt totally overwhelmed and under immense pressure. He was unable to finish the tasks that had been set for him and had no opportunity to ask for help from anyone. The situation was getting worse and worse.

His job was a voyage to the bottom of the ocean. **Nick prepared to resign.** He might have to sign on for a while.

Condition C (Extended literal passage)

Nick was not doing well at work. His boss was very demanding and gave Nick more work than he could manage. He felt totally overwhelmed and under immense pressure. He was unable to finish the tasks that had been set for him and had no opportunity to ask for help from anyone. The situation was getting worse and worse. He was afraid of having a complete nervous collapse. **Nick prepared to resign.** He might have to sign on for a while.

Question: Nick was not likely to get promoted.

Answer: True

7. Condition A (Extended metaphorical passage)

Their relationship was comfortable, but unexciting. It was a mug of watery fruit tea. Holding it tight in her hands Amy felt safe in its familiarity, reassured by its warmth. Yet, whenever she took a sip, a wave of disappointment washed over her and she registered its lack of real flavour. She craved a drink with a little more flavour. Her boyfriend was no espresso. **Amy knew they had to break up.** She hated the idea of hurting him.

Condition B (Extended literal passage with phrasal metaphor)

Amy's relationship was companionable but lacking some excitement. She had been with her partner for many years and he was a great support to her, calming her down when she needed it. People looked at them in admiration – they seemed so well adjusted and stable. But she wanted something more, someone new and challenging, someone who would stimulate her mind. Her boyfriend was no espresso. **Amy knew they had to break up.** She hated the idea of hurting him.

Condition C (Extended literal passage)

Amy's relationship was companionable but lacking some excitement. She had been with her partner for many years and he was a great support to her, calming her down when she needed it. People looked at them in admiration – they seemed so well adjusted and stable. But she wanted something more, someone new and challenging, someone who would stimulate her mind. Her boyfriend was a bit boring. **Amy knew they had to break up.** She hated the idea of hurting him.

Question: Amy was content.

Answer: False

8. Condition A (Extended metaphorical passage)

Emma had never had any luck making friends. She was a forgotten football left on the side-lines, waiting to be picked up and put back into play. But having been battered by frost and storms, there was now no air left within her. She was useless and no one could be bothered to pump her back up again. She lay, neglected on the ground without purpose, abandoned and untouched. Her heart was punctured beyond repair. **Emma joined the local church.** Though she wasn't sure she believed in God.

Condition B (Extended literal passage with phrasal metaphor)

Emma's feelings of loneliness were awful. She longed to make some new friends, or at least be reunited with her old friends and family. They had given up on her years ago when, in a fragile state, she had been unable to take part in their lives. It seemed that

society had forgotten about her, as if no one would notice whether she was dead or alive. Her heart was punctured beyond repair. **Emma joined the local church.** Though she wasn't sure she believed in God.

Condition C (Extended literal passage)

Emma's feelings of loneliness were awful. She longed to make some new friends, or at least be reunited with her old friends and family. They had given up on her years ago when, in a fragile state, she had been unable to take part in their lives. It seemed that society had forgotten about her, as if no one would notice whether she was dead or alive. She was completely isolated in life. **Emma joined the local church.** Though she wasn't sure she believed in God.

Question: Emma hoped to build some relationships.

Answer: True

9. Condition A (Extended metaphorical passage)

Alex had been determined to succeed at any cost. His ambition was a soaring tower, reaching high above all the other buildings around him with their more modest three or four levels. He was indifferent to the bleak shadow it cast over the lowly masses in its proximity. Yet, standing on its roof, peering down at the world below, its creator suddenly felt a desperate need to tear down the ugly edifice. His success was a vacant skyscraper. **Alex signed up for charity work.** He needed to redeem his soul some way.

Condition B (Extended literal passage with phrasal metaphor)

Alex was very ambitious, an attitude which had enabled him to accomplish a great deal. But he was also very ruthless. When he started his company he cared only about himself and was not affected by thoughts of the people he'd put out of business. Yet, later on in his career, he started to feel guilty about his behaviour; he considered quitting his job and trying to restore small businesses. His success was a vacant skyscraper. **Alex signed up for charity work.** He needed to redeem his soul some way.

Condition C (Extended literal passage)

Alex was very ambitious, an attitude which had enabled him to accomplish a great deal. But he was also very ruthless. When he started his company he cared only about himself and was not affected by thoughts of the people he'd put out of business. Yet, later on in his career, he started to feel guilty about his behaviour; he considered quitting his job and trying to restore small businesses. He was full of regret. **Alex signed up for charity work.** He needed to redeem his soul some way.

Question: Alex had never had a job.

Answer: False

10. Condition A (Extended metaphorical passage)

Emily's infidelity was an awful sin against her marriage. With great pain, she carried her guilt about with her, chaining shackles around her ankles. These cold metal fastenings enslaved her to the past and imprisoned her heart. Yet with the help of a therapist, she finally broke free. Releasing the cruel irons of self-loathing she ran back towards her life. Forgiveness was the key that unlocked her. **Emily began to love herself again.** She resolved to never cheat again.

Condition B (Extended literal passage with phrasal metaphor)

Emily was experiencing overwhelming guilt and regret having been unfaithful to her husband of many years. She found it very hard to think of anything except her infidelity and hated herself for what she had done to their relationship. As she started seeing a therapist, however, things slowly began to change. She started to accept what had happened. Forgiveness was the key that unlocked her. **Emily began to love herself again.** She resolved to never cheat again.

Condition C (Extended literal passage)

Emily was experiencing overwhelming guilt and regret having been unfaithful to her husband of many years. She found it very hard to think of anything except her infidelity and hated herself for what she had done to their relationship. As she started seeing a therapist, however, things slowly began to change. She started to accept what had happened. Acceptance gave her a sense of relief. **Emily began to love herself again.** She resolved to never cheat again.

Question: Emily had cheated on her husband.

Answer: True

**11. Condition A (Extended metaphorical passage)**

Felicity's cancer had broken into her life and stolen all her hopes for the future. Her sickness was a fierce dictator. She longed to emigrate and escape his clutches, but he had closed all the borders. As she plotted their reopening, determined to overthrow his controlling regime, he violently trampled on her soul, suffocating her beneath his heavyweight boots. This illness was a merciless tyrant. **Felicity considered her funeral arrangements.** She decided to be cremated rather than buried.

Condition B (Extended literal passage with phrasal metaphor)

Felicity had been unexpectedly diagnosed with cancer six months ago and told that her chances of recovery were very low. She was determined not to die and was desperate to get well again by any methods. As she researched alternative treatments, the sickness continued, making her feel weak and disheartened, both her energy and hope diminished. This illness was a merciless tyrant. **Felicity considered her funeral arrangements.** She decided to be cremated rather than buried.

Condition C (Extended literal passage)

Felicity had been unexpectedly diagnosed with cancer six months ago and told that her chances of recovery were very low. She was determined not to die and was desperate to get well again by any methods. As she researched alternative treatments, the sickness continued, making her feel weak and disheartened, both her energy and hope diminished. The illness appeared to be incurable. **Felicity considered her funeral arrangements.** She decided to be cremated rather than buried.

Question: Felicity was in impeccable health.

Answer: False

**12. Condition A (Extended metaphorical passage)**

So often Alice felt her spirits soaring. Her happiness was a helium balloon lifting up, rising far above the earth. She let go, allowing it to fly free. But as it reached dizzying heights, the elements always worked to untie the knot she had so carefully tied at its base so every time it would plummet down to earth, deflated. Her joy was gone, a burst bubble. **Alice's parents found her behaviour unpredictable.** They wondered if she might have bipolar disorder.

Condition B (Extended literal passage with phrasal metaphor)

Alice tried to regulate her moods and maintain a healthy balance of emotions. Recently, however, she had become deliriously happy and had lost that sense of being in control of her mental state. She became more and more elated, full of excited plans and bordering on mania. Then suddenly Alice's mood changed totally and depression took over. Her joy was gone, a burst bubble. **Alice's parents found her behaviour unpredictable.** They wondered if she might have bipolar disorder.

Condition C (Extended literal passage)

Alice tried to regulate her moods and maintain a healthy balance of emotions. Recently, however, she had become deliriously happy and had lost that sense of being in control of her mental state. She became more and more elated, full of excited plans and bordering on mania. Then suddenly Alice's mood changed totally and depression took over. Her state of mind was not stable. **Alice's parents found her behaviour unpredictable.** They wondered if she might have bipolar disorder.

Question: Alice's moods were up and down.

Answer: True

**13.** Condition A (Extended metaphorical passage)

In our pressured modern lives it is hard to take a few minutes just for oneself. When we do manage to find time to pause and reflect, it is the taste of vintage red wine. Those fortunate enough to have drunk this soothing substance will know that it is a liquor to be savoured and appreciated, the elixir of life. Spare time is the nectar of the Gods. **Meditation holidays are becoming increasingly popular.** Often these involve taking a vow of silence.

Condition B (Extended literal passage with phrasal metaphor)

Modern life is so busy and pressured that we rarely have a moment to reflect on ourselves. We spend our lives rushing about and even when a spare minute comes our way, though we might recognise its value, we do not enjoy it as we should. Indeed we often opt to save it for another occasion. Spare time is the nectar of the Gods. **Meditation holidays are becoming increasingly popular.** Often these involve taking a vow of silence.

Condition C (Extended literal passage)

Modern life is so busy and pressured that we rarely have a moment to reflect on ourselves. We spend our lives rushing about and even when a spare minute comes our way, though we might recognise its value, we do not enjoy it as we should. Indeed we often opt to save it for another occasion. This approach to life, and to time, seems foolish. **Meditation holidays are becoming increasingly popular.** Often these involve taking a vow of silence.

Question: People have too much free time.

Answer: False

**14.** Condition A (Extended metaphorical passage)

Dan tried everything he could to be optimistic, reciting positive mantras and forcing a smile. Yet, his bleak outlook remained, pessimism continued to invade his mind and body. No emotional antibiotics were strong enough to control the violence and strength of this poison that tormented him day and night. Hoping to prevent its toxicity from spreading to those around him, Dan shut himself away from the world. His negativity was a rampant infection. **Dan was forever complaining.** He didn't know how to change and be happy.

Condition B (Extended literal passage with phrasal metaphor)

Dan was always in a bad mood and appeared to be incapable of seeing the good in anything or anyone. Though he tried to be more positive, his bleak outlook on life remained. No amount of forced smiling helped. He knew that other people could sense his pessimism and worried about making them feel bad through his behaviour. This fear led Dan to isolate himself. His negativity was a rampant infection. **Dan was forever complaining.** He didn't know how to change and be happy.

Condition C (Extended literal passage)

Dan was always in a bad mood and appeared to be incapable of seeing the good in anything or anyone. Though he tried to be more positive, his bleak outlook on life remained. No amount of forced smiling helped. He knew that other people could sense his pessimism and worried about making them feel bad through his behaviour. This fear led Dan to isolate himself. He hated his negative attitude. **Dan was forever complaining.** He didn't know how to change and be happy.

Question: Dan was unable to be optimistic.

Answer: True

**15.** Condition A (Extended metaphorical passage)

Melanie felt that her PhD dissertation was taking up too many years of her life and too much of her energy. It was an arduous trek to Everest, the steep daily trudge too painful to bear. Then, at the last stage, eager for it to be over, she rushed ahead, risking collapse and, sadly, missing the beauty of the terrain she was travelling through. Writing the concluding chapter was the final ascent to the mighty summit. **Melanie was dreading the examiners' report.** She couldn't wait for the viva to be over.

Condition B (Extended literal passage with phrasal metaphor)

Melanie was finding her degree extremely difficult. Although she was quite close to finishing it, she considered giving it up. She couldn't stop thinking about finally completing her studies, so much so that she failed to enjoy the interesting theories she was learning about. She began to rush her work, eager for it to be over. If she wasn't careful, she was going to burn out. Writing the concluding chapter was the final ascent to the mighty summit. **Melanie was dreading the examiners' report.** She couldn't wait for the viva to be over.

Condition C (Extended literal passage)

Melanie was finding her degree extremely difficult. Although she was quite close to finishing it, she considered giving it up. She couldn't stop thinking about finally completing her studies, so much so that she failed to enjoy the interesting theories she was learning about. She began to rush her work, eager for it to be over. If she wasn't careful, she was going to burn out. Writing the concluding chapter of her dissertation would be a great achievement. **Melanie was dreading the examiners' report.** She couldn't wait for the viva to be over.

Question: Melanie was uneducated.

Answer: False

**16.** Condition A (Extended metaphorical passage)

As he grew older Richard knew it was only a matter of time until death came barging into his home, uninvited, of course. Every day he listened closely for the loud sound of



knuckles rapping callously against the door. He wished someone could bail him out, but death accepted no bribes. The grave, God's bankruptcy court, would clear him of his debts. Dying is the final tax paid to the world. **Richard was 90 years old.** He had seen a lot in his time.

Condition B (Extended literal passage with phrasal metaphor)

With every year that passed, Richard became increasingly aware that his time on earth was limited. Despite being healthy and in good condition for his age, he was still expecting to die soon. His fear of death stopped him from leaving the house and enjoying his life. Desperately he wished for immortality, though he knew no such thing would be possible. Dying is the final tax paid to the world. **Richard was 90 years old.** He had seen a lot in his time.

Condition C (Extended literal passage)

With every year that passed, Richard became increasingly aware that his time on earth was limited. Despite being healthy and in good condition for his age, he was still expecting to die soon. His fear of death stopped him from leaving the house and enjoying his life. Desperately he wished for immortality, though he knew no such thing would be possible. Dying is an inevitable part of life. **Richard was 90 years old.** He had seen a lot in his time.

Question: Richard was near the end of his life.

Answer: True

17. Condition A (Extended metaphorical passage)

Rob found himself getting increasingly frustrated with the stupidity of everyone around him. His anger was a dormant volcano, which could erupt at any moment. He sensed the hot magma bubbling beneath his scalp, and felt the pressure building up inside of him. He knew it was only a matter of time before he burst, pouring out red-hot lava, viciously burning those around him. His temper was a blistering fire. **Rob tried to take deep breaths.** 'In through the nose, out through the mouth', he recited.

Condition B (Extended literal passage with phrasal metaphor)

From Rob's behaviour one would judge him to be an easy-going contented sort of guy. However, his outward conduct did not reflect how he felt. He was constantly annoyed and frustrated with people. Somehow he managed to conceal his anger, but this repression of his feelings only made matters worse. He knew he wouldn't be able to hide his irritation forever. His temper was a blistering fire. **Rob tried to take deep breaths.** 'In through the nose, out through the mouth', he recited.

Condition C (Extended literal passage)

From Rob's behaviour one would judge him to be an easy-going contented sort of guy. However, his outward conduct did not reflect how he felt. He was constantly annoyed and frustrated with people. Somehow he managed to conceal his anger, but this repression of his feelings only made matters worse. He knew he wouldn't be able to hide his irritation forever. He was anxious about upsetting his friends. **Rob tried to take deep breaths.** 'In through the nose, out through the mouth', he recited.

Question: Rob was very chilled out.

Answer: False

18. Condition A (Extended metaphorical passage)

Whenever Laura spoke on a topic, her friend Tom was struck by her remarkable insight. Her remarks were rough cut diamonds. They may not have had the polished shine of stones exhibited in fancy jewellery shops, but they held a precious element within them, a hidden gem of beauty. With proper care and the knowledge of skilled cutting techniques, this sparkling brilliance might one day be visible to all. Her ideas were valuable jewels. **Laura was studying philosophy at university.** She loved to write in her spare time.

Condition B (Extended literal passage with phrasal metaphor)

Whenever Laura spoke, those who were smart listened intently. Her friend Tom for example always paid close attention to what she said. Though the way she put forward and constructed her arguments was not fully expert, the content of what she said was truly insightful. She had a unique vision and intellect. With the right training and supervision she might one day become a distinguished thinker, whom many would admire. Her ideas were valuable jewels. **Laura was studying philosophy at university.** She loved to write in her spare time.

Condition C (Extended literal passage)

Whenever Laura spoke, those who were smart listened intently. Her friend Tom for example always paid close attention to what she said. Though the way she put forward and constructed her arguments was not fully expert, the content of what she said was truly insightful. She had a unique vision and intellect. With the right training and supervision she might one day become a distinguished thinker, whom many would admire. Her words were worthy of appreciation. **Laura was studying philosophy at university.** She loved to write in her spare time.

Question: Laura was wise.

Answer: True

**19.** Condition A (Extended metaphorical passage)

Although they were very independent people, Nicola dearly missed Jane, her oldest acquaintance, when they were parted. For her, Jane was a bunch of sunny daffodils in constant bloom, impervious to the seasons. Whenever the darkness was setting in, Nicola sought out these vividly coloured blossoms of springtime to brighten her life. A best friend is a beautiful bouquet of flowers. **Nicola spoke to Jane as often as possible.** They had seen each other through so much.

Condition B (Extended literal passage with phrasal metaphor)

Nicola and Jane had known each other since childhood, despite leading fairly separate lives they had somehow managed to stay close all throughout their adult life. Whenever Nicola felt upset, she would turn to Jane, who was always positive and able to give her a sense of hope for the future. A best friend is a beautiful bouquet of flowers. **Nicola spoke to Jane as often as possible.** They had seen each other through so much.

Condition C (Extended literal passage)

Nicola and Jane had known each other since childhood, despite leading fairly separate lives they had somehow managed to stay close all throughout their adult life. Whenever Nicola felt upset, she would turn to Jane, who was always positive and able to give her a sense of hope for the future. A best friend makes daily life easier to bear. **Nicola spoke to Jane as often as possible.** They had seen each other through so much.

Question: Nicola hated Jane.

Answer: False

**20. Condition A (Extended metaphorical passage)**

After being alone for many years, Liz was finally rescued from perpetual singledom by Tom. She had been tossed about for so long on the cold ocean praying for that saving torch to find her. At long last she spotted it from afar and swam desperately towards it, until eventually she was within its warm beacon of light and was dragged safely to shore. His love was a lighthouse. **Liz and Tom quickly got engaged.** She swiftly began planning their wedding.

**Condition B (Extended literal passage with phrasal metaphor)**

Liz had been single for many years and was desperate to find a boyfriend. She never seemed to meet anyone, let alone connect with anyone. She felt totally alone. But finally when she met Tom, she instantly knew that he could save her from her lonely life. He was the kindest, most generous man. He looked after her so well and made her feel completely safe. His love was a lighthouse. **Liz and Tom quickly got engaged.** She swiftly began planning their wedding.

**Condition C (Extended literal passage)**

Liz had been single for many years and was desperate to find a boyfriend. She never seemed to meet anyone, let alone connect with anyone. She felt totally alone. But finally when she met Tom, she instantly knew that he could save her from her lonely life. He was the kindest, most generous man. He looked after her so well and made her feel completely safe. His love made her very happy. **Liz and Tom quickly got engaged.** She swiftly began planning their wedding.

Question: Liz had been single for a long time before meeting Tom.

Answer: True

**21. Condition A (Extended metaphorical passage)**

Isabelle never failed to spend the holidays with her family – the excitement of their crazy amusement park was simply too hard to resist. On her way home, she always felt a sense of anticipation – she was a child again, eagerly awaiting entry to a fun-filled playground. There would be soaring highs and dangerous dives, but she couldn't wait. Christmas dinner was a rollercoaster ride. **Isabelle had lots of siblings.** They were all incredibly close to each other.

**Condition B (Extended literal passage with phrasal metaphor)**

Isabelle loved going back to her home town during the holidays. It was always so much fun seeing all her family and returning to the house she grew up in. Though she was now thirty years old, she felt herself instantly regressing to her childhood. She anticipated numerous arguments, but with these came equally happy times. Christmas dinner was a rollercoaster ride. **Isabelle had lots of siblings.** They were all incredibly close to each other.

**Condition C (Extended literal passage)**

Isabelle loved going back to her home town during the holidays. It was always so much fun seeing all her family and returning to the house she grew up in. Though she was now thirty years old, she felt herself instantly regressing to her childhood. She anticipated numerous arguments, but with these came equally happy times. Christmas was a series of highs and lows. **Isabelle had lots of siblings.** They were all incredibly close to each other.

Question: Isabelle was lonely.

Answer: False

### Filler Items

1. Pete and Margaret rehearsed their life every day. Their daily routines were so predictable their footprints could have been numbered in a chart of dance steps. Early in the morning they would do a quiet waltz around the house, then a foxtrot to work. Their jobs never required them to improvise a quickstep or a swing and the long hours had the rhythm of a lullaby. Back home the evenings were always the same paso doble.

Question: Pete and Margaret led stable lives.

Answer: True

2. When Gina's employees were cooperative, they could achieve great things together. They were a choir in perfect harmony, the delicate notes of the sopranos blending perfectly with the powerful rumble of the basses. After the performance, Gina had merely to pick up the bouquets thrown onto the stage. But when they were uncooperative, the resulting cacophony assailed the senses, their tempo totally off.

Question: Gina's employees always worked well together.

Answer: False

3. The pupils in inner-city schools are notoriously unruly. The places are zoos. New keepers are generally assigned to the safer animals: the placid giraffes, the comical penguins and the half-domesticated goats. Those animals you could handle without protective gloves. It was both the more intelligent and the more aggressive animals that required extra safety measures, the foxes and lions who did not take kindly to any man-handling.

Question: School children can be difficult to manage.

Answer: True

4. Dave had been leading his company in their negotiations with their rivals for months now. It was a boxing match, and both competitors were bloodied, bruised, and starting to let their guard down. But Dave was a chess player. He would wait patiently for the exact moment to strike, and then he would make a decisive attack, leading his opponent into an inescapable checkmate.

Question: Dave was unemployed.

Answer: False

5. Harry and Tom's sibling relationship varied enormously across time. It was a complicated weather system. Some days, there wasn't a cloud in the sky and the sun shone brightly. Other days the sun barely rose and a chill breeze lowered the temperature. Just occasionally, lightning bolts scarred the ground. But the storm usually passed quickly, the fierce wind having cleared the air.

Question: The brothers did not always get on perfectly.

Answer: True

6. Andrew felt his memory deteriorating; what had once been a sponge was now a sieve. He quite enjoyed filtering out what was of little use to his brain, things that previously he'd absorbed automatically. But then he found himself forgetting the things he wanted, and needed, to remember. Somehow the mesh of the sieve had got snagged, the holes were too big, allowing everything to pass through.

Question: Andrew had a photographic memory.

Answer: False

7. Gemma had risen to stardom at a young age, having acted in a number of feature films. She found fame increasingly hard to deal with. The paparazzi were hyenas, lurking around every corner. Even when she thought she was free of them, somehow they would chase her down. She hated the way they hunted in packs and she couldn't understand how anyone could put up with their relentless scavenging behaviour.

Question: Gemma was famous.

Answer: True

## APPENDIX III

### *Experiment 2 Memory Questionnaire*

**Please fill out the blank spaces in the table below, counting backwards in 3s.**

For example:

75	72	69	66	63	60	57
----	----	----	----	----	----	----

30						
96						
44						
51						

**Please answer the following questions related to the experiment just completed on the computer.**

1. What was the most memorable story that you read during this experiment? Please try to remember specific details, exact words, phrases or sentences.

.....  
.....  
.....  
.....  
.....

2. Why do you remember this story?

.....  
.....  
.....  
.....

3. What was the next most memorable story? Again, please try to recall specific details, exact words, phrases or sentences.

.....  
.....  
.....  
.....  
.....

4. Why do you remember this story?

.....  
.....  
.....  
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