

The Application of Metaphors in Psychotherapy

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Table of Contents

	Page
Cover Sheet	ii
Acknowledgements	iii
Abstract	1
Introduction	1
Linguistic Approaches to Figurative Language	3
Classic Rhetorical Theory: Outline & Evaluation	3
Contemporary Theory: Outline & Evaluation	6
Relevance Theory: Outline & Evaluation	12
Conclusion to Linguistic Approaches to Figurative Language	17
Metaphor in Psychotherapy	18
Models of Metaphor Therapy	20
Cognitive Behavioural Therapy	20
Symbolic Modelling and Clean Language	23
Conclusion to Models of Metaphor Therapy	26
Experiment	29
Aims and Hypotheses	32
Method	32
Participants	32
Materials and Design	32
Procedure	34
Results	35
Discussion	36
Conclusion	41
References	43
Appendix 1	52

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The Application of Metaphors in Psychotherapy

Abstract

Inspiring much of literature's most celebrated poetry are experiences of war and love. Emotional disturbance expressed during psychotherapy is also privy to notably increased instances of figurative language. This latter observation has led therapists to create various models by which to utilise these figures, notably Symbolic Modelling and a framework within Cognitive Behavioural Therapy (CBT). Surveying the varied research on figurative language we find support for the speculation that an emotional state of mind enhances metaphor sensitivity and thus, the idea that metaphors could be used to assist and enrich the delivery of therapy. In addition, we find support for the hypothesis that metaphors are heavily relied upon during therapy since emotions are often complex and conventional language is unlikely to be sufficiently descriptive to explicate these emotions. Having established the motivation for investigating the link between emotional state of mind and metaphor sensitivity, an affective priming experiment was conducted. Whilst a significant priming effect was found, this was in the opposite direction to that expected: metaphors were rated significantly lower by the end of the experiment, while literal passages were rated at a more consistent level. We speculate that this result is a consequence of tiredness which affects metaphors to a greater extent than literal passages, since the former can be more demanding in terms of processing resources. We suggest that these results reveal that metaphor interpretation requires a certain sensibility. In our view, this sensibility would increase when people experience difficult emotional situations, strengthening our case that metaphor may be an important tool in psychotherapy.

Introduction

For centuries metaphor was thought to be a 'special privilege of a few gifted speakers' (Gibbs 1994: 124), an ornamental deviation from literal language. Scrutiny of everyday speech however, reveals that metaphor is inescapable. Nevertheless, certain situations continue to provoke notably greater production of these mysterious figures than others. Experiences of war for example, like love, have often proved fruitful sources of inspiration for poets. Interestingly, those engaged in emotional battles expressed in the world of psychotherapy, also display increased exploitation of figurative language. Uniting these situations is a heightened emotional state, and so follows the hypothesis that different moods lead to varying sensitivity to metaphorical language. Accordingly, we ask: can metaphor aid communication and facilitate cognitive healing?

It has long been noted by therapists that patients frequently resort to figurative language when attempting to solve perplexing issues. While in the early days of psychotherapy their productions were resisted, thought to be symbolic disguises, more recently they have been

actively encouraged. Yet perhaps as a result of the extensive and somewhat muddled literature concerning figurative language, practical endeavours to utilise metaphors have avoided theoretical grounding and empirical investigation. The motivation for the well-attested increased production of metaphors in the context of therapy has furthermore remained unexplained; is it, as we hypothesised, the heightened emotional state involved in therapy that makes us resort to such language? And do we find support and reasoning for such a claim in linguistic theory? Alternatively, is the observed increase in production of figurative language due to the fact that metaphors are sometimes the *only* means through which we can express the complex and profound ideas which arise in therapy?

Those who have attempted linguistic validation, notably proponents of Cognitive Behavioural Therapy and Symbolic Modelling, have loosely based their analyses on the seminal Conceptual Metaphor (CM) theory developed by cognitive linguist George Lakoff. Lakoff formulated a vast taxonomy of linguistic expressions which he used as evidence for the idea that metaphor resides in the mind, and as such it has the power to change the thoughts which influence our behaviour. This account represented a significant departure from earlier classic accounts of meaning which viewed metaphor as a matter of language, which was supposedly inherently literal. Nevertheless, while the CM theory successfully explains the ubiquity of metaphors in everyday discourse, it does not account for why metaphors often appear during psychotherapy to a greater extent than in normal speech. Furthermore, like the classicists' approach, it has not fared well under psycholinguistic analysis. As an alternative to this theory we find Dan Sperber and Deirdre Wilson's Relevance Theory. Metaphor on this framework is viewed within the branch of lexical pragmatics in which all word meanings are adjusted, broadened or narrowed in use. Developed within this approach is Robyn Carston's recent proposal of two separate modes of processing: one for simple metaphors and another for the more extended cases. While the banal cases function as outlined by Relevance Theory, more extended examples involve lengthier, more reflective processes. Given its elegance as a theory of communication, it is interesting to explore the extent to which this theory could be applied to frameworks of metaphor use in therapy. Before embarking on such an investigation, however, it is first necessary to outline the various competing linguistic theories mentioned, for only then will we be able to appreciate the preference to use Relevance Theory over others.

Linguistic Approaches to Figurative Language

Classic Rhetorical Theory: Outline & Evaluation

Ever since Aristotle asserted that mastery of metaphor was ‘a sign of genius’ (Aristotle, *Poetics*, 1459a6) this elusive trope has been held in the highest esteem. Born out of this idea was the traditional view of figurative language which fundamentally regarded metaphor production as a special human ability. Comprehension of poetic language was thus seen to involve cognitive and linguistic skills vastly different to those required in the interpretation of so-called ‘ordinary’ language, which was assumed to be fundamentally literal. Most influential within this classical approach was Paul Grice’s theory of conversational implicature and John Searle’s speech act theory. Though much has changed since these early accounts of meaning, understanding of them remains vital if we are to comprehend and appreciate later theories of metaphor.

Noticing the previously overlooked fact that a great deal of information expressed in discourse is implied rather than asserted, Grice set out to account for man’s ability to *infer* meaning. Take the following simple exchange:

Alex: Do you want a gin and tonic?

Lynn: I’m detoxing.

Using the simple linguistic processes of coding and decoding, taking the words literally, will evidently prove inadequate in deriving the meaning of Lynn’s two words which do not constitute an answer to Alex’s question. In order to understand Lynn’s utterance as a refusal of Alex’s offering, we must go through a process of reasoning which necessarily includes recognising Lynn’s intentions. Grice claimed that humans possess a basic principle which enables us to do this: fundamentally, every speaker obeys certain standards when communicating and in obeying these standards they are behaving in predictable and hence expected ways. This idea, that speakers follow a general Cooperative Principle, is defined by Grice as follows:

‘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’ (Grice 1975: 26),

When Lynn claims that she is detoxing, Alex assumes that she is being cooperative and thus offering a satisfying answer to his question. He must therefore go beyond the conventional meaning of her words – which barely counts as an appropriate answer – and recognise that she is *implying* that she does not want a drink. Subsumed within the Cooperative Principle are four additional ‘maxims’, defined as below:

Maxim of Quantity

1. Make your contribution as informative as is required for the current purposes of the exchange.
2. Do not make your contribution more informative than is required.

Maxim of Quality – Supermaxim: ‘try to make your contribution one that is true’

1. Do not say what you believe to be false.
2. Do not say that for which you lack adequate evidence.

Maxim of Relation

1. Be relevant.

Maxim of Manner – Supermaxim: ‘be perspicuous’

1. Avoid obscurity of expression.
2. Avoid ambiguity.
3. Be brief (avoid unnecessary prolixity).
4. Be orderly.

(*ibid*: 26-27).

Given that the main objectives of communication are to transfer information, influence and be influenced, Grice believed that it was in the interest of every speaker to uphold these maxims. This assumption, that every conversational contribution fulfils the Cooperative Principle and maxims, is used as a strategy for deriving *conversational implicatures*. Grice conceded that we may blatantly fail to fulfil a maxim, thereby *flouting* or *exploiting* it (*ibid*:

30), yet he viewed such patent disregard as superficial in that it was designed to be noticed by one's audience. When faced with such occurrences hearers therefore recognise the purpose behind the flouting and search for a conversational implicature. Conversational implicatures are defined as communicated assumptions which are derived through pragmatic inferences; that is through recognising the intentions of the speaker.

Seen from the Gricean perspective, metaphors are a violation of conversational principles, and as with any other implicature, their meaning is derived from the knowledge that a violation of a maxim is occurring. In the case of metaphors, speakers are seen to violate the maxim of Quality, or more specifically the maxim of truthfulness (the first maxim of Quality) which suggests we make only genuine, and not spurious, contributions (*ibid*: 26-28)¹. Understood within this framework, an audience's comprehension of a metaphorical utterance involves first attending to the literal meaning of the utterance, and only on realising that it involves a flouting of the maxim of truthfulness², a 'categorical falsity', will the hearer search for some other meaning. The hearer is supposed to do this in virtue of the fact that he assumes that the speaker is obeying the Cooperative Principle and hence only violating a maxim in order to communicate an implicature. In this sense, comprehension of figurative language demands greater cognitive effort on the part of the hearer. More specifically, Grice asserted that in uttering metaphors of the form *A is B* speakers were,

'attributing to his audience some features in respect of which the audience resembles (more or less fancifully) the mentioned substance' (*ibid*: 34).

Metaphors are thus *hedged* similes. Consequently, the meaning of a metaphor such as 'Sarah is a diamond' comes from grasping the features of 'the mentioned substance', 'diamond' and attributing these features of preciousness, rarity, and value to Sarah. Like Grice, Searle held figurative language to be a deviant departure from normal literal speech, its meaning obtainable through certain rational steps (Searle, 1979).

¹ It is perhaps important to note that in Grice's mind this maxim held special status, satisfied in his view above all others. He even conceded that it had been perhaps inadvisable to have included it within the general 'scheme' he constructed; nevertheless Grice did not modify his theory accordingly and in fact did nothing more than express his opinion on the matter.

² Violation that is made mutually evident to the speaker and hearer.

A fundamental weakness to this classical approach is its failure to account for why we speak figuratively: if language is inherently literal and non-literal language requires extra effort, we find no motivation for its production. Motivation for metaphor however, and its occurrence in emotional contexts, is essentially to what we seek to identify and explain in this paper. As a model for metaphor in psychotherapy, these classical approaches are therefore immediately unappealing. In converting figurative utterances into literal similes, Grice's account furthermore fails to explain the superior effects produced by metaphoric interpretations. As a result, it cannot be used to support the intuitions of psychotherapists who fundamentally believe in the affective power of metaphor. Psycholinguistic evidence too has challenged this traditional view of language, demonstrating that literal meanings are not unconditionally accessed prior to metaphorical ones as is predicted on these frameworks (Ortony et al., 1978). Similarly, studies have shown that it is not possible to ignore metaphors, a finding in contrast to the predictions of classical theories (Keysar, 1989). Perhaps the most insurmountable challenge however comes from the discovery that metaphor is ubiquitous in everyday discourse. As Gibbs notes, even seemingly literal sentences, such as 'our marriage is on the rocks' (Gibbs, 1994: 124), are rooted in metaphorical conceptualisations. It is on this basis, that the Conceptual Metaphor theory was formed.

Contemporary Theory: Outline & Evaluation

Developed in the 80s by cognitive linguist George Lakoff and his colleagues, the Conceptual Metaphor theory represented a significant departure from two previously held assumptions: that language was inherently literal and that metaphor is a matter of language, not thought. In considering concepts such as life, death, time, and argument, Lakoff hypothesised that these and many other concepts are structured metaphorically in the mind, and thus they are represented only as a by-product in our language. Take for example the conceptual metaphor ARGUMENT IS WAR which is demonstrated by the following linguistic expressions:

ARGUMENT IS WAR³

Your claims are indefensible.

He attacked every weak point in my argument.

His criticisms were right on target.

³ Following common linguistic practice, small caps are used to represent concepts.

I've never won an argument.

(Lakoff & Johnson, 1980: 4).

Through our tacit knowledge of this conceptual metaphor, we regard individuals in an argument as opponents, contenders who can win, lose, be demolished or defeated. Our implicit knowledge of the structure of this metaphor enables us to understand the various linguistic expressions noted above. Another conceptual metaphor, wholly culturally specific, is that of time: TIME IS MONEY. Not only does this, like all conceptual metaphors, influence our language, but it also impacts on the way we think, how we perceive our experiences and react to them. In this sense, they are metaphors which 'we live by'⁴. To illustrate, we talk of wasting, saving, spending and investing time (as we do with money), but in life we also treat time as a commodity with which we bargain. As a resource, we are often paid by the hour, just as we pay *for* things by the hour, therapy sessions being a fitting example. Spoken metaphors therefore exist purely as a result of our conceptual system being at least partially structured metaphorically.

As well as structural metaphors, Lakoff and Johnson propose orientational metaphors which organise systems of concepts and link these concepts with our physical experiences. Examples of such metaphors include HAPPY IS UP, SAD IS DOWN, MORE IS UP, LESS IS DOWN, which lead to the following expressions:

HAPPY IS UP; SAD IS DOWN

My spirits rose.

I'm feeling down.

Thinking about her always gives me a lift.

I fell into depression.

MORE IS UP, LESS IS DOWN

My income rose.

He is underage.

(*ibid*: 16).

⁴ 'Metaphors We Live By' is the title of George Lakoff & Mark Johnson's book from 1980 in which they introduce the CM theory.

If we think of our physical posture when we are sad, we can see that it follows from the above metaphors, for at such times we are ‘drooped’, as opposed to ‘erect’, as we typically are when in a positive emotional state. Likewise, the conceptual metaphor MORE IS UP arises naturally from our physical experience of seeing levels increase when we add more of something to a pile or container.

Lastly, Lakoff suggests the existence of ontological metaphors which project concrete things such as substances, onto abstract things like emotions and arise from our experiences with physical objects. Take THE MIND IS A MACHINE, from which follows:

THE MIND IS A MACHINE

Boy the wheels are turning now.

I’m a little rusty.

My mind just isn’t operating today.

(*ibid*: 27).

As the above demonstrates, personification is a simple example of ontological metaphors which is frequently used in everyday discourse.

The CM theory naturally appeals to psychotherapists wishing to utilise figurative language through its fundamental claim that metaphor resides in the mind. Since metaphorical language is only a by-product of our conceptual system, we see the potential in using language to change our thoughts. Evidently, words cannot change our perception of reality, however, changes in our conceptual system have this power. Through creation of new metaphors, or indeed extending existing metaphorical concepts beyond the range of ordinary literal ways of thinking, we have the power to alter our conceptual system, a system which according to Lakoff gives rise to many of our perceptions and actions. In changing our view of reality, we see the potential in metaphors to give us ‘new meaning and insight’. This is often the primary task in therapy – to help us make sense of our experiences and understand them in a new, more constructive light. Of course, changing our existing metaphors is no simple task, for as we have seen many are deeply engrained in our subconscious, nevertheless it remains at least *theoretically* possible.

A central part of the CM theory, particularly relevant to psychotherapy, is its focus on the ability of metaphorical concepts to both disguise and highlight certain features of a concept.

In drawing attention to the power of concepts to highlight and suppress, the theory explicitly demonstrates the potential of language to change thought, and thereby alter behaviour. This gives us a very logical and practical way to utilise metaphors in therapy. When focusing on the concept of an argument as a battle for example, we may lose sight of aspects of an argument, not typically associated with battles, which could prove more helpful. Imagine that a couple are arguing a lot. With the concept ARGUMENT IS WAR in mind they will inevitably see each other as opponents who must either win or lose. Promoting a different concept, TIME IS MONEY, could encourage them to view their arguments and each other in a more positive light: by arguing they are *both* investing time, a valuable commodity, in their relationship. In this sense, it is not necessary for either person to win or lose the battle; instead they can see each other as a team, committed to the same goal of resolving their relationship issues. Highlighting this time aspect of an argument, which may be hidden by the common conceptual metaphor ARGUMENT IS WAR, will help individuals to see the cooperation aspect of their 'battle', which could serve to shift their attention to a resolve more focused on mutual agreement. The CM theory therefore appears to be a worthy model on which to base our framework of metaphor use in therapy.

Whilst the conceptual theory justifies the power of metaphor in healing minds, it also alludes to the potential danger in a therapist employing the device for this purpose. In noting the personal nature of metaphors, which fundamentally arise from individual experiences, we see that each metaphor will come with its own set of entailments, entailments which cannot be predicted and known by others. Whilst a therapist could introduce the aforementioned concept of time as money, hoping to highlight certain aspects of the domain money, different features to those intended could in fact be promoted in the mind of the receiver. The possible entailing concept TIME IS EXPENSIVE for example could receive prominence in a client's mind, prominence which is detrimental to their healing and contrary to the objectives of therapy. In this example, such activation might lead a client to think that they should not 'waste' time arguing with their partner, which in turn could lead them to rush resolving their problems. We thus see the importance of generating the 'right' metaphor for the particular client, though whether such a thing is possible remains to be seen. Can we ever know a client well enough to predict what will be hidden and highlighted by certain concepts? Are we willing to take responsibility for all potential outcomes? The CM theory itself, not being a model of psychotherapy, has not addressed these questions. If we are to utilise metaphor in therapy

however, and base our strategies on this theory, an appropriate approach would seem to be one that encourages patients to develop their own metaphors.

Lakoff and his colleagues effortlessly provide us with an explanation for our motivation to produce figurative utterances: we do not do so consciously, choosing figurative language over literal; we do so because our thoughts are inherently figurative. In this sense Lakoff's account of metaphor is clearly superior to that of Grice and Searle for our purposes and represents a serious contender in our attempt to combine linguistic theory with psychotherapeutic objectives. As well as explaining the general motivation to produce figurative language, the CM theory accounts for the motivation behind individual metaphors which they see as following from patterns of meaning (Tendahl & Gibbs, 2008: 1836-1840). It is these patterns of meaning however, which cause the most problems for the CM theory.

While some metaphoric linguistic expressions can be related to conceptual metaphors which have already been discussed by Lakoff and his colleagues, others will seem initially inexplicable. To account for any novel metaphors, however, which cannot be successfully related to an existing conceptual metaphor, we merely have to add another conceptual metaphor to our list. Increasing this catalogue of conceptual metaphors supposedly lends support to the claim that this metaphor represents our cognitive reality. This claim, that metaphors 'transcend their linguistic manifestations to influence conceptual structure' (McGlone, 2007), is based solely on these manifestations. The foundations of the CM theory therefore show very little explanatory value: they cannot account for *why* conceptual metaphors exist or *how* we know that they do without calling on linguistic manifestations. To illustrate, the assertion that the conceptual metaphor ARGUMENT IS WAR exists, is based on utterances which use war-oriented terminology to talk about arguments. Similarly, the subsequent that this is evidence that people think about arguments in terms of war is based on that same evidence, that people use war oriented terminology to talk about arguments.

The assumption in CM theory that thoughts are shaped by utterances, and that the former can be inferred from the latter has in fact been shown to be seriously mistaken (McGlone, 2001). Whorf (1964) famously proposed that language affects thought by providing the very means by which we perceive and reason about the world, basing his argument on linguistic evidence. Following the observation that speakers of Inuit have more 'snow descriptors' in their language than English speakers for example, it assumed that these speakers thought

about snow differently from English speakers – on closer inspection, this was found *not* to be the case. The reasoning in CM theory is thus not only circular, but also fundamentally flawed.

In addition to being theoretically unsound, experimental data has demonstrated that arguments in CM theory are likely to be mistaken from an empirical point of view as well. Most notable of this evidence is the research on the model's interpretation of nominal metaphors. When asked to paraphrase the metaphor 'Dr. Moreland's lecture was a three-course meal for the mind' for example, which reflects the conceptual metaphor IDEAS ARE FOOD (Lakoff & Johnson, 1980), participants rarely cited such things as cooking or understanding which relate to similarities 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). Likewise, in constructing metaphors of comparable meaning to 'Dr. Moreland's lecture was a three-course meal 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' (McGlone 1996). Accordingly 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'. Their comprehension of the original metaphor was also not enhanced by prior exposure to metaphors from the food domain like 'the book was a snack'; it was, however, facilitated by metaphors which utilised the attributive category, such as 'that book was a goldmine'. We can conclude from these seemingly robust results that people do not retrieve conceptual metaphors in interpreting nominal metaphors; their role in metaphor comprehension therefore is a little uncertain, and perhaps does not exist at all.

Psycholinguistic work on idiomatic expressions furthermore reveals human's involuntary suffering of hindsight bias (Keysar & Bly, 1995) which is likely to affect attempts to argue for the existence of conceptual metaphors. In their experiment participants subconsciously constructed a rationale for how idioms metaphorically reflected the initial meaning they were ascribed; once articulated, this rationale inhibited their ability to think of any alternative metaphorical scheme which could explain the idiom's opposite meaning. Evidently, 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. The underlying reasoning in the CM view thus appears empirically unsound.

Despite its obvious applicability to psychotherapy therefore, it is clear that numerous problems prevail within the CM theory. Lastly, while the account explains our motivation for uttering metaphors, it does not explain why they would be produced to any greater extent in the context of psychotherapy; why this seemingly emotional situation produces spontaneously rich figurative language.

Relevance Theory: Outline & Evaluation

As an alternative to the Conceptual Metaphor theory, we find the Relevance Theoretic (RT) approach to communication and figurative language. Communication in general is understood using the Cognitive Principle of Relevance, which states that ‘every act of ostensive communication communicates a presumption of its own optimal relevance’ (Sperber & Wilson 1995: 158). An ostensive stimulus is defined as being optimally relevant to an audience if and only if:

- i. It is relevant enough to be worth the audience’s processing effort;
- ii. It is the most relevant one compatible with communicator’s abilities and preferences (Wilson & Sperber 2004: 612).

Processing effort 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) used in processing an input and includes such things as perception, memory and inference. In interpreting utterances speakers decode the linguistically encoded sentence meaning, ‘thereby gaining access to certain logical and encyclopaedic properties’ (Carston 1996: 66) and in the ‘mutual adjustment of explicit content, contextual assumptions and cognitive effects’ (Wilson 2004: 353) follow a path of least effort until expectations of relevance raised by the utterance are satisfied. The greater the cognitive effects, the greater the relevance and the greater the processing effort, the lower the relevance. A positive cognitive effect is defined as something that contributes a ‘worthwhile difference to the individual’s representation of the world’ (Wilson & Sperber 2004: 608).

Within RT is the field of lexical pragmatics which looks at how theories of communication apply at the word level; in other words, how ‘word meanings are modified in use’ (Wilson, 2003: 273). The lexical pragmatic processes which enable us to derive the intended meanings

of words are triggered by the general communication mechanisms outlined in RT – by the search for relevance: hearers follow a path of least effort until expectations of relevance raised by the utterance are satisfied. Various lexical adjustments exist, such as *narrowing* and *loosening* and these give rise to the pragmatic construction of *ad hoc* (occasion-specific) concepts. Word meanings can be both broadened, i.e. ‘extended to a penumbra of cases that strictly speaking fall outside its linguistically-specified denotation’ (Wilson 2004: 345), and narrowed, to ‘convey a more specific sense than the encoded one’ (Wilson & Carston 2007: 232).⁵ Imagine the following conversational exchange taking place when Sarah arrives at a restaurant in the United Kingdom (UK):

Sarah: I’m so sorry I’m late.

Natalie: I’ve been here for two hours.

Evidently, Natalie does not mean that she has been in the UK for two hours, she means that she has been in the restaurant for two hours. This exchange demonstrates that we are engaging in lexical adjustments, in this case narrowing the meaning of the word ‘here’, all the time.

On the relevance-theoretic account, metaphors are simply radical cases of category extension on a continuum with hyperbole and approximation. Like Lakoff, relevance theorists take metaphor to be an ordinary feature of everyday language, involving ‘no special interpretive mechanisms’ (Wilson & Carston 2006: 404). Since this view of metaphor claims that comprehension of the figure does not warrant any additional theory beyond the standard relevance based approach, it is considered to be a *deflationary* account; effectively it *deflates* the status of metaphor asserted in other theories⁶. Consider the following example, taken from Wilson and Carston (2006):

1. The water is boiling.

Understood literally this sentence clearly means that the water is 100° Celsius or above. It could also however, be an approximation in which case the water is close enough to boiling

⁵ As Carston (1996) notes, other terms for broadening and narrowing include *loosening* and *weakening* and *enrichment* and *strengthening*, respectively (Carston 1996: 61).

⁶ Deirdre Wilson and Dan Sperber introduce this terminology in their 2006 paper, ‘A Deflationary Account of Metaphor’.

for the differences to be irrelevant in the context in which it is uttered. Understood hyperbolically the statement communicates that the water, though not necessarily boiling is closer to boiling than one would like. Lastly, when taken metaphorically the statement suggests that the water is perhaps bubbling or emitting vapour. In the latter three cases the concepts communicated are derived through relaxing some features of the lexical concept, in other words using the lexical pragmatic processes and constructing an *ad hoc* concept⁷.

Within the RT framework the cognitive content of metaphors is made up of ‘an indefinite array of weak implicatures’ (Sperber & Wilson, 1985/86: 170). Typically, they convey a single, very strong implicature, one that constitutes the main intention of the utterance, yet in addition to this, metaphors have the potential to convey an abundance of weak implicatures and further implications that perhaps do not fall under the speaker’s communicative intention. The notion of weak implicatures supports the notion that more often than not a literal paraphrase of a metaphor does not exist – hence our reason for uttering it in the first place. On this matter, RT takes a similar stance to that of Davidson who notes that, ‘when we try to say what a metaphor “means”, we soon realise there is no end to what we want to mention’ (Davidson, 1984: 263). This feature of the RT provides a plausible account of why metaphors are uttered more frequently in the context of psychotherapy. Such a situation is likely to involve thoughts and emotions which are complex, being complex the client would benefit from explicating them using metaphors, since metaphors are able to imply more than conventional literal language. As John Middleton Murry notes, ‘try to be precise and you are bound to be metaphorical’ (Murry, 1980: 75). This expressive power of metaphor lies at the heart of the relevance-theoretic account and elegantly explains the clinical observation that metaphors are frequently relied upon in the context of therapy.

As previously mentioned, weak implicatures do not necessarily fall under the speaker’s communicative intention. In this sense, though triggered by the metaphor itself, as uttered by the speaker, the unearthing of these implicatures is ultimately the responsibility of the recipient; it is the effort invested by the recipient which leads to the recovery of implicatures. This is a key feature of the RT account and an important one in considering its applicability to psychotherapy. Not only does it account for the attested power of metaphors, but it also entails the subjectivity of metaphorical interpretations. The same metaphor can mean very

⁷ It is worth noting that this account of meaning and metaphor entails that metaphor is wholly distinct from simile; the *ad hoc* concept account applies only to the former. See Carston 2002 for a discussion.

different things to different people in different contexts. This points to the importance of generating careful individual metaphors in therapy, or even allowing only the client to generate metaphors – for we might not wish to be held accountable for derived implicatures which we neither intended nor desired.

As discussed, the RT approach to metaphor places the device on a continuum with other loose uses of language such as approximation and hyperbole. More recent research, however, has challenged this deflationary view of the trope. As Carston (1996) observes, unlike hyperbole and approximation, metaphors 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. In the now infamous example, ‘Mary is a bulldozer’, ‘gross insensitivity’, a property not closely associated with the literal concept, becomes key in the interpretation of the metaphor, while other defining features of the literal concept are dropped, for example, ‘machine for ground-clearing’. Similar to this account of lexical adjustment, the philosopher Philip Wheelwright explains how this feature of metaphor forces us to see concepts in a way that is both deeper and wider in sense, leading to insights which are profoundly focused yet also engrained in a wider context (Wheelwright, 1962). Further setting it apart from other loose uses of language is the fact that metaphor generally involves a ‘domain shift’, as opposed to merely broadening encoded properties. In ‘Mary is a bulldozer’ there is a shift from machines to human personality traits, and in the example ‘their marriage is a minefield’ from ‘physical landscapes to human institutions’ (Carston, 2011b). As Carston notes (2008), metaphorical uses of concepts evoke far more sensory, perceptible properties, ones with a greater imagistic quality than those in hyperboles and approximations. This departure from the standard RT account of metaphor is more in line with those who, like myself, believe that metaphor has some special status. Indeed, it is on this very basis that we have chosen to investigate its potential in psychotherapy.

As already mentioned, the RT approach to metaphor shares the CM theory view that metaphor is a natural phenomenon. Nevertheless, the two approaches differ fundamentally on their opinion regarding the origin of metaphor; for proponents of RT, metaphor is a matter of communication, for advocates of CM theory, it is a matter of thought. While relevance theorists more recently accepted that some cognitive mappings like those asserted in the CM theory might exist, they believe this to be merely a result of their repeated use in

communication. If we use a metaphor often enough, RT states that the route from lexical concept to *ad hoc* concept can become ‘routinised’, resulting in ‘systematic cross-domain correspondences that CM theorists discuss’ (Carston, 2011a). This subsequently ‘facilitate[s] the production and interpretation of new linguistic metaphors based on the same conceptual activation patterns, resulting in thematically-related clusters of linguistic metaphors’ (Wilson, 2009: 56). Fundamentally however these cognitive mappings only arise from repeated patterns of linguistic communication. Metaphor from an RT perspective thus originates in communication, not in thought.

Despite the obvious elegance of the RT account of metaphor, it does not come without its challenges. Most significant, and indeed relevant, is the suggestion that appreciation of more poetic metaphors involves far lengthier, reflective processes than those employed in comprehension of everyday banal figures. It seems likely that as Giora (2006) says, when comparing brain areas ‘recruited’ in metaphor processing, while ‘metaphor per se is not unique... the innovative – that which gives everyday speech an unfamiliar air’ (*ibid*: 113) is indeed special. As the effects of these metaphors appear significantly different, it is logical to assume that their processing too is of a different nature. While at the beginning of processing extended poetic metaphors therefore, we may indeed be projecting *ad hoc* concepts, in time it would appear that we switch to an alternative mode of processing. It is this second mode of processing that Robyn Carston has recently sought to explain.

Carston claims that in processing extended metaphors hearers ‘entertain the internally consistent literal meaning as a whole’ (Carston, 2011b) and metarepresent it as descriptive of an imaginary world. Of course, it is possible that we continue to construct *ad hoc* concepts in these extended metaphors, however, given the ‘persistent high activation (by backwards and forwards priming) of the closely associated literal meanings’ (Carston, 2010: 307) such a task would seem unnecessarily demanding. Consider the following example, taken from Carston’s recent paper:

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 (Heller, 2008: 263, quoted in Carston, 2010: 307).

Rather than engaging in multiple, somewhat extreme adjustments of the many individual lexical meanings in the above passage, Carston suggests that the reader engages in the aforementioned slower, more reflective process. Since the activation levels of the literal meaning is so high, this meaning takes over from the process of metaphorical adjustment of concepts. With the literal meaning metarepresented as depicting an imaginary world in this case, we come to accept the somewhat bizarre idea that states of mind, such as depression, can be animals. The imagery which accompanies our entailing descriptions from this imaginary world helps us to derive thoughts which are applicable to the real world as we experience it.⁸

Conclusion to Linguistic Approaches to Figurative Language

While the Conceptual Metaphor theory and relevance-theoretic approach to metaphor appeal to psychotherapy and make many similar predictions for its use, the latter approach appears superior in terms of overall explanatory value. The Conceptual Metaphor theory sheds light on why it is that we tend to utter certain metaphors over others and how these metaphors become lexicalised more quickly than others. Nevertheless, it fails to account for why metaphors appear in the context of therapy more often than in ordinary discourse and how they are actually understood on a general level. CM theory is not primarily interested in communication and so, without an accompanying pragmatic theory it cannot explain the workings of metaphors in discourse. As a result, it cannot explain how metaphors function in the psychotherapy room. Being first and foremost a pragmatic account, RT needs no additional theory to explain the online comprehension and context-sensitivity of metaphors. Indeed, embedded in RT is an account of speaker's intentions and how hearers derive these intentions, which as we saw earlier is a prerequisite to interpreting language. In failing to explain the context-sensitivity of metaphors, CM theory cannot account for the subtlety and

⁸ It is not so clear how Carston sees her view of metaphor affecting the entailing assumption in Relevance Theory that similes and metaphors are fundamentally different. It would be interesting to explore the idea that when extended similes operate in the same way as extended metaphors: the literal meaning of the whole passage is metarepresented. We will see motivation for such an investigation and speculation later.

richness of poetic metaphors which is so often strongly felt – a central notion to the proposal of metaphor use and spontaneous production in psychotherapy.

Lakoff's Conceptual Metaphor theory is evidently applicable to psychotherapy, yet so too is the relevance-theoretic approach. Through its account of weak implicatures and poetic effects, RT justifies the power of metaphors, providing a logical reason for their deployment in therapy. As Lenrow (1966) suggests 'the wide range of connotations provided by metaphors stimulates the greatest variety of associations in the client', this increased availability of experiences in turn increases the likelihood of insights into behaviour (*ibid*: 145). As well as justifying metaphor use in therapy, RT also makes testable predictions in terms of how best to utilise metaphors. One would expect for example that priming people to invest more effort in these figures of speech, perhaps by increasing the personal relevance of each metaphor, will result in a greater number of derived implicatures. It is possible that some people are naturally disposed to invest more effort in communication, however RT predicts that increasing relevance would enhance this natural disposition. If this is found to be the case, we subsequently have an immensely practical framework for using metaphors in psychotherapy, one based on theory, as opposed to intuition. Intuitively, since people in therapy have a lot to gain from conversational exchanges they will already be more likely to invest effort in communication.

It is clear that metaphor has long been of interest to linguists and psychologists. Perhaps surprisingly, however, no attempt has yet been made to combine this vast research with that of psychotherapy. Having examined the various competing theories of metaphor comprehension, and concluded that RT and Carston's speculative theory of dual processing are superior, we now turn to the diverse approaches to metaphor in psychotherapy. In evaluating these frameworks, we shall consider their applicability to the relevance-theoretic account of metaphor, with the ultimate goal of demonstrating how this account can be used to enhance and support our model of metaphor use in therapy.

Metaphor in Psychotherapy

Though the affective power of metaphor has long been attested amongst psychotherapists, attempts to define its role in explicit terms have only recently begun. In the early days of psychoanalysis, as in many other contexts, metaphor was a thing to be feared and thus

avoided. Just as Plato famously banned poetry from his utopian Republic on the basis that it stirred up emotions and blinded mankind to the truth, many therapists have held scorn for these suspicious figures of speech, warning that they disguise the very impulses which therapy strives to make conscious. Therapists who have used metaphor have generally done so unwittingly, often failing to recognise their productions as metaphoric; referring to them instead as ‘word pictures’ (Wolberg, 1954) or ‘colourful language’ (Bellak & Small, 1965).

Research, however, reveals encouraging testimonies to the power of metaphor in unleashing novel insight. Chessick (1968) for example noted a patient’s ‘literal’ use of the word ‘trapped’ in their description of a dream in which they were sitting between their sister-in-law and mother-in-law at a dinner party. Chessick found that jumping on this metaphor so to speak led to an immensely insightful discussion in which the client succeeded in expressing a number of novel views relating to their marriage.⁹ This ability of metaphors, to facilitate perceptive discussions relating to a client’s reality which they are not immediately aware of, is our precise motivation for striving to uncover how best to employ them. Whilst therapists may seek to avoid metaphors, they note that clients will often generate them spontaneously. It is this increased production of metaphors during psychotherapy which we shall explore; what is it about therapy that makes people turn to these figurative devices? Is it their heightened emotional state, as appears to be the case with poetry from war and times of extreme joy? If so, if emotion is driving the production of metaphor, what is it about emotion that makes us turn to this style of speaking? As discussed, it is possible that the increased production of figurative language in therapy is simply a result of the expressive limits of conventional literal language.

Those who have recently sought to explicitly use metaphors in their therapy can be divided into two main camps: cognitive behavioural therapists and those using Symbolic Modelling. While both have outlined the practical measures by which to employ these devices, neither has laid satisfactory theoretical foundations to support their claims. Each framework loosely bases its ideas on the CM approach yet neither acknowledges the deeper assumptions within this theory which we have shown to be profoundly flawed. Furthermore, while both

⁹ Barlow et al., 1977 also note power of metaphor in therapeutic insight, providing both clinical and empirical data to support the idea. Defining both metaphorical language and therapeutic insight operationally, generating quantitative and qualitative findings, their study represents a significant, albeit slightly dated contribution to the field. Nevertheless while they may successfully ‘validate clinical impressions’ (*ibid*: 212), they do not do so with the backing of theoretical claims.

approaches to metaphor therapy are supported by individual cases, neither has sought to empirically validate their claims. Following Aristotle, they make use of these figures on the basis that they induce insight and enable us to ‘get hold of something fresh’ (Aristotle, *Rhetoric*, 1410b13). Adopting the ineffability hypothesis, both believe that our motivation for producing metaphors arises because often there is simply ‘no fully satisfactory literal paraphrase’ (Pilkington, 2000: 89). As A.C. Bradley said of true poetry, it is often ‘impossible to express the meaning in any but its own words or to change the words without changing the meaning’ (Bradley 1901: 19). Despite these equal foundations cognitive behavioural therapists and ‘Symbolic Modellers’ remain divided in terms of their view on the most effective way to utilise metaphor. It is interesting to explore each framework, their advantages and disadvantages, and the extent to which we might apply our pragmatic theory to them.

Models of Metaphor Therapy

Cognitive Behavioural Therapy

Through a clever merge of cognitive therapy which was developed in the 1960s and behavioural therapy which appeared in the early 20th century, Cognitive Behavioural Therapy (CBT) was born. While the framework was initially intended for the treatment of depression, it has since been applied to a number of conditions: eating disorders, general anxiety disorders, personality disorders, substance abuse problems and schizophrenia to name a few (Simos, 2002). Within the general framework, a number of more specific models exist, each tailored to specific conditions. Uniting these models, are three core beliefs:

1. Cognitive activity affects behaviour.
2. Cognitive activity may be monitored and altered.
3. Desired behaviour change may be affected through cognitive change.

(Dobson, 2001: 4).

The fundamental claim that thoughts are flexible ensues that they are also arbitrary, and as a result they can be independent from reality. Psychological distress according to CBT is battling with abstract concepts and/or behaviours which are maladaptive. Its aim therefore is

to transform meaning in order to achieve a more constructive and realistic view of the self and the world. In highlighting that problems are not necessarily a direct reflection of reality, CBT helps clients to realise that their issues are not a result of a certain situation, but rather our perception of that situation; they are ‘the architects of their misfortune’ (*ibid*: 28). This subsequently empowers clients: if the issues are created by themselves, then logically they can be removed in the same manner. Through encouraging us to identify our own ‘self-talk’ and ‘how it colours our view of ourselves’ (Stott et al., 2010: 61) we arrive at a powerful state of self-awareness through which to achieve our desired change.

The idea that ‘cognitive events may mediate behaviour change’ (Dobson, 2001: 6), has received an overwhelming amount of empirical support. A lot of evidence has been in the form of cognitive appraisals of events which have been shown to affect responses to the events in question (Dobson et al., 2000 and Hollon & Beck, 1994). This idea also seems intuitively accurate, as is evidenced by the common conception of the extraordinary power of the mind. CBT describes how if we tell ourselves something every day we will inevitably start to believe it; this belief however does not make our assertions true. CBT recognises that replacing dysfunctional thoughts and behaviours takes significant time and effort, however through a structured, goal oriented programme it believes this aim to be achievable. As the most heavily researched form of psychotherapy, CBT is supported both in terms of *efficacy* and *effectiveness*. Its predicted outcomes are thus visible in ‘tightly controlled research trials’ (Westbrook et al., 2011: 17), and clinical practice (Westbrook & Kirk, 2005).

Whilst CBT ‘courses’ adopt a systematic procedure, this practice is always tailored to the individual and their particular issue. Generally cognitive-behavioural therapies belong to one of three main classes:

1. Coping skills therapies
2. Problem solving therapies
3. Cognitive restructuring methods

(Mahoney & Arnkoff, 1978).

These classes differ in their orientation to the degrees of cognitive versus behavioural change. Given the diversity of models and techniques now in existence, useful frameworks have emerged for identifying the differences between each (Kendall & Kriss, 1983). CBT theorists

believe that following a set protocol and series of well-tested principles, in a way a set of back-up principles, is what enables therapists to think flexibly themselves and introduce personal and innovative techniques. Contrary to popular belief, CBT does not demand positive thinking in all contexts; instead it seeks to increase our cognitive flexibility so that when problems arise they can be considered from multiple perspectives; helpful and adaptive perspectives. Similarly, it does not promise to remove problems, but rather it equips us with the necessary tools to manage them in a more reasonable way.

Fundamentally, CBT operates a Socratic approach believing that therapy should be a joint undertaking between the therapist and client. As such, 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). Its methods aim to shift patterns of thinking, not by telling clients how to think and what to do, but via a collaborative approach where both parties are seen as expert in some way. The therapist for example can be viewed as an expert on emotional disorders, while the client is an expert on *their* own life, how their emotional disorder works in the context of their life. Therefore, any course of CBT, which typically involves 12-16 hour long sessions (Chambless et al., 1996), will necessarily involve a great deal of discussion, often with the therapist asking questions in an attempt to uncover the inner, perhaps subconscious, workings of client's mind. On the basis of these discussions, the therapist will make suggestions and crucially, it is up to the client to decide whether or not to try these out.

As something which straddles two domains, casting experiences in new light, metaphor represents a very logical device to 'transform meaning'. While not all cognitive behavioural therapies utilise metaphors in the course of their therapy it has been recognised by many as a powerful device. Imagine a depressed client for example. Often people suffering from depression become frustrated, which leads them to push themselves to get better, often to the detriment of their recovery. For these clients a constructive metaphor is encouraging them to see their depression as a broken leg, something which needs time to heal: the healing process, like that of depression, is not something which can be rushed. Amongst those who advocate metaphor use in CBT, the figure is heavily relied upon to describe the very principles of the therapy process and the causes of emotional problems. Helen Morey, for example, member of the MCTBP (Multicentre Trial of CBT for Bipolar Disorders), describes the brain as a 'camera' which gathers information from reality, she goes on to describe a person's mood as a 'filter' which intensifies certain aspects of the world, while at the same time making others

‘wash out and disappear’ (Stott et al., 2010: 59). As filters are not fixed, any helpful aspects of the world which have disappeared can reappear again through simple removal of the filter.

CBT therapists generally believe in generating metaphors *for* clients, though they accept that metaphors are also likely to be spontaneously generated by the client. Rather than encouraging spontaneous production of metaphors, therapists warn of the dangers in these client-generated metaphors. It is advised that upon recognition of a client-generated metaphor therapists must decide whether to ‘build, strengthen and repair’ the metaphor ‘keeping much of its essence, or to demolish and begin afresh’ (*ibid*: 46). Evidently, there is no reason to discard a metaphor if it is not destructive. Of their own productions, therapists also recommend special attention be paid; metaphors should always be sensitively designed for the particular individual in order to achieve maximum significance. Interestingly, for CBT therapists metaphors often work well for the very reason that prior therapists feared them: they allow a person to dissociate themselves from their often overwhelming emotions. This is a very intuitive argument and clear if we think of talking in third person, even this very simple linguistic manipulation will often allow us to ‘open up’ about our feelings, even when we know the guise has been noticed.¹⁰ Provided we recognise this deceit and ensure it only a temporary dissociation from reality, then the metaphors can be used to great advantage. Ultimately, the aim is to reengage with negative emotions from a different, crucially adaptive perspective, an aim which CBT therapists believe to be made all the more possible by introducing a novel metaphor which provides this perspective.

Symbolic Modelling & Clean Language

As previously noted, it is not only CBT which seeks to utilise metaphor in its approach to psychotherapy. In 1995 Richard Kopp produced a ‘metaphor training manual’ for professionals from a wide range of therapeutic disciplines (Kopp, 1995). Of interest here, however, is the more recent practice of Symbolic Modelling which uses Clean Language. Like CBT and cognitive linguists Lakoff and Johnson, this approach believes that metaphor is a matter of thought which has the power to restrict our way of seeing the world and so in turn,

¹⁰ This idea has received empirical support in the field of reflective writing which has demonstrated that abstracting or distancing ourselves from events by writing in third person leads to less feelings of anxiety (Seih et al., 2008). In their experiment, people wrote diary entries using first-person pronoun, they then narrated the same event using different perspectives: second person pronoun and third person pronoun. In general these results promote the idea that manipulating language has the power to affect our state of mind.

our way of dealing with the world. Like CBT practitioners, Symbolic Modellers also believe that thoughts are flexible and following the Conceptual Metaphor theory they take it that the mind can be moulded through a manipulation of language. While Symbolic Modelling and CBT share these initial assumptions, they differ fundamentally in their practical use of metaphors.

As we have already discovered, though CBT accepts that clients spontaneously generate metaphors, their preference is for metaphors to be introduced by the therapist; Symbolic Modelling operates the exact opposite policy. Developed by Penny Tompkins and James Lawley, both practising psychotherapists, Symbolic Modelling is intended to facilitate consciousness of one's personal 'symbolic domain of experience' (Lawley & Tompkins, 2000: xiv) and help people develop their 'Metaphor Landscape' (*ibid*: 23). Using the simple questioning technique referred to as Clean Language, Symbolic Modelling encourages clients to explore their internal metaphors, which consistent with Lakoff are seen to govern behaviour. Following deep understanding of these metaphors, Symbolic Modelling claims to open doors to people's minds and facilitate desired transformations. So what is Clean Language and what makes it so very special and indeed different from those questions asked in CBT?

Clean Language was created in the 1980s by David Grove, a truly innovative psychotherapist.¹¹ While many therapists have noted the 'rich and disturbingly imaginative metaphoric articulations' generated spontaneously by clients (Pollio et al., 1977: 104), it was Grove who came to realise the effect of using the client's *exact* words in continuing discussions. Grove found that this technique quickly lead to change in the client's perception of their trauma; change which did not, like in many other therapy frameworks, feel forced or unnatural. And so, he created Clean Language, a model which enabled therapists to question clients' about their metaphors, without 'contaminating or distorting' them. Using only the clients' words ensures that any subconscious assumptions, presuppositions and inferences on the part of the therapist do not interfere with the clients' construction of their own metaphor landscape. The questions in Clean Language are furthermore specially devised to enhance existing metaphors, and elicit novel ones. Metaphoric productions are thus interpreted 'literally' and encouraged to be extended in this way.

¹¹ Grove introduced his early ideas in the inspiring book *Resolving Traumatic Memories: Metaphors and Symbols in Psychotherapy* (1989).

In order to fully understand the Clean Language framework, it is first necessary to familiarise ourselves with the its 12 basic questions, used 80% of the time in Symbolic Modelling. 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 client's original words. 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 metaphor. The next set of three questions, which create the context for the metaphor 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?

Lastly, come the *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 which represents their personal experience, and does not allow themselves to be misled by any unwarranted assumptions and interpretations from their therapist. By cleansing language, not allowing interpretations to be verbalised, the possibility of unintentionally influencing a client through language is reduced to a minimum.

In working with the client's metaphors which underpin their thinking, Symbolic Modellers believe their therapy to be working in the language of the client's subconscious. They assert that this enables them to bypass cognitive awareness and its limitations, 'providing a bridge between the parts of the mind [conscious and subconscious], so that the hidden is revealed' (Sullivan & Rees, 2008: 29). Given the subconscious nature of these embodied metaphors, like Lakoff, Symbolic Modelling believes that shifting the inner logic of these metaphors is tough. According to Symbolic Modelling, however, this is the only road to lasting change, for without this our mind, and so also our body, will continue to work from the same old, unconscious paradigms. Through the exploration and extension of our internal metaphors clients gain insight into how these figures can be changed to satisfy the aims of their therapy. While some clients will need an entire 'metaphorical landscape transformation' to bring about meaningful change, for others a few questions is all that is needed.

Conclusion to Models of Metaphor Therapy

If our sole aim was to ensure mass metaphor use in therapy, it would make sense to support the CBT approach. With a strong existing following and even government backing, CBT has the potential to reach great numbers of people.¹² On the other hand, with the exception of James Geary's recent book, Symbolic Modelling has received relatively little press.¹³ Nevertheless, it is not with this aim in mind which we are working; instead we strive for *appropriate* use of metaphors in therapy in line with predictions from linguistic theory, and so it is against this which we judge these two approaches.

Evidently, the central difference between CBT and Symbolic Modelling is their stance on the initiator role. While in CBT metaphor introduction is primarily the responsibility of the therapist, in Symbolic Modelling, *only* clients are 'permitted' to generate metaphors. As this is the defining feature of their approach, advocates of Symbolic Modelling and Clean Language present a strong argument for not introducing metaphors. We assume that Lakoff

¹² The UK National Institute for Health & Clinical Excellence (NICE), for example, is contracted by the government to make evidence based suggestions of which treatments should be made available on the National Health Service (NHS). CBT has been recommended in the treatment of eating disorders (NICE, 2004a), generalised anxiety and panic disorders (NICE, 2004b), post-traumatic stress disorder, obsessive compulsive disorder and body dysmorphic disorder (NICE, 2005), schizophrenia (2009a) and depression (2009b).

¹³ James Geary, author of the *New York Times* Bestseller, recently referred to Symbolic Modelling in his book 'I Is An Other: The Secret Life of Metaphor and How it Shapes the Way we See the World', 2011.

and his colleagues would adopt the same approach, for the reasons outlined in the theory of Clean Language: metaphors are powerful and pervade our everyday discourse, and so are likely to be used unwittingly unless special attention is paid. For relevance theorists, the argument would focus on the notion of weak implicatures. According to RT, interpretation of metaphors, and indeed all utterances, is dependent on the amount of effort invested by the hearer. As such, while the speaker may intend some meaning, it is the responsibility of the hearer to derive this meaning and in the case of metaphor, there is likely to be an abundance of weak implicatures communicated which cannot be predicted by the speaker. If they cannot be predicted, we would assume that RT would not choose to have a therapist introduce a metaphor and consequently, take part responsibility for the provocation of implicatures unknown to them. Symbolic Modelling and its approach to the 'initiator' role is thus more in line with linguistic theory. The Clean Language approach to therapy furthermore seems to be in line with early psychotherapy opinions which, as discussed, were not favourable to metaphor. In leaving the client to generate metaphors and only encouraging this when it arises naturally, Symbolic Modelling can be seen as a softer approach to metaphor. In addition, the final three 'intention' questions ensure that the clients and their metaphors are ultimately brought back to reality and so avoids the possibility of metaphors operating as defensive devices, concealing the truth.

To credit cognitive behavioural therapists, they do note that metaphors should be generated with care and made to resonate with each individual client. Yet, without a framework for achieving such a task, this recognition is insubstantial. Presumably CBT takes the framework to be implicit: any therapist will be able to generate appropriate tailored metaphors through a deep understanding of their client. Research, however, has demonstrated that, without either party realising it, therapists and clients frequently fail to draw upon the same 'context of meaning' (mutual understanding) in therapy (Angus & Rennie, 1988). Recordings of therapy sessions and subsequent inquiries in interviews regarding metaphors uttered found that therapists and clients frequently constructed different representations of the same metaphor (Angus & Rennie, 1989). Furthermore, as Muran and DiGiuseppe (1990) point out, 'academic study of literature is filled with examples of different scholars offering different interpretations of the meaning of the same literary symbolism' (*ibid*: 76).

Two points follow: firstly, even if metaphors were avoided until mutual understanding and an explicit context of meaning was confirmed, on the route to this, therapists continually run the

risk that they will unwittingly use a metaphor. Secondly, if clients generate their own metaphors why, when it has potentially dangerous, unpredictable outcomes, would we try to do so as well? In avoiding this, Symbolic Modelling represents the safer, yet equally effective approach. As Wolberg (1954) notes, the greater a patient's participation in the act of their therapy, the greater significance that therapy will hold for the client. Symbolic Modelling and Clean Language ensures maximum client participation and so represents the more powerful approach. Perhaps since the days of Freud, a commonly held assumption about psychotherapy is that therapists form unjustified and unwelcome assumptions about their clients. It is undoubtedly this preconception which keeps so many people away from therapy. Symbolic Modelling has natural appeal to these people who can be assured that no subjective inferences in the part of the therapist will enter therapy discussions.

While Symbolic Modelling is loosely based on the CM theory, the approach does not explore the finer details of this foundation. Though their rough overview of CM theory will no doubt be sufficient to any intrigued clients, to a linguist, it is essential to establish these finer details before we can fully support the Symbolic Modelling account. Since we have demonstrated CM theory to be deeply flawed, it is interesting to explore how the Symbolic Modelling practice can be developed using RT. As we seen throughout our discussions, Symbolic Modelling fits remarkably well with RT. Its assumption that clients will spontaneously produce metaphors in the context of therapy can also be accounted for within RT, through the claim that metaphors possess greater expressive power than literal language. In encouraging clients to extend metaphors, the framework is in line with the idea in RT that metaphors generate more implicatures and therefore more cognitive effects. Lastly, Symbolic Modelling finds support for their choice to leave metaphors to be generated by the client, since derived implicatures cannot always be predicted by the speaker.

It is important to note that the imaginary world which Carston proposes is distinct from psychotherapists' recommended construction of imaginary worlds through metaphor. Intuitively, an imagined world will enable us to gain insight into a situation and 'understand that situation in such a way that it is no longer problematic' (Pollio et al., 1977: 129). As psychoanalyst Rudolf Ekstein noted, metaphors allow us to confront potentially daunting ideas in a playful way (Ekstein, 1966). Metaphors, or more specifically, extended metaphors, have this power for they facilitate entry into an imagined world. Nevertheless, the process of creating an imaginary world in therapy, one that is parallel to a client's problems, is

fundamentally different from Carston's conception of an imaginary world. While construction of the former is a conscious, intentional act, mutually manifest between client and therapist, the latter is a private unconscious mode of processing language.

Our aim in this paper was twofold; not only did we wish to draw together linguistic theory with practical models of therapy, but we also sought to explain why it is that metaphors occur to such a great extent in this context in the first place. As mentioned, psychological distress is battling with abstract concepts which are maladaptive. If we adopt the RT approach, we can see why this would lead to increased metaphor production in psychotherapy. Given the range and indeterminacy of the weak implicatures provoked by metaphor, they represent a convenient and economical way of expressing complex abstract concepts. Concepts which, according to the RT account do not necessarily have a literal counterpart. Emotions are obviously abstract and complex, hence our struggle with them, and so we find a logical reason for the use of metaphor in therapy, where we seek to express these complex emotions. An alternative, compatible hypothesis concerns the relationship between an enhanced emotional state and metaphorical sensitivity. Intuitive support for this relationship comes from the observation that times of war and love prompt metaphorical language. Yet as well as being emotionally charged, these times are also potentially complex to express. Which feature – general ineffability of metaphors or heightened emotional state, has greater prominence in terms of motivating metaphor production in therapy remains to be seen.

Experiment

Given my initial observation, it is the link between an emotional state of mind and language processing that I have chosen to investigate. It is interesting to explore the extent to which such temperament can facilitate greater sensitivity to metaphorical language. In the past 25 years, social psychological research has demonstrated that 'nearly all forms of social representation can be primed' to unconsciously influence subsequent behaviour (Bargh, 2006: 147). With the development of robust methods, we are now able to induce specific moods in participants and study how their emotional state influences their processing style. At the core of this idea is the notion that humans are endowed with an automatic evaluation mechanism which is continually, and often unconsciously, at work (Bargh et al., 1996; Fazio et al., 1986). This automatic mechanism assesses objects and situations we encounter on a positive-negative dimension, inducing a corresponding mood which subsequently influences

our approach to information processing. It has been proposed that when people are in a positive mood, they engage in more heuristic and creative processing (Bodenhausen et al., 1994), as opposed to when they are in a negative mood and their environment is seen as more of a threat and they subsequently rely on more analytical cautious processing. By presenting participants with positive or negative stimuli it is possible to manipulate the mood of participants which arises from this automatic evaluation (Chartrand et al., 2006).

Prime stimuli in affective priming studies are typically displayed for 200 milliseconds, then following an interstimulus interval of approximately 100 milliseconds, a target stimulus is presented (Hermans et al., 2001). This results in a stimulus onset asynchrony (SOA, the interval between the onset of the prime and the onset of the target) of 300 milliseconds. Research has shown that when the prime stimulus shares the same valence as the target stimulus – in other words, when the two are affectively congruent – it takes significantly less time to evaluate the target as either ‘positive’ or ‘negative’. For example participants are significantly quicker to evaluate target adjectives such as *beautiful* and *excellent* as positive when they have been primed with words such as *strawberries* or *gold*; since both the target and primes are positively valenced (Bargh et al., 1992). This data is taken as evidence for the existence of the aforementioned ‘evaluative decision mechanism’ which our priming method relies on. It furthermore provides support for the automatic nature of this mechanism, the idea that it is able to operate independent of any intention or awareness of the prime stimulus. Additional research has demonstrated that increasing the SOA decreases this affective priming, though it is not clear whether this decrease is the result of a ‘diminution of the level of activation, an active process of inhibition, or a combination of both’ (Hermans et al., 2001: 159).

While it is repeated brief exposure to positive and negative stimuli which leads to activation of the automatic evaluation mechanism, intuitively it is unlikely that such exposure will dramatically alter a person’s mood. As already mentioned, presentation of primes in previous studies is typically very short. However, these studies typically investigate effects between pairs of primes and targets that are either of the same affective valence or a different valence. For example, studies compare the time taken to evaluate adjectives like *disgusting* as negative after presentation of the negative primes such as *cockroach* with the time taken to evaluate the adjective after the presentation of an incongruent prime such as *cake* (Fazio et al., 1986). Evaluation of targets in this case is affected by whether the prime is congruent or incongruent

in terms of affective valence. In this sense, these studies are designed to evoke short-term effects and involve participants changing emotion from trial to trial. Unlike the automatic assessment of valence which is an immediate reaction to exposure, mood activation is a slower process. As stated, the aim of this research is to induce a general emotional state in participants and so, to generate more solid, sustainable responses from subjects. To induce these longer term affective consequences it is necessary to present participants to either positive or negative stimuli for a 'relatively prolonged period of time' (Chartrand et al., 2006: 71). This continuous activation of valence is likely to result in a more general diffuse affective reaction relevant to this research.

Stimuli involved in priming experiments have been richly diverse. Williams and Bargh, for example, chose to have participants experience physical warmth or coldness, either through touching a cup of hot coffee or iced coffee, in order to unconsciously activate feelings of interpersonal warmth. This method was successful in that priming experiences accurately predicted subsequent personality judgements; participants were significantly more likely to judge people as caring or generous if they had experienced the hot cup of coffee, than if they had experienced the iced coffee. Similarly, experiences of physical warmth ensured that participants were more likely to choose a gift for a friend than for themselves (Williams & Bargh, 2008a). Using an alternative, equally successful paradigm, Williams and Bargh later found that they could prime judgements using spatial distance and closeness. When asked to locate various points on a grid, they found that more distant coordinates lead to weaker emotional attachments to family members and hometowns, as well as lower emotional stress from violent media (Williams & Bargh, 2008b). Words too have been frequently used in priming experiments (Boroditsky, 2000), as have pictorial stimuli (Aarts & Dijksterhuis, 2003). Due to the high level of experimental control made possible in the use of visual stimuli, it is this technique which was utilised in the study reported in this paper. Images were chosen from the International Affective Picture System (IAPS) (Bradley & Lang, 2007), which holds over 1000 colour photographs from a range of semantic categories. Using the Self-Assessment Manikin (SAM) developed by Lang (1980) images are rated on three primary dimensions: valence (pleasant to unpleasant), arousal (calm to excited) and dominance (control to dominated). These ratings were obtained from 18 separate studies which involved 60 images each. Of interest to this particular work was the valence dimension which was represented by either a smiling, happy figure or a frowning, unhappy figure.

Unsurprisingly, IAPS shows that the most emotionally evocative images are those depicting scenes involving human agents, activities and events (Lang et al., 2008).

Aim and Hypotheses

The aim of the following study is to investigate the extent to which a positive emotional state of mind affects sensitivity to metaphorical language. Sensitivity will be measured using a scale of ‘effectiveness’, with the assumption that higher ratings on this scale will signify enhanced sensitivity. It is hypothesised that the presence of emotionally evocative images will not affect the comprehension of literal, factual passages. We predict that metaphorical statements will be given higher ratings of effectiveness than the literal passages overall. In addition, we hypothesise that as the experiment progresses and subjects see more images there will be a cumulative effect resulting in the metaphors being rated not only higher overall, but also progressively higher over the course of the experiment.

Method

Participants

20 participants, (10 male, 10 female), took part in this experiment. Recruitment was conducted by e-mail and participants took part on a voluntary basis. Every participant was a native speaker of English, between the ages of 18 to 50 and all were educated to degree level. The average age of participants was 30 years.

Materials and Design

To begin, a set of 60 images was selected from the International Affective Picture System database. These 60 images were selected on the basis of their affective valence, with all being rated as pleasant. As such they were designed to elicit feelings of satisfaction, contentment, hope, pleasure and happiness, as opposed to feelings of boredom, unhappiness, annoyance, or melancholy. Special attention was paid to the type of pictures selected, with the majority depicting scenes involving human agents, since overall these are more emotionally evocative than scenes involving pleasant animals or objects.

The 30 linguistic passages, 15 literal and 15 metaphorical, were collected from a range of media. For the literal items, 3 sources were used: *TimeOut London* (a listings and features

magazine), *The Economist* (a weekly news publication) and *The Guardian* (a daily newspaper). Of the metaphorical examples, some came from existing linguistic and psychology research, others from fiction and poetry, and two were entirely fabricated. All passages, literal and metaphoric, were matched in terms of word length (all between 45 and 49 words). No rhyming passages were included. Passages were cleansed of any simile markers, such as ‘like’ or ‘as’¹⁴. Initially included amongst the metaphorical passages was a Shakespeare example; however this was later removed in an attempt to ensure that all items were entirely novel to the participants.

The visual items were ordered by catalogue number and numbered 1 to 60. These numbers were then randomised using www.random.org.¹⁵ The 30 linguistic passages were put in one list, alternating between literal and metaphorical (see Appendix 1), with the first example being literal. Like the visual items, these numbers were then randomised using the same engine as before. A PowerPoint document was subsequently created, and the materials inserted as per their randomised order. For every two images presented, a passage was then displayed, resulting in 90 slides in total. Images were inserted to fill the screen and passages were displayed in the centre of the screen. Unlike in standard emotional priming experiments, the images were not paired with the passages. This was avoided in the present design in order to induce a longer lasting sensitivity to other people’s emotional states. Each image was presented for 2000 milliseconds, while the passages did not disappear from the screen until the participant pressed a designated key.

A seven-point scale of ‘effectiveness’ was used to measure participants’ comprehension of passages. Effectiveness was defined as the extent to which participants felt that each passage successfully captured the message that the writer was trying to convey. Expressive, vivid items were therefore to be included at the high end of the scale, while passages in which words chosen seemed inappropriate and did not fully realise and express the writer’s message

¹⁴ It is worth noting that it was particularly difficult to find examples of extended metaphor, far more common were extended similes or passages which contained a mixture of the two forms. This suggests that when extended, the two operate in similar ways, though as RT predicts, at the simple level there are likely to be more distinct. It would be interesting to explore the extent to which Carston’s second mode of processing could be applied to extended similes. Such a project would not only have important theoretical significance, but also practical significance: if the two were shown to be equal in terms of effects and processing at the extended level, both could be used in experiments such as the one reported here which would make collection of materials much easier. Furthermore, such evidence would support the use of extended similes in therapy.

¹⁵ This website has been operating since 1998 and is run by Dr Mads Haahr, professor at The School of Computer and Statistics at Trinity College, Dublin. The sequence generator function on this resource uses atmospheric noise as opposed to formula in order to achieve truly random sequences.

would be at the bottom end of the scale. The scale was defined in as much detail as possible in the instructions, although doubt remained as to the subjectivity of interpretation.

The linguistic items were read over by two native speakers of English for general comprehensibility and grammatical correctness, after which a few minor modifications were made. Given that the images were from IAPS and thus already had standard affective ratings, no pre-test was required to test their valence.

Procedure

The task was piloted on two individuals, who remarked on the importance of making clear to the participants that the images and the passages were not paired. This was stressed in the instructions, both verbal and written.

The experiment was presented to the participants as a simple sentence processing experiment investigating how people process different kinds of sentences. Participants were told that they would be presented with a series of slides containing either photographs or passages from different types of texts. They were asked to pay attention to the photographs, which were displayed as an automatic slideshow. The participant's task was to read the passages carefully and rate their 'effectiveness' on a sheet provided using a scale of 1 to 7. Effectiveness was defined as the extent to which a given passage (often made up of 2 or 3 sentences) successfully captured the message which the writer was trying to convey. A score of one was said to be 'ineffective' and seven 'extremely effective', although the intermediate values were also defined. It was emphasised that the pictures and the passages had been randomized and that the pictures on the slide show were therefore not related to the passages that were to be rated. Subsequently, participants were advised not to waste memory and attention resources on trying to establish a connection between the two types of stimuli, but rather to concentrate on the task. It was stressed that they had as much time as they liked to read and rate each passage and that they should press the right hand arrow on the computer keyboard to proceed to the next slide.

Instructions were first given in a standardised format and were then explained verbally by the experimenter. Once they had been given the opportunity to ask any questions, participants signed a consent form and were then tested individually in a quiet room. A brief recap of the instructions was also included on the first slide of the task.

Results

Independent-samples t-tests were conducted comparing effectiveness ratings for literal and metaphorical passages. No significant difference emerged between the average ratings for literal passages ($M = 4.723$, $SD = 0.474$) and metaphorical passages ($M = 4.393$, $SD = 0.658$) in the analysis per items, $t(28) = -1.576$, $p = 0.126$. The analysis per subjects did not reveal a significant difference either when comparing literal passages ($M = 4.723$, $SD = 0.851$) and metaphorical passages ($M = 4.393$, $SD = 1.055$), $t(19) = -1.165$, $p = 0.258$.

Further analyses comparing the first, middle and last set of five trials in each of the two conditions were conducted in order to investigate whether participants' scores changed during the course of the experiment. Contrary to what was predicted, scores significantly decreased in the metaphor condition, while there were comparable in the literal condition. There was no significant difference in the first set of five trials between the literal condition ($M = 4.920$, $SD = 0.919$) and the metaphor condition ($M = 4.860$, $SD = 1.042$); $t(19) = -0.219$, $p = 0.829$, nor was there a significant difference in the second set of five trials between the literal condition ($M = 4.500$, $SD = 1.015$) and the metaphor condition ($M = 4.360$, $SD = 1.229$); $t(19) = -0.384$, $p = 0.705$. However, there was a significant difference in the last set of five trials, with scores being significantly higher in the literal condition ($M = 4.750$, $SD = 0.949$) than in the metaphorical condition ($M = 3.960$, $SD = 1.286$), $t(19) = -2.446$, $p < 0.025$.

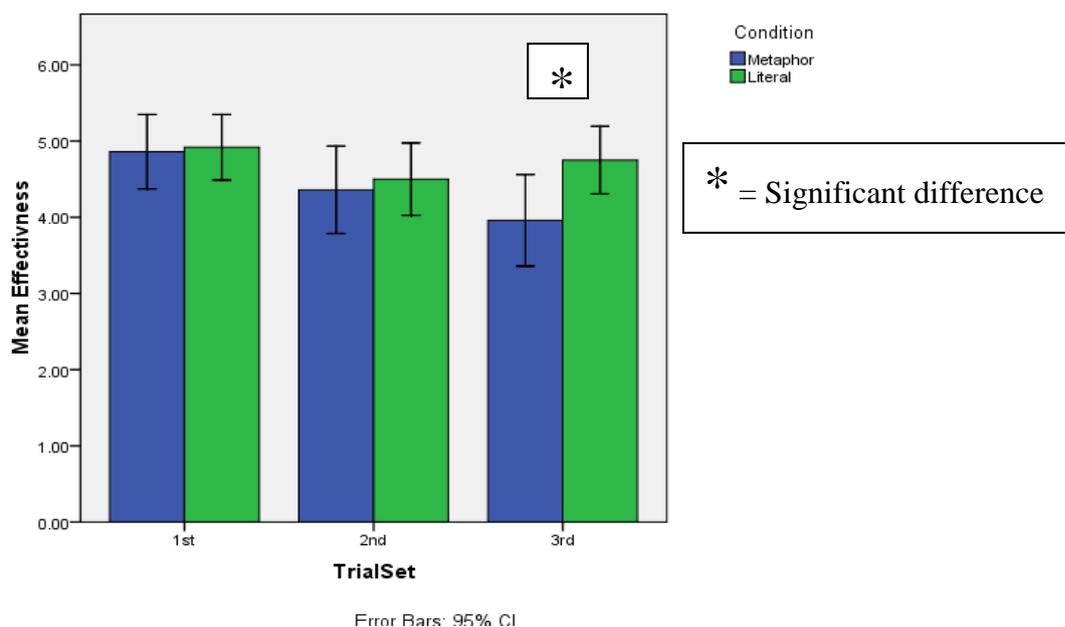
Comparisons within each of the two experimental conditions revealed that the difference between the first set and the second set of five trials in the metaphor condition was nearly significant, $t(19) = 1.952$, $p = 0.066$, while between the second and third sets of five trials the difference was significant, $t(19) = 2.571$, $p < 0.020$. There also appeared to be a significant decrease between the first and the second set of five trials in the literal condition, $t(19) = 2.655$, $p < 0.017$, yet unlike in the metaphor condition, there was no significant difference between the second and third sets of five trials, $t(19) = -1.574$, $p = 0.132$.

An analysis of variance on the participants' average ratings was conducted in order to investigate the effect of Trial set (first, second and third five-trial set) in each Condition (literal and metaphoric). The analysis revealed that there was a main effect of condition, $F(1, 19) = 4.531$, $p < 0.05$, with passages in the literal condition receiving significantly higher

scores than in the metaphor condition. The an interaction between trial set and condition was also significant, $F(2, 38) = 7.074, p < 0.003$.

Separate analyses of variance for the two conditions revealed that Trial set had a significant effect on the scores in the metaphor condition, $F(2, 38) = 8.902, p < 0.001$; but only marginally significant in the literal condition, $F(2, 38) = 2.979, p = 0.063$. The average scores for the analyses of variance are reported in Figure 1.

Figure 1
AVERAGE RATINGS FOR LITERAL AND METAPHORIC PASSAGES
IN THE 1ST, 2ND AND 3RD FIVE-TRIAL SETS



Discussion

While no overall difference was found between the two conditions, literal and metaphoric, our analyses demonstrate that a reliable effect emerged during the experiment, especially in the metaphor condition. Looking at the middle trials, participants lowered their ratings in both conditions relative to the initial trials. However, they only continued to decrease their scores in the metaphor condition. This significant negative priming effect in the metaphor

condition was the opposite of what we had predicted and does not directly support our hypothesis that an emotional state of mind facilitates metaphoric appreciation.

The extent to which the observed negative priming can be viewed as a result of participants' experience of emotive images, however, remains unclear. An alternative and logical explanation of these results, which is also consistent with Relevance Theory, draws on the idea that metaphors might involve different processing costs to literal passages. More specifically, metaphors might involve *additional* processing effort in some contexts; effort which is generally offset by the additional effects which one stands to gain. As Noveck notes 'metaphoric reference is an imposition on a reader, but its potential for impact is linked with an ability to appreciate its intended meaning' (Noveck et al., 2001: 120).

Support for the idea of additional effort in metaphor processing comes from studies which have shown longer reading times for sentences that contain unexpected metaphoric references (Gerrig & Healy, 1983). Experiments demonstrating that extracts which involved a metaphoric conclusion resulted in increased 'memorability' of the passage furthermore demonstrate the potential extra effects in metaphor interpretation (Reynolds & Schwartz, 1983). Recent developmental work has supported these ideas, illustrating that questions preceded by a metaphoric reference elicit fewer correct responses in young readers when compared to a synonymous reference (Noveck et al., 2001). Adults on the other hand display higher rates of correct responses, which Noveck takes as support for the claim that metaphors offer additional effects; presumably, these responses demonstrate 'a richer appreciation of the text' (*ibid*: 113).

In the case of the experiment reported in this paper, metaphors may have been rated significantly lower than literal passages over time due to an overload of processing resources. Effectively, the task itself, and perhaps the taxing presentation of emotive images, would have led metaphors to be affected by decreases in effort. It could be hypothesised that, as the experiment progressed, this overload may have led to a general state of tiredness, leading participants to invest less effort in processing passages. Participants' decreased processing effort would have affected metaphorical passages to a greater extent since, as discussed, metaphors might generally require more effort to be fully appreciated. Interestingly, this hypothesis does not explain the fact that ratings in the literal condition did not display a general decrease over time. While we have evidence that metaphors might have suffered from

an overload of participants' processing resources to a greater extent than literal passages, our results also show that the literal passages survived the effect of tiredness entirely. This therefore implies that the decrease in scores for metaphorical passages might not be simple a result of tiredness.

A compatible hypothesis is that participants' tiredness would have led to a decreased sensibility, which would have affected metaphors more than literal statements. Our initial claim, which the experiment reported in this paper sought to test, was that emotional sensitivity to metaphors would guarantee greater appreciation of these figures. In the case of this study, we hypothesise that the presentation of images, which was intended to induce this emotional state, as well as the evaluation of very different types of passages induced a state of tiredness. This tiredness manifested itself in lower scores of metaphorical passages and thus can be seen as indicative of decreased sensibility to this type of language. In a sense, we can think of tiredness, or indeed boredom which could have been an elicited mood, as the opposite state of mind to that which was intended. Our results, therefore, support the idea that metaphor interpretation requires a certain sensibility.

This interpretation of the results strengthens our case that metaphors can be a useful tool in psychotherapy, since we presume that the sensibility that was lost during the task for our participants might be similar to the sensibility that increases when people experience emotionally difficult situations. Furthermore, our interpretation provides an empirically grounded framework for using metaphors in therapy. Contrary to what was suggested earlier, our results suggest that the effectiveness of metaphors in therapy might not be as simple as we predicted using the RT framework; namely, that everybody in psychotherapy will invest more effort in communication since they have more to gain. For some people, while the effects they stand to gain from communication might be great, the effort they are able to invest might be hindered by their condition. Many psychological conditions, depression the most obvious example, are often characterised by a generally low state of mind. As we hypothesised based on our results, this low negative mood leads to a decrease in sensibility which affects metaphorical language. We thus see the importance of monitoring moods and energy levels in therapy. If therapists can determine the attitude of their client, they have a better chance of using metaphor at the appropriate stage in a particular course of therapy. This 'appropriate' time is likely to be the point at which their client's increased sensibility is

not hindered by the very nature of their condition; that is, a time when the client has the resources and inclination to invest in metaphors.

In order to further investigate the relationship between changes in emotional state and their effect on sensibility to different types of language, one needs to be reliably assured that a certain state of mind has been invoked. To test that a change has indeed occurred, experimenters could present participants with a mood questionnaire at the beginning and end of the experiment. This methodology, however, is likely to increase participants awareness of their mood, which perhaps would not be a desired effect. More often than not, people are unaware of the influence that their emotions have on their beliefs and behaviour. It has not yet been established what effect awareness of these emotions would have¹⁶. In the context of therapy, further research is needed to confirm whether the consciousness of emotional state changes its effect on processing and sensibility to metaphor. Intuitively, people who have actively signed up to therapy will be quite in tune with their emotional state of mind. Nevertheless, even when conscious of their mood, they might be less able to control or recognise its automatic effect on their behaviour. Seen from a different angle, people engaged in therapy are potentially more likely to have a mistaken view of their mood, and thus not be aware of it in terms of how it *really* is. These aspects of emotional state are important to consider in designing future experiments.

In order to ensure that emotional manipulations are kept at the unconscious level in experimental settings, it would be advisable to employ different techniques in an attempt to influence people's mood in the right way. Having participants complete a computer task, for example, in which they either pass or fail could generate the desired feelings of happiness or unhappiness. Subsequently, we could measure how a positive state affects people's appreciation of metaphor, which we assume to be related to their increased processing effort. Pseudo negotiation studies have been shown to be quite effective in relation to generating emotional states; outcomes in negotiating rental property rates for example can leave people feeling either deflated, in the case of 'losing' the negotiation, or in the case of winning, one typically feels positive and powerful. This paradigm would present an effective way of

¹⁶ Recall the research discussed earlier which demonstrated that increase in SOA decreases affective priming (Hermans et al, 2001). It could be argued that increases in SOA led to an awareness of the affective priming. This idea supports the hypothesis that an awareness of priming will reduce its effect. If this is found to be the case, results from priming research in which participants are aware of the intended priming will not be representative of real-life behaviour.

inducing a specific emotional state, without necessarily making participants aware of it. Furthermore, this methodology would not exhaust subjects and thus, would be more reliable in terms of inducing the intended state of mind; as opposed to the study reported in this paper, which accidentally created the opposite mood to that intended through task overload.

Directly measuring the impact of metaphorical language in therapy through *process research* would also be greatly insightful and could provide further directions to be explored empirically. Recordings and analyses of therapeutic interventions have been frequently suggested within the domain of psychotherapy research, although they have not yet been fully developed (Prochaska, 2000). Clients too could be consulted and asked to appraise their therapy, or following Knapp's methods (1960) they could even be asked to comment directly on their feelings regarding the use of metaphors, rating the 'poetical appropriateness' of expressions. Such retrospective analysis, however, could prove damaging in terms of unravelling theory, and so perhaps a better measure would be to test the actual outcome of the therapy using more standardised questionnaires. The following are quite widely used amongst clinicians and do not take long for the client to complete: The Beck Depression Inventory II (Beck et al., 1996), The Beck Anxiety Inventory (Beck et al., 1988), The Clinical Outcomes in Routine Evaluation – Outcome Measure (CORE-OM) (Evans et al., 2002 and Barkham et al., 2006). As well as this, it would be interesting to explore whether the deployment of metaphors by therapists leads to higher ratings of therapist credibility. This would follow from the idea that metaphors give their speakers an impressive authoritative air, hence their frequent deployment in political speeches and their recommended use in persuasive writing frameworks (see Smith, 2002: 179-221 for a discussion). Appraisals of metaphor therapy could furthermore be combined with analysis of the client's condition, in particular investigating the extent to which it was viewed as effective/ineffective in relation to different conditions.

In order to assess individual differences with regard to metaphorical appreciation, psychometric tests could be combined with both therapist appraisals and empirical investigations. As Carston suggests, different individuals will possess different 'tipping points' in respect to their choice of processing mode for metaphors (Carston, 2010: 307). Whilst some people might subconsciously make use of the second, more reflective mode of processing only for a highly extended metaphor, others might do so for relatively simple figures. We take it as true that people invest greater amounts of effort in communication if

such effort is likely to yield greater cognitive effects. Nevertheless, two questions remain: do some people get greater effects from smaller amounts of effort and are certain individuals more naturally inclined to invest more effort? I speculate that the answer to both is yes and as already mentioned, that those in therapy will often be inclined to invest more effort in communication, since they have more to gain. Whilst it is a complex and challenging area of research, this idea of different cognitive styles should not be overlooked. Indeed, it is highly relevant to the study of metaphor use in therapy, which if it is to be effective needs to take into account individual differences.

Conclusion

While linguistic theory and clinical research practice have evolved separately, through tight application of the former to approaches in psychotherapy, I hope to have made significant advances in this area. Scrutiny of the Conceptual Metaphor theory has seriously called into question its loose application to models of metaphor use in therapy; yet thankfully, an alternative framework has been found. Carston's recent proposal of two processing routes for metaphor, set within the general relevance-theoretic approach, naturally accounts for the observed increase in figurative language production during psychotherapy. As well as explaining the motivation for our metaphoric utterances, this theory makes logical predictions regarding the most effective way to utilise metaphors. The idea that it should be left to the client to generate metaphors is consistent with RT's notion of weak implicatures, and thus enables us to make justified choices between metaphor therapy frameworks which differ on this practice.

Since our experiment did not generate the emotional state of mind intended, our findings cannot be used to directly support our initial hypothesis. Nevertheless, we speculate that they are supportive of the more general hypothesis that metaphor interpretation demands a certain sensibility, while literal language does not. In our view, this sensibility increases when people experience emotional conditions, strengthening the case that metaphor may be an important device in psychotherapy. In demonstrating that metaphors are sensitive items, affected to a greater extent by tiredness and other states of mind, we furthermore add empirical weight to the claim that deployment of these figures must be a carefully considered decision. Like many assumptions in linguistic metaphor theory, our experiment reiterates the importance of generating metaphors which are tailored to particular individuals at appropriate times. In

order to confirm our hypothesis with experimental findings, it will be necessary to investigate the critical variables using alternative paradigms; paradigms which elicit the emotional states intended without posing great processing demands on participants. One would hope that mutual endeavours in this work and that of clinical practice will improve our understanding of the underlying processes at work in metaphor use, enabling therapists to improve the quality of life for those who seek help.

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APPENDIX 1

Linguistic Items in Original Sequence

1. It's not often that a national parliament debates and approves a four-year economic and financial framework within a single working week. But by July 15th, when the Chamber of Deputies in Italy voted through a plan drawn up by Berlusconi's conservative government, the country's law-makers had achieved just that.ⁱ
2. Her hair is the summer tresses of the trees, when twilight makes them brown, and on her cheek blushes the richness of a warm autumn sky, with ever-shifting beauty. Her breath, the gentle air of Spring comes full of the fragrance of the morning dewy flowers.ⁱⁱ
3. There are few immigrants in Alabama and even fewer who are there illegally. Roughly 3% of the state's population is foreign-born, compared with 12.5% nationwide and many of those people are legal immigrants. So when Alabama passed the anti-immigration law, it seemed to many a bit of an overreaction.ⁱⁱⁱ
4. The fog comes on little cat feet. It sits looking over harbour and city on silent haunches and then moves on. An urban assassin, it lurks and crawls, ruining lungs, mortar and ships in its wake. When the sun roars through grey fur, feline flotsam litters the bay.^{iv}
5. Some fans may dislike the new commercialism. While in England their name is associated with aristocratic amateurism, the founders of São Paulo's Corinthians had democratic ideals at a time when Brazilian football was an elitist pastime. Brazil's former president is the club's most famous fan.^v
6. Sitting at my desk I was suddenly swept away by an insane wave of tiredness. The computer had stolen my soul and threatened to mould my subconscious into binary

code, eroding my humanity into microcosms of banality, can my psyche fit on a post-it note?

7. Catherine Deneuve plays a wife who spends her days jogging, making breakfast for her husband and writing poetry. But then her husband, the boss of an umbrella company, is taken hostage by striking workers. Ms Deneuve takes over the factory and charms the workers into returning to work.^{vi}
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.^{vii}
9. The suburbs of Mumbai do not resemble the West's green acres of semi-detached domesticity. They are more like chaotic city centres with basic planning, like the water supply, an afterthought. Aravind Adiga's first novel since he won the 2008 Man Booker prize is set in one such suburb, Vakola.^{viii}
10. Religion is the opium of the people, a welcome intoxication to numb their troubles. Science is the antidote, expensive, rare and often fake, offering a hope to cure their troubles. Opium is the bafflement of the scientist or theologian, a dark matter and secret nirvana that can erase all.^{ix}
11. Betty Ford loved to dance. At ten she was gliding round to the waltz and the foxtrot at social-dancing classes in Michigan. As a young woman, she was taught by Martha Graham and danced in her company at Carnegie Hall. She tried out disco steps and shimmied at dinner-dances.^x
12. Depression is a dull, inert thing – a toad that squats wetly on your head until it finally gathers the energy to slither off. Karla's unhappiness was quite a different creature, frantic and aggressive. It had fists and fangs and hobnailed boots. It didn't sit, it assailed. It *hurt* her.^{xi}
13. Britain, particularly England and Wales, not only has the oldest, and arguably the least energy efficient, housing stock in Europe. It is also dismally failing to match

housing need with supply. Latest projections show that, in England and Wales, household numbers will grow by 272,000 annually up to 2033.^{xii}

14. You, predatory beasts in ambush, sank your claws into the youthful body of the revolution, in order ultimately to tear it to shreds. Your socialist gangrene infects the rhizomes that reach to the pulsating heart of the red nation, stifling it with clots and plots and twisted ideological opium.^{xiii}
15. In the Basque country, tobacco users have been prohibited from smoking in any motorised vehicle carrying children since March last year – the rest of Spain has followed or will follow suit. This was received positively by all, far more so than the national ban on smoking in public places.^{xiv}
16. John's ideas were theoretical diamonds, shimmering beautifully in the quarries, priceless to his colleagues. His rough-cut paradigms smashed the feeble spent seams of current thought into a million false stones, chemically treated and raucously imperfect. The minds of his silicon peers were incomparable to such precious intellect.^{xv}
17. Police have told cafes, hotels and others businesses in Beijing to install surveillance technology for Wi-Fi users or face fines and possible closures. China already has the world's largest and most high-tech web censorship and monitoring system. The new software allows officials to check users' identities and monitor activity.^{xvi}
18. The wind blew fierce and strong, brushing the sky clean and chilling the stars in the black sky. As it charged and stampeded through the forest, underfoot all the creatures of the night sank deeper into their burrows, eyes fastened shut, awaiting the dawn, fretfully enduring the beast's temper.^{xvii}
19. Vodafone Group is to meet human rights campaigners to discuss how it can prevent its networks being hijacked by repressive regimes after it was forced to send out pro-government messages and shut down its network by the Egyptian government during the uprising at the start of the year.^{xviii}

20. Man and woman are the earth that brings forth flowers in summer. Love underneath is rock. Older than flowers, older than ferns is the soul underneath. And when, throughout all the wild chaos of love slowly a gem forms it is the crystal of peace, the sapphire of fidelity.^{xix}
21. LVMH, the world's largest luxury good group, reported waiting lists for its Louis Vuitton handbags and finest Dom Perignon champagnes – illustrating that austerity chic is so last season. The French group beat analyst forecasts with a 13% increase in sales to £9.1 billion in the last 6 months.^{xx}
22. When two people are at one in their inmost hearts, they shatter even the strength of iron or bronze. A connection of rough diamond, links of titanium, nothing can draw these two apart. In the shadow of war, famine and disaster their love illuminates and shines brighter.^{xxi}
23. In the opening scenes of this drama an electrician in a remote village is arrested. Known to locals as Mr Light, he's been siphoning electricity from the mains for his poor neighbours. Carted off to prison, Mr Light is saved by a chaotic government coup and released.^{xxii}
24. The world is awake tonight. It is lying on its back with its eyes open. Pondering the infinity of space, looking into the farthest cosmos while the hum of humanity riots on its fragile skin. No sleep for the world while this cancer of homosapiens poisons the biosphere.
25. Playwright Mark Ravenhill wouldn't exist without the welfare state. Comprehensive school enabled the author to be the first in his family to go to university, where he was swiftly radicalised – it was 1984 and the miners' strike was, he recalls, 'all we talked about in the drama department'.^{xxiii}
26. Unruly Sun, why through windows and curtains do you call on us? Your beams are reverend, and strong, I could eclipse and cloud them with a wink. My storm shutter eyelids defeat the glare, but a red magma refracting through the prism of my pulsing blood dazzles my sleep.^{xxiv}

27. We're so used to wildlife programmes focusing on animals that are readily anthropomorphised (apes, meerkats) or exotic and dangerous (sharks or more sharks) that this tale of a man devoting 18 months of his life to living with the humble wild turkey comes as a charming surprise.^{xxv}

28. In the midst of the cruel night, love shines brightly. She envelops us with her melodic words of truth, setting the most troubled nomads free. All those who dream with her will know no darkness, their hearts shall be flooded with bright mercy and their minds illuminated with insight.^{xxvi}

29. As globalisation, population growth, rapid urbanisation and an expanding middle class intensify competition for scarce resources, a fundamental mind-set shift is taking place. Sustainability – once seen as extremist thinking – is fast becoming mainstream, with increasing recognition that it is good for people and business, as well as the planet.^{xxvii}

30. My lawyer was a well-paid shark, the opposition his fearful prey. Smelling the blood of the weak drifting in an ocean of social Darwinism, he violently sank his teeth into the defence, tearing it mercilessly into shreds. No case was too tough to devour for this rich, hungry monster.^{xxviii}

NOTE: Even numbers are the extended metaphor statements and odd numbers are the extended metaphorical statements.

References for Linguistic Items

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- ⁱ The Economist. (Volume 400, Number 8743). Page 29.
- ⁱⁱ Adapted from: H. W. Longfellow, The Spirit of Poetry.
- ⁱⁱⁱ The Economist. (Volume 400, Number 8743). Page 37.
- ^{iv} Adapted from: C. Sandburg, Fog.
- ^v The Economist. (Volume 400, Number 8743). Page 41.
- ^{vi} The Economist. (Volume 400, Number 8743). Page 58.
- ^{vii} Adapted from: E. Dickinson, Hope.
- ^{viii} The Economist. (Volume 400, Number 8743). Page 75.
- ^{ix} Adapted from: Marx, K. (1844). A contribution to the critique of Hegel's Philosophy of Right. *Deutsch-Französische Jahrbücher*.
- ^x The Economist. (Volume 400, Number 8743). Page 76.
- ^{xi} Adapted from: Z. Heller, The Believers.
- ^{xii} The Guardian. (27th July 2011). Society Section, page 4.
- ^{xiii} Adapted from: Steinberg, M. D. (2001). *Voices of the Revolution, 1917*. Yale University Press. Page 111.
- ^{xiv} The Guardian. (27th July 2011). Society Section, page 4.
- ^{xv} Adapted from: Glucksberg, S. & Haught, C. (2006). On the relation between metaphor and simile: When Comparison fails. *Mind and Language*, 21 (3): 360-378.
- ^{xvi} The Guardian. (27th July 2011). Main Paper, page 19.
- ^{xvii} Adapted from: J. Steinbeck, The Pearl.
- ^{xviii} The Guardian. (27th July 2011). Main Paper, page 27.
- ^{xix} Adapted from: D. H. Lawrence, Fidelity.
- ^{xx} The Guardian. (27th July 2011). Main Paper, page 27.
- ^{xxi} Adapted from: I Ching, When Two People Are At One.
- ^{xxii} Time Out. (Issue 2136). Page 91.
- ^{xxiii} Time Out. (Issue 2136). Page 125.
- ^{xxiv} Adapted from: J. Donne, The Sun Rising.
- ^{xxv} TimeOut. (Issue 2136). Page 147.
- ^{xxvi} Inspired by: G. Kendrick. Shine Jesus Shine.
- ^{xxvii} The Economist. (Volume 400, Number 8743). IBM Advert, page 2.
- ^{xxviii} Adapted from: Glucksberg, S. & Haught, C. (2006). On the relation between metaphor and simile: When Comparison fails. *Mind and Language*, 21 (3): 360-378.