National and Kapodistrian University of Athens

Department of English Language and Literature

MA Programme "Linguistics: Theory and Applications"

[THE ROLE OF IMAGERY IN METAPHOR INTERPRETATION:

A RELEVANCE-THEORETIC APPROACH]

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Declaration

Με πλήρη επίγνωση των συνεπειών του νόμου περί πνευματικών δικαιωμάτων, δηλώνω ρητά ότι η παρούσα μεταπτυχιακή διπλωματική εργασία αποτελεί αποκλειστικά προϊόν προσωπικής μου εργασίας, δεν προσβάλλει κάθε μορφής δικαιώματα διανοητικής ιδιοκτησίας, προσωπικότητας και προσωπικών δεδομένων τρίτων, δεν περιέχει έργα/ εισφορές τρίτων για τα οποία απαιτείται άδεια των δημιουργών/ δικαιούχων και δεν είναι προϊόν μερικής ή ολικής αντιγραφής, οι πηγές δε που χρησιμοποιήθηκαν περιορίζονται στις βιβλιογραφικές αναφορές και μόνον, και πληρούν τους κανόνες της επιστημονικής παράθεσης. Τα σημεία όπου έχω χρησιμοποιήσει ιδέες, κείμενο, αρχεία ή/ και πηγές άλλων συγγραφέων, αναφέρονται ευδιάκριτα στο κείμενο με την κατάλληλη παραπομπή και η σχετική αναφορά περιλαμβάνεται στο τμήμα των βιβλιογραφικών αναφορών με πλήρη περιγραφή. Αναλαμβάνω πλήρως, ατομικά και προσωπικά, όλες τις νομικές και διοικητικές συνέπειες που δύναται να προκύψουν στην περίπτωση κατά την οποία αποδειχθεί, διαχρονικά, ότι η εργασία αυτή ή τμήμα της δεν μου ανήκει διότι είναι προϊόν λογοκλοπής ή προϊόν συγγραφικού έργου επ' αμοιβή.

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Abstract

Although the role of 'propositional content' has long been acknowledged and dedicated a great deal of attention by notable theorists, it has now become known that utterances demand for further pragmatic enrichment at the level of 'non-propositional content' in relation to figurative use of language and predominantly to the use of *metaphor*. The ability of humans to produce and comprehend metaphors is realized even at the age of 2 while a wide range of studies demonstrate that metaphor comprehension occurs mainly in the left brain hemisphere. In this MA thesis, I investigate the use of *imagery* in the two major types of metaphors (i.e., novel and conventional metaphors) in the literary domain and in everyday interactions. On a reading, multiple-choice task in the form of a questionnaire participants answered based on what kind of effect a particular utterance caused to them (including *images*). Participants' responses indicate the considerable 'imagistic' nature of novel metaphors culled from the literary domain compared to more conventionalized, everyday metaphors. The results show that images work as 'facilitators' in the inferential process and achievement of *relevance* (Sperber and Wilson 1986/95).

Keywords: metaphor – comprehension – images – relevance – literature – interaction

Περίληψη

Αν και ο ρόλος του ξεκάθαρου περιεχομένου (‘propositional content’) μιας πρότασης έχει καιρό πριν αναγνωριστεί, ενώ επιπλέον έχει αφιερωθεί και έχει δοθεί μεγάλη προσοχή σε αυτό από καταξιωμένους θεωρητικούς, έχει πλέον γίνει γνωστό ότι οι προτάσεις απαιτούν μεγαλύτερη πραγματολογική ενίσχυση σε επίπεδο μη ξεκάθαρου περιεχομένου (‘non-propositional content’) σε σχέση με τη μεταφορική χρήση γλώσσας και πρωτίστως τη χρήση *μεταφοράς*. Η ικανότητα των ανθρώπων να παράγουν και να κατανοούν μεταφορές πραγματοποιείται ακόμη από την ηλικία των 2 ετών, ενώ μία ευρεία σειρά μελετών επιδεικνύουν ότι η κατανόηση μεταφορών λαμβάνει χώρα κυρίως στο αριστερό ημισφαίριο του εγκεφάλου. Σε αυτή τη διπλωματική εργασία ερευνώ τη χρήση των *εικόνων* στα δύο κύρια είδη μεταφορών (δηλαδή, στις πιο δημιουργικές/ποιητικές και στις πιο συμβατικές/καθημερινές μεταφορές) στο λογοτεχνκό τομέα και στις καθημερινές μας διεπαφές. Μέσα από ένα ερωτηματολόγιο πολλαπλής επιλογής, οι συμμετέχοντες-ουσες στη μελέτη απάντησαν βασιζόμενοι-ες στο τι είδους επιρροή έχει η κάθε πρόταση/μεταφορά σε αυτούς-ές, δηλαδή στο τι τους προκαλεί η κάθε πρόταση (συμπεριλαμβανομένων των *εικόνων* στις επιλογές). Οι απαντήσεις τους επιδεικνύουν την ισχυρή «εικονοληπτική» φύση των ποιητικών μεταφορών που συλλέχθηκαν από τον λογοτεχνικό τομέα σε σύγκριση με τις πιο συμβατικές, καθημερινές μεταφορές. Τα αποτελέσματα δείχνουν ότι οι εικόνες λειτουργούν ως «αρωγοί» στην επαγωγική διαδικασία και την επίτευξη της *σχετικότητας* (‘relevance’, Sperber and Wilson 1986/95).

Λέξεις – κλειδιά: μεταφορά – κατανόηση – εικόνες – σχετικότητα – λογοτεχνία – επαφή

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Introduction

The domain of linguistics has attracted a lot of attention by eminent linguists and well-known scholars who have consistently been willing to examine phenomena related to language (i.e., the linguistic aspect), philosophy, neuroscience and even psychology. Although we have already gained a great deal of understanding thanks to Grice's central claims in pragmatics, considerable work has been done since then in linguistic meaning and mainly in inferential pragmatics with scholars suggesting new frameworks and approaches to interpreting language (e.g., Sperber and Wilson 1986/95, Green 2017, Carston 2018). Traditional views and beliefs have been reanalyzed and the notion of 'explicature' has been emphasized more than ever. The *propositional content* of an utterance is undeniable and the majority of theorists have now focused on what they call 'non-propositional content' which relates to more abstract, affective phenomena, including figurative language. Mental phenomena such as images, impressions, emotions and feelings have been offered more attention recently and linguists have attempted to provide explanations to 'hidden meaning' intended by the communicator.

Among the most remarkable non-propositional entities, *metaphor* is still considered a distinctive phenomenon of language use by most philosophical and rhetorical traditions albeit Sperber and Wilson's (2008) *deflationary account* of metaphor, which is considered as its normal treatment (i.e., like any non-figurative utterance). Metaphorical language has been studied from various domains, like psycholinguistics, neuroscience and pragmatics, all of which emphasizing its important role in communication. What is true is that metaphor is indeed a powerful and challenging phenomenon and as the Greek philosopher Aristotle said, "The greatest thing by far is to have mastered the metaphor". In the last two decades, notable scholars and researchers have been investigating the development of metaphor comprehension and production whereas issues of acquisition of figurative language in preschool children have been significantly addressed.

There are two main categories of metaphors used: creative or novel metaphors and everyday, more conventionalized metaphors. The former type is mostly used in literary texts[1] whereas the latter is commonly used in people's everyday interactions. Carston (2010) distinguishes between two kinds of metaphors as well, which she names 'ordinary' and 'literary'. She argues that there is no clear-cut distinction between the two and that no single theory can account for both (Carston 2010: 297). We can follow two different directions to their interpretation: a quick process of their meaning and a slower assessment of their literal meaning. In fact, this shows that we do talk about two distinct types of metaphorical language.

Since metaphor interpretation is dealt with systematically these days, other scholars from the post-Gricean school and cognitive pragmatics have focused on the role of non-propositional effects and, most importantly, the role of imagery in metaphor comprehension. Carston (2018) claimed that images are not an essential component of metaphor comprehension but they may facilitate the overall process, whether being *ad hoc* concepts automatically activated in our minds or retrieved from memory. Although H. P. Grice (1975) omitted any mention of imagery in the understanding of metaphor, others advocated its role and asserted that they work as 'vehicles' for the interpretation and remain as necessary as propositional content.

The pioneers of Relevance Theory, Sperber and Wilson (1986/95), in striving to provide an account for the role of imagery in metaphor comprehension maintain that imagery is not an essential component and take a more 'propositional' stand. The scholars support that the main topic, the context of the metaphor and our background knowledge would be responsible for the activation of relevant (propositional) information and contextual assumptions from which implicatures are elicited. The basic claim is that images may aid in the manifestness of an array of propositions for the activation of relevant implicatures – especially *creative* metaphors which take longer to comprehend and this may facilitate the overall

[1] Novels and poems are well-known for their rich vocabulary, expressions and extensive use of figurative language, especially mastered by acknowledged writers.

process – though the nature of the images evoked is not clear and besides that images are not part of the ostensive act, which means that they are not made manifest and we cannot link them to the speaker's intended meaning (Wilson and Carston 2019).

So far, literature has shown that there is a lot of work that can be done on non-propositional effects and imagery in relation to metaphor interpretation. My main aim in this MA thesis is to offer an analysis of metaphor comprehension and production with significant literature drawn from various domains. In addition, I will examine the role of imagery using a questionnaire in relation to both novel and conventional metaphors to observe people's reaction in metaphor understanding. Chapter 1 includes basic literature on propositional and non-propositional content. In chapter 2 I discuss metaphor comprehension and production in general and in literary and everyday contexts in particular. Chapter 3 outlines the role of imagery in metaphor comprehension and chapter 4 focuses on a relevance-theoretic framework with emphasis on images. The next three chapters include the experimental part of the dissertation and, more specifically, the methodology followed (chapter 5), the results of the study (chapter 6) and the discussion of the results (chapter 7).

Chapter 1
Propositional and non-propositional content

1.1 Propositional content

In recent years, an eminent group of pragmatists have devoted a great deal of their research to the understanding of *propositions*. The term dates back to Aristotelian logic whereby the great philosopher attributed the term to a complete sentence which manifests an assertion that is true in the world. By claiming that a sentence is divided in different – secondary and essential parts – Aristotle suggested that all propositions either assert or refute something but they definitely cannot perform both. Being a term often used very widely across the domain of linguistics, *propositions* are also known as "bearers of truth values" in philosophy. Indeed, this is one aspect of *propositions* which cannot be denied. However, intentionality and linguistic modality play a significant role in this matter since all *propositions* induce certain attitudes (i.e., propositional attitudes) which make us believe, fear, doubt or even expect something to happen. On the notion of intentionality Capone (2016) emphasizes the role of pragmatic inference and foregrounds the indispensable part of pragmatic intrusion into semantics in that it can be responsible for leading us to believe an utterance is false rather than true (Capone 2016: 308).

The main argument behind propositional content is that some compositionally determined contents are not sufficient of the propositional content of an utterance and this makes the demand for pragmatic expansion necessary in order to have a full, truth-valued content (Borg 2016). In other words, it is not always a matter of what is *true* about a sentence but if the sentence is complete enough to account for a full, propositional meaning to be derived. In this case we will have to seek for more information, far from what Grice (1975) originally imagined of 'what is said' (see *Explicatures* below). So far, what is true about *propositions* is that they are

closely connected to sentences and language itself and they can operate as the effect of an inference process (Wilson and Carston 2019: 36).

1.1.1 Explicatures

As suggested above, the effect(s) of the inference process is the key to successful communication. How are propositions generally formed? Grice's (1975) distinction between 'what is said' and 'what is implicated' has constituted a controversial issue in the domain of linguistics. Grice's saying/implicating distinction is mostly associated with the explicit/implicit distinction. However, another corps of scholars came to claim that context manifests much more information than resolving ambiguation and reference assignment. Sperber and Wilson (1986/95), through a relevance-theoretic framework, introduced the term *explicature* to reveal the fact that there are further pragmatic enrichments of the linguistically encoded meaning. According to the theorists, an *explicature* is "a communicated proposition recovered by a combination of decoding and inference" which yields the basis on which contextual assumptions and other cognitive effects emanate (Sperber and Wilson 1995: 260). They explain that a hearer constructs a hypothesis about explicit meaning and they do so via what Grice's proposes (i.e., 'what is said' – the semantic meaning of words) along with certain pragmatic enrichment processes.

In this vein, Carston (2002) asserts that explicatures are premised on ostensive communication and the responsibility is entirely on the part of the communicator. Interestingly, an addressee can deduce various propositions which may create a propositional attitude and this can be accomplished through other linguistic or paralinguistic cues (e.g., intonation) realized from the speaker in communication. What is true is that the linguistic content perhaps plays a fundamental role in explicatures. In the recovery of explicatures through decoding and inference, different variations or degrees of explicitness can arise. The notion of explicature involves adjustments of the linguistically encoded meaning realized, for instance, through broadening and narrowing. According to Sperber and Wilson (1995), the more explicitly encoded meanings in an utterance the more explicit an explicature

can be. This way creates a better ground for the reader/hearer to understand the message of an utterance. It also leads to using less effort on their part since the meanings are expressed on the basis of more context given, thus more explicitly, and there is no need to attempt second thoughts and explanations.

Similarly, Borg (2016) supported the argument that in order to get a full, truth-evaluable content more pragmatic expansion is required. By this, he means that some parts of the determined contents of an utterance seem to be insufficient of propositional content and require more pragmatic input (and ability) to offer a complete content. For instance, when a speaker says 'No one is here', he may assert that *no one is in this room right now.* So, in this respect Grice's 'what is said by the sentence' fails to account for a fully propositional content asserted by the speaker and we need to enable a richer set of pragmatic processes for meaning-making (Borg 2016). Additionally, what the speaker attempts to communicate yields what is known as 'free pragmatic effects'. These are contextual effects (or cognitive effects) which are not based on disambiguation and reference assignment but they are rather optional and caused solely by the circumstantial setting of the sentence (Recanati 2004).[2]

Given the various strands of the term *explicature* one would be the same (or even more) curious to discern and apprehend the notion of *implicature.* An *implicature* denotes an implicated message but the question arises as to how a speaker derives what the speaker said and what s/he conversationally implicated.

1.1.2 Conversational implicatures

In 1975 Paul Grice coined the term of *implicature* and stated that what is not literally expressed, is basically implied (or 'implicated' in Gricean terms). Providing that people in communication are cooperative[3] in conversation, they

[2] What a speaker asserts is not just the literal meaning of a sentence but he produces 'pragmatically modulated content' which is expressed in a way that generates a complete, conversationally relevant proposition (Borg 2004, 2012).
[3] I refer to Grice's (1975) *Cooperative Principle* and the maxims he introduced (see Grice 'Logic and conversation' in P. Cole and J. L. Morgan (eds.): Syntax and Semantics Volume 3: Speech Acts. Academic Press 1975, p.48).

would follow the four maxims proposed by Grice on which *implicatures* are based and ultimately help achieve successful communication. What someone implicates is what they have not *said directly* but *indirectly*. We should then *infer* their message since it is not said. According to Grice, *conversational implicatures*[4] are derived when addressees obey the maxims and become helpful in communication (Wilson and Sperber 1981). Consider the example:

(1) A: I've run out of milk.
B: There is a supermarket nearby.

Here, B does not say *directly* that A should go and buy milk from the supermarket, but *conversationally implicates* that there is a supermarket – near enough – where A could (easily) find milk. Also, in this case Grice (1975) stated that conversational implicatures are *defeasible*, in that they can be cancelled:

B: But unfortunately it's closed on Sundays.

This implicates that the day of speaking (which is Sunday) the supermarket is closed and consequently A cannot buy milk from there at the moment[5].

Post-Grice pragmatists craved for researching the case of *implicatures* and introduced important findings proving that there is more than being cooperative in conversation. Inspired by the work of Paul Grice, Sperber and Wilson (1986/95), through a relevance-theoretic model discussed the role of implicature and claimed that implicatures are a counterpart to explicatures and equally important in the inferential process. More analytically, while Grice (1975) asserted that conversational implicatures are processed via the Cooperative principle and the maxims, relevance theorists argued that they are inferred wholly inferentially. The main claim of the theory is that a hearer infers a message through a parallel inferential process for the derivation of both explicatures and implicatures to

[4] Grice (1975) distinguished *conversational* from *conventional implicatures*. The latter are tied to particular words such as 'but', 'yet', etc. triggered by the lexical or syntactical meaning of a sentence (Grice 1975: 24-26).
[5] More on the 'cancellability of conversational implicatures': Weiner (2006), Blome-Tillmann (2008).

achieve optimal relevance (Carston and Hall 2012). In other words, explicatures, implicatures and contextual assumptions work together for the hearer to draw certain conclusions (in this case, implicatures) about a message (Carston and Hall 2012)[6].

Implicatures in relevance theory presuppose the communicator and the addressee to have access to contextual information. This contextual information would be for the benefit of the addressee to draw certain implicated conclusions based on implicated premises. By exemplifying if Mark says:

(2) Tom told me that his boss complained to him about his job.

in the context that Tom confided this in Mark, the hearer might arrive at the explicature:

> Tom told Mark that his, Tom's, boss complained to him, Tom, about his, Tom's, job.

Now assuming that Mark and the hearer both have access to the contextual information that:

> Tom gets seriously angry if his boss complains to him that he's not doing his job well.

and that Mark intended the hearer to activate the above contextual information, then we may state that this is an *implicated premise*, which leads the hearer to agree with Mark, and finally allows him to draw the contextual implications that:

- Someone should never tell Tom how he does his job
- Mark wants me to calm down Tom

[6] For the parallel inferential process of explicatures and implicatures see also Wilson and Sperber (2002, 2004).

These are *implicated conclusions*. Notice that both implicated premises and conclusions are essential and part of the inferential process. Furthermore, we would agree that the above implications are *strongly* implicated utterances in order to achieve relevance but if we infer:

- Mark wants me to calm down Tom by talking it over

then the assumption is just *weakly* implicated. According to Carston and Hall (2012: 21) and relevance theory, "implicatures are more or less strongly communicated, depending on the extent to which they can be taken to have been specifically intended by the speaker". To put it another way, a hearer may derive various implications of an utterance but cannot be certain whether any of these are indeed intended by the speaker.

A controversial issue in the case of implicatures and the inferential process is their 'global' nature. However, is that still the case? Carston and Hall (2012) distinguish between what is considered to be 'global' and 'local' by underpinning the basic claim that the localness of an utterance is based on disambiguation and reference assignment. In their paper, they conclude that in relevance theory the group of implicatures has become much more restricted. The shift from Grice's conversational implicatures to a more cognitive approach has come to show that generalized implicatures, as well as other instances of figurative language, for example metaphors and metonymies (see Chapter 2), have been originally analyzed at the local, lexical level of encoded meaning (see Wilson and Carston 2007). If I understand correctly, the role of explicatures which denotes 'local' development is now emphasized more than ever. According to relevance theorists, implicatures and explicatures work in a unified manner for the hearer to satisfy their expectations of relevance. Yet according to Carston and Hall (2012) in certain cases implicatures can be derived wholly globally but only when relevance demands it[7] or in contextual assumptions wholly restored from perception or memory. To conclude, there is substantial evidence demonstrating strong links

[7] See also Noveck and Sperber's (2007) paper on the analysis of scalar inferences.

between Grice's conversational implicatures and relevance theorists' way of thinking but also powerful deviations.

1.2 Non-propositional content

While in linguistics a proposition is the meaning of a sentence, in philosophy "meaning" is a non-linguistic entity and, likewise, propositions are non-linguistic entities in the world which can be realized as being true or false. However, human cognition also involves a non-propositional entity which relates to existential attributes, such as affective phenomena, that associate with notions of aptness rather than truth (Golding 2015). Non-propositional representations are different from propositional representations showing that human interaction involves much more than simple (true/false) statements. Metaphor, irony, humour are among the most well-known non-propositional entities. In fact, words are not entirely a solely cognitive content (Ifantidou 2021: 6) but they nearly always come in tandem with feelings, emotions, images or experiences. These, which are known as *non-propositional effects*, are evoked by non-propositional content and are linked to our memories, beliefs and background (Ifantidou 2021). As de Saussure and Wharton (2020: 185) have stated, sensations, emotions and feelings are difficult to analyze in propositional terms or interpret them as concepts inasmuch as the communication of propositional content is only one aspect of human communication.

Notice that I have not used the term 'language' but I preferred human communication or interaction. According to cognitive pragmatics, such as relevance theory (Sperber and Wilson 1986/95, Carston 2002), language and communication are not exactly terms to be considered interlinked (Moeschler 2009). Communication can be achieved through non-linguistic means and language can exist without being communicated, as in fiction. Indeed, I may communicate something to a person without using language or at least not using explicit content but rather let the other person understand my intentions through other means (e.g., images) or non-verbal means (e.g., facial expressions, gestures, prosody). This is expressed via the use of non-propositional entities. According to Wilson and Carston (2019), Grice's notion of *non-natural meaning* includes cases

of non-verbal communication but it does not contain cases which exist and are communicated but are less determinate (*non-propositional effects*). Yus (2017) referred to non-propositional effects as part of the act of communication and indicated that these contribute – both in a positive and negative manner – to the cognitive effects derived from what is available in a sentence for us (i.e., the propositional content). What is important to mention at this point is the issue of *intentionality*. Yus (2017: 69) supports that non-propositional effects are basically non-intended by the communicator but they emerge from the act of communication in various forms (e.g., images, feelings, etc.) and ultimately assist the inferential process. Although this sounds reasonable, I would say that in cases of a different kind of communication, like that of a writer with his/her readers, non-propositional effects may be intended to arouse a particular kind of feeling or put the reader in a similar position. In this case their role is crucial and may offer a great deal of insight.

Some basic features of *non-propositional effects* are first and foremost their infinite meanings. They can be interpreted in multiple ways and they vary among humans. Their character is unique and they are responsible for the activation of various human mechanisms (perceptual, emotional, etc.). Needless to say, *non-propositional effects* are covered in a wise manner, 'poetically' offered by writers in literature or 'hidden' by interlocutors in everyday interactions. The domain of pragmatics was not concerned with such effects in the past. Grice (1967/89) sidestepped the notion of *non-propositional content* and this stance was also adopted by other neo-Gricean scholars. More specifically, Levinson (2000) concentrated on generalized implicatures and did not give emphasis on particularized implicatures and figurative use. Moreover, Davidson (1978) supported that metaphorical language is not to be interpreted and humans should not struggle to grasp its meaning. Other scholars (e.g., Lepore 2010) even claimed that a different theory should deal with such pragmatic phenomena.

The above points have their own place in the history of pragmatics but more recent interest and desire for analyzing *non-propositional effects* seem to shed the light for new theories and research to be conducted from now on.

Chapter 2

Metaphor comprehension with emphasis on literary discourse and everyday metaphors

"*Metaphor* is not a theoretically important notion in the study of verbal communication. […] there is no mechanism specific to metaphors, and no interesting generalization that applies only to them".

Sperber and Wilson (2008: 84)

Metaphor or metaphorical language has started to concern epistemologists for the last fifty years. The word derives from the Latin *metaphora* which means to have and transfer and, eventually, from the Greek *μεταφορά (metaphora)* which refers to transfer something as meaning something different. Metaphor is not just a task of transferring language/meaning using different words. A lot of theorists now believe that it is a way of thinking, one that can create a mental model from any tangible notion (Yazici 2010: 5339). The fact that metaphor is linked to the mental states of humans was expressed by the work of Lakoff and Johnsson in 1980, who introduced the Contemporary Metaphor Theory (abrev. CMT). The scholars put forward the idea of conceptual mapping of one idea to another. They claimed that there are different conceptual domains across which generalizations of thoughts happen. CMT is a significant theory for linguistics in that it constitutes the beginning of thinking metaphorical language as a distinct, more abstract notion. The definition of metaphor by the scholars is to show that two items are similar in some way and analyzing metaphor in communication they offered valuable examples of figurative use (e.g., *argument is war, time is money*). The work of the scholars and CMT was entirely significant because it illustrated a new path for other scholars to investigate the role of metaphor in literature. Lakoff and Johnsson (1980) stated that metaphors are strong conceptual entities and cross-domain mappings apply not only to novel metaphors but also to more everyday examples

since the study of literary metaphors is a development of the study of everyday metaphors.

Contemporary theorists (e.g., Sperber and Wilson 1986/95) offered a more detailed explanation of metaphorical language and use and described it as *loose.* There are several situations where the speaker does not make his/her utterance fully known and explicit to the addressee, but the propositional content is implicated. In this case, the message is not derived logically and literally (it is not an explicature) but it is interpreted *loosely* (Romero 2014). The *loose* use of language is found in different forms, such as in the form of approximation. Suppose that Tom goes to the supermarket to get milk after his mum has requested to. He comes back and instead of answering as in (3a), which would be an utterance to be interpreted fully literally, he responds with (3b), an utterance which triggers loose interpretation of his thought:

(3a) It cost 2.85 euros.
(3b) It cost 3 euros.

Given that the hearer will derive the same conclusions about the situation, (3a) would take more processing effort to comprehend whereas (3b) is false but economical. The speaker will of course opt for the more economical statement, always providing the same contextual effects.
Similarly, metaphors should be treated as any other loose use and this *deflationary* account of metaphors is endorsed in relevance theory. Interpreting someone's words loosely is applied to conventional metaphors too, for example:

(4) Sam is a plane.

In this case, the speaker's intention is not to communicate the literal propositional meaning of the utterance (that Sam can actually be a plane) but by yielding the encyclopaedic entries for SAM and PLANE and the above utterance to retrieve the following implicatures:

(4a) Sam is fast.

(4b) Sam is smart.

Thus, in this sense the metaphorical utterance is explained as a case of loosening which is similar to how we would interpret a non-literal utterance.[8] Borrowing Sperber and Wilson's (2008) words, Romero (2014) argues that metaphorical interpretation can be elucidated through the use of *ad hoc* concepts that derive from a partial mapping between two conceptual domains. The scholar agrees on the basic tenets of their theory (i.e., Relevance Theory) but objects to viewing metaphor as loosening in a continuum. This proposal has also been supported by other linguists in the past (e.g., Richards 1936, Kittay 1987, Forceville 1996). However, the basic claim agreed on by both groups of scholars (those supporting loosening in a continuum and those who do not) is that the *ad hoc* concept construction applies to all cases of metaphors – including both creative and conventional types.

Turning to novel metaphors writers look back on their memories to draw relevant information, acknowledging their audience and goals at the same time. Consider the following example:

(5) Her tall black-suited body seemed to carve its way through the crowded room.
(Josephine Hart, *Damage*, 1991)

The author provides a creative metaphor for the reader to picture what she has in mind (or has experienced in the past). She offers a poetic description of a person having a dark appearance trying to achieve their goal through exhaustive effort.

Williams-Whitney et al. (1992) discussed the role of writers on creating novel metaphors. The authors compared autobiographical to nonautobiographical texts and concluded that the latter is much more demanding as a task since the writer should produce material based on another person's perspective. The results of their study showed that experienced writers are much more flexible in the construction

[8] For more see: Romero, E. & Soria, B. (2014). *RELEVANCE THEORY AND METAPHOR. Linguagem Em (Dis)curso, 14(3), 489-509.*

of novel metaphors than novice writers (Williams et al. 1992: 499-508). The above metaphor would be successful if the reader manages to create an *ad hoc* concept to be used in the interpretation of the metaphor. The question that arises at the moment is how everyday metaphors are used and can be interpreted.

Suppose that two women are talking about their husbands:

(6) A: I spent my whole day cleaning the kitchen yesterday because Tom made a mess cooking.
B: Well, my husband is a sofa hog.

In the above example, A communicates her message fully literally by revealing various literal contents: first, that she cleaned the kitchen; second, that she did this yesterday; third, that her husband (TOM) made a mess and so on. B prefers to communicate her message indirectly, by using a metaphor, and implies that her own husband is a lazy person and does not really help in housework like cooking. The dynamic role of this metaphor is undeniable.

Literature has indicated that more conventional metaphors' use is crucial and involves various linguistic, cognitive and affective dimensions as well as feelings (Cameron 2010). The scholar emphasizes the role metaphors play in human communication, defines *discourse* as "social interactions" and points out a discourse dynamics approach to metaphor. We use metaphors to explain, describe, elucidate and persuade as in political speeches (e.g., Charteris-Black 2004). The discourse dynamics framework does not limit itself in conventional metaphors only but it is applicable in more creative examples too. However, research has shown that extended metaphors take longer to interpret compared to conventional types which can be treated at the same level as literal sentences (Lai et al. 2009).

So far, we can infer that literature is indeed a domain rich in metaphor use both in prose and in dialogues (in the form of direct speech). The hybrid nature of fiction has been studied by various authors (e.g., Biber 1988/89, Biber and Finegan 2001, Leech and Short 2007, Fludernik 2009). According to Biber (1988/89), there are two major literary types: oral literature and written texts. Both pass from one

generation to the next but in the case of written texts someone can investigate and look for non-poetic types too, since it involves a more valid transmission of new literary forms. So, in this respect we can consider literary texts ample works of literature. In oral literature poetic forms tend to be in first place because, as the author explains, it is less demanding to transmit from one generation to the next and they are easily remembered. Generally speaking, there has been considerable disagreement concerning the linguistic differences between spoken and written language. There is a tendency to believe that written language is more complex while spoken language reflects a context-dependent, more simplistic language structure (Biber 1988/89). However, both genres have strengths and weaknesses and they need to be examined in parallel, allowing for possible new conclusions.

2.1 Metaphor comprehension and production: early developments

As previously stated, figurative language involves "hidden" meaning and the addressee has to go far beyond what is provided by the words in a sentence to comprehend the *real* meaning of it. In order to arrive at this point, the reader/hearer must follow a comprehension process which sounds complex: s/he must use some contextual information, background knowledge and certain expectations of relevance raised by the utterance (Wilson and Sperber 2012) (see Chapter 4). One would probably pose an interesting question here: how and when did we manage to come to a point at which we can claim that we can process and understand figurative language? I wonder: is production and comprehension of figurative language (and, specifically, metaphor) an innate ability of humans or a skill that is acquired at some point in their life?

For a long time, the ability to understand figurative language was taken to be a rather late acquisition task (Asch and Nerlove 1960, Demorest et al. 1983, Demorest et al. 1984, Winner 1988/97). Classical studies of children's metaphor comprehension reported that the ability to understand metaphoric uses of language develops during late childhood and in the early years of adolescence (Schaffer 1930, Asch and Nerlove 1960, Elkind 1969). Winner et al. (1976) make mention of mature metaphoric comprehension and metalinguistic awareness which appears in preadolescence, although they indicate that spontaneous metaphor production

occurs first. The view that spontaneous use of metaphors and other figures of speech appears at a preschool age has been reported by other scholars too (Chukovsky 1968, Carlson and Anisfeld 1969, Gardner 1973, etc.). For instance, Gardner (1974) showed that preschool-age children have the capacity to match words to other metaphoric elements. The basic claim that metaphor processing before the age of 7 years is undeveloped adequately and that children process language literally to grasp the meaning of an utterance (Levorato and Cacciari 2002) was believed to be the case for many years in the past with scholars even talking about immature or attributing this to poor pragmatic abilities of children. However, contemporary trends of pragmatics changed the way things were seen.

In recent years, the view of children's pragmatic abilities in their communication and comprehension has changed completely and scholars now talk about a well operated pragmatic system (Matthews 2014). Recent studies maintain that children's performance in early studies is far from poor pragmatic capacities and they attribute this to certain factors such as the missing context and the use of relatively demanding cognitive tasks (Vosniadou 1987, Pouscoulous 2014, Falkum 2020). It is true that studies on figurative language comprehension now involve less cognitively demanding tasks, focusing on more explicit rather than implicit factors, such as eye-tracking which has proven to be really efficient in children's pragmatic abilities (Southgate et al. 2007, Falkum 2020). Therefore, using more age-appropriate and less complex tasks recent literature has shown that humans' metaphor comprehension emerges during the preschool years, even at the age of 3, and scholars have started to shy away from the view that figurative processing occurs later, at the age of 7 (Deamer 2013, Di Paola et al. 2020, Pouscoulous and Tomasello 2020, etc.).

Cognitive pragmatics has focused on the development of figurative language such as metaphor and metonymy and researchers have attempted to examine children's ability of figurative uses and instances of metaphor. It has been found that children up to age of 2 tend to over-extend words to describe others having similar characteristics, for example *dog* to refer to other small animals (Clark 2019). Paradigms of *overextension* (or *overgeneralization*) are very common and spontaneous but it has been claimed that it is the child's inner need to communicate

rather than a "real" instance of a metaphor produced (Clark 2019). However, there are quite a few objections to this with scholars supporting that cases of *overextension* and the production of metaphors share similar cognitive features (Vosniadou 1987, Pouscoulous 2011). In fact, in many cases it is hard to distinguish between an *overextension* and a spontaneous metaphor. What is true so far is that figurative use such as metaphor is an inherent communicative process since children select expressions which can "make sense" in their mind and use them to refer to the targeted objects and get their message across (Falkum 2019).

Another observation noticed for children's and adult's figurative use and communication is the use of pretend-play and conceptual perspective. The former starts even from the age of 2 (Clark and Svaib 1997) and involves children pretending for example to sleep using a blanket or drink using a straw in an empty cup (Clark 2019). In pretend-play children are based on gestures and actions rather than using linguistic expressions and later on they start to add words and take roles and turns with their parents making the nature of the play more explicit (Clark 2019).[9] Conceptual perspective starts even before 1 year old, at around 9 to 12 months (Escalona 1973, Rheingold et al. 1976), with children pointing at objects to ask for something. This develops later on and by the age of 2 they start marking different conceptual entities using language. For example, they can identify an animal on a page from a book upon request. All the above lead to the claim that cases of overextension, pretend-play and conceptual perspective are – among others - signs of children's and adults' basis for figurative use and comprehension.

Interestingly, Clark (2019) also referred to the criteria used for deciding if any linguistic particle that has been uttered from the mouth or showed in movements by very young children is figurative. The scholar stated that first and foremost the child should know what the two (similar in his/her mind) items mean. For instance, imagine a one-year-old who used a pen as a straw. In this case, s/he should know both meanings of the items (i.e., *pen* and *straw*). Second, s/he should have the ability to understand two of their different perspectives (i.e., when to think of it as a straw and when as a pen). Third, s/he should suppose that one perspective is the

[9] For example, they pretend feeding a doll and say *eat*.

primary one. These criteria apply to figurative usage because the basic referent is the thing the child wants to refer to and the metaphor is the vehicle to show his/her object. Thus, this shows that children have the ability to refer to various objects around them, even before they come to the point to use language officially. Let's accept that humans indeed seem to have the ability from a very young age to produce and understand figurative language or at least they have the potential to do so, now the question that comes to my mind is the following: what kind of metaphors are they able to comprehend (and produce), novel or conventional?

Little has been done on what types of metaphors are mostly used and understood by children. Clark (2019) reports that although certain expressions are learnt and perceived from a young age as figurative, later they are learnt as fixed expressions or idioms, like *the head of the school, bed,* etc. These are considered 'dead' metaphors, since they involve conventional meanings, and they are not regarded as extended figurative uses. In a recent study by Pouscoulous and Tomasello (2020), 3-year-old children's behaviour was observed. The researchers investigated their understanding of novel metaphors through the use of a behavioural choice paradigm. They found that children have the necessary pragmatic skills to understand novel metaphors already at the age of 3 (Falkum 2020: 20). Furthermore, the scholars identified two important abilities necessary for metaphor comprehension, namely analogical perception (i.e., to spot similarities between things) and alternative naming (i.e., to use two names for the same referent). Using a picture-matching paradigm Di Paola et al. (2020) revealed that 3- and 4-year-olds were capable of understanding novel metaphors while analogical perception and alternative naming worked as facilitators in their overall final comprehension. Similar results were shown in metonymic uses too (Falkum et al. 2017, follow-up study: Köder and Falkum 2020).

Previous studies on psychology attempted to offer explanations on how children's production and comprehension of metaphors resemble those of adults. We learn from Werner (1948) that (older) children's and adults' physiognomic and metaphoric language seem similar. Also, this implicitly shows that the way children and adults use metaphors is similar. The physiognomic language of children is closely related to adults' capability of how they produce metaphors:

two usually dissimilar items are brought together. Werner (1948: 74) provides an example of a metaphor created by a child: “Mother, it’s so foggy, everything is like whispering”. In a metaphor like this the child connects *fogs* to *whispers*. This indicates that children conceptualize the world in a specific way. According to Werner (1948), it is a matter of changing construals for children of the real world – a task which heavily resembles the poet’s cognitive state of mind since s/he changes too real entities in the world and presents them as different whereas for adults it is an action of reconstruals.

However, Werner (1948) touched upon two distinct types of language usage. On the one hand, he referred to the *transparent* language usage which is language we exploit just to communicate. In this sense, there are specific words which refer to certain items. On the other hand, he mentioned the *opaque* language usage on which he based his argument that here lies a difference between children’s and adults’ metaphor production and comprehension. According to his definition, *opaque* language is when words play an important role in communication. To put it simply, the addressee must make use of and analyze the words to get the meaning of the message. *Opaque* language does not present reality as it is but it conveys reality in its words, either more explicitly or implicitly. The scholar claimed that children’s language contains the characteristic of *opaque* usage of it and the children’s ability to distinguish between world and words is still undeveloped. This is the difference with adults’ ability to using metaphoric language. Werner (1948) expressed the issue of *intentionality* and supported that children have not yet developed figurative language to the extent that adults have done. Children do not have the intention to use figurative language to express themselves whereas adults do use figurative language consciously and intentionally to get their message across, express a thought or evoke certain feelings of the addressee.

The above viewpoints by Werner (1948) seem to have a basis for metaphor interpretation but recent work (as the one presented earlier in this chapter) reflects more compelling ideas which have been presented after extensive research on child and adult capability of figurative language use. The fact that figurative language analysis is well known for generating a variety of pragmatic effects useful for interpretation is now indisputable and we surely know a lot about how things began

concerning figurative acquisition and development but future research and more experimental work would definitely reveal more interesting results.

2.2 Metaphor production and metaphor comprehension from different perspectives

In an attempt to successfully get their message across, stimulate interest and create enough space for the readers to find out for themselves what a literary text shows, what emotions, experiences and images it evokes, writers often use metaphors and other figurative elements. They tend to describe someone or something through the use of more poetic words but non-poetic too. As mentioned earlier, constructing a metaphor involves a great deal of experience and other linguistic and cognitive capacities. How do writers reach a level of being capable of creating metaphors and how do the readers manage (if so) to *fully* interpret them?

The issue of metaphor production and comprehension has been investigated by psycholinguistics and neuroscience whereas much has been earlier discussed in philosophy. The French philosopher Ricoeur (1978) introduced a three-step procedure in metaphor-making: selection, which involves picture-making in writers' mind, substitution of the concept and the final stage of language formation. Even before Ricoeur, Spitzer (1970: 21) claimed that a literary text is "the soul of a nation" written by "elect speakers". This adds more on the idea that literary works constitute a unique genre with special characteristics written by exceptional people. Of course, literature is not restricted to prose but it also involves poetry. Levin (1979) argued that the poet creates language and the poem is his/her creation. Then, the reader of the poem should think of a different world by reading a metaphor – one which is abstract and not real. This is strongly facilitated by 'non-propositional effects' (see Chapter 3).

Recent neuroscientific research has investigated the way the brain produces new metaphors. Benedek et al. (2014) in an fMRI study examined the neural system of figurative language production and through a completion task, they found that the left-hemispheric brain region is responsible for the metaphor generation. Furthermore, their study also revealed that the left hemisphere maintains and

controls the selection for language creativity. Creative thought and cognition have previously been researched through neuroimaging studies with a variety of tasks, including visual problem solving and generation of novel responses (e.g., Fink et al. 2009, Aziz-Zadeh et al. 2012). These indicate that there is still further room for future research in metaphor production and creative thinking.

In regard to metaphor comprehension, similar processes seem to collaborate. Metaphor comprehension involves a selection process by which a person identifies the conceptual category of an entity, extracts its relevant properties and suppresses the unrelated characteristics which exist in memory (Grucksberg 2001/2003). Traditional views assume that a person first processes and discards the literal meaning and subsequently moves on to extracting the nonliteral meaning (Clark and Lucy 1975). Previous neuroscientific studies have criticized brain activation processes which champion the idea of a passive processing between literal and nonliteral language (e.g., Rapp et al. 2004).

Contemporary research on figurative language processing and the selection of appropriate, relevant meaning showed that processing takes place *predominantly* on the left hemisphere (Glucksberg 2001, Badre and Wagner 2007) but a number of other studies supported that the right hemisphere also plays a significant role, especially in patients with unilateral brain damage (Thoma and Daum 2006, Schmidt et al. 2010). More specifically, in the case of novel metaphors, from a neuroscientific perspective, it is assumed that different frontal brain regions in the left hemisphere seem to activate as well as some regions of the right hemisphere too whereas more familiar metaphors are processed particularly in the left hemisphere (Bambini et al. 2011, Benedek et al. 2014). This comes in tandem with Giora's (2003) research who focused on the *salient* nature of familiar metaphors. According to the scholar, the difference between literal and non-literal meaning is basically based on salience. In short, by providing different phases and integration processes, she found that salient familiar metaphors were processed equally literally and figuratively and in less time compared to unfamiliar metaphors which required more time to comprehend their literal interpretations (Giora 2003: 147). It is on the communicator's part to decide if s/he wants to make percepts or objects

more noticeable to the audience and make it more likely for the reader to use them as a source of input to the interpretation process (Carston 2018).

Gentner and Bowdle (2008) underlined that *behaviour* is a key factor in differentiating between novel and conventional metaphors. They stated that a stand-alone metaphorical base term is not sufficient to uncover the meaning of a novel metaphor. Indeed, a word like for example *butterfly* if it is not paired with a target, it lets fuzzy or even no meanings at all. On the other hand, if it combines with a target word, such as *Little girls are butterflies*, it will surely reveal meaning to be easily interpreted (that little girls are very cute, etc.). So, novel metaphors need to involve a comparison between two different terms or entities to make sense. Unlike novel metaphors, conventional metaphors can take place in isolation without the use of different complementary targets. For instance, the conventional metaphor *gone nuts* simply means *being crazy*. In this case, we do not need further words to better understand this metaphor and, what is more, meaning will not necessarily change if we pair it with different targets. The scholars have called this theory of conventionalization *the career of metaphor* manifesting a process of an alignment shift. In other words, target concepts are associated with the literal base concepts and the result is salience and conventionality. We then talk about a direct access of meaning avoiding the process of aligning two literal terms.

From a psycholinguistics perspective, important findings on novel and conventional metaphors have emerged. Glucksberg (2003) reports that novel metaphors have become conventionalized and their metaphorical senses turned out to be more standardized in our days. The scholar argues that metaphorical meaning is interpreted in the same automatic way and time as literal meaning since their metaphorical sense has expanded and entered our thoughts and how we see and interpret utterances. This view was reinforced by other studies on metaphor comprehension too (e.g., McElree et al. 1999). Nonetheless, he states that it is not the case that metaphors have become literal but they remain metaphorical in sense and we interpret them in such a way. In addition, according to him, whether the metaphor is presented as a simile or not, the intended meaning remains the same and if I say that something is *like* something else, I intend to say that it has the same characteristics as that and I want to show so. In this way meaning is not lost

and we perceive them as metaphors. However, other scholars have offered more extensive work on the processing of non-propositional content and have given more emphasis on the effort put by the reader (see Chapter 4).

In a very recent study Canal et al. (2022) examined metaphor comprehension in terms of Theory of Mind (abrev. ToM) which relates to understanding the other's mental state. I have already mentioned that metaphor comprehension heavily relies on the mindset, our thoughts. The scholars claimed that even a simple kind of metaphor, such as *Time is money*, activates a mental process that denotes which properties of the word *money* relate to the word *time.* In other words, they show that *time* is so valuable as *money*. More specifically, it was revealed that metaphors which affect our mental state are more difficult to understand than simpler, more 'physical' metaphors. Especially in middle childhood better ToM skills evoked greater mental understanding. Thus, the relationship between ToM and metaphor is indeed important and this shows that metaphor is a type of language which draws on different domains: perceptual, social and psychological.

Concerning metaphors in literature, Semino and Steen (2008) indicated that the majority of researchers support that the metaphors in literature are more novel, creative and rich in language compared to those found in everyday interactions. Successful creative metaphors in literary texts can fulfil their purpose when "some kind of psychological, emotional or perceptual relation" exists between the literal and figurative meaning of a word (Leech 2008: 25). This also means that literary metaphors must be examined and analyzed under the spectre of other elements such as the activation of imagery. In line with this, I will attempt to show that literary texts are different than non-literary texts and ordinary language use on non-propositional content. Reading a novel metaphor derived from a literary book may generate *more* non-propositional effects compared to reading a metaphor used in everyday interactions. The role of metaphor in literature is outstanding as it provides the writer's thoughts, imagination and experience in a covered manner, "poetically" given and in a way that it attracts the reader's attention. Indeed, figurative meaning stands unique but what role does it play in everyday, more conventionalized metaphors and how do readers of a metaphor used in conversations manage to grasp its meaning?

Chapter 3

Imagery

Propositions serve as the primary meaning subjects and are the effect of the inference procedure. Yet after so many years the 'non-proposition' camp seems to have developed and expanded with important figures from the domain of linguistics (e.g., Sperber and Wilson 2008, Carston 2010, etc.). Being amongst the most predominant, metaphors encompass and evoke non-propositional effects whose dynamics is challenging for most linguists. Recent work on non-propositional content has shown that language, even if it ostensibly seems easy to understand and plain in nature, is rich in emotions and feelings. To what extent and what kind of non-propositional effects do metaphors express?

It has been found that when we read or hear information, we tend to create images in our mind. Psycholinguistics and neuro-imaging studies reveal that when we process information, motor areas are activated and thus we manage to better conceive objects in the world by picturing them (Ifantidou 2021: 7). The idea of visual imagery has started - during the last decade - to concern a great number of scholars who admit that it plays a crucial role in the processing of utterances. In fiction we can experience different feelings, such as anger or sorrow, and most times imagine things. Moeschler (2009) emphasized the speaker's/writer's need for a new, indirect route to account for efficient communication and provide his/her informative intentions through simpler linguistic means. In fact, when we read that *a dog with its sharp, razor-like teeth rushed towards me like a storm* who doesn't create an image and even sound of this dog in his mind?

We should always bear in mind that emotions and images, although working in similar ways for the derivation of non-propositional effects, are traditionally examined separately (Ifantidou 2021: 7). Images refer to the mental part of our mind and so do emotions but the main difference lies in that images are conceptual

entities. Yet both play a role in the inferential process and can offer valuable results for formulating pragmatic interpretations. My main objective would be to analyze images for this MA thesis and stress their role in fiction and everyday communication through metaphors supported by paradigms.

Images seem to aid in a way and benefit the inferential process by adding to the already made assumptions we have formulated. As Carston (2018: 39) puts it, images play "a significant tangential role" in the overall comprehension process. Adding to this, Wilson and Carston (2019: 37) claimed that images are percepts and they contribute to the understanding and relevance of an utterance (and thus a metaphor). The recent view that there is further pragmatic enrichment at the level of non-propositional effects in the form of evoked images is supported by a resolute group of scholars who have examined the role of imagery in metaphor comprehension (e.g., Green 2017).

At this point, I would like to remind an explicit distinction in linguistics. There are two main categories of metaphors: the *conventional* or known as *frozen metaphors* and the so-called *novel, imaginative* or *poetic metaphors* (the term *extended metaphors* is also applicable here). The former group relates to more idiomatic, fixed perception of entities. These are metaphors that have been used so often that their meaning has become standardized. For this reason, it has been found that no images come to mind when we read or hear a conventional metaphor (Just 2008, Desai et al. 2011). Indeed, if we take for instance the metaphor *grab life by the throat* who thinks of someone actually grabbing an abstract notion from the throat? Let alone the fact that this will lead us to misunderstanding or unnecessary information about the situation. Yet no conclusions can be based on speculations and further research to be carried out in the future may be useful for conventional metaphoricity.

The latter group includes metaphors which are more extended and may involve new ways of thinking. As mentioned earlier, novel metaphors are made from scratch by the author based on their thoughts and feelings. According to the American philosopher Rorty (1991), such a metaphor is so dynamic that it can alter one's language and life and it is "a voice from outside logical space", able to

establish new perspectives. Similarly, Knowles and Moon (2005) referred to this "fuzzy" meaning of novel metaphors, which makes them vivid and a powerful instrument to transmit images and feelings. Indeed, all acknowledge the compelling nature of novel metaphors but, on the other hand, there is an extensive use of conventional types in social situations and political speeches in order to persuade and motivate. In the case of novel metaphors, non-propositional effects seem to emerge with emotions and images interacting in most cases (Green 2017).

From a psycholinguistics perspective, a very influential distinction in the case of metaphor and imagery, which will be advantageous to my analysis, was made by Green in 2017. The scholar introduced "two flavors of metaphor" – as he called them – namely, the *image-permitting* and the *image-demanding metaphors.* As the term itself suggests, *image-demanding metaphors* (hereafter IDMs) are based on a necessary construction of an image for the understanding of the metaphor. As he claims, the activation of an image is spontaneous and does not necessarily refer to sight but it can be auditory or kinetic too. In fact, the scholar states that no particular image should be constructed but any kind - even unclear - will do. It goes without saying that the *image-permitting metaphors* (hereafter IPMs) do not rely on imagery and so the addressee needs not constructing any kind of image but they *can* do so. However, it is important to mention here that the hearer/reader and time are two basic elements which display if it is about an IDM or an IPM. This simply means that coming across an already seen metaphor, the hearer/reader will just omit the activation of an image and try to elicit its semantic content (Green 2017: 4). Similarly, he explains that while a hearer/reader may need to activate an image in order to interpret a metaphor, another might just grasp it without doing so, by only drawing on background knowledge, a task which would not require an image construction. Therefore, it seems that the way a metaphor is interpreted varies accordingly to each individual.

One of the most important features in Green's (2017) work is the idea of *self-expression* and *empathy.* This denotes that communicators may express themselves, how they feel and think about a situation by creating an artifact to show their current state of mood and using words to evoke images that stand for this artifact (Green 2017: 7-8). He takes his research a step further and claims that

the construction of IDMs and similes relates to expressive behaviour[10] and the psychological state of the communicator which they want to make manifest to the audience or put them in the same position to experience it in a similar manner. In simple words, in many situations the communicator himself/herself is the one who invites the addressee to empathize with him/her cognitive, affective or experiential states that are manifest through the use of images. On the contrary, IPMs are used in the service of illocutionary acts by creating ad hoc concepts for meaning-making (also, Carston 2002). I mean that IPMs are used through self-expression, the need to express ourselves (feelings, etc.) without literal content and these IPMs "serve as vehicles of illocutionary acts" (Green 2017) such as imperatives and interrogatives. It seems though that, according to the scholar, there is some common ground for both IPMs and IDMs and can be seen under a wide cognitivist scope, both through speaker-meant uses (IPMs) and within the ambit of self-expression (IDMs).

[10] According to the scholar, *expressive behaviour* can refer to facial expressions, intonation and body language.

Chapter 4
Relevance Theory and imagery

There have been different strands of analyzing and decoding speaker meaning throughout the history of linguistics. While Grice's central claims about speaker meaning were based on his Cooperative Principle and the maxims he proposed, the relevance-theoretic account would suggest that utterances raise expectations of relevance because of the humans' inner need to seek for relevance (Wilson and Sperber 2002). In fact, relevance theory (hereafter RT) agrees on Grice's tenet that an utterance raises expectations of relevance, but it contrasts with other features and mostly with the fact that interpretation is actually based on the Cognitive Principle of Relevance and it is undeniable that the focus should be on both the explicit and the implicit content. According to Sperber and Wilson's model, *relevance* is a broad term which includes external as well as internal representations such as memories and thoughts. An input then would be relevant to the individual and create a 'positive cognitive effect' worth for the interpretation of the utterance as long as it associates with his background information (Wilson and Sperber 2002: 251). The pioneers of relevance theory laid emphasis on context too and supported that an accurate conclusion of an utterance is deducible not just from the input, but also from the relevant context, producing what they called a 'contextual implication'. In lay words, within the relevance-theoretic framework the addressee uses both the intended explicature and the intended assumptions derived from the relevant context to create appropriate and meaningful hypotheses (Wilson and Sperber 2004).

According to Sperber and Wilson's (1986/95) Relevance theory (and inferential pragmatics), the expectations of relevance created by an utterance are clear enough and enable the hearer to understand the speaker's meaning to a point at which certain conclusions can be drawn. Relevance theory's tenet pertains to using the *least* possible effort for the interpretation of an utterance. In light of this, non-

propositional effects such as images work as facilitators by hastening the interpretation process. In their seminal paper *A deflationary account of metaphors*, Sperber and Wilson (2008) reveal that metaphors are omnipresent but they question their distinctiveness. According to them, metaphors are predicated on a natural model which includes literal, loose and other interpretations and thus their analysis does not require a separate theory. In other words, metaphors are not an exception to the rule and their linguistic content influences their interpretation. They function in a process of encoding and decoding meaning for the achievement of relevance. In other words, the communicator provides an *ostensive stimulus* through which and the context the addressee infers his/her message. The word 'ostensive' means that the communicator draws the attention of the addressee and intentionally leads them to his/her intentions. The main contrast with Grice's account of metaphors is that RT theorists treat metaphors as ordinary whose meaning is inferred through both an ostensive stimulus and context and they are not wholly inferred. RT scholars support that metaphors fall under the category of explicatures. An addressee can derive meaning when he processes it based on a context of previously available information, which gives rise to new cognitive effects. Finally, RT claims that when the addressee satisfies the expectations of relevance, s/he should stop at that point, meaning that the message of the utterance has been derived (Wilson and Sperber 2004: 613). Of course, during the inferential process many implicatures can be derived too. In her seminal paper, Carston (2018) poses a very important question, that of "how and where might (mental) imagery enter into pragmatic theories of metaphor comprehension/interpretation". She doubts whether imagery is an inadvertent phenomenon or "by-product" – as she calls it – of the process of understanding or if it actually plays a more significant role expected to happen in the cognitive process or being just a vehicle driven to aid or facilitate the cognitive process. Therefore, the question that arises here is: What role does imagery play in meaning-making and metaphor comprehension in a relevance-theoretic approach?

According to Carston (2010: 298), a metaphor induces certain responses and, in particular, mental images. We tend to create images in our mind when we read a metaphor, which might come from past experiences or memories. This 'imagistic' view differs from views which express that propositional content is what should

only matter to us. For example, Searle (1979: 85) stated that in order to understand a metaphorical expression the hearer must not rely on background assumptions or knowledge shared with the speaker but s/he must adopt another set of truth conditions or a "combination of principles and information" that will enable him/her to perceive the metaphor uttered. As stated previously, propositional content is available in an utterance and propositions are literally expressed. This justifies their truthfulness attitude but is not sufficient to account for metaphor interpretation. Therefore, under this respect metaphors call our attention but the problem remains as they are *non-propositional in character,* a view expressed by Davidson (1978), and thus we cannot fully interpret them or explain them through propositional/linguistic content. As Davidson (1978) mentioned, words constitute a wrong way to switch to an image. It is even likely that words lead to inconsistencies if interpret them solely literally, but the literal content of a metaphor can evoke images facilitating in this way the inferential process and ultimately the interpretation of the metaphor. Carston (2010) claimed that metaphor interpretation includes both the propositional and imagistic component heedless of which direction is chosen. The propositional component and the imagistic component work on a one-on-one relation for the derivation of a metaphor's meaning. But let us see how this works in an example:

> Cyclamen
> They are white moths
> With wings
> Lifted
> Over a dark water
> In act to fly,
> Yet stayed
> By their frail images
> In its mahogany depths.[11]
>
> R. S. Thomas (1946)

[11] The example is taken from Carston (2018).

In this ‘image metaphor’ the flowers of the cyclamen are “viewed as” white moths. Here the author chose to characterize a cyclamen by describing the physical properties of a moth (i.e., he used one physical thing to describe another). Carston (2018) explains that the writer’s aim was to pass on his personal experience and feeling to the audience. This perceptual experience through the use of such words and the metaphor produced works as putting the addressee in a similar (since it is impossible to pass on full expression of the perception) position with the writer. This novel metaphor can also be auditory for the addressee (the act of trying to fly when lifted from the water). Overall, it has a great imagistic dimension with colors, shapes, sounds, etc. work altogether in agreement. The writer gives us the chance to even think of another personal memory similar to his and construct an image to find out what he wants to say/show. In other cases of novel metaphorical expressions, the idea of sharing a similar perceptual experience involves the use of demonstratives (e.g., ‘this’, ‘that’) and ostensive stimuli from the external world (Camp 2006). Of course, the derivation of a range of implicatures (both strong and weak) is unavoidable in the case of this metaphor. The cyclamen petals can be seen as thin, fragile, pale on a dark background but this picture is only one manifestation of the cyclamen. Someone may imagine them as different entities and derive different assumptions. Furthemore, Carston (2018) makes an important distinction here and separates images from percepts. She claims that there is a combination between percepts and images, in that percepts evoke images and these images (‘memory images’ as the scholar calls them) are not types of percepts but they are considered a distinct category of mental entity, realized through the selective nature of our memory. In other words, memory images are probably stored in our memory in specific encyclopaedic entries and are activated when concepts like ‘cyclamen’, ‘moth’, etc. appear, facilitating the process of decoding and proposition knowledge about the words’ meanings. Finally, the scholar highlights that imagery is voluntary and it is on the addressee’s part whether to activate a certain image for the interpretation or not.

Sperber and Wilson (1986/95, 2008) and relevance-theoretic approaches emphasize the role of pragmatic adjustment and the construction of ‘ad hoc’ concepts. For example, in the above metaphor the lexically encoded concept MOTH (which denotes certain physical characteristics) is pragmatically

broadened to adjust for the meaning of the metaphor. This being part of the inferential process evokes implicatures about 'cyclamen' and the result is an ad hoc concept (MOTH*) which includes both denotations of the physical properties of a moth and other things which have similar physical properties as moths, like the cyclamen. On Sperber and Wilson's account and RT, (mental) images do not play a significant role in the derivation of the meaning of a metaphor. For them, important propositional information about an entity (its physical attributes) led by the metaphor vehicle and shying away irrelevant information are actually activated for the final derivation of implicatures (see Sperber and Wilson 2008, Wilson and Carston 2008). However, according to Carston (2018) this is a strictly relevance-based model which is not always the case. The author argues that in other cases it is actually not the broadening of ad hoc concepts that helps us derive the meaning of a metaphor but "the literal meaning of the metaphor vehicle (and the imagery it triggers) as a whole" which leads us to a selective application of implications to the topic based on the literal meaning (Carston 2010, Carston and Wearing 2011, Carston 2018). In addition, from a neuroscientific perspective, Barsalou (2008) reports that conscious representations seem to collaborate with our working memory and ultimately evoke images. Similar conclusions were also drawn from other experimental studies too (e.g., Farah 1989, Kosslyn et al. 2006). Overall, we could assume that perception, perceptual simulation and conscious imaging overlap in the construction of the representations and the neural mechanisms of our brain (Carston 2018).

In line with Sperber and Wilson's relevance theory (1986/95), Golding (2015) argues that novel metaphors are effortful in their comprehension and this extra effort they require is counterbalanced by cognitive effects which lead the mind to seek for perceptual aspects. The idea that creative metaphors take more time and their comprehension requires a great deal of effort when compared to conventional metaphors has been expressed by other scholars too (Giora 2003, Lai et al. 2009). More recently, Wilson and Carston (2019) suggested that the extra time and effort demanded for comprehending the creative metaphor facilitates or aids the final understanding of grasping the meaning of the metaphor. Let us now consider a conventional type of metaphor. A is talking to B about John and his skills at work:

(7) A: John is excellent. He could even sell sand to a desert dweller.
B: Indeed.

Someone might expect that a conventional metaphor like this would induce the same or similar processes to understand its meaning as the ones used in novel metaphors. There are two influential and important neuroscientific studies. Just (2008) like the already mentioned scholars highlighted the role of visual imagery in metaphor comprehension too but he found that perceptual representations are activated and used only in the case of novel and not in conventional metaphors. Indeed, it may be hard to imagine a person *implicitly* described as a good salesperson to actually sell sand to a desert inhabitant. Similarly, in their study Desai et al. (2011) by using fMRI compared neural responses in three types of sentences: literal, metaphorical and abstract sentences. Their study revealed that although the same sensory-motor areas in our brain are activated, less detailed simulations are needed while processing more familiar metaphors. In simple terms, their results showed that as familiarity increases, that is, when reading more familiar metaphors or metaphors whose meaning has become more standardized through the years, comprehension increases too.

In the RT framework a metaphor should evoke a wide array of weak implicatures to achieve relevance and interpretation. Sperber and Wilson (1985) argued that the cognitive effects derived from conveying such weak implicatures are known as *poetic effects* (Sperber and Wilson 1995, Pilkington 2000). Such effects are powerfully generated by both literal and loose forms of expression. These are not the same for every reader but they may vary producing images, impressions or emotions. However, in the case of conventional metaphors such as the above the scholars of the RT's position is pretty clear: conventional metaphors "may have lost their poetic appeal, if they ever had one" (Sperber and Wilson 2008: 119) and thus no need of imagery would be necessary for their comprehension. Similarly, considering even simpler, standardized metaphors such as "the legs of the table" or "a computer's brain" do not create any poetic effects and the hearer does not need to go through thinking of an array of possible implicatures to achieve relevance. This type of metaphors is unproblematic and, according to some linguists, we should merely focus on creative metaphors. Surely, creative

metaphoricity is more effortful, deeper and requires at a certain degree the use of an image towards its comprehension.[12]

[12] RT scholars also discuss the role of disambiguation, narrowing and broadening in metaphor comprehension (Sperber and Wilson 2008).

Chapter 5
Metaphor comprehension: a quantitative comparison of literary and everyday metaphors

5.1 Methodology

The previous chapters presented the basic literature on metaphor use and, primarily, its development and relation to imagery. The current chapter aims to unveil interesting new findings in novel and conventional metaphors via a new experiment. The methodology of the current experiment is based on a selection of a range of metaphors (chosen from two domains: the literary domain and from everyday interactions), presentation of them to participants to complete a multiple-choice task, the analysis and the discussion of the results. In Section 5.1.1, I first introduce the rationale for this experiment. Then, I present the participants involved in my study (Section 5.1.2), followed by the materials used for the analysis of this paper in Section 5.1.3. A description of the procedure is offered in the next section (Section 5.1.4), the final outcomes of the study in Chapter 6 and the discussion in the final chapter (Chapter 7).

5.1.1 Rationale

This experiment aims at showing how different kinds of metaphors, retrieved from distinct environments, can create different images to each individual. The multifaceted nature of metaphors allows us to attempt various research and draw valuable conclusions. Due to the previously presented theoretical points, I have chosen to compare two kinds of metaphors: literary and everyday metaphors. My basic rationale behind this is to seek to demonstrate the possible images formed while reading a metaphor, argue that there is indeed a difference on how people perceive these two kinds of metaphors and to explore how the presented metaphors

are generally interpreted and ultimately derive images during the interpreting process.

5.1.2 Participants

50 participants took part in this research, mainly graduate students from the English Language Department of the National and Kapodistrian University of Athens, English teachers and others who communicate in their everyday life in English or read literature books. The majority's level of English Language Proficiency was proficient according to the CEFR (Common European Framework of Reference). They completed a multiple-choice questionnaire (12 multiple-choice questions), requesting to choose the option that relates to them in a way that they consider it may create an impression, an image, a feeling or if they think that none of those is the case.

5.1.3 Materials

Metaphors were selected from two domains: 6 literary metaphors were culled from a well-known and best seller trilogy, *The Lord of the Rings (book I),* written by J. R. R. Tolkien[13], and 6 metaphors were derived from everyday interactions, and particularly from the VU Amsterdam Metaphor Corpus and random examples online (see Appendix). All metaphors were 12 in total and similar in word count. They were presented randomly in the form of a questionnaire to avoid biased responses and a short description with instructions was also given at the beginning (see Appendix: numbers 1, 4, 6, 7, 10 and 12 are everyday metaphors and numbers 2, 3, 5, 8, 9 and 11 are literary metaphors). The purpose of using a fair balance of everyday and literary metaphors was to track down any differential effects with regard to how images are activated in literary against more spoken situations (also: Ifantidou 2021).

[13] Tolkien's long descriptions in the book and his use of extensive figurative language were key factors for my selection criteria.

5.1.4 Procedure

On the procedure, participants were asked to choose the most appropriate option for them after reading each sentence. On the questionnaire design, 5 options followed each question, namely *impression, image, feeling, all of the above and none of the above.* A short space was also provided for them after each question to describe briefly why they chose the option. They were asked after choosing the option they believe was applicable to write in a few words what they understand from the sentence they read. They were given the choice of *none of the above* because I also wanted to see if non-propositional effects were not the case in these metaphors (if participants considered so).

Chapter 6

Results

The following table contains the results of the questionnaire in which I presented participants with various metaphors from the literary domain and the everyday interactions and registered their interpretation:

Table 1 Responses percentages for *impression, image, feeling, all of them, none of them*

	Everyday metaphors	**Literary metaphors**
Impression	21.4%	17.8%
Image	**16.6%**	**51.2%**
Feeling	**28.5%**	19%
All of the above	9.5%	7.1%
None of the above	22.6%	**4.7%**

At a first glance, we notice a high percentage of images retrieved in literary compared to everyday metaphors. The percentage is more than three times higher (51.2%>16.6%). As expected, there is indeed an increased tendency for participants when reading a novel metaphor from a book to create an image on the spot in a possible attempt to conceive the meaning of that metaphor. Image activation reaches a 16.6% for the more everyday metaphors used in communication. What is also striking is that there is a high 28.5% of feeling in everyday metaphors compared to a quite lower 19% in literary examples. In this case, the deviance in feeling between everyday and literary metaphors is indeed obvious. This means that the non-propositional effect of feeling in metaphor interpretation needs further analysis and follow-up research. The percentages for impression in both cases are relatively similar (17.8% for literary metaphors and 21.4% for the conventional ones). It is also noteworthy that almost 23% of the responses of participants were “none of the above” which means that the

metaphors did not create any kind of feeling, impression or image to them. This percentage reached only a 4.7% for the literary genre. Likewise, by observing my data I notice that the percentage for those answering *all of the above* is also equivalently diminished if compared to the percentage of those who chose the same option for the everyday metaphors. The following tables include data with the metaphors used in the study and the descriptive responses of the participants.

Table 2 Participants' indicative comments on everyday metaphors

Everyday metaphors	Comments
1. "No matter how big a hammer you find, you can't pound common sense into stupid people"	*a. You can never change a stubborn person's opinions*
	b. A gigantic hammer hitting sb on the head
	c. Feeling of knowing the truth of life
2. "Please wait a minute now because we've frozen now"	*a. People caught in ice like ice age*
	b. Cold territory, people unable to move
	c. Nothing. We're just waiting because there's a problem
3. "Life is a road trip for us to enjoy and not carry too much baggage"	*a. A car with two people and a suitcase in the open road*
	b. Road, a car heading to a place unknown
4. "I graduated from the University of Life. All right? I received a degree from the School of Hard Knocks"	*a. The person that's speaking is cocky*
	b. I am so powerful, unstoppable
5. "Your practices are your own affair, and in them I decline to dabble"	*a. The speaker is confident and proud*
	b. I dislike the speaker, sound so hard. What a coarse voice
6. "Look, we're barely keeping our heads above water now. Why risk…?"	*a. People's heads almost completely in the ocean and then trying not to drown*
	b. People struggling to survive, a capsized vessel
	c. Life can indeed be harsh at times

Table 3 Participants' indicative comments on literary metaphors

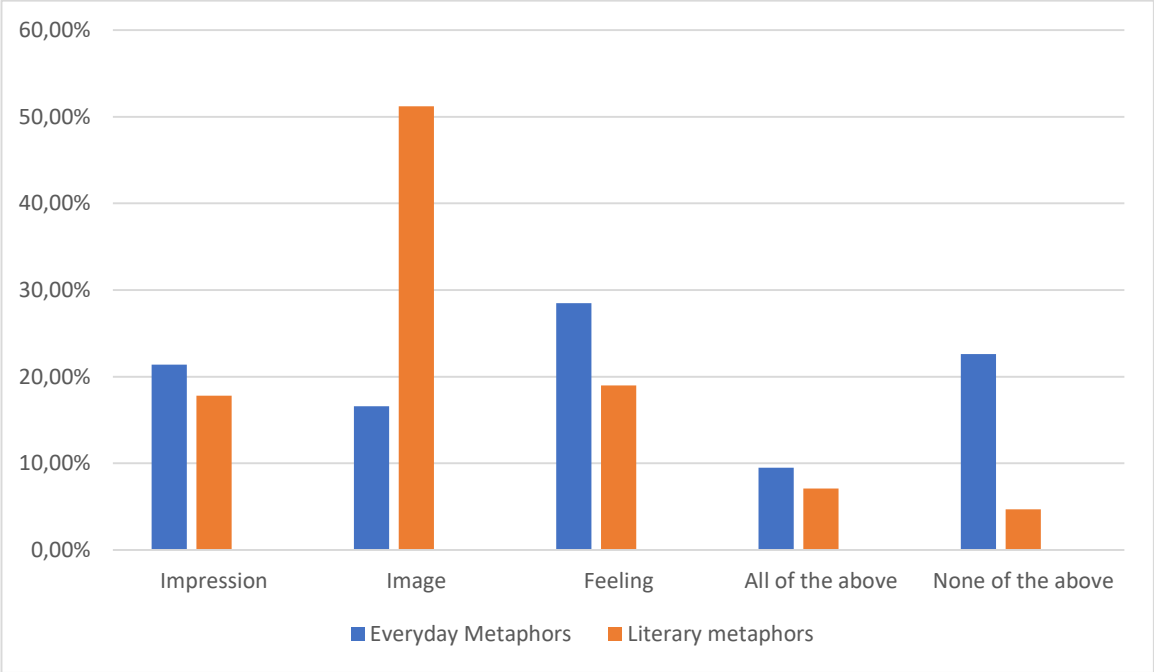
Literary metaphors	Comments
1. "…more food and drink were needed to cure the guests of shock and annoyance"	*a. People sitting round being served food and then looking upset but eating, unable to resist all the smell that's coming from the hot food*
	b. Image of people sharing the same awkward situation, trying to hide sth
	c. A place with tables full of food and drinks and people staring at sth with surprise
	d. Plenty of food and drink interrupted by a sudden event
2. "Her face looked as if she was in the throes of thinking out a really crushing parting remark"	*a. A female face with 'thinking' brows*
	b. Sorrow
	c. This is a speculation created when you see someone's facial expressions
3. "There was nothing more, only nasty furtive eating and resentful remembering"	*a. A tad of sadness, remembering how I feel when I'm sad and want to eat to comfort myself*
	b. Reaching the end….
	c. A mixed of feelings has been activated simultaneously
4. "Everything looked fresh, and the new green of spring was shimmering in the fields"	*a. A shiny green field wind blowing and making everything be glittery and green grass*
	b. A green valley full of flowers and trees. I can even smell…
	c. I imagine myself walking in a forest full of trees and grass which looks stunning

5. "As I looked at him, his face seemed more lined with care and wisdom"	a. *(Gandalf's) friendly old face with wrinkles*
	b. *A man to be highly respected*
	c. *An old man seeming like very experienced in life*
6. "Soft as butter they can be, and yet sometimes as tough as old tree-roots"	a. *Heated butter being cut and deep roots growing in fast forward underground*
	b. *Balance, reminds me of life itself*

Recall that my main concern was to examine participants' reactions to reading metaphors from two domains and see if and to what extent they activated imagery. As can be seen from the tables above, overall images were more highly activated in literary metaphors than in common, everyday examples. Participants' comments tend to be more creative and descriptive in the literary examples. It is important to mention that feeling is present in almost all cases and participants seem to be willing to explain the metaphor read through vivid images and personal experiences (e.g., *I imagine myself…, reminds me of…*). Worth mentioning is the fact that for each metaphor participants offered more abstract or general ideas in everyday metaphors (e.g., referring to people generally) and they were more specific and descriptive in the literary ones. Interestingly, in one literary example we even notice the use of the word *image*.

If we look attentively at literary examples, we notice that they evoked comments made by participants which describe a picture using colour (*green valley, green grass*), smell (*all the smell that's coming from…, I can even smell*) as well as adjectives which reflect vivid, "loud" images (*awkward, sudden, shiny, glittery, stunning,* etc.). In contrast, in everyday examples description is quite limited and participants chose to comment on the person talking rather than showing a picture that they may see (*I dislike the speaker, the speaker is confident and proud, the person.*.). The following graph shows the overall results in each option in percentages (*impression, image, feeling, all of the above, none of the above*).

Table 3 Participants' responses in %



Chapter 7
Discussion

As signaled in the previous chapters, metaphor interpretation is in fact a challenging activity. With scholars claiming in our days that metaphor comprehension cannot be considered a late acquisition task but it can happen even before the age of 3, a new path is open for contemporary developmental studies on metaphor comprehension. The fact that metaphor understanding takes place at an early age may justify our ability to interpret metaphorical meaning at an older age. Recent experiments have shown that we are equipped with special pragmatic abilities that cannot be disregarded. Research revealed that the process and understanding of figurative language is an innate ability of humans and this can be explained since we develop a conceptual comprehension system from a very young age. In other words, we are capable of creating concepts in our mind early in life and are expected to explain or understand metaphorical meaning while reading.

The two different major categories of metaphors (i.e., novel and conventional metaphors) manifest the dominant role of imagery in metaphor comprehension. According to basic literature, 'non-propositional content' is perhaps equally important as propositional content. As Wilson and Carston (2019) and recent studies on 'non-propositional content' (e.g., Ifantidou 2021) have shown, the comprehension of more creative types of metaphors can trigger image activation which in turn can aid in the derivation of perceptual entities and finally contribute to the derivation of relevance of an utterance by reducing space for irrelevant information and by treating non-propositional content independently, we can see that meaning is driven by non-propositional effects as well as propositional content is not based solely on purely propositional items. Similarly, implicatures cannot be characterized as carrying only propositional meaning but also non-propositional, imagistic items. We can assume that non-propositional content –

and specifically images – can motivate inference and affect the derivation of relevant meaning.

The present study takes the theory on non-propositional content a step further and suggests that image activation is more powerful in the literary genre than in more common situations. In Green's (2017) terms, *image-demanding* and *image-permitting metaphors* seem to have their own place in metaphor comprehension. Many participants have attempted to explain the metaphorical expression through the use of a vivid image or via putting themselves in the same position as the writer, often displaying personal experience and perceptual phenomena already existed in memory. What this study reveals is that image activation is indeed higher in literary examples compared to more conventionalized ones but we may not completely exclude the derivation of images in more everyday metaphorical use of language. I agree on the aforementioned relevant studies which demonstrate that the literary genre is more powerful and that more conventionalized metaphors have entered our perceptual world and have become fixed entities but image activation is also highly dependent on the semantic meaning of a metaphor. I believe that indeed image activation facilitates metaphor interpretation but this is not exhaustive or restricted to literary examples. This study shows that image activation and non-propositional effects in general plays a role – whether significant or not – or at least a complementary role in the comprehension of extended metaphors but it cannot be denied that imagery may be present (even in a very limited degree) in more conventionalized metaphorical instances. Factors such as frequency, familiarity, length and word choice (i.e., the words used in a metaphor) can significantly affect the overall metaphor comprehension. It remains to be shown in follow-up studies how these can contribute and to what extent to our understanding of figurative language. Furthermore, Gibbs (2017) suggests that metaphor researchers should examine metaphorical language in real discourse to understand how they work in real, communicative situations. Metaphors are not to be analyzed only in terms of the language they contain (their linguistic sense) but they could bring about big breakthroughs in psychology as they are strongly linked to thought and feelings. The truth is, as Ortony (1975) stated, that "metaphor is an essential ingredient of communication and consequently of great educational value" (Ortony 1975: 45).

Appendix

Questionnaire – Panagiotis Koukounas

This research is conducted for the purposes of my dissertation for the master's program "Linguistics: Theory and Applications" 2021-23 of the National and Kapodistrian University of Athens.

The domain of Linguistics has been examined from different strands of research i.e., psychology, philosophy, neuroscience, psycholinguistics, etc. This questionnaire is addressed to linguists, academics and students of the English language. There are 12 multiple choice questions followed by an optional short space to elaborate on each of the questions. Read carefully each option below, tick the option that you think applies to you and describe briefly why you chose this option or what you understand by reading it. There is no correct or wrong response. Your answers should be either in English or in Greek. Time needed: 15-20 minutes. For further questions contact me on: koukpanos@enl.uoa.gr

Thank you for your cooperation!

Panagiotis Koukounas

MAT, MA

1. No matter how big a hammer you find, you can’t pound common sense into stupid people.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

2. …more food and drink were needed to cure the guests of shock and annoyance.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

3. Her face looked as if she was in the throes of thinking out a really crushing parting remark.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

4. Please wait a minute now because we've frozen here.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

5. There was nothing more, only nasty furtive eating and resentful remembering.

   Impression

   Image

Feeling

All of the above

None of the above

If yes, what? (explain in a few words) …

6. Life is a road trip for us to enjoy and not carry too much baggage.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

7. I graduated from the University of Life. All right? I received a degree from the School of Hard Knocks.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

8. Everything looked fresh, and the new green of spring was shimmering in the fields.

   Impression

   Image

   Feeling

   All of the above

   None of the above

If yes, what? (explain in a few words) …

9. As I looked at him, his face seemed more lined with care and wisdom.

   Impression

   Image

   Feeling

   All of the above

   None of the above

   If yes, what? (explain in a few words) …

10. Your practices are your own affair, and in them I decline to dabble.

    Impression

    Image

    Feeling

    All of the above

    None of the above

    If yes, what? (explain in a few words) …

11. Soft as butter they can be, and yet sometimes as tough as old tree-roots.

    Impression

    Image

    Feeling

    All of the above

    None of the above

    If yes, what? (explain in a few words) …

12. Look, we're barely keeping our heads above water now. Why risk…?

    Impression

    Image

Feeling

All of the above

None of the above

If yes, what? (explain in a few words) …

References

Asch, S. and Nerlove, H. 1960. The development of double function terms in children: an exploratory investigation. In: Kaplan, B., Wapner, S. (Eds.), Perspectives in Psychological Theory: Essays in Honor of Heinz Werner. International Universities Press, New York, 47-60.

Aziz-Zadeh, Lisa, Liew, Sook-Lei and Dandekar, Francesco. 2012. Exploring the neural correlates of visual creativity, *Social Cognitive and Affective Neuroscience*, (Vol. 8), 4, 475-480.

Badre, David and Wagner, Anthony D. 2007. Left ventrolateral prefrontal cortex and the cognitive control of memory. *Neuropsychologia*, 45(13), 2883-2901.

Bambini, Valentina, Gentili, Claudio, Ricciardi, Emiliano, Bertinetto, Pier Marco and Pietrini, Pietro. 2011. Decomposing metaphor processing at the cognitive and neural level through functional magnetic resonance imaging. *Brain Res. Bull*., 86, 203-216.

Barsalou, Lawrence. 2008. Grounded cognition. *Annual Review of Psychology*, 59, 617-45.

Benedek, Mathias, Beaty, Roger, Jauk, Emanuel, Koschutnig, Karl, Fink, Andreas, Silvia, Paul J., Dunst, Beate and Neubauer, Alioscha C. 2014. Creating metaphors: The neural basis of figurative language production, *NeuroImage* (Vol. 90), 99-106.

Biber, Douglas. 1988. *Variation across speech and writing*. Cambridge: Cambridge University Press.

Biber, Douglas. 1989. A typology of English texts. *Linguistics* 27, 3-43.

Biber, Douglas and Finegan, Edward. 2001. Diachronic relations among speech-based and written registers in English. In: S. Conrad and D. Biber (Eds), *Variation in English: multi-dimensional studies*, 66-83. Harlow: Longman.

Blome-Tillmann, Michael. 2008. Conversational Implicature and the Cancellability Test. *Analysis* 68.298, 156-160.

Borg, Emma. 2004. *Minimal Semantics*. Oxford: Oxford University Press.

Borg, Emma. 2012. *Pursuing Meaning.* Oxford: Oxford University Press.

Borg, Emma. 2016. Exploding Explicatures. *Mind Language* 31(3), 335-355.

Cameron, Low and Maslen, Robert (Eds.) 2010. Metaphor Analysis: Research Practice in Applied Linguistics, Social Sciences and the Humanities. London: Equinox.

Camp, Elisabeth. 2006. Metaphor and that certain 'je ne sais quoi'. *Philosophical Studies*, 129, 1-25.

Canal, Paolo, Bischetti, Luka, Bertini, Chiara, Ricci, Irene, Lecce, Serena and Bambini, Valentina. 2022. N400 differences between physical and mental metaphors: The role of Theories of Mind. *Brain and Cognition*, 161.

Capone, Alessandro. 2016. Attributions of Propositional Attitude and Pragmatic Intrusion. In: The Pragmatics of Indirect Reports. Perspectives in Pragmatics, Philosophy & Psychology, 8. Springer, Cham.

Carlson, P. and Anisfeld, M. 1969. Some observations on the linguistic competence of a two-year old child. *Child Development* 40, 565-575.

Carston, Robyn. 2002. Thoughts and utterances: The pragmatics of explicit communication. Oxford: Wiley-Blackwell.

Carston, Robyn. 2010. Metaphor: *ad hoc* concepts, literal meaning and mental images. *Proceedings of the Aristotelian Society* 110(3).

Carston, Robyn and Hall, Alison. 2012. Implicature and Explicature. In Hans-Jörg Schmid (Ed.), *Cognitive Pragmatics*, 47-84.

Carston, Robyn. 2018. Figurative Language, Mental Imagery, and Pragmatics. Metaphor and Symbol 33, 198-217.

Carston, Robyn and Wearing, Catherine. 2011. Metaphor, hyperbole and simile: A pragmatic approach. *Language and Cognition*.

Charles, E. Reagan and David, Stewart (Eds.) 1978. *The Philosophy of Paul Ricoeur: An Anthology of his Work*. Boston: Beacon Press.

Charteris-Black, Jonathan. 2004. Corpus Approaches to Critical Metaphor Analysis. Basingstoke: Palgrave Macmillan.

Chukovsky, Korney. 1968. *From two to five*. Berkeley: University of California Press.

Clark, Herbert H. and Lucy, Peter. 1975. Understanding what is meant from what is said: A study in conversationally conveyed requests. *Journal of Verbal Learning and Verbal Behavior,* 14, 65-72.

Clark, Eve V. 2020. Perspective-taking and pretend-play: Precursors to figurative language use in young children. *Journal of Pragmatics* 156, 100-109.

Clark, Eve V. and Svaib, Trisha A. 1997. Speaker perspective and reference in young children. *First Lang*. 17, 57-74.

Davidson, Donald. 1978. What metaphors mean. *Critical Inquiry, 5*: 31-47. Reprinted in D. Davidson 1984. *Inquiries into truth and interpretation* (245-264). Oxford, UK: Oxford University Press.

de Saussure, Louis and Wharton, Tim. 2020. Relevance, effects and affect. *Int. Rev. Pragmat*. 12, 183-205.

Deamer, Felicity. 2013. An Investigation into the Processes and Mechanisms Underlying the Comprehension of Metaphor and Hyperbole. PhD dissertation. University College London.

Demorest, Amy, Silberstein, Lisa, Gardner, Howard and Winner, Ellen. 1983. Telling it as it isn't: children's understanding of figurative language. *Br. J. Dev. Psychol*. 1(2), 121-134.

Demorest, Amy, Meyer, Christine, Phelps, Erin, Gardner, Howard and Winner, Ellen. 1984. Words speak louder than actions: understanding deliberately false remarks. *Child Dev*. 55(4), 1527-1534.

Desai, Rutvik, Binder, Jeffrey, Conant, Lisa, Mano, Quintino and Seidenberg, Mark. 2011. The neural career of sensory-motor metaphors. *Journal of Cognitive Neuroscience*, 23(9), 2376-2386.

Di Paola, Simona, Domaneschi, Filippo, Pouscoulous, Nausicaa. 2020. Metaphorical developing minds: the role of multiple factors in the development of metaphor comprehension. *Journal of Pragmatics* 156, 235-251.

Elkind, David. 1967. Egocentrism in adolescence. *Child Development* 38, 1025-1034.

Escalona, Sibylle K. 1973. Basic modes of social interaction: their emergence and patterning during the first two years of life. *Merrill-Palmer Q*. 19, 205-232.

Falkum, Ingrid Lossius, Recasens, Marta and Clark, Eve V. 2017. The moustache sits down first': on the acquisition of metonymy. *J. Child Lang*. 44(1), 87-119.

Falkum, Ingrid, Lossius. 2019. Metaphor and metonymy in acquisition: a relevance-theoretic perspective. In: Scott, K., Clark, B., Carston, R. (Eds.), *Relevance, Pragmatics and Interpretation*. Cambridge: Cambridge University Press, 205-217.

Falkum, Ingrid, Lossius and Köder, Franziska. 2020. The acquisition of figurative meanings. *Journal of Pragmatics* 164, 18-24.

Farah, Martha. 1989. The neural basis of mental imagery. *Trends in Neurosciences*, 12(10), 395-399.

Fink, Andreas, Grabner, Roland H., Benedek, Mathias, Reishofer, Gernot, Hauswirth, Verena, Fally, Maria, Neuper, Christa, Ebner, Franz and Neubauer, Aljoscha C. 2009. The creative brain: investigation of brain activity during creative problem solving by means of EEG and fMRI. *Human Brain Mapping*, 30(3), 734-748.

Fludernik, Monika. 2009. *An introduction to narratology*. London: Routledge.

Forceville, Charles. 1996. Pictorial Metaphor in Advertising. Routledge.

Gardner, Howard. 1973. *The arts and human development*. New York: Wiley.

Gardner, Howard. 1974. Metaphors and modalities: How children project polar adjectives onto diverse domains. *Child Development* 45, 84-91.

Gentner, Dedre and Bowdle, Brian F. 2008. Metaphor as structure-mapping. In R. Gibbs, Jr. (Ed.), *The Cambridge Handbook of Metaphor and Thought*. (Cambridge Handbooks in Psychology, 109-108). Cambridge University Press.

Gibbs, Jr. Raymond. 2017. Identifying Metaphors in Language. In *Metaphor Wars: Conceptual Metaphors in Human Life* (57-103). Cambridge: Cambridge University Press.

Giora, Rachel. 2003. *On our mind: Salience, context, and figurative language*. Oxford University Press.

Glucksberg, Sam. 2001. *Understanding Figurative Language: From Metaphors to Idioms*. Oxford University Press.

Glucksberg, Sam. 2003. The Psycholinguistics of Metaphor. *Trends in Cognitive Sciences*, (Vol. 7), 2, 92-96.

Golding, Alex. 2015. Mental Imagery and Metaphor. *Porto Alegre* 8(1), 20-32.

Green, Mitchell. 2017. Imagery, expression, and metaphor. *Philosophical Studies* 174, 33-46.

Grice, H. Paul, 1967. Logic and Conversation. William James Lectures. Reprinted in Grice, 1989, 1-143.

Grice, Herbert Paul. 1975. Logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and semantics 3: Speech acts*, 41-58. New York, NY: Academic Press. Reprinted in H. P. Grice (1989). *Studies in the way of words*, 22-40. Cambridge MA: Harvard University Press.

Grice, H. Paul, 1989. Studies in the Way of Words. Harvard University Press, Cambridge, MA.

Ifantidou, Elly. 2021. Non-propositional effects in verbal communication: The case of metaphor. *Journal of Pragmatics* 181, 6-16.

Just, Marcel A. 2008. What brain imaging can tell us about embodied meaning. In M. de Vega, A. Glenberg, & A. Graesser (Eds.), *Symbols and embodiment* (75-84). Oxford UK: Oxford University Press.

Kittay, Eva Feder. 1988. Metaphor: Its Cognitive Force and Linguistic Structure. Oxford University Press.

Knowles, Murray and Moon, Rosamund. 2005. *Introducing Metaphor* (1st ed.). Routledge.

Kosslyn, Stephen M., Thompson, William L. and Ganis, Giorgio. 2006. *The case for mental imagery*. Oxford University Press.

Lai, Vicky, Curran, Tim and Menn, Lise. 2009. Comprehending conventional and novel metaphors: an ERP study. *Brain Res*. 1284, 145-155.

Lakoff, George and Johnson, Mark. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.

Leech, Geoffrey N. 1983/2008. *Principles of Pragmatics*. London and New York: Longman.

Leech, Geoffrey and Short, Mick. 1981/2007. Style in fiction: a linguistic introduction to English fictional prose. Harlow, London, etc.: Pearson Education Limited.

Lepore, Ernie, Stone, Matthew, 2010. Against metaphorical meaning. Topoi 29(2), 165-180.

Levin, Samuel. 1979. Standard approaches to metaphor and a proposal for literary metaphor. In A. Ortony (Ed.), *Metaphor and thought*. Cambridge: Cambridge University Press.

Levinson, Stephen, 2000. Presumptive Meanings: The Theory of Generalized Conversational Implicature. MIT Press, Cambridge, MA.

Levorato, M. Chiara and Cacciari, Cristina. 2002. The creation of new figurative expressions: psycholinguistic evidence in Italian children, adolescents and adults. *J. Child Lang*. 29, 127-150.

Matthews, Danielle. 2014b. Introduction: an overview of research on pragmatic development. In: Matthews, D. (Ed.), Pragmatic Development in First Language Acquisition. John Benjamins, Amsterdam, 1-35.

McElree, Brian and Nordlie, Johanna. 1999. Literal and figurative interpretations are computed in parallel. *Psychonomic Bull. Rev*. 6, 486-494.

Moeschler, Jacques. 2009. Pragmatics, propositional and non-propositional effects. Can a theory of utterance interpretation account for emotions in verbal communication? *Soc. Sci. Inf.* 48, 447-463.

Noveck, Ira A. and Sperber, Dan. 2007. The Why and How of experimental pragmatics: The case of 'Scalar Inferences', 307-330.

Ortony, Andrew. 1975. Why metaphors are necessary and not just nice? *Educational theory* 25, 45-53.

Pilkington, Adrian. 2000. *Poetic Effects: A Relevance Theory Perspective*. Amsterdam/Philadelphia: John Benjamins, xiv, 214.

Pouscoulous, Nausicaa. 2011. Metaphor: for adults only? *Belg. J. Linguist*. 25, 51-79.

Pouscoulous, Nausicaa. 2014. 'The elevator's buttocks': metaphorical abilities in children. In: Matthews, D. (Ed.), Pragmatic Development in First Language. Acquisition. John Benjamins Publishing Company, Amsterdam, 239-259.

Pouscoulous, Nausicaa, Tomasello, Michael. 2020. Early birds: metaphor understanding in 3-year-olds. *Journal of Pragmatics* 156, 160-167.

Rapp, Alexander M., Leube, Dirk T., Erb, Michael, Grodd, Wolfgang and Kircher, Tito T. J. 2004. Neural correlates of metaphor processing. Brain research. *Cognitive Brain Research*, 20(3), 395-402.

Recanati, François. 2004. Literal Meaning. Cambridge: Cambridge University Press, Cambridge. *Journal of Pragmatics* 38(7), 1111-1116.

Rheingold, Harriet L., Hay, Dale F. and West, Meredith J. 1976. Sharing in the second year of life. *Child Dev*. 47, 1148-1158.

Richards, Ivor Armstrong. 1936/95. *The philosophy of rhetoric*. Oxford, UK: Oxford University Press.

Romero, Esther and Soria, Belén. 2014. Relevance Theory and Metaphor. *Linguagem Em (Dis)Curso* 14(3), 489-509.

Rorty, Richard. 1991. *Objectivity, Relativism and Truth.* Cambridge University Press.

Schaffer, Laurance F. 1930. Children's interpretation of cartoons. *Contributions to Education*. Columbia Teachers College, 429.

Schmidt, Gwenda L., Kranjec, Alexander, Cardillo, Eileen R. and Chatterjee, Anjan. 2010. Beyond laterality: a critical assessment of research on the neural basis of metaphor. *J. Int. Neuropsychol. Soc*., 16, 1-5.

Searle, John. 1979. Metaphor. In J. Searle, *Expression and meaning* (76-116). Cambridge UK, Cambridge University Press.

Semino, Elena and Steen, Gerard J. 2008. 'Metaphor in literature'. In R. W. Gibbs (Ed.) *The Cambridge handbook of metaphor and thought*, 232-246. Cambridge: Cambridge University Press.

Southgate, Victoria, Senju, A. and Csibra, Gergely. 2007. Action anticipation through attribution of false belief by 2-year-olds. *Psychol. Sci.* 18(7), 587-592.

Sperber, Dan and Wilson, Deirdre. 1986/95. *Relevance: Communication and cognition*. Oxford, UK: Blackwell.

Sperber, Dan and Wilson, Deirdre. 2008. A deflationary account of metaphors. In R. Gibbs (Ed.), *The Cambridge handbook of metaphor and thought*, 84-108. Cambridge: Cambridge University Press.

Spitzer, Robert. 1970. *The soul's upward yearning.* Ignatius.

Thoma, Patrizia and Daum, Irene. 2006. Neurocognitive mechanisms of figurative language processing-evidence from clinical dysfunctions. *Neurosci. Biobehav. Rev.*, 30(8), 1182-1205.

Vosniadou, Stella. 1987. Children and metaphors. *Child Dev.* 58(3), 870-885.

Weiner, Matthew. 2006. Are All Conversational Implicatures Cancellable? *Analysis* 66.2, 127-130.

Werner, Heinz. 1948. *The comparative psychology of mental development*. New York: International Universities Press.

Williams-Whitney, Diana, Mio, Jeffery Scott and Whitney, Paul. 1992. Metaphor production in creative writing. *J Psycholinguist Res* 21, 497-509.

Wilson, Deirdre and Carston, Robyn. 2007. A unitary approach to lexical pragmatics: Relevance, inference and ad hoc concepts. In N. Burton-

Roberts (Ed.), *Pragmatics*, 230-259. Basingstoke UK: Palgrave Macmillan.

Wilson, Deirdre and Carston, Robyn. 2019. Pragmatics and the challenge of "non-propositional" effects. *Journal of Pragmatics* 145, 31-38.

Wilson, Deirdre and Sperber, Dan. 1981. On Grice's theory of conversation. In P. Werth (Ed.)

Conversation and Discourse. London: Croom Helm, 155-78. Reprinted in Kasher (Ed.) 1998 (Vol. 1V), 347-68.

Wilson, Deirdre and Sperber, Dan. 2002. Truthfulness and relevance. *Mind* 111, 583-632.

Wilson, Deirdre and Sperber, Dan. 2004. Relevance Theory. In L. R. Horn & G. Ward (Eds.), *The Handbook of Pragmatics*. Blackwell, 607-632.

Wilson, Deirdre and Sperber, Dan. 2012. *Meaning and Relevance*. Cambridge: Cambridge University Press.

Winner, Ellen, Rosenstiel, Anne K., Gardner, Howard. 1976. The development of metaphoric understanding. *Dev. Psychol*. 12(4), 289-297.

Winner, Ellen. 1988/1997. The Point of Words: Children's Understanding of Metaphor and Irony. Harvard University Press, Cambridge, MA.

Yazıcı, Nermin. 2010. Metaphors on "Literature" by teachers-to-be graduates of Turkish language and literature departments, *Procedia - Social and Behavioral Sciences*, 2(2): 5339-5343.

Yus, Francisco. 2017. Contextual constraints and non-propositional effects in WhatsApp communication, *Journal of Pragmatics*, 114, 66-86.