

National and Kapodistrian University of Athens  
Department of English Language and Literature

M.A. Programme “Linguistics: Theory and Applications”

**METAPHOR PRODUCTION IN AN EFL SETTING:  
A COGNITIVE - AFFECTIVE PROCESS.**

ANASTASIA KATSAROU

ID 7563112100005

Supervisor

Dr Elly Ifantidou

Members of evaluation committee

Dr. Tim Wharton, Dr. Tzeni Liontou

January 2023

## 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.

Όνομα

ΑΝΑΣΤΑΣΙΑ ΚΑΤΣΑΡΟΥ

Υπογραφή



*My M.A. dissertation is a dedication*

*to my sons*

*Nikolaos and Georgios*

## **Acknowledgements**

This M.A. dissertation has been a demanding and challenging procedure for me. There have been several moments of disappointment which discouraged me from completing this endeavour. Thankfully, my willingness along with the support of some beloved people led to its completion.

First and foremost, I would like to express my gratitude to my supervisor, Doctor Elly Ifantidou, who has supported and guided me through the entire process. She provided invaluable feedback and expanded my horizons by introducing new aspects and dimensions to my ideas.

Additionally, I would like to thank all my students for their contribution. Their support, enthusiasm and interest was the impetus for this M.A. dissertation. Their involvement was essential for providing important data which enabled me to draw interesting conclusions.

Above all, I would like to thank my beloved brother, Dimitrios G. Katsaros, for his constant support and encouragement. Lastly, I could not exclude my family, especially my two beloved sons, who have always been my inspiration in my constant education endeavours.

Anastasia Katsarou

January 2023

## Abstract

Aristotle in his *Rhetoric* first acknowledged the prevalent role of metaphor in language, as a figure of speech which appeals to our senses and is omnipresent in everyday interactions. To date, linguists and philosophers have investigated this salient field, extensively. Among them, Cognitive linguists attributed properties to metaphors which exploit thought, cognition and embodied experience in synergy, facilitating the conceptualization of situations and understanding of abstract ideas in terms of more concrete entities (Lakoff and Johnson 1980). But is metaphor interpretation purely a cognitive process, or given the vagueness of what can be communicated by metaphors we can acknowledge the existence of non-cognitive processes which influence their interpretation?

Within current cognitive pragmatics, evidence on non-propositional effects which facilitate the interpretation of metaphors has been claimed recently (see Wilson and Carston 2019, Ifantidou 2019, Ifantidou and Hatzidaki 2019, Ifantidou 2021). In particular, Wilson and Carston have suggested that metaphorical utterances are interpreted through perceptual, emotional or sensorimotor mechanisms which provide relevant information about the interactants' mental states and encourage searching for additional interpretive effects in order to achieve metaphor interpretation.

My aim in this M.A. dissertation is firstly, to examine whether metaphor interpretation can be facilitated through exploitation of readers' emotional perception and secondly, to investigate to what extent metaphor production can be triggered by emotional states and prior experiences when language learners are requested to produce short texts narrating a personal emotional experience. The above research questions addressed in this M.A. dissertation are investigated in an experiment conducted in an EFL setting with 50 Greek native speakers learning English as a foreign language. Participants were divided into two groups according to their level of proficiency in English and were exposed to two tests. The first test investigated the role of emotions in metaphor interpretation and the second test the role of emotions in metaphor production by language learners.

In this experiment, I further examine the impact of participants' grammatical and communicative level of proficiency in the target language on metaphor production and whether raising learners' pragmatic awareness can facilitate metaphor production. Evidence on L2 metaphors produced by language learners in contexts requesting a vivid description of emotions, reinforces the view that metaphorical competence involves cognitive-affective processes which facilitate metaphor production.

## **Keywords**

Emotional perception, metaphorical competence, non-propositional effects, metaphor production

## Περίληψη

Η μελέτη του φαινομένου της μεταφοράς ανάγεται αρχικά στην εποχή του Αριστοτέλη. Εκείνος πρώτος αντιμετωπίζει τη μεταφορά ως σχήμα λόγου ή προσθήκη στην κυριολεκτική γλώσσα και αποδίδει την ερμηνεία της μεταφοράς στην αναγνώριση της απόκλισης από την κυριολεξία των όρων της σύγκρισης της μεταφοράς. Η αναγνώριση της ασυμβατότητας των σημασιολογικών όρων που αποτελούν τη μεταφορά από τον αναγνώστη, οδηγεί στην κατανόηση της.

Η Γνωσιακή γλωσσολογία με κύριους εκπροσώπους τους Lakoff και Johnson (1980), που αναγνωρίζουν στη μεταφορά ιδιότητες άλλες πέρα από αυτή του απλού τρόπου έκφρασης, αναγάγει τη μεταφορά σε κύριο συστατικό που επηρεάζει τον τρόπο σκέψης που δομεί τις συλλογιστικές διαδικασίες και κατ'επέκταση τη συμπεριφορά. Είναι όμως η ερμηνευτική κατανόηση της μεταφοράς αποτέλεσμα μόνο γνωσιακής διαδικασίας ή ενδεχόμενα θα έπρεπε να αναγνωρίσουμε και άλλους παράγοντες που επιδρούν στην κατανόηση της;

Η σύγχρονη Γνωσιακή πραγματολογία αναγνωρίζει και άλλους παράγοντες που επιδρούν στην ερμηνεία της μεταφοράς και διευκολύνουν τον αναγνώστη ή τον ακροατή να την κατανοήσει. Οι Wilson and Carston (2019), Υφαντίδου και Χατζηδάκη (2019), προτείνουν τη συμβολή επιπλέον επιδράσεων στην ερμηνεία της μεταφοράς. Ο ρόλος του συναισθήματος και των αισθησιοκινητικών μηχανισμών που φαίνεται να επιδρούν στην κατανόηση και ερμηνεία των μεταφορών, αρχίζει να διαφοροποιεί τη μέχρι τώρα προσέγγιση της εννοιακής μεταφοράς (conceptual metaphors), όπως δόθηκε από τους Lakoff και Johnson.

Η παρούσα διπλωματική εργασία επικεντρώθηκε αρχικά στην αναγνώριση και ερμηνεία της μεταφοράς και σε δεύτερη φάση στην παραγωγή της μεταφοράς από Έλληνες μαθητές που διδάσκονται την Αγγλική γλώσσα. Κύριος σκοπός της έρευνάς μου ήταν να αποσαφηνίσω κατά πόσο εμπειρίες και καταστάσεις έντονου συναισθήματος θα μπορούσαν όχι μόνο να διευκολύνουν την κατανόηση της μεταφοράς στην ξένη γλώσσα αλλά και να πυροδοτήσουν την παραγωγή της.

Διερευνάται ειδικότερα ποια μπορεί να είναι η επίδραση των συναισθημάτων της χαράς, της λύπης, του φόβου και της αγάπης στην αναγνώριση και κατανόηση μεταφορών που συμπεριλαμβάνονται σε κείμενα που περιγράφουν τα προαναφερθέντα συναισθήματα. Επιπλέον επικεντρώνομαι στο να διερευνήσω τι καθορίζει την παραγωγή της μεταφοράς από τους συμμετέχοντες καθώς και στην ανάλυση των ειδών της μεταφοράς που παράγουν.

Συνοψίζοντας, διερευνάται η ενδεχόμενη επίδραση της διαφορετικότητας του επιπέδου της γραμματικής και επικοινωνιακής ικανότητας των συμμετεχόντων στην

ξένη γλώσσα καθώς και η συμβολή της ενίσχυσης της πραγματολογικής ενημερότητας στα πλαίσια της διδασκαλίας της Αγγλικής με τη μορφή της παιδαγωγικής παρέμβασης, στην διαμόρφωση των παραγόμενων μεταφορών.

### **Λέξεις κλειδιά**

Συναισθηματική αντίληψη, μεταφορική ικανότητα, παραγωγή μεταφοράς



# Table of Contents

Declaration .....	ii
Acknowledgements .....	iv
Abstract in English .....	v
Abstract in Greek .....	vii
Table of contents .....	ix
1. Introduction .....	2
1.1 Aim and theoretical background .....	2
1.2 Grice's implicatures and metaphor interpretation .....	5
1.3 Lakoff, concepts and metaphors .....	6
1.4 Relevance theory .....	7
2. Metaphor variety .....	9
2.1 Introduction .....	9
2.2 Conceptual and non-conceptual metaphors .....	9
2.3 Conventional and creative metaphors .....	10
2.4 Language learners and metaphors .....	13

3. Metaphor in use .....	15
3.1 Introduction .....	15
3.2 Metaphorical competence .....	15
3.3 Processing metaphors .....	17
3.4 Metaphorical competence and language proficiency .....	19
3.5 Foreign language input .....	21
4. Methodology .....	23
4.1 Introduction .....	23
4.2 Rationale .....	23
4.3 Participants .....	24
4.4 Materials and procedure .....	24
5. Results .....	26
5.1 Introduction .....	26
5.2 Metaphor interpretation .....	26
5.3 Metaphor production .....	28
6. Discussion .....	32
6.1 Introduction .....	32

6.2 Summary of findings .....	32
6.3 Types of metaphors produced .....	36
6.4 Language input and intervention .....	38
6.5 Implications and future research .....	39
7. Conclusion .....	41
Appendix I .....	43
Appendix II .....	47
Appendix III .....	48
References .....	49

## Chapter 1

### Introduction

#### 1.1 Aim and theoretical background

. . . all people carry on their conversations with metaphors and words in their native and prevailing meanings (1404b).<sup>1</sup>

. . . Metaphor especially has clarity and sweetness and strangeness, and its use cannot be learned from anyone else (1405a).

Aristotle (The *Rhetoric* chapter III, by G. A. Kennedy).

Aristotle's influence on contemporary scholars and philosophers has laid the foundations for experimental research in the salient field of metaphors and their investigation through the scope of pragmatics. He distinguished the dual nature of the lexical items carrying their native (i.e., the literal) and metaphorical meaning and postulated the use of metaphors in everyday conversations as aforementioned.

Pragmatics adopts the stance that communication is usually achieved by means of utterances, shared between the speaker and the hearer, which may be carriers of determinate meanings alongside with less determinate ones, characterised as "non-propositional effects" (see Wilson and Carston 2019). Specifically, creative metaphors may convey loose impressions which can vary from one individual to the other and may be activated not only due to perceptual but also through emotional and sensorimotor mechanisms.

Philosopher Paul Grice (1975) in *Logic and Conversation*, defines the duality of the meaning of lexical items in a conversation, as non-natural or intention-based semantics which explains the non-natural meaning based on the intentions of the utterer. Therefore, the utterer's meaning may vary from the timeless meaning or the so-called "conventional meaning" of the lexical items, as illustrated in the phrase "Tom is English but Bill is Welsh". The discourse connective *but* here emphasizes the contrast between the properties encoded by the lexical items "English" and "Welsh"

---

<sup>1</sup> Aristotle seems to be referring to what Lakoff and Johnson in *Philosophy in the Flesh* (1999), call literal meanings.

attributed to Bill and Tom. These two lexical items do not only include the difference of the nationality between Bill and Tom but “imply” the different qualities that the two persons have as well.

From another perspective, according to Ifantidou and Hatzidaki (2019), Ifantidou (2021), there are implications that metaphor comprehension links with the brain and sensorimotor activity, as examined in a study triggered by the Aristotelian notion that metaphors must appeal to our senses. Current linguistic approaches to pragmatics suggest that understanding is not merely a cognitive process but it can be interspersed with experiential elements such as emotions experienced and that the affective disposition determines both our beliefs and meanings (see Ifantidou 2021).

Cognitive linguists, on the other hand, trying to shed light on the metaphorical utterances suggested that metaphorical meanings permeate everyday vocabulary and that metaphors are regarded as a figure of thought rather than speech (Lakoff and Johnson 1980). In more recent work, metaphors are considered as consisting of the propositional content that is conveyed by an utterance which is essential for the conversational exchange and the imaginative engagement of the hearer (Lepore and Stone 2015) which is called “the imagery of an utterance”, suggesting that how we interpret utterances in general and metaphorical utterances more specifically, cannot be a process achieved entirely within the cognitive realm of our experience.

The notion of imagery is discussed within Relevance Theory with reference to the assumption that less effort is desirable upon interpreting metaphorical utterances. Sperber and Wilson (2008), demonstrated that metaphors include literal, loose and hyperbolic interpretations aligned with the Aristotelian consideration of the wide use and range of metaphors in everyday exchanges. Given the innate propensity of the individual’s preference for less processing effort in the cognitive process, we can speculate that verbal and non-verbal communication, determinate and indeterminate, propositional and non-propositional can be of equal contribution in the interpretation of the exchanges employed in human communication.

Therefore, from what is mentioned so far, we can assume that interpreting utterances especially metaphors can be a multi-dimensional process facilitated by a variety of cognitive and affective mechanisms to a certain extent. More often than not, linguists have examined the field of metaphor interpretation even studied metaphors in a second language environment (Littlemore 2013, Nacey 2013, Ifantidou 2019, Olkonemi, Bertram and Kaakinen 2022) and their significance in first and second language acquisition contexts.

However, on the grounds that language is a complex system that associates sounds

with meanings, that is demonstrated via productive and receptive skills, we believe that the above notions should be examined when it comes to metaphor production as well, as this seems to be a relatively underexplored area in linguistics.

In the experimental cognitive linguistic literature, the predominant question is how metaphors are perceived and understood and what factors can enhance their understanding. In this vein, I will try to examine which of the aspects presented in the above section can apply to the area of metaphor production, more specifically, in an EFL setting (i.e., English as a foreign language) in a natural educational environment. In addition, I will attempt to examine to what degree the metaphorical competence of the language learner, is related to the learner's grammatical and communicative proficiency (Danesi 1986, 1993, Nacey 2013, 2022).

On that note, I will venture to discuss the significance of exposing language learners to material and data such as book, film, album, TV programme reviews and newspaper editorials (see Appendix III) from the website: <https://www.independent.co.uk>, to cultivate the learner's pragmatic awareness and ultimately, their ability to produce and comprehend as Low (1988), and Zibin (2016), support. Consequently, by combining real-life material from the Internet and educational material from the student's textbooks (see Appendix III), I will examine if they can produce metaphors in the target language, in instances where they have experienced feelings and situations pertinent to the emotions described in the excerpts provided.

As previous research suggests, due to the fact that metaphors are on the one hand ubiquitous and on the other hand informative, they can be arguably vehicles for better understanding in educational contexts (see Littlemore 2013, 2017). Additionally, it is suggested that language learners display a preference for metaphors as an inferential route to particular interpretations even in cases of obscure semantics (see Ifantidou 2019).

Hence, I will investigate the extent up to which language learners may be able to not only comprehend but also generate metaphors, especially novel ones. Another perspective to be taken into consideration, is the degree of productivity achieved when they describe autobiographical experiences and intense feelings (see Williams-Whitney, Mio and Whitney 1992) and if they can employ their experiences and feelings to become productive (Williams *et al.* 1992).

With this in mind, I will address the following issues:

- Is metaphor production related to grammatical and communicative proficiency in the target language?

- Can metaphorical competence be facilitated by stimuli such as newspaper editorials, a variety of reviews (as mentioned previously) and selected material from the students' textbooks?
- Can learners produce metaphors when they describe their experiences and feelings?

Next, in the following sections (1.2, 1.3, 1.4) of Chapter 1, I will display the most important theoretical frameworks which appear to have influenced metaphor comprehension by referring to eminent philosophers and cognitive linguistic approaches.

## **1.2 Grice's implicatures and metaphor interpretation**

Philosophy and linguistics have been undeniably influenced by Grice's theory of implicature and his notion that an utterance can be divided into what the speaker says and what he/she implicates. He exerted influence both in the fields of semantics and pragmatics, mainly due to the fact that he introduced the distinction between the natural and the non-natural meaning of the lexical items (Grice 1957) and the conventionally and conversationally implicated character of an utterance (Grice 1975).

What is conversationally implicated and realized through the Cooperative Principle and the four Maxims, can become informative in multiple ways. In cases of figurative speech such as metaphors and irony, according to Grice, after we have ruled out the literal meaning, we investigate for alternative meaning in the interpretation of utterances produced by the speaker. For example, the proposition expressed in the following metaphorical utterance can be derived by the addressee, in terms of what is implicated:

1) "John is a lion"

is literally absurd but the hearer will recognize the implicated proposition of the speaker who wants the addressee to form certain beliefs such as that:

a) John is brave

b) John is aggressive

c) John is to be feared.

The speaker's meaning according to Grice, attempts to explain the non-natural meaning based on the notion of the speaker's overt audience directed intentions. In other words, a speaker's meaning has several properties like a single or a set of

propositions which must be duplicated in the minds of both the recipient and the addressee and taken for granted for a successful conversation to take place.

Whether the Gricean notion of the duality of meaning as natural and non-natural and the speaker's intentions to communicate some related true proposition as an implicature, can apply to the identification of metaphors and to metaphor production in particular in an educational environment, so that second language (L2) learners will be able to identify and produce, will be thoroughly examined in the current study.

### **1.3 Lakoff, concepts and metaphors**

Metaphors for Lakoff and Johnson (1980), are defined as conceiving one thing in terms of another, on the grounds that an entity is perceived through a preexisting conceptual system which permits individuals to understand even abstract concepts using pre-established mappings.

Cognitive linguists who laid the foundations for Conceptual Metaphor Theory (henceforth CMT), attributed properties to metaphors beyond mere description. Metaphors are considered as vehicles which facilitate understanding of abstract entities structuring them in a concrete way. To elaborate, thought, cognition and embodied experience operate in synergy. Consequently, metaphors seem to be a figure of thought rather than of speech. Conceptual metaphors involve two different domains of knowledge, known as the source and the target domain which allow us to resort to specific mappings so as to achieve full understanding.

Like Aristotle, the dominant approach of Conceptual Metaphor Theory (CMT), proposes that metaphors are omnipresent and structure the way people think and communicate. To exemplify, in modern western cultures a considerable number of concepts are structured by the knowledge that we have acquired from another, like the concept of time which is structured by the knowledge we obtain from the concept of money. In English, this can be mostly reflected upon the expressions "Time is money" or "She buys some time" when the properties of the source domain of money are attributed to the target domain of time to successfully comprehend it.

As far as metaphor comprehension is concerned, according to Lakoff (1992), metaphors are interpreted or processed through a cross-domain mapping in the conceptual system. For instance, we tend to understand the domain of love in terms of the domain of journeys when we use the metaphorical expression: LOVE IS A JOURNEY, as we map knowledge about journeys onto love. Such mappings and experience form the basis of metaphors along with mental images, permitting



understanding, most of the times even subconsciously, after exposure to L1 (i.e., the learners' first language).

In cases such as "My wife whose waist is an hourglass", there is superimposition of the image of an hourglass onto the image of a woman's waist and we map the hourglass onto the image of the waist. Hence, if a similar process could operate for metaphor production, needs to be further examined. In the following section, I will refer to another approach, that of Relevance Theory and metaphor comprehension.

#### **1.4 Relevance theory**

The framework of Relevance Theory, which is used within cognitive linguistics and pragmatics in the interpretation of utterances, was postulated by Sperber and Wilson after being inspired by Gricean pragmatics. Their approach to metaphors is deflationary, acknowledging their importance but at the same time questioning their distinctiveness. In their *A Deflationary Account of Metaphors* (Sperber and Wilson, 2008) are *on the lean side* and they see metaphors as a range of cases at one end of a continuum that includes literal, loose and hyperbolic interpretations. According to Sperber and Wilson (2008), there is no specific mechanism for metaphorical interpretations or a generalization that applies only to them. On the contrary, in their paper they defend their view that the same inferential procedure applies to both ends of the continuum including all the aforementioned interpretations.

Their principle was that every utterance must convey information which is relevant to deserve the hearer's effort to process it and that utterances are ostensive so as to draw the hearer's attention. On the same note, Sperber and Wilson view utterances as largely inferential (i.e., the hearer will infer what message the speaker wishes to convey and interpret it by using a combination of the literal meaning, the knowledge of the world and their memory and overall perception. To sum up, bearing the above properties, verbal communication is deemed to be *ostensive-inferential communication* (Sperber and Wilson 1995: 50ff).

Inferences give rise to implicatures and explicatures, which are typically supplemented by contextual information. In the case of metaphors, implicatures are derived by the addressee by broadening and narrowing down the concepts encoded by the lexical items used. To illustrate, in the metaphor "John is a soldier" we broaden the concept of the lexical item "soldier" in the following manner. First we access the concept encoded by the lexical item "soldier" (a person who follows orders, devoted to duty or a patriot), then we infer that the communicator wishes to

convey the implicature that “John is a *trustworthy* and *reliable* person”.

Another example that sheds light on what is mentioned previously, is the metaphorical utterance B in the following exchange:

2) A: I’ve had this back ache for a while now, but nobody has been able to help.

B: My chiropractor is a magician. You should go and see her.

According to Sperber and Wilson (2008) , in order to interpret the utterance there are inferential steps that A must go through so as to understand that B, by using the lexical item MAGICIAN, means to convey that the chiropractor has extraordinary capacities and access the implications of the speaker by achieving a relevant interpretation of the metaphor used.

To conclude, as illustrated in the above example, interpretation is carried out “on line” and starts while the utterance is in progress. Consequently, as Sperber and Wilson (2008) claim, there are not exact sequences or a representational format of thought but other factors cause hearers to converge on an interpretation. When this interpretation coincides with the one intended by the speaker, then the communication is successful. In Chapter two (2), I will refer to the variety of metaphors and the relationship between language learners and the figures of speech they encounter in the texts they are exposed to.

## Chapter 2

### Metaphor variety

#### 2.1 Introduction

In this chapter I would like to discuss the issue of metaphor variety. This chapter opens with Section 2.2, which briefly describes what constitutes conceptual and non-conceptual metaphors and how conceptual metaphors are employed to conceptualise a situation. The issue of people's preference for conceptual metaphors, is raised in this section.

The chapter then turns to the distinction between the creative and conventional metaphors in section 2.3. We shed light on the degree of difficulty language learners may face when processing the aforementioned types of metaphors (i.e., conceptual, non-conceptual, creative and conventional metaphors). Language learners seem to access the underlying conceptual metaphors in order to facilitate comprehension, either for conventional or innovative metaphors.

The chapter closes with section 2.4, which raises the issue of how language learners process the metaphors they encounter in the texts they are exposed to. Whether pragmatic awareness is influential for metaphor processing will be also examined.

#### 2.2 Conceptual and non-conceptual metaphors

Kövecses, Z. (2022), in his *Some recent issues in conceptual metaphor theory*, highlights the existence of different terms attributed to conceptual metaphors and the conceptual structures they involve, such as *domain* (Lakoff and Johnson 1980), *experiential gestalts* or *frame*, implying the relationship between two frames. According to Lakoff (1996), framing entails getting the language that fits your worldview when you communicate, as the ideas are primary and language carries those ideas. As a result, selecting carefully the words to use when individuals communicate is important.

What seems to unify these ideas, is our experience of the world in terms of mental organization. Psycholinguistic research has shown that conceptual metaphors influence how people produce and understand language. For example, it has been shown that we retrieve conceptual metaphors when reading poetry (see Rasse Onysko and Citron 2020). Additionally, Lakoff and Johnson (1980), in their

*Metaphors We Live By*, support that metaphors structure our ordinary conceptual system and they are pervasive in our everyday way of thinking. This structure provides a new “experientialist” perspective.

Another influential idea is *schematicity*. Kövecses (2017), refers to the four different levels that structure conceptual metaphors. According to Kövecses (2017), schematicity, (i.e., image-schema structures, domain structures, frame structures, mental space structures), functions within a rich context which influences which conceptual metaphor is used to conceptualise a situation. More precisely, the totality of our experiences is what constitutes this context as stated by Kövecses (2017) and other cognitive linguists (Lakoff and Johnson 1999, Gibbs 2006).

Nevertheless, the body of conceptual metaphors structuring how we view the world, is not universal and it includes metaphors which are specific to groups and individuals (Kövecses 2022). On the same note, Nacey (2013), emphasizes that although conceptual metaphors appear to be universal, in some cases, linguistic metaphors depend on the language in question. For instance, knowledge of conceptual metaphors such as ARGUMENT IS WAR, might not be enough to urge language learners to produce metaphors. However, according to Nacey (2013), basic knowledge of conceptual metaphors may enhance language learners’ understanding.

To conclude, another study conducted by Littlemore, Sobrino, Houghton, Shi, Winter (2018), highlighted that people show a preference for conceptual metaphors even in a subconscious level. More specifically, when readers encounter metaphors, either conventional or innovative ones, they access the underlying conceptual metaphor to facilitate comprehension. This will be further explored for metaphor production in the current study.

### **2.3 Conventional and creative metaphors**

Aligned with what was explained in the previous section is the notion that we will venture to scrutinize, which refers to the distinction between the so-called conventional and creative metaphors and the potential degree of difficulty in processing which may be encountered by readers and more specifically language learners. Existing research showcases that highly conventional metaphors crystallized as expressions of everyday life are easy to understand and not very challenging for the reader (see Citron and Zervos 2018).

The American philosopher Richard Rorty in his *Metaphor as the Growing Point of Language* (1991), characterizes creative metaphors as a *voice* from outside logical space. Rorty (1991), views metaphors as a *call* to change a person’s language and life and not as a proposal about how to systematize them. In other words, creative

metaphors usually coined as poetic and literary as well, are considered to be more original than conventional metaphors.

To elaborate, the main difference between conventional and creative metaphors lies in that since the former are familiar comparisons of everyday language and the latter an original comparison, they usually demand more cognitive effort to be interpreted. According to Lakoff (1992), several conventional metaphors are idioms as illustrated in the example “spinning one’s wheels” and they come with a conventional mental image. These mental images facilitate interpretation of the idioms.

Lakoff (1992), suggests that conventional metaphors have become a fixed part of our conceptual system and they are conceptual not in the words but in the mental images. For instance, in the utterance: “His toes were like the keyboard of a spinet”, the words prompt us to perform a conceptual mapping between the conventional mental images of the keyboard of the spinet and his toes in order to interpret it. Attributing the properties of the poor, inadequate, spinet (i.e., a discouraging starter piano) to his toes, we can interpret the metaphor as *unwillingness* to take action.

In the same vein, “to hold all the aces”, “I have got an ace up my sleeve” and “If you play your cards right” seem to conceptualise various facets of the LIFE IS A GAMBLING GAME metaphor theme. So, for Conceptual Metaphor Theory and Cognitive linguists conventional mental images are structured by image-schemas and allow us to map properties of one domain on to another.

In creative metaphors, an array of different aspects appear as they seem to be a demanding procedure both for interpretation and comprehension, as indicated in the poem entitled “Fear” by Sophie Tunnell:

3) “Fear is a slinking cat I find

Beneath the lilacs of my mind.”

The interpretation is more effortful as “fear is not a slinking cat” and “lilacs in a person’s mind” cannot be perceived through certain schemata. As Carston (2017) suggests, we need to activate other modes and mental images regarding this kind of metaphors to achieve comprehension.

As recommended by Deignan (2005), creative or novel are those metaphorical utterances consisting of lexical items, whose usage can be characterised as innovative, only if it is found in *a certain sense* (i.e., not literally used), in the frequencies of a corpus, less than one in every thousand citations. This would indicate that a specific lexical item is used in a more creative/novel manner than it is usually used. The frequency of the usage of a certain lexical item in utterances

bearing a non-literal meaning, would entail creativity. For example, in her study among students on metaphors of climate change, Deignan (2020), pinpoints the tendency among students to extend metaphors creatively. The metaphor “they trap heat” was used to describe what the “greenhouse” effect is. This example as Deignan (2020) states, showcases that the students tend to extend metaphors creatively (as mentioned before *in a certain sense*) using their knowledge of the literal meaning of a word.

However, Black (1993), suggests the use of the standard lexicon for defining whether a word is used in a metaphorical utterance in an innovative way or not. Consequently, using contemporary dictionary entries or base research on a corpus body and data may be used as the criterion for classifying a metaphor in the appropriate category of the above mentioned.

Thus, a possible way of classifying metaphors could be to use the field of semantic analysis of the domains involved in a metaphorical utterance. For instance, when the source domain is concrete and the target domain is abstract, the lexical unit is conventional. For example, in the metaphor “Laughter is a medicine”, the concrete source domain is “medicine” and the abstract target domain is “laughter”. As a result, the metaphor “Laughter is a medicine” could be considered as a conventional metaphor.

From a neurolinguistic perspective, conventional metaphors seem to be more engaging than their literal paraphrases, e.g., “a firm grasp of an idea” can evoke more attention than “a good understanding of an idea”, which in a way can justify people’s preference for metaphors over their literal counterparts, as hypothesized by recent research (see Goldberg, Mon, Necheva, Citron, Williams 2021). Goldberg *et al.* (2021), claim that when metaphorical and literal sentences were compared directly, participants of their study judged metaphorical sentences to convey “richer meaning”.

Consequently, the question we would like to raise is which type of metaphor should serve the purposes of our research, when it comes to the case of learners of English as a foreign language. Literary critics and rhetoricians are concerned with *creative or poetic* metaphors whereas linguists and philosophers of language with linguistic metaphors (see Kronfeld 1980). So, my intention is to examine whether language learners can respond both to conventional and creative metaphors in the same manner.

To conclude, my explicit motivation was to examine the preference of conventional metaphors to creative ones by language learners in terms of metaphor production. Additionally, I will examine whether they can identify easier conventional or creative metaphors, using affective processes as a means of accomplishing identification. In

the next section 2.4, I will investigate the interaction between language learners and figures of speech they can see in the texts they are exposed to in class.

## **2.4 Language learners and metaphors**

In connection with what I demonstrated in the previous sections, I will attempt to examine the relationship between the learners of a language and figures of speech they may encounter in the texts they are exposed to. Initially, pragmatic awareness seems to play a significant role in how they establish the connection with the target language (i.e., the language they learn). Language acquisition seems to be facilitated through the use of such figures of speech, especially if we take into account that metaphors are pervasive not only in literature but also in neutral, as they are called, other non-deliberately forms of language, like everyday interactions and genres of written or oral speech (Kövecses 2017, Lakoff and Johnson 1980).

Over the past forty decades, there has been a wealth of research on metaphor drawing on Conceptual Metaphor Theory, according to which linguistic metaphors are part of the mental lexicon acquired through exposure to the native language. Idiomaticity can explain the pervasiveness of this figure of speech and enables people's understanding according to Lakoff (1992). In effect, a conceptual system governs our thought and it seems to be operating automatically. Consider the concept ARGUMENT, the conceptual metaphor ARGUMENT IS A WAR and the variety of expressions where this metaphor is reflected. For instance, "He shot down all my arguments" or "He demolished my argument", obviously demonstrate our view of interacting with other people as gaining or losing ground and others as opponents or enemies.

Clearly, metaphor comprehension within Cognitive linguistics is interconnected with mental preexisting concepts of our cognitive system. Would that operate as an obstacle when encountered by foreign language learners since their conceptual mappings are originally constructed in another language? Would that clog their comprehension? Recall that on this account, an experiential basis can be beneficial to metaphor comprehension by resorting to pre-established mappings in order to interpret metaphors. To exemplify, phrases drawing on the idea of up and down which imply the idea of good and bad. "His income went up", is grounded in the experience of pouring more fluid into a container (see Lakoff 1992). Undeniably, these examples advocate the close connection between language and thought as supported by CMT (Conceptual Metaphor Theory).

In fact, several researchers have attributed certain properties of significance to metaphors. Metaphors are of significance for language learners appearing to exploit

metaphorical utterances as a vehicle to ease comprehension in cases of difficulties related to semantics (see Ifantidou 2019). Respectively, Glucksberg and Keysar (1993), in their *How Metaphors Work*, pinpoint that metaphors understood via conceptual mapping, are not read faster than others, possibly implying that individuals do not necessarily use conceptual mappings to achieve comprehension.

From a relevance-theoretic perspective, the question is whether metaphors trigger affective values, too, in tandem with cognitive effects facilitating comprehension. This remains to be examined in our study by using metaphors geared to expressing four basic emotions those of *Love, Fear, Sadness* and *Happiness*.

Another line of research as far as non-native speakers are concerned, is Littlemore's work (2013, 2017), on the significance of metaphor as an educational tool, which can be used in order to extend learners' knowledge. Metaphors can be used to extend knowledge by activating a different mode of reflecting on a given subject (Littlemore 2017: 2). Metaphorical utterances, can be used by learners appropriately in productive skills such as speaking and writing and not only in receptive (reading and listening), as according to Littlemore they can serve a variety of educational functions. Littlemore and Low (2006), highlight the importance of metaphor in language, especially in second language teaching, from the earliest to the most advanced stages of learning.

Among the functions served via the advanced metaphorical competence displayed by language learners, is its contribution to all areas of communicative competence (Littlemore and Low 2006). Metaphorical competence can contribute to grammatical, textual and illocutionary competence of foreign language learners. Littlemore *et al.* (2006), consider "metaphoric competence" as stated in their study, to include both knowledge of and ability to use metaphors. Littlemore and Low (2006), claim that *textual competence*, in other words the ability to understand and produce well-organised and cohesive texts in written and spoken contexts, can be amplified by language learners' "metaphoric competence".

To conclude, in this section I have argued that the ability to interpret and produce metaphors can contribute to building language learners' communicative competence (Littlemore and Low 2006, Littlemore 2013, Littlemore 2017). Consequently, the factors that foster metaphorical competence need to be further examined along with the foreign language associations adopted by L2 (second language) learners in the interlanguage which the learners may gradually adopt, as Piquer-Píriz and Alejo-González (2019) support.



## Chapter 3

### Metaphor in use

#### 3.1 Introduction

In this chapter I would like to discuss the issues raised when metaphors are used. For this reason, I begin with section 3.2, where I present metaphorical competence and what it denotes. Metaphorical competence entails interpretation and production of metaphors, too.

Section 3.3, sheds light on the different approaches when processing metaphors and which one can best apply to metaphor processing in the field of foreign language education. Whether conceptual mappings or non-propositional effects are factors which influence how we process metaphors, will be investigated. Are affective values triggered in tandem with cognitive effects to facilitate comprehension?

In section 3.4 of Chapter 3, I turn to the issue of correlating metaphorical competence with the level of language proficiency in English as a second language. Language proficiency is regarded as a substantial factor contributing to metaphorical competence but it seems that it may not be the only one.

Chapter 3 closes with section 3.5, which deals with the foreign language input and the relationship established between the *language input* the learners receive and the *language output* they can produce.

#### 3.2 Metaphorical competence

In this section I would like to raise the issue of metaphorical competence. Metaphorical competence denotes both the ability to interpret and produce metaphorical utterances. I will first refer to metaphorical competence in general concerning all individuals and then I will narrow it down to language learners of a foreign language. Linguists coming from a variety of theoretical backgrounds and disciplines, pinpoint the existence of different factors which seem to influence metaphorical competence, especially metaphor interpretation.

To begin with, Carston (2012), introduced the idea that interpreting metaphors in terms of *loose use* and processing them through a relevance theoretic account, is a breakthrough but it may be incomplete. Carston (2012), raised the question of how moving from the lexically encoded concept to the new metaphorical concept is effected. She questioned that the properties attributed to the new concept are

always found in the encyclopaedic properties of the lexically encoded concepts used in every metaphor. Consider the following metaphor:

4) Robert is a *bulldozer*.

This metaphor is interpreted if we bring together the encyclopaedic entries for *Robert* and *Bulldozer*. The relevance will be established through *weak* and *strong* implicatures but in the above case the implicature that comes to mind is rather weaker. The implicature here, has to do with Robert's *obstinacy* and *insensitivity*, properties which cannot be recovered from the encyclopaedic entry of the concept BULLDOZER.

The psychological properties of *obstinacy* and *persistence* applicable to Robert by comparing him to a bulldozer, are not those of the machine used for moving earth. The properties of the two encyclopaedic entries interact somehow, to make some different properties plausible for Robert. This interaction, according to Carston (2012), seems to be justified by a large number of preexisting metaphorical schemes playing a fundamental role in structuring abstract concepts. Preexisting schemes or the specific scheme that PEOPLE ARE MACHINES, may underpin the *bulldozer* example.

In a more recent discussion, (Wilson and Carston 2019), acknowledged the challenge of non-propositional effects, claiming that it is not mere cognitive processing that facilitates metaphor interpretation. On the contrary, current linguistic approaches to pragmatics, should include other aspects which allow images and other mechanisms (perceptual, emotional, sensorimotor), to ease metaphor interpretation. Wilson and Carston (2019), claim that skilled language users can exploit the fact that sensorimotor simulations are activated by language. Speakers and writers craft their utterances or texts in such a manner, so that they can promote the experience of *imagery* in their addressees. *Imagery* and *affective states* are automatically activated products of pragmatic and linguistic processes. Yet, are *affective states* and *imagery* influenced by individual experiences?

Individuality plays an important role in how native and non-native speakers interpret metaphors as indicated by some linguists (Littlemore 2013, Wilson and Carston 2019). Metaphorical utterances can be paraphrased in rather different ways, which justifies their description as "open-ended". Wilson and Carston (2019), claim that *imaging* is linguistically guided and that the mental images activated are provided by the language itself. A line of research introduced that being a holistic or analytic learner or even being a convergent or divergent thinker, can at times influence metaphor interpretation (Littlemore 2001, Littlemore and Low 2006). In other words, individuality is of major importance and designates how people in general or learners more specifically, can interpret metaphors.

Metaphor comprehension has been recently investigated within neurolinguistics (Huang and Yuhang 2022) and Cognitive pragmatics, suggesting that metaphors are richer in affective connotations than previously considered (Ifantidou and Hatzidaki 2019, Ifantidou 2019, Ifantidou 2021, Nacey 2022). This research sheds light on the role of emotions and mental imagery in how we understand metaphorical meaning in the context of English, more specifically as a foreign language. This line of evidence on the role of the *affective states* on metaphor interpretation (Ifantidou and Hatzidaki 2019, Ifantidou 2019, Ifantidou 2021, Huang and Yuhang 2022) triggered my research on language learners of English as a foreign language. My intention is, to examine whether emotional connotations could also activate metaphor production and not only facilitate metaphor comprehension. Consider that Huang and Yuhang (2022), view metaphors as an important observation object in linguistic research and carrier of emotion.

Based on the available evidence (Littlemore 2010, 2017, Hall 2022), I believe that metaphors could be used as a tool to foster pragmatic awareness in the foreign class environment. Whether emotions are an encouraging factor for learners to produce metaphors in the foreign language, remains to be further investigated. Littlemore (2010, 2017), pinpoints that language learners' metaphorical competence can improve their proficiency in the target language. Not only their grammatical but also their illocutionary and textual competence can improve as stated in section 2.4 of Chapter 2.

To conclude, metaphorical competence when it comes to interpretation, lies in personal experiences and prior memory, as these "open-ended" effects are inferred by their contribution (Carston 2010). Yet, can personal experiences and affective states work for metaphor production? I will next attempt to touch upon some theoretical frameworks on metaphor processing in the following subsection.

### **3.3 Processing metaphors**

Previous research has focused mostly on how we receive and comprehend metaphorical utterances rather than how we produce them, which is an underexplored field in pragmatics. Several researchers (Nacey 2013, 2022, Theodoropoulou and Xioufis 2021) take Conceptual Metaphor Theory (CMT) as the starting point in postulating the theoretical framework for metaphor processing as a procedure which involves the relationship between two domains of knowledge and emphasizing the literal and figurative interpretation of utterances which seems to be contingent upon contextual properties. For example, in the sentence "My lawyer is a shark", comprehension is achieved through comparing the common characteristic of *ruthlessness* existing both in lawyers and sharks. As a result, this metaphor is

conventionally perceived and the characteristics seem to be more constrained for such conventional and dead metaphors compared to novel ones (Traugott 1985: 36).

At this point, I will refer to what characteristics classify metaphors as dead and conventional. Metaphors are regarded as *dead* when they lack *vitality* according to Muller (2008: 179), which connects them to metaphorical processing and thus the consciousness of metaphoricity (i.e., the quality of being metaphorical). Dead or frozen metaphors are figures of speech that readers are familiar with and eventually do not conjure an image anymore or do not require much thought or analysis. Many linguists would claim that they have lost their *force*. This becomes obvious for example in cases like “the leg of the chair” or “the foot of the mountain” where processing them is not needed anymore as they are repeatedly used and have lost their *uniqueness*. In such cases we need less or no effort at all to process them.

Conventional metaphors however, are conventionalized and thus codified in the standard lexicon of the language in question. The majority of conventional metaphors are understood through preexisting conceptual metaphors and mappings, which seems to allow them to be processed more effortlessly. They are phrases which comprise of words whose literal and metaphorical meanings are connected through similarity (e.g. *a gene is a blueprint*, is perceived through comparing the properties of a gene to those of a blueprint in order to facilitate understanding, as it has been mentioned in the previous sections 2.3 and 3.2 also).

According to Nacey (2013), basic knowledge of conceptual metaphors in the foreign language may facilitate interpretation but this does not necessarily help and spark production among language learners. On the same note, Littlemore *et al.* (2018) in a study conducted assessing metaphor understanding in English, Spanish and Mandarin Chinese, found that metaphors containing an “optimal” (intermediate) degree of novelty or conventional metaphors, were more likely to be perceived easier than creative metaphors. The metaphors included in Littlemore *et al.* (2018) study, were of “A is B” type grounded in the Conceptual Metaphor Theory. Thus, if prior knowledge of conceptual metaphors can operate not only as a vehicle to provide understanding but also as stimuli and source for production, is not yet fully demonstrated, especially in the case of an educational environment.

From a Relevance theoretic point of view, conventional metaphors require less processing, as implicatures are usually fairly easily accessible or fewer in terms of search space. The linguists and philosophers who are in favour of this theoretical framework, highlight the need for following a path of less effort in deriving cognitive effects, so as to access only the relevant properties in context. The process which applies to metaphor for Relevance Theory can be illustrated in three stages as they follow. Firstly, we access our encyclopedic knowledge of the lexical concept described, secondly the speaker’s explicit meaning and then we infer the implicature

(the process is described through the use of examples in section 1.4). In other words, we process metaphors inferentially. Undeniably, this approach sounds very promising but could it stand alone in the cases of language learners?

Consequently, we deem and pose the question of which of the frameworks we described, could best apply to metaphor processing in the field of foreign language education. Wilson (2011: 196), characterises the two theories as complementary and not contradicting. On the same note, I tend to believe that both conceptual domains mapping and pragmatic inference can be considered as a continuum.

Wilson and Carston (2019), in a recent paper postulate the challenge of “non-propositional” effects which should be taken into account in processing metaphors and the contingencies of individual memories and associations which may influence it. An ostensive act, loaded with perceptual and sensorimotor information can attract the addressee’s attention and focus on the communicator’s intentions, which indicates that what is communicated by it, is the *intended import*.

If we take for granted that this *intended import* communicated by *showing* (showing a photo) and by *telling* (offering direct evidence) may yield an array of propositions, it would be interesting to find out if verbal stimuli may tap into further elements beyond propositional content. This can be explored while processing metaphors in a natural classroom setting, where the educator, the material taught and exposure to natural language (as described in the Introduction and in the Sections of Methodology and the Procedure of the experiment), would license cognitive and emotive effects during production as well.

### **3.4 Metaphorical competence and language proficiency**

Correlation between metaphorical competence (i.e., the ability to identify, interpret and produce in this research) and language proficiency of the second language (L2), have been an object of interest and frequent research among a plethora of contemporary researchers (Nacey 2013, 2022, Littlemore 2013, 2017, Munoz and Martinez 2022) more specifically, those who are mostly interested in the use of metaphors in the field of education and language acquisition.

There seems to exist an influential interaction between the level of grammatical and lexical proficiency of the language learners and their capacity to process metaphorical utterances as part of the educational material. An obvious proclivity for variation in metaphorical competence following learners’ language level, demonstrates that language learners of lower language levels, lack the necessary language or pragmatic awareness background which would enable them to handle metaphors with ease.

In a study conducted by Munoz and Martinez (2022), findings indicated marked differences in figurative competence according to discipline and degree, when undergraduate students performed better at metaphor identification and college students frequently misidentified literal terms for metaphorical. Clearly, the level of acquired knowledge and metaphorical competence are interrelated.

When Littlemore (2010), carried out two experiments to examine the use of metaphor in university lectures, they drew the conclusion that they are widely used in the academic discipline but international students face difficulties in identifying and using metaphors, which seems to be connected or indicate a close relation to vocabulary and grammatical efficiency. This tallies with other studies (Azuma 2005, Aleshtara and Dowlatabadi 2014), showing a strong correlation between the students' knowledge of vocabulary and general language proficiency in English (as the studies were conducted with EFL students as participants) and their ability to understand and use metaphorical expressions in English.

When it comes to the instrumental factors that seem to influence and control both metaphor understanding and production, language proficiency is taken into account in studies carried out by eminent linguists such as Nacey (2013, 2022), Littlemore and Low (2006). Nacey (2013), sheds light on the influential contribution of the advanced level of the participants in her study between Norwegian learners of English and native English students and pinpoints that the Norwegian learners do produce (mostly) novel metaphors, more than their British peers due to their acquired language competence which gets stronger in more advanced levels. In accordance with Nacey (2013, 2022), Olkonemi *et al.* (2022), support that language proficiency is a significant element when learners process figurative language and this is a question to be tested in the experiment conducted for this M.A. dissertation.

It would be of interest at this point, to refer to a different approach expressed by Ifantidou (2019), who supports that metaphors can be chosen by learners among other inferential tools to provide and facilitate understanding in cases of hindrances of semantic difficulties. In her study, she highlights the substantial role that images, sensorimotor processes and emotional attitudes play, when they are triggered by certain words. According to Ifantidou (2019), emotion processing and metaphors are tightly linked and I will also attempt to examine if this emotional processing can operate as the impetus to evoke metaphor production, even in instances of second language learners of lower levels, in our case of intermediate level as acknowledged by CEFR (i.e., Common European Framework of Reference for Languages).

Could the learners identify the metaphors in the excerpts included in the pre-test, even when they have to overcome obstacles like unknown semantic items? The excerpts selected by the educator, included semantic difficulties purposely and it was stated clearly from the beginning that participants could not make any enquiries

concerning semantic difficulties during the pre and post-test. Could metaphor identification be triggered by specific lexical items describing the emotions of *happiness, sadness, fear* and *love* included in the excerpts? I will focus on these factors when I present the findings of the research in Chapter 6, Section 6.2.

### 3.5 Foreign language input

Foreign language input has been extensively acknowledged as a concept in the field of second language acquisition (SLA) as more often than not, pedagogists, linguists and educators admit the importance of the language *input* offered to language learners in EFL settings. Undeniably, the quality of the input provided designates the *output* produced by the foreign language learners. Let us first of all coin the term *input*, by saying that it refers to the exposure the learner experiences to authentic language in use, which can come from a variety of sources such as the educator, the interaction with other learners or even authentic material in the form of data from trustworthy websites on the Internet. From an educational perspective, textbooks used in class are not adequately equipped since the new generation is computer literate, which makes classroom material seem obsolete, even though publishing houses often update their educational material and adopt new formats to keep up with the new trends every so often.

In the early 1980s, Krashen (1985, 1989), supported that language can be learnt as a result of mental processing of linguistic features based on the input they receive. In his *input hypothesis*,<sup>2</sup> he claimed that the language we acquire subconsciously could be effortlessly used, especially if acquired in an anxiety-free environment. On the other hand, Ellis (1985, 2008), considered input important, based on a variety of theories like behaviorist, mentalist and interactionist, which view language learning as environmentally influenced by stimuli and the language input the learners are exposed to. Thus, language acquisition is controlled by external factors, too, among which can be types of language input other than textbooks. Wouldn't that apply to the case of familiarizing learners with figurative language such as metaphors which are omnipresent? It remains to be answered, as our participants are to be exposed to a variety of stimuli selected from textbooks and other reliable educational sources like the British website <https://www.independent.co.uk>.

In the same vein, Pawley and Syder (1983), Boers (2004) and Hall (2022), emphasize the instrumental role of the language input offered. Would metaphors viewed in texts increase metaphorical awareness and familiarize language learners with the

---

<sup>2</sup> Krashen (1985, 1989) states that learners progress in their knowledge of the language when they comprehend language input which is slightly more advanced than their current level. This level of input "i+1" is the learners' interlanguage and the next stage of language acquisition.

specific figure of speech? Since native speakers according to Pawley and Syder (1983), can produce metaphors based on lexical combinations and prefabricated structures and chunks of words such as idioms and collocations, we hypothesize that the same could be gradually achieved by language learners. If exposed to the appropriate material, would their pragmatic awareness be enhanced?

Consider also the significance of pragmatic awareness as a key element for language acquisition, as claimed by Eisenclas (2010) and Bardovi-Harlig, Hartford, Mahan-Taylor, Morgan, Reynolds, (1991). Eisenclas (2010), claims that language textbooks fall short in accurately describing naturally occurring data and points to the importance of supplementing classroom materials, so as to expose students to pragmalinguistic features of the target language.

To conclude, based on the hypothesis of the language input, I designed the experiment of my M.A dissertation to examine to what extent language learners, could become motivated to understand and most importantly to produce metaphorical utterances. In Chapter 4, I will present the Rationale, Participants, Materials and the Procedure of the experiment conducted in the natural classroom environment.



## Chapter 4

### Methodology

#### 4.1 Introduction

In this chapter I would like to present the Rationale of the experiment conducted. My intention was to examine how affective processes influence metaphor identification and metaphor production, too. Chapter 4 opens with section 4.2 of the Rationale and continues with section 4.3 where the participants' profile is presented.

In the last section 4.4 of this chapter, I discuss the materials used during the two stages of the experiment with the language learners. In the same section, I explain the procedure followed throughout the experiment in a detailed manner.

#### 4.2 Rationale

The current study is grounded in a corpus consisting of empirical data collected in the natural educational environment of classes taking place twice a week for a period of two months. It was conducted as a two-stage experiment in a natural learning environment at a foreign language centre. I examine if the foreign language learners (i.e., language learners of English), can perceive and identify metaphors illustrating the two basic feelings of *Love* and *Fear* and the two opposing feelings of *Happiness* and *Sadness* in the first stage of the experiment. Then, in the second stage, I investigate whether their ability to produce metaphors can be influenced by a form of *intervention* such as stimuli provided by the educator.

I also seek to investigate to what extent language proficiency interacts with metaphor production. For this reason, I administer two tests to two groups of participants of different language levels. A pre-test (see Appendix I) in the first stage, to investigate the participants' ability to perceive and identify metaphors conveying the aforementioned emotions, included in a variety of excerpts selected from different sources which will be presented in the Materials Section (4.4). Additionally, a post-test (see Appendix II) is administered in the second stage, to demonstrate the level of the language learners' competence to produce and to what extent this can be interrelated with their language proficiency.

I hypothesize that their ability to produce metaphors is highly related to the level of the acquired knowledge according to their level of proficiency which adheres to Nacey's (2013) study, suggesting that the more proficient language learners are, the more productive they can be in the field of metaphors. Concluding, I attempt to demonstrate that the occurrence of autobiographical experiences and memories can

trigger metaphor production irrespectively of language proficiency (with the task assigned in the second stage of the experiment, see Appendix II) as autobiographical memories have strong emotional effects which has been confirmed by other linguists (see Nacey 2022, Ifantidou and Hatzidaki 2021, Williams *et al.*, 1992).

### **4.3 Participants**

The overall design of the study involves two groups of Greek native speakers learning English as a foreign language. In total 50 teenage students, between the ages of 12 and 15 years of age (25 male, 25 female) completed two tests. With the pre-test, I requested them to identify the emotion expressed in 10 excerpts (see Appendix I). The participants were also instructed to write two sentences from the excerpts that helped them identify the emotion expressed on their answer sheets. The emotions in the excerpts were expressed with metaphors and I wished to examine whether the participants would identify them. The same participants were requested to produce a text of their own, illustrating one of the emotions mentioned in Section 4.2, using a figure of speech. All the texts of the pre and post-test were of the same length (50 words).

The participants were allowed to complete both tests, the pre-test and the post-test within the same time (30 minutes). Half of the participants were students of intermediate level (B-C senior) and the other half were learners of the advanced level (C1-C2), according to the Common European Framework of Reference for Languages (CEFR). All the learners were taught by the same educator.

### **4.4 Materials and Procedure**

The two tests were carefully designed by the educator and proofread both by a linguist and an experienced teacher of the English language, to ensure that the metaphors included could activate the emotions mentioned in the instructions and that those metaphors could be identified in the 10 excerpts included in the pre-test.

They were selected by the educator purposely so that they would be representative of a variety of genres which reflect the interest of the age group of the participants. Half of those (5 items) were reviews of books, TV series, albums and movies from the British website <https://www.independent.co.uk>. They were modified by the teacher and obvious lexical items of the four emotions were excluded to avoid biasing participants' answers. For example in excerpt 1, "The third season of ..... *Is Blind* has officially dropped on Netflix", the word *Love* was not included in the excerpt.

The remaining half (5 items), were selected from standard textbooks for intermediate and advanced level learners and were modified so that words alluding to the four emotions would not appear in the texts. For example in excerpt 9, “Dark is sorrow but there is still hope”, the lexical item *fear* was replaced by *sorrow*. All 10 excerpts consisted of 50 words. The participants were delivered an answer sheet requesting them first to identify the emotion illustrated and then write 2 phrases from each text which activated the emotion they had identified. I requested them to write two sentences expecting that some of the participants would identify the metaphor which described the emotion in each of the 10 excerpts.

I selected the test format and not a classroom occurring discussion as I opted for unbiased answers on the one hand and on the other hand I wished to ensure that they would be offered the time and opportunity to identify the metaphor incorporated in the excerpts. I avoided interviewing the participants and preferred to use the form of a pre and post-test to prevent “the observer’s paradox” from exerting influence on the findings. Labov (1972), claimed that when a situation is observed, it is unwittingly influenced by the investigator’s presence. During the whole procedure the participants were silently supervised by the teacher to prevent them from cooperating and to keep good track of time limits.

In testing metaphor production in the second stage of the experiment, the participants were assigned to complete the post-test. They were requested (in 50 words) to narrate an event they have experienced recently illustrating one of the following emotions: *happiness, sadness, fear, love* and find the best possible way to express the specific emotion *vividly* to the readers of their text through *a figure of speech*. They had to complete the post-test which was in the form of an answer sheet with the instructions presented above, provided by the educator, asking them to tick their sex and write their texts on it in 30 minutes. During the whole procedure, they were silently supervised by their teacher who did not offer any form of help or other explanation.

At this point, I need to refer to the fact that all the participants were exposed to a series of stimuli carefully chosen by the educator for six weeks in order to enhance participants’ performance and build their confidence in identifying and producing metaphors as well, before completing the post-test. The material used in class by the teacher is demonstrated in Appendix III and it included tasks from their textbooks and metaphorical sentences from a variety of texts from the newspaper website <https://www.independent.co.uk>. The tasks used, were supposed to reinforce their ability to identify and mainly produce metaphors in the target language by cultivating their pragmatic awareness of the foreign language taught (i.e., English).

## Chapter 5

### Results

#### 5.1 Introduction

In chapter 5, I would like to discuss the results of the study and the experiment conducted in class with the participants of the advanced and intermediate group. The results are analysed in two sections as there are two stages in the experiment of our study.

In section 5.2 of the Results, I present the results of the pre-test administered to participants, comparing the differences and the similarities of metaphor interpretation between the advanced and the intermediate participants.

In section 5.3, the results of the second stage of the experiment are presented. Section 5.3 is about metaphor production by the two groups of the language learners.

#### 5.2 Metaphor interpretation

In testing the ability of the participants to identify metaphors pertinent to emotions, we analyse the data we collected through a quantitative and qualitative approach. Table 1 shows the metaphors of the pre-test which were incorporated in the 50 word-length excerpts and the percentage of each metaphor identified. The participants were required to identify them along with the emotion they perceived after having read the texts. I need to emphasize that the words *love*, *sadness*, *fear* which appear in the examples 1, 2, 5 of Table 1, were excluded from the pre-test administered to our participants. Additionally, example 9 was modified as explained in section 4.4, to avoid biasing participants' answers.

Taking into consideration the results depicted in Table 1, we can account for the similarities and the differences between the participants of the two levels by stating that the majority of the advanced participants managed to identify mainly the metaphors which were related to *happiness* and *love* used in extracts 6, 7, 8 by 60%, 56% and 48% respectively. This implies the participants' ease to identify metaphors that are related to positive emotions either due to their conceptual mappings or to chunks of language they have been previously familiar with (see the idiomatic phrase "completely over the moon"). This will be further analysed in Chapter 7. Striking enough is their difficulty to identify the metaphor "Dark is sorrow" (0%), purposely modified by the investigator and connect it to *sadness*.

Contrary to previous literature (see section 3.4), the participants of the intermediate level did not seem to face difficulties with dealing with semantic obstacles and identified the same metaphors as their advanced peers. The easiest test item for them was the idiomatic phrase “over the moon”, identified by 56% followed by “the hearts are totally open” (48%) and “Travelling is .... at home” (40%). The metaphor of the outmost difficulty for them seems to be “Love is blind” (0%), which can be probably attributed to the fact that I had purposely excluded the lexical item *love* from excerpt 1. This modification may have blurred identifying this metaphor.

Table 1 Metaphors of the pre-test and percentage of metaphor identification

	Advanced level participants			Intermediate level participants		
	Male	Female	Percentage	Male	Female	Percentage
1) Love is blind.	3	2	20%	0	0	0%
2) Henry is an ocean of bottled-up sadness.	4	2	24%	1	2	12%
3) The first track is a laundry of woes.	2	2	16%	0	1	4%
4) This sequel isn't an emotional rollercoaster.	1	1	8%	0	0	0%
5) Fear is a valley of anxiety.	5	3	32%	4	2	24%
6) Travelling is leaving all my beliefs and worries at home.	8	6	56%	3	7	40%
7) I was completely over the moon.	9	6	60%	4	10	56%
8) The hearts are totally open.	6	6	48%	3	9	48%
9) Dark is sorrow.	0	0	0%	1	1	8%
10) My mind raced with questions	2	1	12%	0	1	4%

Worth mentioning is the fact three test items, namely the metaphors in excerpts 6, 7, 8 operate reversely between the two groups of participants (i.e., intermediate and advanced participants), in terms of metaphor identification. I observed that there is a tendency of more male advanced participants to identify the metaphors of these excerpts (excerpts 6, 7, 8), contrary to intermediate level learners. Interestingly, more female participants identified the same metaphors from the intermediate level group. If this is pertinent to criteria of age and sociocultural factors may be of interest for potential future research.

To conclude the metaphor “This sequel ..... rollercoaster” (excerpt 4), could not be identified by any participants from the intermediate level group, even though a rollercoaster should bring to their minds a familiar image expected to facilitate understanding. As for the advanced participants, I would say that the percentage who identified it, seems to be rather low (8%).

### **5.3 Metaphor production**

In testing participants’ ability to produce metaphors, the results seem to be of interest for both groups (i.e., intermediate and advanced participants). However, the findings contradict what has been supported by previous research (Munoz and Martinez 2022, Aleshtara and Dowlatabadi 2014, Littlemore 2010), suggesting that language learners of lower levels lack the necessary language background to handle and produce metaphors with ease (see section 3.4). As shown in Tables 2 and 3, participants demonstrated high proclivity to generate metaphors illustrating their personal experiences.

Consider the fact that participants were requested to narrate an event they have *experienced*, illustrating *vividly* their emotions of *happiness, sadness, fear, love* using a figure of speech. This task was assigned in the second stage of the experiment. Our findings are in agreement with my initial hypothesis that autobiographical experiences and memories can trigger metaphor production irrespectively of language proficiency. Autobiographical memories have strong emotional effects which has been confirmed by other linguists (see Williams *et al.*, 1992, Nacey 2022, Ifantidou and Hatzidaki 2021).

Table 2 Examples generated by advanced learners (C1-C2 Level)

Advanced level participants				
Examples	HAPPINESS	FEAR	SADNESS	LOVE
1) Had passed my exams with flying colours.	✓			
2) I was over the moon.	✓			✓
3) I was scared to death.		✓		
4) I felt butterflies in my stomach.	✓			
5) Having ice in his veins.	✓			
6) I felt I was stepping on thin ice.		✓		
7) Fear started running through my body. Anxiety running through my body		✓		
8) Love flew me to the moon. Butterflies in my stomach.				✓
9) Looking at me like a deer caught in headlights.		✓		
10) Fear took over my body. My anxiety was through the roof.		✓		

The percentage of advanced participants producing metaphors amounts to 60%, with the greater proportion of them showing a tendency to generate metaphors applying to the emotions of *fear* and *happiness* and *love* at an equal rate. The factors which may have triggered the production of the specific examples whether influenced by prior conceptual knowledge, image schemas or sensorimotor stimuli, will be examined in Chapter 6 of Discussion with reference to relevant and recent research on metaphor production.

Nevertheless, a first conclusion drawn from the data presented in Tables 2 and 3, can be that the higher proficiency of participants can be associated with the greater variety of idioms (see metaphors 1, 2, 3, 4, 8) used by the advanced participants. This is justified by their higher L2 competence in terms of a more robust lexical background in the target language. Another dimension to be taken into serious consideration, is the selection of the lexical items of *run*, *took over* and *caught* in the description of experiences illustrating *fear* (see examples 7, 9, 10). Evident in the aforementioned example of “Fear started running through my body” (example 7), is the *containment schema* (Johnson 1987), when our bodies are perceived as containers.

Table 3 Examples produced by intermediate learners (B-C senior)

Intermediate level participants				
Examples	HAPPINESS	FEAR	SADNESS	LOVE
1) I felt my heart stopped		✓		
2) My heart was dead		✓		
3) The forest looked like a bloody river of dead people			✓	
4) I was scared to death		✓		
5) My dad froze in fear		✓		
6) My blood froze in fear		✓		
7) My hand froze (playing the guitar)		✓		
8) I had just taken a bath of sweating		✓		
9) I was over the moon	✓			
10) The ball was flying	✓			

As far as the production of metaphors by the younger participants is concerned, the fact that they shared the same enthusiasm with the advanced group to produce metaphors, is positively surprising. Therefore, 14/25 (i.e., 56%) of the participants produced the metaphors displayed in Table 3, showcasing their ability to generate based on their previous experiences. Requesting them to narrate recent experiences illustrating their emotions, may have been the vehicle to activate production. This is in accordance with previously mentioned accounts (see Ifantidou and Hatzidaki 2021, Nacey 2022).

Repetition of the lexical item *froze* and *heart* among participants of the intermediate group, is observed when illustrating instances of *fear*, being by far the most prevalent in their metaphors. As shown in Table 3, the subject-verb-object word order, is possibly indicative of younger learners' lack of confidence to expand on their ideas. The above word order, may suggest their difficulty to be more imaginative and creative upon expressing themselves in writing. For example the metaphors

- 5) a) "My dad froze in fear"
- b) "My hand froze"
- c) "My heart was dead"



all display the same word order.

Furthermore, repetition of the subject-verb-object structure, could possibly suggest influence of the idiomatic phrase “I was scared to death”. This may point to the contribution of the teacher’s intervention. This idiomatic phrase was included in the tasks provided (see Appendix III) used to raise participants’ pragmatic awareness through exposure to metaphors. The task with the idiomatic phrases used, may have contributed to their feeling *safe* to produce using structures and patterns they are familiar with.

To conclude, it is essential that we point out the prevalent preference of the younger learners (especially the female ones), to illustrate vividly the emotion of *fear* in their metaphorical sentences which can be to a certain extent in accordance with their young age. Recent research highlights the close connection between younger adults (YA) and overall higher levels of fear contrary to older adults (OA) who prefer to engage with more positive information and demonstrate lower levels of fear and worry across many domains (see Villalba, Stanley, Turner, Vale and Houston 2020). Additionally, participants’ preference for the negative emotion of fear can be related to another study. Littlemore et al. (2018), in their study of metaphors in three languages observed that metaphors containing negatively valenced words, were more likely to be considered *high-quality*, in other words to be appreciated as metaphors.

In the following Chapter 6 of Discussion, I will refer extensively to other aspects such as the factors that seem to have influenced the production of the metaphors on behalf of the learners, which differentiate our research from previous research in the field of metaphor production, when it comes to language acquisition. I will also comment on the type of metaphors produced by the language learners and the possible implications, limitations and suggestions for future research.

## Chapter 6

### Discussion

#### 6.1 Introduction

In this chapter I would like to discuss the findings of the study in section 6.2. The findings suggest the influence of preexisting conceptual mappings in metaphor interpretation and production but we also acknowledge the significance of cognitive-affective processes. Cognitive-affective processes operate to facilitate comprehension and evoke metaphor production when language learners are requested to give a vivid description of emotions.

In section 6.3, I will attempt to shed light on the metaphors produced by the participants by further analyzing the lexical combinations and lexical items selected by the participants for producing their metaphorical utterances.

The last section of chapter 6 (section 6.4), deals with the role of the language input and the intervention in the form of in-class tasks. We examine what their possible influence on metaphor production may have been.

The chapter closes with the implications, the limitations and suggestions for future research presented in section 6.5.

#### 6.2 Summary of findings

The findings of the two-stage experiment we conducted in class with the language learners of the English language, seem to be divided into two categories since half of them are in line with previous research whereas some others are not. To be more specific, as for the first part of the experiment addressing the learners' competence to identify the emotions of *love*, *fear*, *happiness* and *sadness* illustrated through the use of the metaphor as a figure of speech, it was indicated that the groups of the participants despite their variations in the level of language taught (i.e., 25 were advanced level students and the other half were intermediate level students) were competent to identify the same metaphors successfully.

It is worth mentioning that both groups showed higher performance in identifying the idiomatic phrase "completely over the moon" as a metaphor which describes *happiness* with little variation between them as 60% of the advanced level contrary to 56% of the intermediate level participants identified it. This seems to be in accordance with previous research which supports that pre-fabricated phrases like

idioms and collocations can be easily adopted by learners of a foreign language and become part of their mental lexicon. These pre-fabricated expressions seem to be stored as a unit which can be more easily retrieved by learners when they process language and linguistic properties of lexical items. (see Pawley and Syder 1983, Gibbs 1980, Kjellmer 1991, Sinclair 1991, Kemmer and Barlow 2000, Jiang and Nekrasova 2007).

Therefore, formulaic sequences like idioms and collocations are stored and processed holistically (i.e., memorized as a unit and retrieved as a whole). This may be a factor facilitating interpreting and identifying figures of speech. The same framework is evident when it comes to metaphor production due to the fact that the majority of the metaphors produced by the advanced participants belong to the category of the formulaic sequence of words as they mainly used idioms to describe their personal experiences (see Table 2, numbers 1,2,3,4,8). Contrary to the majority of the advanced participants who produced metaphors using idiomatic phrases, very few of them took the challenge to generate novel metaphors, with the exception of “Looking at me like a deer caught in headlights” as shown in Table 2 (see example 9).

This is indicative of the language acquired at this level which allows them to adopt idioms and collocations to sound more native-like. The intermediate level learners, used some pre-fabricated phrases but not to the degree of their advanced peers (see Table 3, numbers 4, 5, 9). There seems to be a repetition of lexical items describing the experiences of *fear*. To elaborate, the lexical item *freeze* is often repeated in their metaphorical utterances possibly suggesting that linguistic metaphors are implementations of other broader conceptual metaphors as analysed in previous sections (see sections 2.2, 2.4 of Chapter 2).

Returning to our findings on identifying metaphors, I would like to emphasize the aspect that both advanced and intermediate level participants, achieved a high score in identifying the phrase “Travelling is leaving all my beliefs and worries at home” (see Table 1, example 6). Their ease to identify the aforementioned metaphor may lie in the fact that this conceptual metaphor is a spatial metaphor, too. Lakoff and Johnson (1980), mention types of spatial orientation like *front-back*, *in-out*, *up-down* used to facilitate understanding abstract concepts in terms of perceptual experience. Participants may have identified positive elements in this metaphor (see Table 1, example 6) due to *moving forward* suggested by the lexical item “leaving”. “Leaving” triggers positive connotations of moving in space and it may also include affective associations of being *happy*. All the aforementioned mappings and experiential elements seem to have eased interpreting this metaphor and associating it to the emotion of *happiness*.

The satisfactory performance of both the advanced and intermediate participants as far as the specific metaphor is concerned, (see Table 1, example 6), suggests that

conceptual metaphors in their mental lexicon applying to TRAVELLING in their mother tongue, encouraged them to venture a successful guess. This is in line with Nacey (2013), who supports that conceptual mapping of the mother tongue may contribute to metaphor understanding in the foreign language.

On the other hand, taking it a step further, I would be tempted to attribute the participants' successful interpretation of this metaphor, to the experiences obtained while travelling. These experiences equal to moments of happiness and carelessness (see Table 1, example 6, *leaving my worries* at home) that may have *subconsciously* assisted younger participants to identify this metaphor despite any possible unknown word obstacles.<sup>3</sup> We should also keep in mind the sensorimotor stimuli and possible experiences which work in favour of using or showing preference for metaphors as inferential tools as stated by Ifantidou (2021).

To conclude, the *tourist experience* is essentially multisensory and promoted through the use of metaphorical language as shown in a study by Jaworska (2017), and as a result this may have enabled them to connect it to the emotion of happiness and spot the metaphor easier in excerpt 5 included in the pre-test (see Appendix I). Consider also the fact that participants were exposed to intervention tasks, relevant to the *tourist experience* they have previously acquired and vocabulary revealing emotions, in units of the textbooks used in the school curriculum (see Appendix III).

Proceeding with the results for identifying the metaphors in the pre-test, I will continue with the metaphor "The hearts are totally open" (see Table 1, example 8). The performance was high for advanced and intermediate participants as well, possibly demonstrating the influence of the conceptual metaphor addressing *the heart* as a *container for emotions*. I will first refer to what may have facilitated their understanding and subsequently to what may have triggered the production of metaphors using the lexical item *heart*. Initially, the similarity of the lexical item *heart* to *open-hearted* and *ανοιχτόκαρδος* in their mother tongue, carrying properties of *care*, *affection* and *love* may have operated as the vehicle to facilitate the participants' understanding the metaphor and relating it to the emotion of *love* in this excerpt.

The fact that concepts in the human brain are organized in terms of distributed representations where conceptual representation in memory entails linked sensory (visual, aural, olfactory) action and semantic–linguistic knowledge may be the key factor in the above case (Athanasopoulos 2019). Concepts refer to multi-modal representations including linguistic, extra-linguistic and non-linguistic knowledge.

---

<sup>3</sup> The logical assumption of the semantic difficulties derives from the fact that the excerpt including the metaphor is from a book for C2 level learners according to CEFR.

Thus, meaning is not only the linguistic meaning but also the non-linguistic experiential representation which can be perceived as a synonymous term to concepts and can build the learners' competence.

In conclusion, the conceptual representation of the HEART AS A LIVING ORGANISM is obvious in the metaphorical utterances produced mostly by the intermediate level participants in the examples of "my heart stopped", "my heart was dead" (see Table 3), where the heart shares properties of a machine (stopped) and a human being (dead) when the heart is transformed into a person (personification). The conceptual metaphor seems to be grounded on the same concepts in the two languages (i.e., Greek-English) in the thought patterns but how their subsequent linguistic metaphors are realized may differ.

Notice that the heart metaphor is constant and universal, independent of origin and related to emotion. According to Desmond (2018) and Alelign (2014), the heart metaphor appearing in several languages such as in Amharic and English languages, has various metaphorical pragmatic extensions. The heart, is the fundamental organ of the body, associated with cognitive and affective domains of humanity when used in metaphors. Alelign (2014), pinpoints that there is evidence in several Amharic metaphors, showing that the heart is assumed to be the source of emotion and thought. For example, "the mouth speaks what has been contemplated by the heart" and "get the heart from Gonjii and the knowledge from the neighbours" indicate the thought and emotional connotations of the lexical item *heart*. Alelign (2014), continues with showcasing the fact that the heart is related to sympathy and emotion in English as well, by exemplifying with the metaphor "I will remove the heart of stone from you and give you a heart of flesh" suggesting altering someone's emotional state.

In the following section 6.3, I will discuss metaphor production, with emphasis on the observation that the majority of the participants displayed a tendency to produce mostly conventional metaphors and avoided generating novel, creative metaphorical utterances in the post-test (i.e., the test we exposed them to, to examine their competence in metaphor production).

### **6.3 Types of metaphors produced**

In this part of my M.A. dissertation, I will shed light on the metaphors produced by the two groups of participants in a divergent mode than what I have explained in section 6.2. Evident though is the participants' preference for producing metaphorical utterances which emerge from relying their productivity on pre-

existing knowledge of idiomatic language, it can be of great interest to comment on their selection of lexical units especially verbs of motion such as *run*, *step*, *fly* (see Tables 2 and 3) which constitute parts of their metaphors.

Previous research places emphasis on the constant use of verbs of bodily movement and expression of emotions rooted on the schema EMOTION IS A MOTION (see Sandström 2006). Sandström (2006), investigated the close connection between emotion and expression of feelings through metaphors via verbs of movement. The concepts of emotion, motion and metaphor appear to be interconnected in a study that she conducted comparing data from the British National Corpus (BNC) and metaphor dictionaries.

Sandström (2006), attributed the common use of verbs of motion in describing situations of basic emotions like *happiness* or *anger* to the fact that motion is a basic image schema which assists our cognitive understanding of concepts through previous experience as also pinpointed by Ungerer and Schmid (1999). Langacker (1987), with his “Cognitive Grammar” developed imagistic representations for verbs and hypothesized that grammar may be deconstructed into patterns that come together to represent concepts. He developed an imagistic representation of cognitive processes which seems to justify the use of verbs of motion to express human emotion in a bodily way.

The use of the same verbs in our participants’ metaphors could be explained by referring again to Ungerer and Schmid (1999), and the outcome of their empirical research of the great impact the emotions have on our body (see Ungerer and Schmid 1999: 131). To elaborate, in the sentences “Fear/Anxiety started running through my body” (see Table 2), it is obvious that the participants who produced the utterances in question, consider fear to be a process passing through their body which in this case operates as a CONTAINER OF EMOTIONS (i.e., another common schema grounded on concepts and experiential elements).

I will proceed with the metaphor “Love flew me to the moon” (see Table 2 example 8). The emotion of *love* described in this metaphor with the motion verb “fly”, can be associated with positive connotations and implies lifting a person and transferring him or her to another destination. Thus, we can observe the underlying cognitive process which is realized through the process of bodily movement.

Worth mentioning is another instance of a verb of movement as in the following sentence from Table 2:

6) “I was stepping on thin ice”.

The participant wishes to convey the feeling of experiencing *fear* as an element slowing down the person’s movement. Another instance of using a verb of

movement indicating *happiness* this time, becomes manifest in the example “the ball was flying” (see Table 3). This may be connected to the conceptual mapping of moving upwards and be considered as a spatial metaphor. This metaphor describing a positive experience could be grounded on the Conceptual Metaphor Theory (Lakoff and Johnson 1980).

Viewing the data from a qualitative perspective, it was found that the participants did not to produce novel or creative metaphors, which suggests that in terms of originality their performance was poor. Contrary to what has been claimed by Nacey (2013), our learners of the English language did not display a sufficiently high performance of generating novel metaphors with the exception of few instances discussed in the next paragraph.

Both advanced and intermediate participants displayed competence in production after they had been assigned a variety of tasks (see Appendix III), possibly raising their pragmatic awareness of the target language. Raising their awareness via the in-class tasks, may have fostered their production. This will be discussed in section 6.4, entitled *Language input and intervention*. Here, I would like to discuss two metaphorical sentences expressing the feeling of *fear*:

7) “the forest looked like a bloody river of dead people”

8) “looking at me like a deer caught in headlights”.

Both metaphors expressing *fear* and *sadness* were produced by an intermediate and an advanced participant respectively. This is in line with previous research pinpointing that language learners can become more prolific and generate creative metaphors when they describe autobiographical experiences and intense feelings (see Williams *et al.* 1992). Additionally, it is claimed that they can employ their experiences and feelings to become productive in writing (Williams *et al.* 1992). However the production of creative metaphors among all participants was rather little.

To conclude, the observation that female participants seem to compose metaphors possibly perceived as more original or creative like in the two aforementioned cases of examples 7,8, should be carefully investigated in a future study. Even though it was not my initial intention to examine sociocultural factors potentially influencing metaphor interpretation and production, the data collected may show interesting tendencies. As stated in Chapter 5 of Results, it would be of interest to examine whether metaphorical competence is sex related and what sociocultural factors may be of importance in terms of metaphor interpretation and production.

In section 6.4, I will comment on the language input offered and the educator's intervention by means of the educational material provided to participants before the stage of production.

#### **6.4 Language input and intervention**

A wealth of research postulates the significance of exposing language learners to a plethora of multimodal stimuli to enhance their language competence and prevent their sociopragmatic failure in the target language. To exemplify, Bardovi-Harlig et al. (1991) and Eisenclas (2010), support the incorporation of samples of language observing social, cultural and discourse conventions in the educational environment and the school curriculum to improve and facilitate the realization of the pragmatic awareness of the language taught.

On the same note and sharing the perspective that has been formulated by Littlemore (2013, 2017) that metaphors would play the role of an educational tool for the benefit of language learners, we undeniably, tend to support that exposing them to selected material from the textbooks and excerpts of *The Independent* website, must have built their confidence triggering metaphor production. I also tend to believe that using metaphors as a figure of speech to illustrate emotional situations, can to some extent, be supported and cultivated. It seems that the more the learners practice, the more competent they may become in metaphor production. However, their language level and their grammatical and communicative proficiency may not be the deciding factor for metaphor production as stated in section 5 of Results.

The tasks performed in class throughout the period of two months, targeted at familiarizing participants with metaphors in the target language and offering them the *input* to build on, in terms of metaphor production, may have been beneficial. In line with research suggesting the significance of language *input*, (Pawley and Syder 1983, Krashen 1985, 1989, Ellis 1985, 2008, Low 1988, Boers 2004, Zibin 2016, Hall 2022), I tend to consider language *input* influential for metaphor production.

Participants may have taken advantage of being exposed to tasks such as those described in this paragraph and shown in Appendix III. Initially, after the pre-test, they read the ten excerpts included and identified the metaphors used to express the four emotions of *fear*, *happiness*, *sadness* and *love*. The educator advised all participants not to pay attention to semantic difficulties in all stages of the experiment. Rather than that, she drew the participants' attention to



*comprehensible input*.<sup>4</sup> Then, tasks in the form of in-class activities like idioms used to express emotion, figures of speech used to express emotional states in editorials, texts relevant to describing feelings and experiences were incorporated in the educational procedure.

All the aforementioned stimuli, may have enabled participants to produce metaphors in the post-test. In Section 6.5, I will discuss the limitations and implications of the current study.

### **6.5 Implications and future research**

This study has some limitations as well as possible extensions. Firstly, further research should be conducted to employ a larger body of participants probably being observed and examined via more tests, during a longer time period, to ensure the validity and reliability of the results.

A future study could also indicate whether the selected material worked as a stimulus for triggering mostly the production of conventional metaphors especially for the intermediate level participants, who displayed a poor performance in generating novel and more complex sentences in structure when asked to produce metaphors.

Another aspect to be tested is whether participants' individuality as learners (i.e., what type of learners they are), as discussed in Section 3.2, may have influenced the findings of the current study as Littlemore and Low (2006) claim. Additionally, acquired knowledge of the first language should be first checked to exclude its influence in the foreign language production. Recall at this point, that a line of research claims that utterances may be paraphrased in different ways. Wilson and Carston (2019), claim that *imaging* is linguistically guided and that the mental images activated are provided by the language itself. Would transfer from L1 clog or facilitate metaphor production?

On the whole, metaphor production is an underexplored domain, which needs to be further explored, especially when it comes to second language acquisition. In conclusion, the crucial implication of this study is that, although metaphors in high frequency are processed through conceptual mechanisms, they may be interpreted and produced via our emotions and autobiographical memories as hypothesized in our research questions. Consider the fact that, participants were required to narrate an event they have *recently experienced*, illustrating *vividly* their *emotion* through a

---

<sup>4</sup> According to Krashen comprehensible input is crucial and the necessary ingredient for language acquisition. Comprehensible input allows learners to produce language when they are ready as this method does not force early production. Krashen (1985, 1989).

*figure of speech* in the second stage of the experiment. Metaphor interpretation and eventually metaphor production, may be a cognitive-affective process, especially in an EFL setting.

As discussed in Chapter 5 of Results and in Section 6.2 of Summary of findings, there is evidence that affective states operate as vehicles, facilitating metaphor interpretation as claimed by Ifantidou (2019, 2021). Interpretation of metaphors and metaphor production, are experienced with the contribution of non-propositional effects and facilitated by preexisting conceptual mappings, too. Undoubtedly, the role of non-propositional effects in metaphor interpretation and metaphor production is prominent but it seems as if it coexists with conceptual mapping. In Chapter 7 that follows, I will briefly discuss the conclusions of the current study.

## Chapter 7

### Conclusion

This study examined whether 25 advanced and 25 intermediate learners of the English language, could process metaphors by drawing on their perception of emotions, in terms of metaphor identification in the first stage and metaphor production in the second stage of the experiment conducted. Participants were instructed from the first stage of the experiment and throughout the whole procedure, (until the last stage of the post-test), not to pay attention to any semantic difficulties. Consider here, the fact that both advanced and intermediate participants were exposed to the same material and the same pre and post-test.

The same material was purposely selected, to examine participants' ease or difficulty to complete the tests, despite their variation in grammatical and communicative proficiency. Recall that, 25 of them were intermediate level learners and the remaining 25 were advanced level learners according to CEFR. Clearly, intermediate level participants must have faced semantic difficulties as part of the selected material comprised of excerpts used for advanced learners (bear in mind that A2 learners are basic users while C2 learners are proficient users of languages according to CEFR). Posing questions about unknown words during the pre and post-test was not permitted. Rather than that, participants were advised to pay attention to context and the emotion described in the excerpts.

The relatively high number of participants identifying the metaphors in terms of the perceived emotion in the pre-test, is in line with previous research. As noted by Ifantidou (2021), metaphors enhance comprehension by being vehicles for emotions such as affection and dislike. As suggested by our study, the interaction of cognitive-affective processes and metaphor identification is notable. Participants demonstrated high performance in identifying metaphors describing the positive emotions of *happiness* and *love*.

Requiring them to showcase their metaphorical competence of producing metaphors in the post-test, revealed interesting tendencies. After familiarizing themselves with metaphorical sentences incorporated in the intervention tasks, participants displayed an interesting performance in producing metaphors. The tasks were selected from textbooks, reviews and editorials in the British newspaper website *The Independent*. We consider that having exposed participants to the selected material, must have contributed to their metaphor production.

Closer examination of the participants' performance, revealed similarities in how they process metaphors but differences in their production patterns, as the majority of the advanced participants displayed a variety of pre-fabricated idiomatic language contrary to younger participants who produced but utilized simpler structure and lexical items in their metaphors.

The results suggest that requesting them to recall prior experiences and illustrate them via a figure of speech, was the vehicle to motivate the participants' metaphor production. Thus, cognitive-affective processes may have played a role in metaphor production as we hypothesized. This tallies with previous research as Williams *et al.* (1992), claim that language learners achieve a higher degree of productivity when they describe autobiographical experiences and intense feelings. However, most of the metaphors produced, could be classified as products of schematicity and preexisting conceptual mappings. I conclude then, that experiences which may have initially contributed to conceptualize situations, can ultimately provoke the production of metaphors, to be used in everyday discourse by language learners of both advanced and intermediate level.

As a final remark, I would like to point out two major differences with previous research (Nacey 2013, 2022). The first difference concerns the data collected as for Nacey's 2013 study, the data analyzed for linguistic metaphors derived from the Norwegian component of the International Corpus of Learner English (NICLE) and the Louvain Corpus of Native English Essays (LOCNESS). Nacey's 2022 study included data from a corpus of publicly available doctoral dissertations written in English, by both first and second-language speakers of English. In our study all the data compiled, were from Greek learners of the English language completing the pre and post-tests in class.

The second difference relates to the intervention before participants completed the second stage of the experiment. As indicated in our interventional tasks, exposing participants to a variety of educational stimuli and the educator's guidance in the form of the practice tasks offered in class before the post-test, seem to have benefitted the majority of the participants, especially in terms of their production of metaphors. It remains to be investigated whether exposing them to other genres, more creative (i.e., literature or poetry), would activate their production of more original and creative metaphors, too.

My overall evaluation of the quantitative and qualitative examination of the results of the study conducted, is positive but I would like to draw our attention to the fact that participants were required to complete all tasks in class, monitored by their educator keeping track of time. This circumstance may have confined their creativity in terms of metaphor production, as any possible anxiety they may have felt, might have been amplified by the educator's presence.

## Appendix I

The pre-test (for the first stage of the experiment)

**Read the following extracts carefully and answer the questions on the answer sheet.**

1. The third season of ..... *Is Blind* has officially dropped on Netflix and the drama has already been wild, to say the least. Since the first four episodes of season three premiered on Wednesday 19 October, viewers have already seen five couples get engaged after forming relationships in the pods.

2. Lawrence is brilliant here – fatigued, anxious, wonderfully unaffected. Henry, meanwhile, is an ocean of bottled-up ..... There is a scene about halfway through *Causeway* in which James talks about the accident that left him without a leg, but few specifics – or the horrid tangents it sprouted in its aftermath – are actually verbalised.

3. Picked apart, the lyrics – from the group’s forthcoming second LP, *Gulp!* – are revealed to be rather bleak. “The Game”, the first track, is a laundry of woes confronting Gen Z-ers and millennials in this age of unaffordable housing and gig economy-type zombie jobs. Yet the feeling it communicates is one of exultation.

4. With flashbacks via journal entries to the blossoming romance of their youth, as well as revelations about their past, Hoover intertwines Lily and Atlas’s love story in the past and present. This soft and fluffy sequel isn’t an emotional roller coaster like the first book, but it doesn’t have to be. This is very much a book for the fans who want to see their beloved characters happy.

5. Now she feels proud of herself in terms of her actions and the response of the community. She said: “My family and I felt desperate. There was no help for us and we didn’t know if the river was going to wash away all our hopes and concerns. .... is a valley of anxiety.

**6.** Travel guides us toward a better balance of wisdom and compassion. For seeing without feeling can be uncaring while feeling without seeing can be blind. Yet for me travelling is simply the luxury of leaving all my beliefs and worries at home and seeing everything I thought I knew in a different light and from a crooked angle.

**7.** When I first arrived in Australia at the age of 16, I was completely over the moon with everything – and I mean everything! I was so exhilarated that I was finally in Australia! You are, so-to-speak, wearing your rose-coloured culture glasses and cosily floating on a cultural cloud nine!

**8.** Although the programme was limited to 14 inmates, it was clear there has been a ripple effect through the prison. The interaction between the staff and inmates is amazing. Before it was yes sir, no sir –now it is more cordial. It is two human beings having a conversation. The hearts are totally open, explained the warden of the prison.

**9.** Van Gogh struggled with his mental health throughout his life. After his happy time in Arles, he became ill again. He began to add dark colours in his palette, showing his melancholy. Dark is sorrow but there is still hope. He used green, brown and grey to give the viewer the idea of the miserable lives they lived.

**10.** I was terrified and made my way back to the shelter looking behind me mistaking every bush and tree to be a man. I didn't sleep at all that night. My mind raced with questions I had no answers for. How was it possible that another man was on this island with me? Man or even worse men!



**ANSWER SHEET**

**MALE** .....

**FEMALE** .....

- Can you identify the main emotion expressed in the extracts?
- Which phrases from the extracts activated the emotion?

**EXTRACT 1** emotion .....

**PHRASES: 1** .....

**2** .....

**EXTRACT 2** emotion .....

**PHRASES: 1** .....

**2** .....

**EXTRACT 3** emotion .....

**PHRASES: 1** .....

**2** .....

**EXTRACT 4** emotion .....

**PHRASES: 1** .....

**2** .....

EXTRACT 5 emotion .....  
PHRASES: 1 .....  
2 .....

EXTRACT 6 emotion .....  
PHRASES: 1 .....  
2 .....

EXTRACT 7 emotion .....  
PHRASES: 1 .....  
2 .....

EXTRACT 8 emotion .....  
PHRASES: 1 .....  
2 .....

EXTRACT 9 emotion .....  
PHRASES: 1 .....  
2 .....

EXTRACT 10 emotion .....  
PHRASES: 1 .....  
2 .....

THANK YOU!!



## Appendix II

The post-test (for the second stage of the experiment)

**FEMALE.....**

**MALE.....**

In a text of 50 words narrate an event you have experienced recently illustrating one of the following emotions: happiness, sadness, fear, love. Find the best possible way to express the specific emotion vividly to the readers of your text through a figure of speech.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

THANK YOU!

## Appendix III

The list with the tasks the participants were exposed to in class before the post-test:

1) Analysis of the metaphors and the different genres of the excerpts included in the pre-test (see Appendix I).

2) Three editorials from *The Independent* website:

- The Independent is calling for free school meals for all children in poverty (October 12<sup>th</sup> 2022).
- The Prime Minister is caught up in a trap of her own making (October 12<sup>th</sup> 2022).
- Rishi Sunak needs to make time for the climate crisis before it's too late (October 28<sup>th</sup> 2022).

3) Vocabulary tasks with idiomatic phrases from *Activate your grammar and vocabulary* (Hamilton House).

4) Travel tales and vocabulary tasks about positive and negative feelings, from #2 (Express Publishing).

5) A horror story from *I52* (Express Publishing).

6) The search for wonder (Reading section), *On Screen* (Express Publishing).

7) Do you have true friendships? (Reading section), *On Screen* (Express Publishing).

## References

- Aleign, Wudie. 2014. The human body of metaphors: A critical analysis of the metaphoric extensions vis-à-vis Amharic and English languages. *The Philosophy of Ethiopian, African Systems of Thought Journal*.
- Aleshtar, Maryam and Dowlatabadi, Hamid. 2014. Metaphoric Competence and Language Proficiency in the Same Boat. *Procedia - Social and Behavioral Sciences* 98: 1895-1904.
- Athanasopoulos, Panagiotis. 2019. Conceptual representation in bilinguals: the role of language specificity and conceptual change. In *The Cambridge Handbook of Bilingual Processing*, 275-292. Cambridge University Press.
- Azuma, Masumi. 2005. *Metaphorical Competence in an EFL Context: The mental lexicon and metaphorical competence of Japanese EFL students*. Tokyo: Toshindo Publishing.
- Bardovi-Harlig, Kathleen, Hartford AS. Beverly, Mahan-Taylor Rebecca, Morgan Mary J. and Reynolds W. Dudley. 1991. Developing pragmatic awareness: closing the conversation. *ELT Journal* 45(1): 4-15.
- Black, Max. 1993. More about metaphor. In *Metaphor and thought*, 2nd edition. A. Ortony (ed.) Cambridge: Cambridge University Press, 19-41.
- Boers, Frank. 2004. Expanding learners' vocabulary through metaphor awareness: What expansion, what learners, what vocabulary?" In M. Achard and S. Niemeier (eds.) *Cognitive linguistics, second language acquisition, and foreign language teaching*. Berlin and New York: Mouton de Gruyter, 211-232.
- Carston, Robyn. 2012. Relevance theory. In Gillian Russell & Delia Graff Fara (eds.), *Routledge companion to the philosophy of language*. London: Routledge, 163-176.
- Carston, Robyn. 2017. Relevance theory and metaphor. In E. Semino (ed.) *Routledge Handbook of Metaphor and Language*. Abingdon: Routledge.

Citron, Francesca and Zervos, Emmanouil. 2018. A Neuroimaging Investigation into Figurative Language and Aesthetic Perception. In *Sensory Perceptions in Language, Embodiment and Epistemology*. Annalisa Baicchi, Rémi Dignonnet and Jodi Sanford Cham (eds.). Switzerland: Springer, 77–94.

Danesi, Marcel. 1986. The role of metaphor in second language pedagogy. *Rossegna Italiana di Linguistica Applicata* 18(3): 1–10.

Danesi, Marcel. 1993. Metaphorical competence in second language acquisition and second language teaching: The neglected dimension. In J. E. Alatis (ed.) *Language, communication and social meaning*. Washington DC: Georgetown University Press, 489-500.

Davies, Alan. 2003. *The native speaker: Myth and reality*. Clevedon: Multilingual Matters.

Deignan, Alice. 2005. *Metaphor and corpus linguistics*. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Deignan, Alice. 2020. Translating science for young people through metaphor. *The Translator* 25(40): 369-384.

Desmond, Sheridan. 2018. The heart, a constant and universal metaphor. *European Heart Journal* 39(37): 3407-3409.

Eisenclas, A. Susana. 2010. On-line interactions as a resource to raise pragmatic awareness. *Journal of Pragmatics* 43(1): 51-61.

Ellis, Rod. 1985. *Understanding Second Language Acquisition*. Oxford: Oxford University Press.

Ellis, Rod. 2008. *The study of second language acquisition* (2<sup>nd</sup> edition). Oxford: Oxford University Press.

Gibbs, Raymond W. Jr. 1980. Spilling the beans on understanding and memory for idioms in conversation. *Memory and Cognition* 8(2): 149-156.

Gibbs, Raymond W. Jr. 2006. Metaphor Interpretation as Embodied Simulation. *Mind and Language* 21(3): 434-458.

Glucksberg, Sam and Keyser, Boaz. 1993. How metaphors work. In *Metaphor and thought* (2<sup>nd</sup> edition). A. Ortony (ed.) Cambridge: Cambridge University Press, 401-424.

Grice, H. Paul. 1957. Meaning. *The Philosophical Review* 64: 377-388.

Grice, H. Paul. 1975. Logic and conversation. In P. Cole and Morgan (eds), *Syntax and Semantics 3: Speech Acts* 41-58.

Grice, H. Paul. 1989. *Studies in the way of Words*. Cambridge, Massachusetts, London: Harvard University Press.

Goldberg Adele, Mon Serena, Necheva Mira, Citron Franscesca and Lew-Williams Casey. 2021. Conventional metaphors elicit greater real-time engagement than literal paraphrases or concrete sentences. *Journal of Memory and Language* vol. 121.

Hall, J. Kelly. 2022. L2 classroom interaction and its links to L2 learners' developing L2 linguistic repertoires: A research agenda. *Language Teaching* 55(1): 100-115.

Huang, Huaxin and Yuhang, Li. 2022. Metaphorical description and model description of complex systems. *Computational Intelligence and Neuroscience* vol. 2022 3094010.

Ifantidou, Elly. 2019. Relevance and metaphor understanding in a second language. In K. Scott, B. Clark, and R. Carston (eds.), *Relevance, Pragmatics and Interpretation*. Cambridge: Cambridge University Press, 218-230.

Ifantidou, Elly and Hatzidaki, Anna. 2019. Metaphor comprehension in L2: meaning, images and emotions. *Journal of Pragmatics* 149: 78-90.

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

Jiang, Nan and Nekrasova Tatiana M. 2007. The Processing of Formulaic Sequences by Second Language Speakers. *The Modern Language Journal* 91(3): 433-445.

Johnson, Mark. 1987. *The body in the mind: The bodily basis of meaning, imagination and reason*. Chicago: University of Chigago Press.

Kemmer, Suzanne and Barlow, Michael. 2000. Introduction: A usage-based conception of language. In *Usage-based Models of Language*. Barlow, M. and Kemmer, S. (eds). Stanford: CSLI Publications.

Kennedy A. George. 1991. *Aristotle On Rhetoric: A Theory of Civic Discourse*. Oxford: Oxford University Press.

Kjellmer, Gustava. 1991. A mint of phrases. In *English corpus linguistics: Studies in honour of Jan Svartvik*. K. Aijmer and B. Altenberg (eds.). London and New York: Longman, 111-127.

Kövecses, Zoltán. 2017. Context in Cultural Linguistics: The Case of Metaphor. In: Sharifian, F. (eds) *Advances in Cultural Linguistics*. Cultural Linguistics. Springer, Singapore, 307-323.

Kövecses, Zoltán. 2022. Some recent issues in conceptual metaphor theory. In *Researching Metaphors: Towards a Comprehensive Account*. M. Brandi and M. Rossi (eds.). New York: Routledge.

Krashen, Stephen D. 1985. *The input hypothesis: Issues and complications*. Longman.

Krashen, Stephen D. 1989. We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *Modern Language Journal* 73(4): 440-464.

Kronfeld, Chana. 1980. Novel and Conventional Metaphors: A Matter of Methodology. *Poetics Today* 2(1b): 13-24.

Labov, William. 1972. *Sociolinguistic Patterns* Philadelphia: University of Pennsylvania Press.

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

Lakoff, George. 1992. *The Contemporary Theory of Metaphor*. In O. Andrew (eds.) *Metaphor and Thought* (2<sup>nd</sup> ed.) Cambridge: University Press.

Lakoff, George. 1996. *Moral Politics: What Conservatives Know That Liberals Don't*. Chicago: University of Chicago Press.

Lakoff, George and Johnson Mark. 1999. *Philosophy in the Flesh: the Embodied Mind and its Challenge to Western Thought*. Basic Books.

Lakoff, George. 2016. Kinesthetic Image. 1987. In B. Schneider, C. Ernst and J. Wöpking (ed.), *Diagrammatik-Reader: Grundlegende Texte aus Theorie und Geschichte* Berlin. Boston: De Gruyter, 106-108.

Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar*. Stanford: Stanford University Press.

Lepore, Ernie and Stone, Mathew. 2015. *Imagination and Convention: Distinguishing Grammar and Inference in Language*. Oxford: Oxford University Press.

Littlemore, Jeannette. 2001. Metaphoric Competence: A language learning strength of students with a holistic cognitive style? *TESOL Quarterly* 35(3): 459.

Littlemore, Jeannette and Low D. Graham. 2006. *Figurative Thinking and Foreign Language Learning*. Palgrave: Macmillan UK.

Littlemore, Jeannette 2010. Metaphoric competence in the first and second language: similarities and differences. In M. Putz and L. Sicola (eds.), *Cognitive processing in second language acquisition: Inside the learner's mind*. John Benjamins Publishing Company.

Littlemore, Jeannette, Krennmayr Tina, Turner James and Turner Sarah. 2013. An investigation into metaphor use at different levels of second language writing. *Applied Linguistics* 35(2): 117-144.

Littlemore, Jeannette. 2017. Metaphor use in educational contexts: functions and variations. In E. Semino and Demjen (eds.) *The Routledge handbook of metaphor and language*. London: Routledge, 283-295.

Littlemore, Jeannette, Sobrino Pérez Paula, Houghton David, Shi Jinfang and Winter Bobo. 2018. What makes a good metaphor? A cross-cultural study of computer-generated metaphor appreciation. *Metaphor and Symbol* 33(2): 101-122.

Low, Graham D. 1988. On teaching metaphor. *Applied Linguistics* 9(2): 125-147.

Müller, Cornelia. 2008. *Metaphors dead and alive, sleeping and waking: A dynamic view*. Chicago: University of Chicago Press.

Muñoz, Martín A. and Martínez Laura. 2022. Analysis of the relationship between students' proficiency level and their ability to identify figurative language: The effect of individual factors and extra-curricular activities. *Iberica* 43, 179-204.

Nacey, Susan. 2013. *Metaphors in Learner English*. Amsterdam: John Benjamins.

Nacey, Susan. 2022. Systematic Metaphors in Norwegian Doctoral Dissertation Acknowledgements. *Scandinavian Journal of Educational Research* DOI: 10.1080/003133831.2022.2042847

Olkoniemi, Henri, Bertram, Raymond and Kaakinen, Johanna. 2022. Knowledge is a river and education is like a stairway: An eye movement study on how L2 speakers process metaphors and similes. *Bilingualism: Language and Cognition* 25(2): 307-320.

Pawley, Andrew and Syder, H. Frances. 1983. Two puzzles for linguistic theory: Native-like selection and native-like fluency. In J. C. Richards and R. W. Schmidt (eds.). *Language and communication*. London and New York: Longman, 191-226.

Piquer-Píriz, Ana and Alejo-González, Rafael. 2019. *Metaphor in Foreign Language Instruction*. Berlin, Boston: De Gruyter Mouton.

Rasse, Carina, Onysko Alexander and Citron Francesca. 2020. Conceptual metaphors in poetry interpretation: A psycholinguistic approach. *Language and Cognition* 12(2): 310-342.

Rorty, Richard. 1991. *Objectivity, Relativism, and Truth: Philosophical Papers, (Vol.1)* New York: Cambridge University Press.

Sandström, Karin. 2006. When motion becomes emotion. *Linguistics in the midnight sun* 22: 1402-1552.

Sinclair, John. 1991. *Corpus, concordance, collocation*. Oxford: Oxford University Press.

Sperber, Dan and Wilson, Deidre. 2008. A deflationary account of metaphors. In R. Gibbs (ed.) *The Cambridge Handbook of Metaphor and Thought*. Cambridge: Cambridge University Press, 84-105.

Theodoropoulou, Maria and Xioufis, Theodoros. 2021. Comparing the Greek metaphors for fear and romantic love. A paper presented at the international conference of the Greek Linguistics (Archakis A., Vlahos H., Markopoulos Th., Xidopoulos G., Pappazahariou D. and Roussou A., 1278-1288. Patra: Philology Department, University of Patras.

Traugott, Elizabeth. 1985. Conventional and dead metaphors revisited. In *The ubiquity of metaphor*. W. Paprotté and R. Dirven (eds.). Amsterdam and Philadelphia: John Benjamins Publishing Company, 17-56.

Ungerer, Friedrich and Schmidt, Hans. 1996. *An Introduction to Cognitive Linguistics*. Addison-Wesley: Boston.

Villalba, Antonio, Stanley Jennifer, Turner Jennifer, Vale Michael and Houston Michelle. 2020. Age differences in Preferences for Fear-Enhancing Vs. Fear-Reducing News in a Disease Outbreak. *Frontiers in Psychology* vol. 11, 589390.

Williams-Whitney, Diana, Mio S. Jeffery and Whitney Paul. 1992. Metaphor production in creative writing. *Journal of Psycholinguistic Research* 21: 497-509.

Wilson, Deidre. 2011. Parallels and differences in the treatment of metaphor in relevance theory and cognitive linguistics. *Studia Linguistica Universitatis Lagellonica Cracoviensis* 128.

Wilson, Deidre and Carston, Robyn. 2019. Pragmatics and the challenge of “non-propositional” effects. *Journal of Pragmatics* 145: 31-38.

Zibin, Aseel. 2016. On the production of metaphors and metonymies by Jordanian EFL learners: Acquisition and Implication. *Topics in Linguistics* 17(2): 41-58.



