

University of Nottingham
UK | CHINA | MALAYSIA

Hammas, Wedyan (2021) Conceptual Metaphor Theory and Translation: A Cognitive Linguistic Analysis of English FEAR Metaphors and Metonymies into Arabic. PhD thesis, University of Nottingham.

Access from the University of Nottingham repository:

Copyright and reuse:

The Nottingham ePrints service makes this work by researchers of the University of Nottingham available open access under the following conditions.

This thesis is made available under the University of Nottingham End User licence and may be reused according to the conditions of the licence. For more details see: http://eprints.nottingham.ac.uk/end_user_agreement.pdf

For more information, please contact eprints@nottingham.ac.uk



CONCEPTUAL METAPHOR THEORY AND TRANSLATION: A COGNITIVE LINGUISTIC ANALYSIS OF ENGLISH FEAR METAPHORS AND METONYMIES INTO ARABIC

Wedyan Ahmed Hammas, MA

Thesis submitted to the University of Nottingham
for the degree of Doctor of Philosophy

September 2021

Abstract

One of the fastest-growing developments in Metaphor in Translation Studies lies in the critical applications of Cognitive Linguistics, namely Lakoff and Johnson's (1980) Conceptual Metaphor Theory (henceforth CMT). From a cognitive linguistic perspective, metaphor and metonymy in Translation Studies are characterised as cognitive linguistic shifts of concepts, especially those where there is an association between space and another domain. This thesis examines the way in which conceptualisation processes play a fundamental role in supporting the translation process of the linguistic manifestations reasoned by an emotion concept from English into Arabic. The thesis is based on existing assumptions about metaphor translation within CMT, and, as such, is expected to go beyond established studies and complement existing ones by also investigating the translation of metonymy as a significant cognitive operation. This investigation highlights theoretical issues and arguments related to the translation of metaphor and metonymy at the level of the cognitive dimension involved. It argues that metaphor and metonymy with patterns of interaction underlying an emotion concept and integrated with image-schematic representations can provide valuable insights into the analysis of translation procedures.

This thesis follows a corpus-based approach. It combines qualitative and quantitative methods to investigate the translation of metaphors and metonymies in the context of a specialised corpus extracted from three English popular novels and their Arabic translations. The major conclusions of this study highlight the significant contribution of the conceptual synergy between metaphor and metonymy in CMT in translation. This includes a set of fourteen procedures contained in nine major categories that translators use to handle metaphors and metonymies, with an emphasis on the challenging demands that source domains make upon translators. A key finding of this thesis is that the interactive imageries resulting from metaphor and culture (as well as the latter with metonymy within emotions) likely exert an influence on their treatment in translation. This thesis also demonstrates how the interplay between image-schemas and rich images, and their relationship with culture, can be crucial factors in determining translation decisions.

Acknowledgement

They say it is all about the journey, not the destination. True as this may be, I cannot even begin to describe how glad I am that after four years the journey of my PhD has been completed and my destination has finally been reached. Through the years have certainly flown by, the final phase was a struggle and at times a sheer battle of wills.

First and foremost, I praise God for giving me this priceless opportunity and allowing me to achieve one of my most wanted ambitions. With great respect to all who helped me to complete this thesis, I owe a huge debt of gratitude to few important people without whose insightful comments and guidance I may not have emerged victoriously. I thank my supervisor Dr. Pierre-Alexis Mevel and my previous supervisor Prof. Kathryn Batchelor without whom this thesis simply would not be. Their guidance and great assistance have been invaluable. For their support and encouragement, I shall always be indebted. I would also like to extend my sincerest appreciation for my second supervisor Dr. Ahmed Meliebary for his, encouragement and never-ending faith.

I cannot be more grateful to anyone than to my family for all the unconditional moral support they provided in addition to their help during the writing of this thesis. Among all my family who motivated me to keep going, I would like to single out my dearest mother and my children Raneem and Abdulrahman. Their patience, love and support have kept me going this far and will keep me going further. Finally, my unreserved appreciation goes to my sponsor, Taibah University, that gave me the opportunity to pursue my dreams.

Abbreviations

Abbreviation	Description
CMT	Conceptual Metaphor Theory
CM	Conceptual Metaphor
CMN	Conceptual Metonymy
DTS	Descriptive Translation Studies
MEAPaC	Mono-directional English Arabic Parallel Corpus
MIP	Metaphor Identification Procedure
r-im	Rich image
SL	Source Language
TL	Target Language
ST	Source Text
TT	Target Text
SD	Source Domain
TD	Target Domain
-P	Partial
MS	Microsoft
OCR	Optical Character Recognition
MAXQDA	Qualitative and Mixed Methods Data Analysis Software
ICM	Idealised Cognitive Model
I-S	Image-schema

Table of Contents

Abstract ..... **ii**

Acknowledgement ..... **iii**

Abbreviations ..... **iv**

Table of Contents ..... **v**

List of Tables ..... **x**

List of Figures ..... **xi**

Chapter 1: Introduction **12**

1.1. Structure of the Thesis 26

Chapter 2: The Development of Metaphor Translation Research from Language to Cognition **30**

2.1. Metaphor: From a Linguistic Tool to a Cognitive Construct 31

2.1.1. The Linguistic Paradigm: Metaphor in the Western Rhetoric 32

2.1.1.1. Aristotle's Transference Theory of Metaphor 32

2.1.1.2. The Substitution Theory 34

2.1.1.3. The Comparison (Similarity) View 36

2.1.2. Metaphor in Arabic Rhetoric 38

2.1.3. The First-Generation of Cognitive Science of Metaphor Research 41

2.1.4. The Second-Generation of Cognitive Science of Metaphor Research 47

2.1.4.1. Conceptual Metaphor Theory (CMT) 47

2.1.4.2. Image-schemas: definition and characteristics 57

2.1.4.3. Emotion Concepts 68

2.2. Metaphor as a Problem in Translation Studies 78

2.3. The Translation of Metaphor Takes a Cognitive Turn 88

2.4. Conclusion 110

Chapter 3: Resisting the Power of Metonymy in Translation Studies 113

3.1. Metonymy in English 115

3.1.1 Metonymy: Sense and Reference 115

3.2. Metonymy in Arabic 120

3.3. Towards a Cognitive Linguistic View 124

3.3.1. Metonymic Types of Cognitive Relations 128

3.3.2. The Metonymy-Metaphor Conceptual Relation 134

3.3.3 The Metonymy-Metaphor Conceptual Interaction 138

3.4. Cognitive Metonymy Theory and Translation 149

3.8. Conclusion 160

Chapter 4: Theoretical Framework and Methodology 163

4.1. Corpora 166

4.1.1. Criteria for Corpus Selection 168

4.1.2. An Interpretation of Corpora 172

4.2. Qualitative Analysis 175

4.2.1. Corpus-based Methods 175

4.2.2. Identifying metaphoric linguistic expressions in written texts: Insights from applying Pragglejaz Group MIP (2007) 178

4.3. Identifying Emotion-related Metaphors and Metonymies in Texts for Translation Studies: Pragglejaz and Beyond 181

4.3.1. Identifying linguistic expressions 182

4.3.2. Identifying emotion overlaps 197

4.3.3 Identifying body-based metonymic expressions 202

4.3.4. Establishing source concepts 204

4.3.5. Classifying linguistic expressions 209

4.3.6. Identifying schematic concepts in STs 215

4.3.7. Determining the metaphoricity and metonymicity in TTs 216

4.3.8. Identifying schematic concepts in TTs 218
4.3.9. Identifying translation procedures 220
4.4. Overview of Issues Encountered in the Identification Process 225
4.5. Quantitative Analysis 226
4.6. Conclusion 231
Chapter 5: Classifications of FEAR Metaphoric and Metonymic Source Domains 233
5.1. Physiological Source Domains 236
5.1.1. External Physiological Source Domains 238
5.1.1.1. PHYSICAL AGITATION 238
5.1.1.2. INABILITY TO BREATHE 240
5.1.1.3. BLOOD LEAVES THE FACE 241
5.1.1.4. INABILITY TO MOVE 243
5.1.1.5. SWEATING 244
5.1.1.6. INABILITY TO SPEAK 244
5.1.2. Internal Physiological Source Domains 245
5.1.2.1. INCREASE IN PULSE AND HEART RATE 245
5.1.2.2. NERVOUSNESS IN THE STOMACH 246
5.1.2.3. DROP IN BODY TEMPERATURE and INABILITY TO MOVE 247
5.1.2.4. INABILITY TO THINK 249
5.1.2.5. COLD 250
5.2. Cognitive Source Domains 251
5.2.1. The CONTAINER Metaphor 253
5.2.1.1. A FLUID IN A BODY CONTAINER 253
5.2.1.2. A SUBSTANCE IN A BODY CONTAINER 254
5.2.1.3. A FLUID NATURAL FORCE IN A BODY CONTAINER 255
5.2.1.4. A GROWING ENTITY IN A BODY CONTAINER 256
5.2.1.5. A MOVING ENTITY IN A BODY CONTAINER 258
5.2.2. AN ILLNESS 258

5.2.3. COLD 259
5.3. Behavioural Source Domains 260
5.3.1. Physical Behaviour 261
5.3.1.1. AN ENERGISER 261
5.3.2. Non-verbal Vocal Behaviour 262
5.3.2.1. A CONVULSIVE GASP (TEARS) 262
5.4. Expressive Source Domains 263
5.4.1. WAYS OF LOOKING 263
5.5. Cultural Source Domains 264
5.5.1. COLOUR 264
5.6. Conclusion 267
Chapter 6: Cognitive Linguistic Analysis 270
6.1. Parallel TT mapping 271
6.1.1. Same expression of the same concept 272
6.1.2. Same expression of the same concept with an addition 276
6.1.3. Same expression of the same concept with an omission 284
6.1.4. Different expression of the same concept with a different form of image-schematic concept 286
6.1.5. Different expression of the same concept with an addition 290
6.2. Abstracting the rich image 291
6.3. Concretising the image-schematic concept 295
6.4. Different TT mapping 299
6.4.1. Different expression of a different meaning with a parallel sequence of different mapping 300
6.4.2. Different expression of a different meaning with a divergent sequence of different mapping 307
6.5. The non-metaphoric or metonymic rendition 309
6.6. Deletion of any reference to the concept 312
6.7. The creation of a new concept 314

6.8. Partial TT mapping 317
6.8.1. Different expression, with a partial cognitive function and a similar meaning 317
6.9. Overlapping TT mapping 321
6.9.1. Different expression of an overlapping mapping with a different meaning 321
6.10. Conclusion 323
Chapter 7: Discussion of Results 326
7.1. Revisiting the Research Questions 326
7.2. Conclusion 346
Chapter 8: Conclusions and Implications 348
8.1. Main Contribution 348
8.2. Limitations of the Research 357
8.3. Recommendations for Future Research 359
8.4. Concluding Remarks 361
References 363
Appendices 388
Appendix A. FEAR linguistic expressions in (ST1-TT1) based on the frequency of source domains 388
Appendix B. FEAR linguistic expressions in (ST2-TT2) based on the frequency of source domains 397
Appendix C. FEAR linguistic expressions in (ST3-TT3) based on the frequency of source domains 402

List of Tables

Table 1. References of corpus texts..... 24

Table 2. References of corpus texts.....167

Table 3. A work in progress database of (ST3) and (TT3) in MS Word. 183

Table 4. Problems encountered during the identification process. 225

Table 5. Frequencies of SDs and their linguistic expressions in the ST corpus.....235

Table 6. Frequencies of linguistic expressions for physiological SDs in the ST corpus. 237

Table 7. Frequency of linguistic expressions for cognitive SDs in the ST corpus. 252

Table 8. Frequencies of linguistic expressions for behavioural SDs in the ST corpus. 260

Table 9. Frequencies of linguistic expressions for expressive SDs in the ST corpus. 263

Table 10. Frequencies of linguistic expressions for cultural SDs in the ST corpus 264

Table 11. Frequencies of fear expressions rendered with a parallel mapping. 272

Table 12. Frequencies of fear expressions shifted to image-schematic representations. 292

Table 13. Frequencies of fear expressions concretised in the TTs. 295

Table 14. Frequencies of fear expressions rendered with a different mapping. 300

Table 15.Frequencies of fear expressions paraphrased in the TTs. 309

Table 16. Frequencies of fear expressions omitted from the TTs. 312

Table 17. Frequencies of fear expressions created in the TTs. 314

Table 18. Frequencies of fear expressions rendered with a partial mapping. 317

Table 19. Frequencies of fear expressions rendered with an overlapping mapping. 322

Table 20. Procedures o fear metaphor and metonymy translation. 343

List of Figures

Figure 1. A structural mapping of "LOVE IS A JOURNEY" metaphor. 14

Figure 2. A cognitive blended network based on Fauconnier and Turner (1998). 54

Figure 3. The CONTAINER schema adapted from Lakoff (1987). 64

Figure 4. The CONTAINER schema lexicalized by *out*. 64

Figure 5. A detailed schematised sketch of the expression *Sara went out the room*. 65

Figure 6. A metaphor from metonymy conceptual mapping for example (11). 145

Figure 7. Domain expansion and domain reduction in metonymic processing. 154

Figure 8. The main window of Cisdem with a scan process in progress. 188

Figure 9. The document system window in MAXQDA. 188

Figure 10. The lexical analysis window with the lexical entry for dread. 189

Figure 11. A list of dread units retrieved in the lexical analysis window. 189

Figure 12. Discarded dread hits in the retrieved lexical analysis window. 193

Figure 13. Classifying the STs' data by source domains via the coding system. 212

Figure 14. A screenshot of coded segments under the physiological source domains. 213

Figure 15. The aligning of (ST3) and (TT3) in MAXQDA document window. 217

Figure 16. Classifying process of the (TT3) data via the coding system. 218

Figure 17. An extended expression coded under different source domains. 227

Figure 18. Classifying linguistic data into translation procedures. 228

Chapter 1
Introduction

Since the 1960s, early metaphor translation analysis investigations have followed non-systematic linguistic-based approaches. These studies have established a base perspective for metaphor translatability, transferring meanings and linguistic equivalence as substituting the signs between different linguistic systems. Two decades later, Lakoff and Johnson's (1980a) cognitive (non-linguistic) approach was introduced to Translation Studies to redress the drawbacks of the linguistic paradigm. Exploration of their theory identified problematic areas within the predominant semantic approaches, positioning it as a platform that strongly aligns to cognitive mechanisms and their conceptualisation of the world.

Cognitive approaches shifted the role of translators from intercultural intercessors to communicators who integrate linguistic and conceptual aspects between the source language (SL) and target language (TL) (Rojo & Ibarretxe-Antuñano, 2013). Since then, Cognitive Metaphor Theory (henceforth CMT) has been one of the most prominent frameworks within the field, leading to a proliferation of studies, namely in the work of Tabakowska (1993), Stienstra (1993), Mandelblit (1995), Schäffner (1998, 2004), Kurth (1999), Dickins (2005), AL-Hassnawi (2007), Sun (2011) and many others. These contributions completely changed the way metaphor was viewed in rhetorical linguistic theories and in translation, contributing to the discipline in both areas.

Despite the increasing body of literature in Translation Studies exploring metaphor within CMT, these approaches are not without their limitations. Lakoff and Johnson's framework is still less used than the linguistic paradigm, and this is due to the clear understanding and interpretations offered by the latter as compared to the former. Lakoff and Johnson believe that metaphors are modes of thought expressed by language as opposed to the idea that they are linguistic in nature. Their principles establish metaphoric language based on the embodiment theory, which takes the conceptualisation of abstract ideas based on the experience of our bodies as a significant factor in reasoning and structuring metaphoric concepts.

The cognitive etymology of metaphor in cognitive linguistics defines metaphorical language as thinking of one concept in terms of another, or more technically, a mapping process between two coherent organisations of experience: the source domain and the target domain. The former is the concept to be described by the metaphor and the latter refers to the concept drawn upon to create the metaphorical construction. Conceptual metaphors are then cognitive mechanisms, whereby information of physical concrete existence is partially mapped onto its potential from another abstract domain of experience existing in thought.

The mapping between the source and the target is intentionally rendered by Lakoff and Johnson in capital letters in the form of TARGET-DOMAIN IS SOURCE-DOMAIN or TARGET-DOMAIN AS SOURCE-DOMAIN. The mapping operation takes a unidirectional movement. So, for example, with the conceptual metaphor LOVE IS A JOURNEY the domains give rise to many metaphoric correspondences. During the process, a metaphor takes the aspects of the most salient semantic structures from the

source domain entities in JOURNEY to be carried over to the entities in the target domain of LOVE, as illustrated in Figure 1.

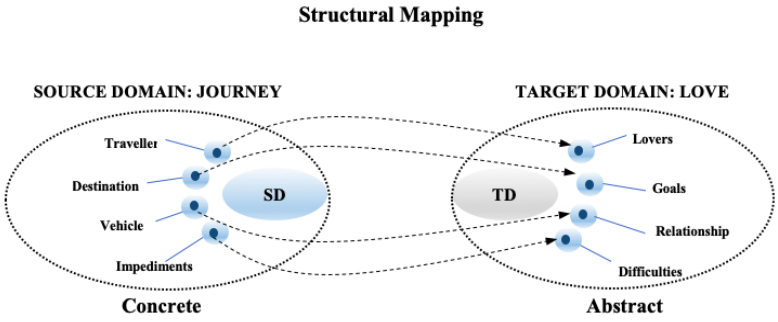


Figure 1. A structural mapping of "LOVE IS A JOURNEY" metaphor.

Lovers, in the target domain, correspond to travellers in the source. General goals of the lovers can be identified with their common destinations, the love relationship corresponds to the vehicle and difficulties in the relationship correspond to impediments to travel (Lakoff, 1992, pp. 207-208). By means of a concrete, clear entity, journey, we are able to reason and talk about love, an elusive entity. Conceptual mappings, according to Lakoff and Johnson, can host various metaphorical expressions. For example, the LOVE IS A JOURNEY metaphor is reflected in various expressions such as *"We are going nowhere in our relationship"* and *"We are spinning our wheels"* (Lakoff & Johnson, 1980a, pp. 44-45). Hence, every metaphorical expression is connected in our language to a network of conceptual metaphors (Lakoff, 1987).

The conceptual theory puts forward the understanding of conceptual metaphors as a diverse means of how we think, act and perceive the world around us. Successive advances in CMT have expanded its reach into other disciplines besides translation studies where metaphor is also explored and researched, such as emotions. Lakoff (1987, p. 380) posits that emotions have an extremely complex structure that requires further investigation to examine the question of how human emotions are structured and how

they emerge from embodied experience (e.g., Lakoff & Johnson, 1980a; Lakoff, 1987; Kövecses, 1995; Maalej, 2007). This line of argument in the debate established a robust interdisciplinary field of enquiry, exploring the relationship between emotions and metaphors, and focusing on finding their similarities and differences in various social and cultural settings. Lakoff and Johnson's position of emotion and its relationship with metaphors has been endorsed and subsequently developed by other cognitive linguistic scholars (e.g., Lakoff & Kövecses, 1987; Lakoff & Turner, 1989; Kövecses, 1991; Kövecses & Radden, 1998; Radden & Kövecses, 1999; Barcelona, 2003a, 2003b) and many others from a number of theoretical frameworks. These scholars claim that emotion metaphoric concepts and their expressions are pervasive examples of coherent, repetitive mind patterns and can be considered mostly, as such, without cultural basis. Scholars frame this position based on the premise that emotions constitute a basic human experience embedded in bodily responses and groundings.

However, studies have shown that emotion concepts are not only biologically but socially determined and have the ability to access culture-specific conceptions of emotions used for socially-oriented achievements. As such, we vary how we experience and perceive these emotions, the kinds of reactions they provoke and how they relate in different surrounding contexts, not only between different languages but also between verities of the same language (Lakoff & Johnson, 1999, p. 202). These developments have paved the way for significant contributions to the development of cross-cultural analyses of how we perceive metaphors when they are expressed to describe emotions. In almost all cultures, metaphorical expressions denoting emotions are used where some seem highly culturally stable compared to others. For example, the conceptual metaphor ANGER IS A HOT FLUID, which conceptualises such emotional experience as a physiological reaction of body temperature (i.e., heat), underpins different linguistic

realisations in English as in *"He is boiling with anger"* (Kövecses, 2005, p. 35). Many similar linguistic items have been recorded across a number of distinct language families and cultures including Zulu (Taylor & Mbense, 1998), Sino-Tibetan (Yu, 1998) and Arabic (Al-Sharif, 2007) and others. However, some languages like English have different linguistic realisations deeply grounded in cultural salience as in *"He's just blowing off steam"* which does not appear to exist in Zulu culture (Taylor & Mbense, 1998). In basic English cultural models, ANGER is often associated with the blood being a hot, warm or boiling fluid, and this implies a negative connotation. However, images under BOILING BLOOD IS ANGER can imply different ideas in other cultures like the Chinese culture. The expression *"His blood is boiling",* for instance, has a different concept in that boiling is understood as ENTHUSIASM (Chen, 2010, p. 74). This supports the conclusion that, even with emotion concepts being bodily-based and generated from the human physiology, there can still be non-universals and culture-specifics in certain context-sensitive and culturally defined cases. This could be due to the different kinds of cultural elements and distinctive contexts each culture has such as climate, environment, and lifestyle. Based on these distinctions, Kövecses (2000a,b) has classified the concepts into two main levels of conceptualisations: generic-level cognitive concepts (universal or near universal) and specific-level concepts, where conceptual variations are limited to the latter (see also Wierzbicka, 1992b and 1995).

The study of interrelationships between metaphor, translation and emotions has previously been a neglected area of study. Initiatives to develop descriptions of the translation of metaphor, so far, still suffer from lack of research where emotions are the focus within translation and CMT perspectives. To provide some statistics, there are three recent relevant articles: Yan et al. (2010), Hanić et al. (2016), Hanić and Pavlović (2017), which have all examined this triangle from a cognitive linguistic perspective.

The first study is a corpus-based contrastive study, describing fear metaphor translation from English to Chinese with reference to the entrenchment rank, which refers to the state of metaphor occurring in a specific language culture ranked by its previous use over time. The more it is used the more firmly entrenched the metaphor becomes conceptually and linguistically. Yan et al. (2010) found that the entrenchment rank in the target has a stronger influence than the fact that the source metaphor is available in the TL. This study pinned down differences in addition to their conclusion that integrating a corpus-based approach and quantitative analysis will greatly, from their view, enhance research into metaphor translation. This factor is one reason this current study has used such a methodological approach. The other two studies represent a development in CMT and have examined the translation of emotion-related metaphors with novice translators and found four main translation patterns. These works, however, were conducted with different language combinations and their exclusive foci were restricted to certain factors and contexts. Furthermore, these works are still hardly reviewed, almost isolated and disconnected from the translation studies literature, methodologies, and findings.

Another argument in Lakoff and Johnson's framework in translation research was the consensus that the implications had been expended on working with metaphor, overshadowing the exploration of other mental operations like metonymy. Metonymy is one of the primitive cognitive linguistic mechanisms and the link between real life experience and basic cognitive models (Lakoff & Johnson, 1980a; Lakoff, 1987). Taylor (1995) and Gibbs (1999) confirm that metonymy is like metaphor or probably more basic and experiential than metaphor. Within CMT, metonymies differ in the way they function compared to metaphors due to their inferential function as a STAND FOR RELATIONSHIP. The metonymic structural mapping evokes not between two domains

like in LOVE IS A JOURNEY metaphor, but rather as an intra-domain highlighting process at the level of mental activity, such as BODY PART FOR PERSON and PROCESS FOR PRODUCT where the mapping uses only one entity, "the immediate subject matter", that "occurs within a single conceptual domain", either a source or a target, to stand for the other (Schmidt, 2012, p. 36; Lakoff, 1987, p. 288). The extended aspects of this research are intended to change the bias towards metaphor as the main intellectual mechanism from being the primary translation enquiry in metaphor translation studies, paving the way for metonymy. This thesis argues that metonymy like metaphor cuts across the realm of epistemology, ontology, language and cognition. The thesis aims to explore how these various realms in interact in a translation.

Other studies expanded the cognitive research network to look at how metaphor and metonymy interact in the situation of emotions. Kövecses and Radden (1998) believe that, between metaphor and emotions, metonymy lies at the core of metaphor. This belief comes as a result of the strong interaction between the two constructs ruled by an emotion concept. An all-encompassing theory to account for the translation of metaphor and metonymy within the research field of Translation Studies does not exist. Clearly, much remains unknown about how the semantic relations of both constructs which give rise to an emotion concept are dealt with in a translation process. Translation descriptions, in particular those of English-Arabic languages, contain no information on how metaphoric and metonymic emotional situations are cognitively translated, and the author of this thesis believes that it is one of the first studies of metaphor and metonymy translation that is centred on emotional situations in popular fiction texts. It is in the academic interest to redress these shortcomings. This thesis will build on this line of translation research to offer an examination of the complexities of translation research by utilising a methodological approach that corresponds to the needs of the study. This

study is an attempt to bring CMT-informed research to bear on translation, highlighting its limitations and attempting to propose a new hypothesis. To conduct an in-depth study, this thesis adopts a previous hypothesis presented by cognitive linguistic scholars in Translation Studies who contend that translation is not about the linguistic equivalence of individual words nor about universal similarities between different languages and cultures. Rather, it is more about the perception of experience and how it is perceived metaphorically and metonymically. To be more specific, the research focuses on conceptual mapping, the metonymic relation with metaphor guided by an emotion concept. Moreover, the thesis takes these ideas further and adds Lakoff and Johnson's (1980a) image-schema perception to the assumption. Figurative expressions describing emotions have sensitive cultural dimensions as regards the physiological nature of the basic bodily experience. As seen above, metaphoric and metonymic emotion concepts are culturally determined and could possibly exhibit different schematic changes of function across cultures. The image-schema perception could, thus, be seen a significant tool for the promotion of translation shifts within the context of this current research. The research focus is, however, limited to the following five parameters:

The first parameter places emphasis on exploring the translation of metaphors and metonymies expressing fear as a target domain. This choice is not completely arbitrary but motivated by two reasons. Firstly, there is a lack of studies exploiting figurative expressions where the target domain is fear. The majority of studies in the literature have explored other emotion concepts like ANGER and HAPPINESS in English and other languages but not FEAR (Kövecses, 2000a, p. 21). Furthermore, most of these were European studies on languages such English (Kövecses, 1990), Lithuanian (Sirvydé, 2006) and Spanish and Russian (Ogarkova & Soriano Salinas, 2014). investigating the cognitive aspects of fear concepts. This current research, however, explores how these

aspects influence and/or affect the translation of English fear metaphors and metonymies into Arabic and how the findings can contribute to the field of Translation Studies. Secondly, according to Kövecses (1990, p.70), fear appears to possess an interesting categorical conceptual structure that forms complex hierarchies and groups due to its "physiological effect and behavioural reactions" (Kövecses, 1990, p. 70). This complex structure will be a further step towards providing insightful results about the translation analysis of both constructs.

The second parameter is the choice of the language variety. Cultural distinctions lead to distinctive language varieties being referred to as emerging dialects, which differ widely. In Maalej's (2008) study of Tunisian Arabic and his joint study in 2012 with Al-Hadlaq of Saudi and Tunisian Arabic, for example, both sets of data were extracted from a culturally constructed language variety. In these cases, preconceptions and findings biases emerge. The primary data in the present study are rooted in translation texts that feature a variety of Modern Standard Arabic (MSA) labelled as *Al-Arabiya Al-fusha* (the eloquent Arabic) within a Pan-Arabic language frame that employs a socially preferred literary variety. MSA has been developed from Classical Arabic, the language of the Islamic Holy Book, Qur'an (see Awad 2005, p. 29). The MSA language varietyis ideologically advocates for the unified formation of a fixed language variety of Arabic language "accepted as the *lingua franca* for written and formal spoken Arabic and as a language of science and technology throughout the Arab World" (Almijrab, 2021, p, 31). Adopting a universally accessible variety for all Arab countries will provide firm findings with regard to the translation patterns that will appear via analysis. Support for this is also found in the United Nations for General Assembly and Conference Management, (DGACM) of Arabic translation services. The DGACM has endeavored

to use a “Pan-Arab” language variety as the main language preference, which indicates that this is considered the most universally accessible variety for all Arab countries.

The third parameter looks at context. Many Arabic studies have explored metaphors in translation disconnected from context. This was obvious in Mandelblit (1995), Hasnawi (2007), Maalej (2008), Ghazala (2012), and Al-Hadlaq and Maalej (2012). Van Dijk (2009, p. 5) states that “a context is what is defined to be relevant in the social situation by the participants themselves” (see also Kövecses, 2015). It was necessary to adopt contextualised data to provide empirical data via objective statements avoiding preconceptions, ambiguity and findings bias (Semino & Short, 2004). In other words, this will enable the thesis to reach an adequate generalisation between the linguistic conceptual structures, what they express, and how they are translated. Kövecses (2015, p. 9) reflects on Ritchie’s (2004) analysis of the ANCHOR metaphor out of context, stating that it could hold more than one meaning: “stability”, on the one hand, but could also possibly mean “lack of freedom”. The relationship between the role of context and its role in organising (syntactic, phonological, lexical, and semantic) features and content (linguistic actions) is omnipresent and will always be bidirectional, not to mention that the effects of the two measures are undeniable for the establishment and recovery of meaning. Thus, the choices of corpus for this thesis had to be contextualised. This means that dictionaries and thesauruses with insufficient consideration of the textual form of the data had to be excluded for reasons of objectivity (see Semino & Short, 2004; Semino et al., 2004).

The fourth parameter is genre. Previous studies in translation research have put more weight on other text typologies mostly on political and literary texts etc., with few studies using popular fiction texts as a source material. The basic premise of this research

is that the translation of this genre necessitates the awareness of social and cultural implications. Generic features of the texts fulfil specific functions, such as pragmatic and communicative purpose, and, consequently, affect the translators' decision processes (Berkenkotter & Huckin, 2016). Moreover, from the review of previous research, Arabic texts have never been used to investigate translations of metaphoric and metonymic emotion concepts. Therefore, this thesis uses the popular fiction genre to investigate the subject at hand.

The fifth parameter is the historical period. The time span for this study concerns a collection of texts published between 2000 and 2016. This decision was made to limit diachronic variation in metaphor that might develop over the years. This is due to the nature of language dynamism, which is often socially and culturally problematic (see Gevaert, 2007, 2001; Geeraerts & Gevaert, 2008). Some metaphors stay on to become entrenched in culture while others do not.

The current thesis offers the opportunity to address the above limitations. It argues that the interactive imageries resulting from the synergy between metaphor and culture (as well as the latter with metonymy within emotions) likely put forth effects on their treatment in translation. It accounts for the emergence of a translation typology for the purpose of analysing the procedures that translators have recourse to when translating fear-related metaphoric and metonymic language. The selection of and results of the thesis are a response to the lack of literature on the subject area and questions raised in relation to the research topic. The research focuses on the following main question:

- Can CMT provide additional insights into metaphor and metonymy translation?

To this overarching research question, five interrelated questions can be added:

1. Within CMT, what are the new theoretical areas of metaphor and metonymies, which have hitherto not been extensively studied in Translation Studies?
2. How could metaphor and metonymy in translation contributions approached by CMT provide us with a typological model to study the ways both constructs are translated in the new context?
3. What are the source domains identified to structure the target domain?
4. What are the translation procedures identified within the translation context of this study?
5. What are the implications of CMT on how metaphors and metonymies are handled in translation, as illustrated in the context of this thesis?

This study is target-text oriented. It is intended to shed light on the translators' behaviours in reproducing metaphors and metonymies of fear and the reasons behind their choices. As a result, the analysis will not address the analysis of the phenomenon as proposed in prescriptive-based approaches. This entails that no further conclusive solutions to existing problems, particularly in the areas of metaphor and metonymy in translation, are elucidated. The interrelated questions are intended to broadly explore the cognitive linguistic perspective, the notion of metaphors and metonymies, their cognitive properties and how they interact. It also takes emotion studies as a secondary framework to address the folk theories of emotions and how they could interrelate with metaphors and metonymies.

The corpus used in this research is a mono-directional English/Arabic parallel corpus (MEAPaC), which is a collection of electronic popular fiction texts of the same genre. The primary corpus includes Arabic translations of the English texts. The corpus consists

of around 615,000 words, producing a total of 616 fear-related expressions. This breaks down to 176 in *Eclipse* (Source Text 1, henceforth ST1) with 171 in its translation, (Target Text 1, henceforth TT1), 65 in *The Girl on the Train* (Source Text 2, henceforth ST2) with 70 in its translation (Target Text 2, henceforth TT2), and 69 in *Deadly Decisions* (Source Text 3, henceforth ST3) with 65 in its translation (Target Text 3, henceforth TT3). Table (1) presents the STs and TTs in question:

Texts	Details
ST1	Meyer, S. (2007). *Eclipse.* New York, US: Little, Brown and Company.
TT1	Meyer, S. (2009). خسوف (Halabi. A. Trans.). Morocco: Sama Publishing House.
ST2	Hawkins, P. (2015). *The Girl on the Train.* New York, US: Riverhead Books.
TT2	Hawkins, P. (2015). فتاة القطار (Al-Nabhan, H. Trans.). Egypt: Dar Al Tanweer.
ST3	Reichs, K. (2000). *Deadly Decisions.* New York: Charles Scribner's Sons.
TT3	Reichs, K. (2010). قرارات قاتلة (Shamdeen, F. Trans.). Morocco/Lebanon: Arab Scientific Publishers, Inc.

Table 1. Corpus text references.

This corpus was purposely built and designed through corpus-based methodological tools via MAXQDA (VERBI Software, version 1, 2020), a qualitative data analysis software to qualify the data for collection and analysis with more informed decisions (see Stefanowitsch, 2006). The selection of the texts was guided by their popularity. The texts were chosen with emphasis on the nature of the study, the material of the translated texts, language related elements, the time frame of texts, genre factors, and the availability of the texts themselves. The quantity of corpus texts was established based on an interpretive hypothesis on whether it provides a sample of data that could be used for the analysis through existing claims by existing studies. The mixed methods approach investigates the phenomenon and underpins the research design adopted for the purpose of addressing the various aspects of the research questions. In this research, both qualitative and quantitative approaches were adopted, yet with different weight, to observe the translation of metaphors and metonymies by focusing on the analysis of

three main elements: the corpus of texts, fear source domains and translation procedures. The data was collected based on a triangulation of data collection methods. It places emphasis on the use of a balanced semi-structural method that integrates automatic and manual analysis. This is to say, using the proposed corpus-based methods for data collection with Pragglejaz Group (2007) Metaphor Identification Procedures (MIP) to determine the metaphorical use of the identified data. The MIP was reviewed and refined with extended steps with the aim of illustrating how to identify emotion-related metaphoric and metonymic linguistic data and their concepts in textual contexts and provide a wider understanding of how these new methods can be applied in Translation Studies. The following nine steps were followed:

1. Identifying linguistic expressions.
2. Identifying emotion overlaps.
3. Identifying bodily-based metonymic expressions.
4. Establishing source concepts.
5. Classifying linguistic expressions.
6. Identifying schematic concepts in STs.
7. Determining the metaphoricity and metonymicity in TTs.
8. Identifying schematic concepts in TTs.
9. Identifying translation procedures.

The clustering of these methods into a redefined identification procedure is expected to impact the ways the constructs in a translation context are identified, not only on the level of language but also on the levels of culture and thought. The elements used to analyse the data are based on cognitive linguistic approaches. These are represented within Lakoff and Johnson's (1980a) CMT. The overall framework serves as a major paradigm to build background knowledge about the areas under investigation for the purpose of examining the MEAPaC. This approach illustrates the contrast between the source domains derived from the English corpus data in terms of five conceptual types,

presented as special cases of fear. These aspects are clustered and approached based on the embodied cultural prototype view that incorporates Lakoff's (1978) cultural embodied theory and insights of Kövecses' (1990) prototypical structure of emotions. This is based on Descriptive Translation Studies. This approach goes further and incorporates the image-schema aspect of the analysis based on Lakoff and Johnson's (1980) and Johnson's (1987) embodied schema hypothesis. The second approach covers all aspects of translation analysis within Lakoff and Johnson's (1980a) cognitive linguistic perspective on the ways the data derived from the translations are translated. The analysis is represented in light of a target-oriented approach with a triangulation of three models: Schmidt's (2012) metaphor translation model, Lakoff and Johnson's (1980) and Johnson's (1987) image-schema hypothesis and Kövecses' (1990) conceptual structure of emotions with more emphasis on the structure of fear. The incorporation of the approaches is expected to shed light on the cross-cultural mapping decisions that translators may resort to as a way of conveying the mapping relations of fear as an emotion concept between domains from the source text into the target within the context of this study's corpus.

1.1. Structure of the Thesis

Chapter 2 presents a detailed examination of the theoretical background to and related literature on CMT in translation. It explores the origins of metaphor and how its perception changed in CMT. The chapter presents a number of theoretical frameworks stemming from the early stages of the classical understanding of metaphor. It goes on to explore how Metaphor Studies moved from the level of language to the level of the mind. Expanding on Lakoff and Johnson's theoretical framework, the chapter explores the general principles and main concepts of conceptual metaphor, mapping and

cognitive domains before going on to explicate how the theory was supported by other linguists in the field of CL. The chapter offers a discussion on existing research into metaphor as problematic in translation research and how it changed direction from its translatability and equivalence to a cognitive cultural construct.

Chapter 3 discusses the rise of metonymy in metaphor research in general and in translation in particular, examining the vital role it plays in the conceptualisation process. The discussion addresses the notion of metonymy as a fundamental referential construct and how it was granted equal importance to metaphor as a cognitive operation. This chapter then goes on to discuss the arguments in cognitive linguistics concerning metonymic interactions with metaphor from the domain-based approach. It reviews the studies that have attempted to examine metaphor and metonymy, specifically focusing on arguments around the accuracy of the domain-based approach and the nature of interaction in linguistic realisations. Based on this relationship, Chapter 3 brings metonymy and metaphor together as a continuum under Translation Studies. The detailed implications of metonymy in CMT translation research in this context are presented to illustrate the research gaps that have not yet been researched.

Chapter 4 presents the research methods. It proposes an empirical methodology and adopts mixed method approaches. It adopts two main approaches to observe the translation of fear metaphors and metonymies by focusing on the analysis of texts and the cognitive-cultural aspects of translating metaphors and metonymies in the target culture. The chapter describes the corpus and the methods applied in data collection. The chapter proposes new identification methods in light of the chosen parameters and methods. The identification methods were revisited and integrated to design an extended

procedure as a way of adding them to existing procedures for the purpose of identifying the object of analysis in the adopted corpus in the field of Translation Studies.

Chapter 5 provides a detailed discussion of the results of the cognitive analysis of source domains, guided by linguistic expressions from the assigned source texts. The chapter provides statistical tables of frequencies and percentages of the source domains identified and their linguistic realisations. The overall discussion is based on the hierarchical class findings of source domains linked to five special cases of physiological, cognitive, behavioural, expressive and cultural conceptual types of fear, as well as incorporating image-schemas and considering it, according to cognitive linguistics, the basic mechanism for metaphor and metonymy constructions.

Chapter 6 provides the findings of the contributed translation procedures in light of CMT. It tests the adequacy of existing findings in order to describe the translation of metaphors and metonymies presented in this research context. More specifically, the discussion focuses on the application of the Pragglejaz MIP extended steps related to translation. The translation analysis is linked to the representation of fear's physiological, behavioural, expressive, cultural and cognitive features. The chapter also provides statistical tables of frequencies and percentages of the translation procedures evaluated.

Chapter 7 revisits the research questions with more theoretical extensions to place the discussion of data analysis in the wider field of Translation Studies. It draws conclusions from the previous chapters within the thesis and proposes changes that can be made to improve this field.

Chapter 8 concludes the thesis, drawing together and explicating the results of the research and the challenges and shortcomings of CMT. Furthermore, it evaluates the scientific contribution via a discussion of the potential implications and applications of the translation of metaphor and metonymy approached within CMT. It also highlights the limitations of this study and recommendations for future research.

The translation of metaphor is not a new subject in Translation Studies, and this research is not the first that applies CMT to metaphor translation. The present research, however, is original in the way it focuses on emotion concepts that cut right across the metonymic interaction with metaphor. As such, it represents an original contribution to Translation Studies. The proposed procedures in this thesis will form a useful reference and guide for related research studies in the field of Translation Studies, in addition to translation training and classrooms.

The cognitive nature of metaphor and metonymy is a beneficial method to assist translators and trainees with their vocabulary enlargement, emotion conceptual systems and language acquisition. It will offer a new way to gain useful insights into the intellectual mechanisms used during emotional linguistic productions and understandings. This study offers a more nuanced contribution to the literature of metaphor and metonymy translation within CMT in general than approaches previously available. The researcher aims to continue this line of research, more specifically, regarding the challenges that have existed and to some extent still exist in metaphor and more importantly with metonymy in translation research within cognitive approaches through discussing the different possibilities of addressing these challenges.

Chapter 2
The Development of Metaphor Translation Research from Language to Cognition

The challenges of translating metaphor have been noted in the literature for over 50 years and the majority of research has focused on the problem of metaphor as a linguistic device. This chapter delivers a clear picture of what this research is intended to do, and how it fits into the context of metaphor and translation research. This chapter addresses the first research question: within CMT, what are the new theoretical areas of metaphor, which have hitherto not been extensively studied in Translation Studies? This chapter provides a critical review of the relevant arguments and outlines the main threads in the history of metaphor and metaphor in translation research, drawing on critical voices from scholars addressing Lakoff and Johnson's (1980a) Conceptual Metaphor Theory (CMT).

Section 2.1 introduces underpinnings and overviews of metaphor research. Section 2.1.1 delineates theoretical views and studies which have addressed the nature of metaphor right from Aristotle's notion of metaphor throughout history until the present day. Section 2.1.2 presents some general definitions and major characteristics of metaphor in Arabic rhetoric from existing metaphor in Arabic linguistic literature. Section 2.1.3 introduces how metaphor moved out from under the umbrella of language and into the cognitive domain. Section 2.1.4 delineates the main features and general principles of CMT upon which the current research is based. Section 2.1.4 discusses metaphorical concepts as a mapping process, their features, image-schemas, emotion concepts and other cognitive aspects. The last two sections 2.2 and 2.3 address the relationship

between metaphor studies and Translation Studies. Section 2.2 presents the different approaches that treat metaphor translation as a linguistic problem. Section 2.3 highlights the translation aspect through the different contributions conducted within CMT.

2.1. Metaphor: From a Linguistic Tool to a Cognitive Construct

Metaphor has been defined in various ways in multiple disciplines, including in pragmatics, linguistics, translation and cognitive linguistics. This has happened over the past two millennia, from the time of Aristotle and throughout the history of human thought and language until the present day. As such, any serious study of metaphor necessarily begins with a review of the various definitions of metaphor and the major theories that have contributed to the understanding and functions of this figurative device. Nevertheless, due to the limited timescale of this study and space limitations, it would be prohibitive to detail an exhaustive discussion of metaphor along with supporting evidence. Therefore, section 2.1, presents an overview of the two most prominent metaphor models that capture two different, yet complementary ways of construing metaphor: the linguistic paradigm and the emergence of the first and second generations of the cognitive science of metaphor research.

The linguistic paradigm encompasses: definitions of metaphor from both English and Arabic literature, the transference theory of metaphor by Aristotle, the different theories of metaphor that developed thereafter. The second generation of cognitive science includes Lakoff and Johnson's (1980a) CMT that treats metaphor as understanding a single conceptual domain of experience in terms of another. These two models are the most significant and empirically viable in terms of their influence on translation theories of metaphor. Furthermore, the main emphasis is on CMT as it provides a theoretical

basis for the current study and the discussion between the two opposing theories, at least outwardly, is the most valuable way of viewing metaphor.

2.1.1. The Linguistic Paradigm: Metaphor in the Western Rhetoric

2.1.1.1. Aristotle's Transference Theory of Metaphor

The term *metaphor* was first introduced to English language in the 16th century via the Old French word *"métaphore"* (Giannakis et al., 2013). The *Online Etymology Dictionary* (2001-2021) outlines the lineage of metaphor with *transfer/carry over,* which accords with translation (Lat. *traducere'*) meaning *carry across,* or *pherein* in Greek meaning to *bear*. However, the notion of metaphor in the linguistic paradigms differs from the Greek definition. This can be traced back to Aristotle's view of metaphor.[1] In Aristotle's *"Poetics",* Aristotle argues that metaphor is as a transference or a shift of the normal usage of a word to a new figurative one and a distinction between the metaphorical use of language and its literal equivalent, focussing mainly on two basic notions: "similarity" and "substitution" (Richards, 1936/1990). To explain Aristotle's view of metaphor, the following example is used when the word *jail* is transferred from the place domain to the domain of people presented in (1):

(1) "My job is a jail" (Glucksberg & Keysar, 1990, p. 4).

In Aristotelian terms, statement (1) could be considered an analogy-comparison (Gentner et al., 2001, p. 200), an expression that would consist in the semantic transfer of some features from *jail* to *job* and thus shares relational information. Second, an

[1]Aristotle work was influenced by Plato's (428/ 427 BC - 348/ 347 BC, in Pender, 2003) theory of metaphor that was based on the eternal ideas of the world and on the principle that metaphor as a part of language should reflect these ideas. Plato's theory has a very close connection to the idea of a cross-mapping process between two domains proposed by Lakoff and Johnson (1980a) in their conceptual theory of metaphor with some exceptions detailed in section 2.1.4.1.

outside frame in the statement exists as part of a physical object, which is reflected in language through the literal term *jail.* The entry for *jail* in *Oxford Dictionaries* (1884-1928) reads as follows: "A place for the confinement of people accused or convicted of a crime" and we already know from experience that a jail is a frustrating, confining, and unpleasant place. Thus, metaphor breaks such a reference system through the application of the word *jail* to its description. The use of the word *jail* to refer to the description of a place, narrowing the rule of locked doors and windows, is considered exceptional as well as deviating from the ordinary use of speech, which for Aristotle involves the use of literal language. In such cases, which of the salient features of *jail* should be transferred from jails to a job? Semantically this cannot happen, as a semantic theory cannot account for such problems. A pragmatic theory that takes pragmatic factors or the incorporation of context with semantics into account might provide a solution (see Kittay, 1987). Aristotle's claims regarding metaphor seem contradictory. On the one hand, he views metaphor only as a stylistic ornament of language which should be used in specific texts and not ordinary everyday language or scientific writing. On the other hand, Aristotle assigns metaphor a precise cognitive role of having a command in the following statement:

> …but the greatest thing by far is to have a command of metaphor. This alone cannot be imparted by another; it is the mark of genius, — for to make good metaphors implies an eye for resemblances (Aristotle, cited in Butcher 1950, p. 29).

That is, the way of seeing likeness in the external physical world expressed in language, according to Aristotle, may differ from one person to another and the ability to see the similarities between entities cannot be unified, as one may see a resemblance more than another, making metaphor a mark of a cognitive ability. Notwithstanding, Aristotle attempted to theorise metaphor understanding as a kind of balance between literal

"ordinary language" and non-literal "metaphoric or poetic language", considering metaphor a type of expression or a poetic tool. Though many of his hypotheses have been considered eccentric and, to some extent, have been invalidated, it goes without saying that his findings have had a significant impact on the history of language and thought. After a full description of Aristotle's account of metaphor, sections 2.1.1.2 and 2.1.1.3 will address the most prominent theories in metaphor that have considerably influenced the topic in Translation Studies.

2.1.1.2. The Substitution Theory

Substitution theory is "a way of saying what could be said literally" (Martin & Harré, 1982, p. 90). According to Black (1962, p. 31), that considers a metaphor to be a stylistic linguistic utterance used in a literal sense and involving an inner contradiction. In metaphors, contradiction occurs in a variety of forms, the most common being literal falsity and sortal incorrectness (Scholz, 1987, p. 273). Literal falsity concerns the integration of words which are not linked in ordinary speech, and the metaphor's surface meaning may be perceived as being when it is accepted literally. According to Josef (2006, p. 243), literal falsity is the "odds with the standard contextualist explanation of metaphorical interpretation". If, for example, someone were to report to another person that *she literally was five foot tall* or *she turned purple with fear* and then it was discovered that neither is true. This might reach to a conclusion that the reporter was either a liar or she is not familiar with the correct use of the term literally. Sortal incorrectness implies that certain elements or parts of the metaphor do not fall under the same category as the other elements. By way of illustration, consider example (2):

(2) "Caroline is a princess" (Romero & Soria, 2014, p. 494).

If we take this statement at face value, we construe it as follows: Caroline is a member of a royal family. However, we know in this context that the typical convention is that Caroline is not actually of royal lineage, therefore, the statement is not true and is sortally incorrect. This interpretation is rejected on the grounds that it does not seek to achieve an outward appearance with an implicit content. The semantic attribute of *princess* gives rise to the metaphorical meaning of Caroline as spoiled, free, indulged, etc. and not to the concept of a royal family. It is used to provide an implicit comparison to a human figure expressed by Caroline. In other words, the meaning of Caroline belonging to a royal family has been replaced by the meaning of Caroline being spoiled. For more clarity, consider the utterance presented in (3):

(3) "War is a contagion" (Sommer & Wiess, 1996, p. 448).

In example (3) above, *war* exists in the political domain, whereas contagion lies in that of diseases or illness. Therefore, logical contradictions exist; political phenomena may not imply transmitted bodily diseases. As van Dijk (1975, p. 17) observes, predicates are used for a subject belonging to an incorrect/false category, for example, as in subject-predicate sentences. To illustrate further, consider the two examples in (4-a and 4-b):

(4) a. "the colour of the copper is forgetful"
b. "the colour of the copper is pretty" (Thomason, 1972, p. 209).

In sentence (4-a), the reference predicate uses an unmatched and incorrect sort in *is forgetful* that does not apply to the subject, making it sortally incorrect, whereas (4-b) uses a predicate of the right sort in *is pretty*, which leads to sortal correctness. The reference of predicates of both sorts can be thought of as functions from objects to truth-values. The function of the reference of the predicate in (4-a) returns the truth-value as false because the given input of the object is a description of the absence of the mind, whereas the function of the reference of the predicate in (4-b) returns the truth-value as

true because the given input of the object describes how attractive the colour of the subject is. This is what explains the fact that (4-b) is true and (4-a) is false: the colour of the copper is pretty and is not forgetful. A metaphor may be identified using sortal incorrectness within the literal comprehension of the metaphor by acquiring sortal incorrectness within the metaphor's meaning. Contagion and war belong to different sorts or categories. This view of metaphor is shallow and does not describe the actual nature of metaphor, inasmuch as it only reduces the metaphorical aspects of figurative language to the literal.

2.1.1.3. The Comparison (Similarity) View

Comparison theory can be traced back to Aristotle's contributions and his followers. This view has been used in Aristotle's explorations in metaphor understanding, flourishing in the 20th century and still alive today. This section outlines some of the main lines of criticism this theory has been subjected to and provides a brief overview of any major points that have served the construction of the theory of metaphor.

Comparison theory assumes certain fundamental objectivist proposals about substitution theory which involve finding similarity between objects being compared (the metaphorical use of language and its literal reference centrality/equivalent). Black (1962) considers comparison theory a special kind of or an offshoot of substitution theory. Similar to Black, Nöth (1985) observes that the comparison and substitution views go hand in hand. For clarity and simplicity, take the previously mentioned metaphor *Caroline is a princess*, discussed in section 2.1.1.2 above. What are the attributes of a princess that should be predicated of Caroline? Stating that both entities have pre-existing similarities makes it a null context, inconsistent and vague, and comparison theory does not employ the notions of context or world knowledge like

Black's (1962) interaction theory does (see section 2.1.3). This issue could be resolved by finding salient features, but since the theory does not make use of context and world knowledge, salient features cannot be pointed out. Considering simile as a shortened form of metaphor leads to further objections. Ortony (1993, p. 345) states that the "problems posed by the existence of metaphors are also posed by the existence of simile, so that the reduction of metaphors to similes will contribute nothing to their solution." The comparison view received various forms of criticism from different scholars (see Black, 1995; Davidson, 1978; Ross, 1993; Searle, 1993; Ortony, 1993) and, of relevance to this research framework, Lakoff and Johnson (1980a), who reject the view of similarity and comparison between the compared objects as they are realised from external reality only. Lakoff and Johnson (1980a) believe that compared objects exist outside the human mind, confirming that these objects maintain disparate categories from their concepts stored in human cognition.

Despite extensive criticism of comparison theory (reducing metaphor to simile, the literal view, or the similarity/comparison base in metaphorical statements), the theory was sufficiently accepted to influence some reputable 20th century scholars, most notably Miller (1993), who adopted its basic assumptions, albeit adding innovative elements. Miller emphasised the importance of context and world knowledge being consistent in the use of metaphor. Miller even goes a step further in his conception of metaphor. He states that it is not merely a tool that transfers features but also a way of learning, incorporating cognitive context and world knowledge into the theory of metaphor. Miller's new ideas are originally based on Black's (1962) proposal, in which he refined Richards' (1936/1990) interaction theory, as will be shown in section 2.1.3 in this thesis.

Section 2.1.1 introduced the main ideas connected to the discussion of metaphor as an exclusively linguistic issue amongst rhetoricians of ancient Greece, and the most influential theories of metaphor from Aristotle (section 2.1.1.1) through to the 21st century that includes substitution theory (section 2.1.1.2) and comparison theory (section 2.1.1.3). The foregoing accounts of metaphor treat it as a means of conceiving one idea in terms of another, and as a figure of speech analysed at the word, phrase, text, and above the text level. It is a process which involves a linguistic expression referring to people, animals, things, events, or concepts in an unconventional way on the basis of some similarity, correlation, analogy, or by means of substitution and comparison. These linguistic theories have influenced most existing theories of metaphor in translation literature, as shown in section 2.2. Following the review of these metaphoric orientations, this chapter will continue with section 2.1.2, presenting some general definitions and major characteristics of metaphor in Arabic rhetoric from existing metaphor in Arabic linguistic literature. In addition, the section is intended to evaluate how different or similar the two conceptions in the West and in the Arab world are.

2.1.2. Metaphor in Arabic Rhetoric

Campbell (1988, p. 1) states that rhetoric denotes "that art or talent by which one discourse is adapted to its end." He identifies four aims of discourse: to enlighten the understanding, to please the imagination, to move the passion, or to influence the will (ibid.). In Arabic rhetoric, metaphor is termed *al-istiaarah*, a form of linguistic allegory. Linguistically, *al-istiaarah* is derived from the verb *to borrow*, which means borrowing a feature from one thing and applying it to another (Abdul Raof, 2006, p. 218). Rhetorically, however, *al-istiaarah* is an intensified comparison in which one term either the tenor (*al-mushabbah*) and/or the vehicle (*al-mushabbah bihi*), is omitted from

context (Najjar, 2012, p. 89). Metaphors in Arabic are used for their highly rhetorical flowery nature that aims to provide "appropriate effective stylistic mechanisms required for eloquently forceful discourse" (Gholami et al., 2016, p. 58). In every metaphor, there is a relationship (*alaqah*) between the intrinsic and non-intrinsic meaning established through a shared element between the two entities of *al-mushabbah* and *al-mushabbah bihi* to form a semantic link of explanation. The metaphorical meaning, however, is comprehensible to the addressees through what is referred to in Arabic as *al-qarinah* - literally meaning a sign or a "lexical clue" (Abdul Raof, 2006, p. 218) and a context which is "the fine line between the literal and the figurative meaning" (AI-Misned, 2001, p. 125). According to Shuhood (2007, p. 103), metaphor is defined as:

> A term used in a different way than its original meaning although there is a similarity between the transferred meaning and the current meaning used in a true context (Al-Shuhood, 2007, p. 103, my translation).

According to Abdul-Raof (2006, p. 218), metaphor has three main components: the borrowed-from (*al-mustaar minh*) which is "the equivalent to the likened element in simile", the borrowed-to (*al-mustaar lahu*) which is "the equivalent to the likened-to in simile" and the borrowed (*al-mustaar*) which is "the borrowed lexical item taken from the borrowed-from and given to the borrowed-to". By way of illustration, consider the following Quranic verse in example (5):

قَالَ رَبِّ إِنِّي وَهَنَ الْعَظْمُ مِنِّي وَاشْتَعَلَ الرَّأْسُ **شَيْبًا** (Q19: 4).

(5) {O my Lord! infirm indeed are my bones, and the hair of my head doth glisten with grey}(Q19: 4).[2]

In example (5), the borrowed-from is the noun *fire*/النار, the borrowed-to is the noun *grey hair*/الشيب and the semantic feature of (a quick spread) is the shared element that

[2] Soura Chapter Maryam/ Mary (19): Aya/Verse (4). Translated by Yusuf Ali. Retrieved from the Quranic Arabic Corpus at: https://corpus.quran.com/translation.jsp?chapter=19&verse=4.

establishes the link between the spread of the white/grey hair and the kindling of the fire. In Arabic, metaphors can be seen as an eloquent analogy where a tenor and vehicle must be mentioned. However, if the vehicle (*al-mushabbah bihi*) is mentioned but the tenor is not, this would be a declarative metaphor (*istiaarah tasrehiya*). A declarative metaphor means that there is a declarative statement that one thing is another. If the tenor (*al-mushabbah*) is mentioned without the vehicle it is considered a metonymic metaphor (*istiaarah makaneya*). For example, consider Bashar ibn Burd's following poetic line in (6):

يا قَومِ أَذني لِبَعضِ الحَيِّ عاشِقَةٌ *** **وَالأُذنُ تَعشَقُ** قَبلَ العَينِ أَحيانا.

(6) "Oh people, my ears loved some living soul *** As ears may sometimes surpass eyes to cause love at first sound." (my translation)

The highlighted expression in example (6) is considered a metonymic metaphor (*istiaarah makaneya*). The poet replaces the *ear* as the organ responsible for love in the phrase *the ear loves/* الأُذنُ تَعشَقُ and omits *heart*/ القلب, the vehicle. However, the poet uses the verb *love*/ تَعشَقُ and its semantic feature as one of the requisites and attributes of the heart.

The discussion of the literature in section 2.1.2 contribute to a closer comparison of the definitions and classifications of metaphor in the Arabic world. As is obvious from the discussion, Arabic rhetoricians are not concerned with domains of the terms involved with *al-istiaarah*, but with the point(s) of similarity. This is to say that the classifications of metaphor in Western studies focus on the concrete and abstract (physical or non-physical) domains of thought types as will be discussed in section 2.1.4. The Arabic conception of metaphor is an objective one that relies on similarity as opposed to Lakoff and Johnson's (1980a) conceptual perspective.

As will be discussed in section 2.1.4, Lakoff and Johnson's conceptual metaphor theory does not require any pre-existing similarities between cognitive domains, but looks at the perceived structural similarities, and they do not need to be real or objective, as is the case on metaphor theory in Arabic rhetoric. However, Al-Jurjani (1078, cited in Deeb, 1971) explains that some semantic structures are borrowed from one concept to another (between the borrowed-from and borrowed-to) to highlight certain points of similarity, which requires a cognitive correspondence between entities. Thus, we can say that Al-Jurjani's argument about the metaphoric function of borrowing in Arabic is close to the arguments made in the West. The discussion moves on with section 2.1.3 to introduce how metaphor research developed to focus on the understanding of metaphor in cognition. Section 2.1.3 delineates theoretical views that mainly assume that metaphors are represented in the individual linguistic expression but grants metaphor a special cognitive status as involving an interaction of ideas. This interactional view of metaphor focuses on human cognition with the innovative aspects of world knowledge and experience.

2.1.3. The First-Generation of Cognitive Science of Metaphor Research

In Black's view (1962, p. 31), the substitution view regards metaphor as "replacing some set of literal sentences" while the comparison theory, according to Black (1962, pp. 35-61, cited in Ortony, 1993, p. 27), "takes the imputed literal paraphrase to be a statement of some similarity or analogy." In 1936, Richards proposed a new theory called interaction theory. Richards postulates that each metaphor is denoted by an individual linguistic expression formed by two juxtaposed ideas that create an understanding of reality and involves what Beardsley (1962) describes as a "verbal opposition" (Richards, 1936/1990, p. 93, cited in Shelestiuk, 2006, p. 334). His theory offered metaphor a

unique cognitive status that involves the exchange of ideas at the level of individual words. The new perspective of interaction was proposed due to drawbacks in aesthetics affected by Romanticism because metaphor overrides and can express the statement equally with a literal expression (see Kirstein, 1971). Richards' theory was a turning point for the conception of metaphor and only then did it cease to reduce metaphor to rhetoric, extending its role to thought with the influence of his two terms: the "tenor" (the literal) and the "vehicle" (the non-literal) through the postulation of semantic elements for filling figurative and literal gaps in use. Tenor, in Richards' (1936) terms, is considered the key element that is compared to another object from a different domain. The vehicle, on the other hand, is the borrowed element or entity in terms of which the tenor is presented. Richards (1936) states that there is an embedded approach that grants cognition a primary role in obtaining experience.

> In the simplest formulation, when we use a metaphor, we have two thoughts of different things active together and supported by a single word, or phrase, whose meaning is a resultant of their interaction (Richards 1965, p. 93).

Richards' new framework integrated the two aspects of language and thought, but at the level of words. In 1962, Black was not sufficiently convinced by Richards' findings and thus continued to search for more robust answers regarding the nature and function of metaphor. In the second half of the 20th century, Black (1962, p. 28) introduced two new aspects into Richards' interaction theory: world knowledge and experience.[3] He puts forward that metaphors are not merely decorative but are essential for the purpose of spreading knowledge in order to achieve cognitively equivalent literal utterances in a reduced form.[4] Black's proposal enhanced Richards' valuable accounts of metaphor via

[3] Black's (1962) interaction theory influenced theoretical frameworks to explain the function of metaphor as a cognitive aspect before the appearance of Lakoff and Johnson's (1980a) conceptual approach.
[4] Black's (1962) proposal of the experiential basis theory of metaphor was preserved to contribute to the emergence of the cognitive linguistics approaches to metaphor starting in the late 1970s.

a kind of interaction between its two divisions: the *"literal primary subject"* or *"frame"* for the normal surrounding *"literal"* meaning, which is the *"tenor"* in Richards' terms, and the *"metaphoric secondary subject"* or the *"focus"* for the nonliteral, which corresponds to the *"vehicle"* in Richards' work (Black, 1962, p. 28, emphasis in original). To illustrate Black's distinctive new subjects, consider example (7) from Esenova (2011):

(7) "Man is a wolf" (Esenova, 2011, p. 13).

In statement (7), *man* is the literal (primary subject) and *wolf* is the metaphoric (secondary subject). Both subjects represent structural domains of many things and not one particular object. Thus, in contrast to the substitution and comparison theories, which long argued that metaphoric language is cognitively reducible, and Richards' account of metaphor that viewed metaphor as an interaction between entities only at the level of words, Black's account of metaphor gave researchers the opportunity to conceive of metaphor beyond the limits of the word level as an interaction between conceptual structures underlying words.

Despite the contrasts between all three major views, they all share a common thread: the similarity between the metaphoric entities of an expression must be real and measurable in terms of truth values and factual knowledge. For instance, similar to Aristotle's view, Black (1962) postulates that the comparison in the interaction view of metaphor is established through some of the already existing similarities between the literal and the target.[5] In 1977, Tversky created similarity theory, which is intended to describe the

[5] This objectivist view has a different perspective on the nature of the similarity between the domains in Lakoff and Johnson's (1980a) nomenclature. In CMT, there is no need for pre-existing similarities, instead there are perceived structural similarities, and they do not need to be real or objective, as is the case on Aristotle's view and in Black's theory. Kövecses (2010a, p. 310), however, argues that "(correlations in experience and resemblance or similarity) should be seen as complementary rather than mutually exclusive."

nature of metaphorical comprehension. Tversky attempted to solve the inadequacy of feature selection through asymmetries found not only in literal similarities but also in other types of comparison, including metaphor and analogy. Van Dijk (1975, p. 73), goes a step further to set out the ultimate requirements for a theory of metaphor, that is, specifying the conditions under which metaphorical statements may be considered as having a truth value (Müller, 2005, p. 40). Unravelling the issue associated with semantic contradiction necessitates the lateralisation process of a metaphor. Nevertheless, the interactive approach still exhibited particular limitations. Ortony (1979) posits that there is a need for an "imbalance [to] exist[s] between shared characteristics of two terms in a metaphorical statement" (Fawson & Reutzel, 1994, p. 358). That is, details on how the comparison takes place are lacking in Black's interaction theory and his explanation of how properties are highlighted is still abstract. Ortony (1979) explores Black's theory further and proposes his salience imbalance theory, which can be exemplified in the following metaphor:

(8) This soldier is a *lion*.

In example (8), *lion* exemplifies courage and bravery in a much more salient way than *soldiers* and by making the comparison in the metaphor, the salience of the courageousness and braveness featured by *lions* serves to highlight this feature in this soldier.[6] The salience theory, and many subsequent theories, serves to explain the symmetrical feature in metaphorical comparisons, meaning that *this soldier is a lion* appears more acceptable than *the lion is a soldier.* Tversky's (1977) *"feature contrast*

[6] It is interesting, though, in the right context, that the "reverse'" metaphor is completely fine. Sometimes we say soldiers are hardworking. Imagine a lioness that is hunting more than the other lions in her pride, she could be described as a soldier. It depends on which feature is salient in the context. Sperber and Wilson's (1986) relevance theory could account for this. Their cognitive linguistic and pragmatic framework views metaphor as arising from communication more than what is expressed in any literal sense. Within CMT, however, this expression is labelled under the PEOPLE ARE ANIMALS metaphor. This leads us to understand the characteristics of a human in terms of animal behaviour.

model" or Ortony's (1979) empirical findings regarding the salience theory of metaphor yielded comprehensive results and neither of their views provide "a clear account of how comparisons convey new information about their targets" (cited in Gentner & Bowdle, 1994, p. 351). Furthermore, the requirements of their proposal exceed counter-intuitive explanations due to the consequence of suppressing the semantic requirement the metaphor may depend on. This resulted in metaphor theories yielding three different typological decisions all still, to some extent, based on Black's work but offering different solutions to the limitations of Black's (1962) and Ortony's (1979) theories. The first type treats metaphors as using the same processes as analogy. This type is referred to as the structuralist orientation approach: a non-mentalist approach that views language as a structural mapping that "unifies metaphor with processes of analogy and similarity" and involves the feature of a mapping process between the topic and the vehicle in a metaphor (Gentner et al., 2001, p. 6).[7] Thus, it represents a much more sophisticated comparison process than both interactive and salience imbalance theories can offer. The second typological decision treats metaphors as categorised within attributive categorisation theory, which deems metaphors to be class-inclusion statements. This entails placing the topic into a category defined by a feature or features exemplified by the vehicle (Jones & Estes, 2005, p. 111). For example, *The soldier is a lion* involves placing *the soldier* into the category of courage, the description of which *lion* typically fits. The final, and widely-used, type of cognitive theory of metaphor comes out of

[7] Up to the 1950s, linguists were anti-mentalists and their arguments about language and its relation to the human mind stumbled between two conflicting views, the Structural (*Descriptivism*) and the Behavioural (*Empiricism*). The behaviourist Bloomfield (1933), for example, argued that the mental aspect and its relation to language is not definite and thus speculative due to the lack of absolute scientific evidence. However, in 1959, Chomsky refuted the behavioural approach to language and proposed the mentalist approach. He argued that the human language actually exists in the mind and thus the study of language and the human mind cannot be separated. Chomsky's framework and Cognitive Linguistics share their non-behavioural attitude to language.

cognitive linguistics and is either based on Lakoff and Johnson's (1980a) CMT or the blending theory of metaphor from Gilles Fauconnier (1995).

As a response to the principle of evolution, new trends and theories in the field of contemporary linguistics have emerged to explore in depth human thought and the conceptual system that operates on creating the system of speech. In 1980, the conceptual metaphor theory by Lakoff and Johnson (1980a) emerged, resulting in a revolutionary change in the understanding of metaphor. This radical theory mainly accounts for conceptual analysis of the linguistic systems based on the links between the mental abilities of understanding and the human experiences in the world to form an interpretive cognitive channel between conceptual and visual perceptions and sense.

Lakoff and Johnson (1980a) restated the two major failures in the objectivist (external world) and subjective (internal truth) views to a philosophical experientialist alternative. Firstly, the scholars challenged the internal zone of structural linguistics which underpins formal semantics. Metaphor in structural linguistics is considered only in language and approached from a purely linguistic perspective as a feature of language, a linguistic expression or a single expression that addresses the contrast between metaphor figurative and literal use.[8] Secondly, they challenged the understanding of the external reality of metaphor independently from the internal reality of the human cognition depending on "pre-existing similarities based on well-defined inherent properties" without the interference of language (Lakoff & Johnsons, 2003, pp. 203-215). Overturning these views depended on arguing that the production of meaning is

[8] The criticism actually traces back to 1965 when Chomsky developed the "Architecture of Grammar" - all humans were born with natural knowledge of grammar that serves as the basis of any language acquisition. Many linguists such as McCawley (1988), Postal (2004), Lakoff and Ross (1976) in their publication "Is deep structure necessary?" rejected, among many others, Chomsky's view and argued for a generative semantic account of language (see Panther & Thornburg, 2017, p. 273). For further debates around Chomsky and deep structure see Glucksberg and Keysar (1990).

not confined to linguistic structures only, but rather extends to various aspects of the mind in the sense that language interacts with the human mind and works on the same basis as cognitive mechanisms. Section 2.1.4 addresses metaphor within the cognitive linguistic tradition of Lakoff and Johnson's (1980a) CMT and describes their main claims, understanding of metaphors as concepts and how they are formed in much greater detail.

2.1.4. The Second-Generation of Cognitive Science of Metaphor Research

2.1.4.1. Conceptual Metaphor Theory (CMT)

Conceptual Metaphor Theory is a cognitive and experiential-basis theory of metaphor first introduced by Lakoff and Johnson (1980), who revealed a new cognitive property of metaphor. Lakoff and Johnson's contribution reformed the literature and was the key that unlocked a new realm in the understanding and studying of metaphor one where it is argued that the human conceptual system (thought) is largely metaphorical by nature. Unlike other metaphor scholars, Lakoff and Johnson (1980a) endeavour to describe the power and significance of metaphor through features of the human body's cognitive apparatus. They regard metaphor as a fundamental and productive part of human thought and a diverse way of how we think, act and perceive the world around us, emerging from non-linguistic functioning. Their conceptual theory is situated in the more general framework of the embodied cognition principle, according to which ideas and human experiences are implemented, influenced, and constrained by the way we function in the world with our bodies (Lakoff & Johnson, 1999; Gibbs, 2005). The contemporary theory of metaphor focuses on describing and understanding the linguistic and conceptual mechanisms, the perceived semantic relatedness, and the structural connectedness

between metaphorical expressions and their conceptual domains of experience. Lakoff and Johnson (1980a) postulate that conceptual metaphor reflects the mental processes of thinking, and maintain that metaphor is neither just "propositional" nor merely a convenient mechanism for expressing knowledge but is rather considered to be fundamentally conceptual and deeply embedded in our culture (Lakoff & Johnson, 1999, p. 45). Based on their argument, metaphors are constructed from our cognitive consciousness of everyday experience, and, thus, the structure of language reflects the structure of the mind and that linguistic expressions partially reflect cognitive processes and structures. This involves all basic mental mechanisms people use to understand information and make sense of experience, confirming that everyday language is metaphoric. Lakoff and Johnson's theory could be seen as an extension of the Sapir-Whorf Hypothesis, pioneered by Sapir and Whorf in the 1920s. Their controversial linguistic relativity theory posited that there is a systematic relationship between the structure of a language and its native speakers. That is, the way language encodes cognitive and cultural perceptions and categorisations affects the way people think, understand the world and behave. In their own words, Lakoff and Johnson state that:

> If you are mostly looking at the surface forms of the language, rather than at the conceptual systems and inferential structure, you may not be looking in the right place to notice the difference (Lakoff & Johnson, 2003, p. 266).

Lakoff and Johnson emphasise the inadequacy of the linguistic approaches to metaphor analysis that view metaphor as a deviant construct treated only on the structural level of language (at the word level). The linguistic view is totally rejected in CMT, because, if this was the case, then each metaphoric expression would give rise to a different conceptual metaphor (Lakoff, 1987). The two scholars moved the state of metaphor from being a linguistic aberration to being recognised as an omnipresent conceptual feature in language acquisition and, as such, metaphor should operate at the level of thought.

The term Conceptual Metaphor or metaphorical concept, is a coherent mechanism of human cognition understood through two domains in thought: the source domain, which represents the concrete experience and the target domain the abstract notion (Lakoff & Johnson, 1980a).[9] The definition of "domain" is originally based on Langacker's (1987, cited in Kövecses, 2010, p. 4) definition as "any coherent organization of experience". The source and target domains give rise to images from physical experiences around us (Lakoff & Johnson, 1980a, p. 125). According to Lakoff and Turner (1989, p. 113), these images are either "embodied", i.e., dependent on the subjective experience of being in a human body, or "grounded" through our intellectual operations such as categorising, remembering, thinking, reasoning and knowledge framing in addition to metaphor understanding (Ströbel et al., 2016) (see also Johnson, 1987, p. 23). These conceptual metaphors structure our experiences and organise our thoughts, shaping not just our communication but also our thought processes and behaviour in a coherent manner formed by a representation of cognitive correspondences, or what Lakoff and Johnson (2003) call "conceptual mapping[s]".

Unlike the traditional view of metaphor that looks only at the function of pre-existing similarities or comparisons between the literal meanings in an expression, a conceptual mapping is a representation of cognitive correspondences from a source domain onto a target domain (Johnson, 1987). In the simplest formulation, conceptual mappings reflect the expressions used in our everyday life. In every mapping process, the target domain is structured in terms of the source domain. This means that the source domain overrides aspects of mental concepts of semantic features onto the target domain, thereby

[9] It must be noted that CONCEPTUAL METAPHORS are conceptualisations that are likely to be structured as image-schematic concepts, (see section 2.1.4.2) or bodily-based concepts that are not structured in parts of speech (Semino, 2010).

conceptualising one domain in terms of another (Lakoff & Johnson, 2003).It must be noted that the cognitive mapping is not activated unless the target domain lacks a clear semantic structure, thereby taking precedence and receiving rich knowledge, structure and reason from the source domain (often existing physical entities in the real world). The term "entity" in this context alludes, according to Barcelona (2011, p. 9), to "a physical object, an animate being, even a well-defined abstract concept, like 'agent', 'action', 'institution', 'emotion', 'category', 'cause', 'effect' etc." and constrains the form of any linguistic expression the metaphor may motivate.

The mapping process in every conceptual metaphor from source to target is partial. That is to say, in every conceptual mapping, the source domain concept normally holds more than one aspect. During the mapping process, the metaphor uses a selection of these aspects from the source to be mapped onto the target, and these serve to function as highlighters, while others remain unused (Kövecses, 2010a, p. 92).[10] If the metaphorical mapping structuring were holistic, meaning the target domain would *"be"* the source domain, then, in this case, the abstract concept would not be understood in terms of the concrete (Schmidt, 2012, p. 34). For instance, the mapping in Lakoff and Johnson's (2003, pp. 52-53) THEORIES ARE BUILDINGS generates the linguistic expression *"He has constructed a theory"* amongst many others. As the example indicates, the source domain focuses on highlighting the aspects of the concept BUILDING represented in the entities "construction and foundation" in relation to the metaphorically defined THEORIES, the target domain (ibid.). Further, the mapping process requires consistency between mental domains. Lakoff (1993, p. 12) postulates

[10] This feature is related to Taylor's (1989, pp. 90-126) notion of *"perspectivization"*. Taylor's notion points to the cognitive process of bringing a specific part of an entity to the fore. This function is clearly represented as part-whole metonymy, as only a specific part of experience is perspectivised as in the mapping WHOLE THING FOR A PART OF THE THING, (see Radden & Kövecses 1999, p. 31). For a summarised discussion see Ungerer and Schmid (2006).

that this consistency in conceptual mappings can be accounted for by the so-called the invariance principle, which is an attempt to illustrate the contrast between ideas expressed literally in natural language and when used as conceptualisations of the world. The invariance principle stipulates that the cognitive classification of the source domain preserves the conceptual structure in a logic and persistent manner with the structure of the target domain. Every metaphoric concept provides a host of linguistic expressions that reflect the basic conceptual metaphor. However, all conceptual metaphors and the linguistic expressions they host, are distinct. Linguistic expressions are conventional expressions and are viewed as "manifestations" of conceptual metaphors (Lakoff & Johnson, 1980a, p. 7; Kövecses, 2010a, p. 45). Conceptual metaphors, on the other hand, are representations of the metaphorical system which relate to conceptual structures shared by members of a culture (Lakoff & Turner, 1989, p. 50). They are cognitively automatic, defined as experientially bound, used unconsciously in a systematic way, and are, thus, conventionalised. To illustrate, the mapping in THEORIES ARE BUILDINGS hosts various linguistic metaphors such as those instances in (9-a, b, c, d and e):

(9)

a. "He has constructed a theory".
b. "His theories are Bauhaus in their pseudo functional simplicity".
c. "His theory has thousands of little rooms and long, winding corridors".
d. "He prefers massive Gothic theories covered with gargoyles".
e. "Complex theories usually have problems with plumbing*"* (Lakoff & Johnson, 2003, pp. 52-53).

According to Lakoff and Johnson (1980a, pp. 52-53), the expression in (9-a) falls inside "literal language" and describes the metaphoric expression as non-imaginative, which excludes it from "figurative language". In expressions (9-b, c, d and e), however, the case is different. The statement in (9-d), is figurative or imaginative language, and

excludes it from literal language, yet both (9-a) and (9-d) can belong to the same general metaphor THEORIES ARE BUILDINGS. In this situation, Lakoff and Johnson (2003, p. 53) classify figurative metaphors into three categories:

1. "Extensions of the used part of a metaphor". For example, the metaphoric expression "These facts are the bricks and mortar of my theory" refers to the "outer shell" of the building, as it has more details of the materials used in constructing a building. THEORIES ARE BUILDINGS does not extend to the materials used and, thus, the expression classified as an imaginative linguistic metaphor that has an elaborate extension of the used parts of the metaphor type. Nonetheless, this falls inside the conceptual metaphor THEORIES ARE BUILDINGS.
2. "Instances of the unused part of the literal metaphor", illustrated in example (9-c). Even though the metaphoric expression has unused parts such as "rooms" and "corridors" that fall outside the conceptual metaphor frame, we may consider it as a linguistic manifestation of the general metaphor THEORIES ARE BUILDINGS.
3. "Instances of novel metaphors" this type is different from the first and second in that it falls outside the general metaphoric concept. For example, "Classical theories are patriarchs who father many children, most of whom fight incessantly" is a metaphoric expression that is structured in "a new way of thinking" different to the normal conceptual system in THEORIES ARE BUILDINGS.[11]

[11] See Grady (1997) for a revisited analysis of "THEORIES ARE BUILDINGS".

Lakoff and Johnson's classifications in 1 and 2 can be collapsed into one basic category of figurative metaphors with two types. The first is what Lakoff and Johnson (2003) coin as the "outer shell" of the conceptual metaphor's SOURCE DOMAIN, for example, images of *bricks* and *mortar* from the domain BUILDINGS. The second is the "inner shell" of the conceptual metaphor's SOURCE DOMAIN, for example, images of *rooms* and *corridors* from the grounded domain BUILDINGS. All images produced from conceptual domains, according to Johnson and Lakoff (1980b), are image-schema repetitive patterns of conceptual structures. The main aim for the present study is to identify a new typological model for metaphor translation analysis. These types of metaphors are prototypical experiential kinds which contribute to the emergence of image-schemas which allow us to deal with abstract entities in terms of our interaction with the physical world and the environment.

Lakoff and Johnson (1980a) and Lakoff (1993) set out more concisely how the theory of conceptual metaphor works. They distinguish between two types of metaphors/conceptual metaphors: generic-level metaphors (universals) or "(near) universal generic-level concepts" and specific-level metaphors (Kövecses, 2000a, p. 169). The former is what have become a routine and unconscious part of our everyday conceptualisation. They are experiences that are structured through general scenes that do not have fixed source and target domains to develop more complex specific domains.

Lakoff and Turner refer to generic metaphors as "superordinate level metaphors" that entail a series of projections and constitute general levels of source and target domains. Generic-level structures have been related to Fauconnier's (1994) blending theory of mental space, one of the basic components in Fauconnier and Turner's (1998) work. Blending theory involves *"conceptual integration"* of cognitive networks, a third

mental space structured from two existing mental spaces. A space that inherits semantic structure from the source domain entity and from the target domain inputs other semantic features to form an emerging blend that has a semantic structural combination of the two domains. Figure 2 visualises how the integral network of domain inputs map together through an unconscious cognitive process for the blended input to be produced.

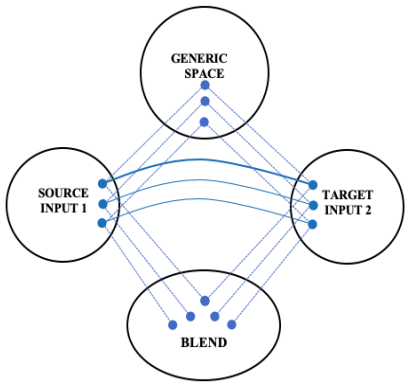


Figure 2. A cognitive blended network based on Fauconnier and Turner (1998).

For Fauconnier and Turner (1998), mental spaces are small areas in our cognitive sphere. They are constructed, when we think or talk, for the purpose of understanding an action. Fauconnier and Turner (1998) have structured concepts and mental models connected to our skeletal schematic knowledge of long-term types. These schematics, according to the scholars, are connected through different mappings and can be activated through means such as metaphoric mappings, for example, the memory of when I had my first child in 2007. The mental space includes three elements: me, my first child, and the year 2007. These elements are stored in my brain and can be activated through different means for any purpose.

Lakoff (1993) refers to the system of structure of generic metaphors as the "EVENT STRUCTURE" metaphor, which is based on two main conceptualisation systems: the "location system" as in *I'm in lov*e and the "object system" as in *I have a solution.* Lakoff

(1993, p. 16) EVENT STRUCTURE metaphor includes sub-metaphors such as the following list and exemplified with expressions for further illustration:

1. STATES ARE LOCATIONS (bounded regions in space CONTAINERS) (e.g., Sara is *in love*).
2. CHANGES ARE MOVEMENTS (into or out of bounded regions in space) (e.g., John's work went from bad *to worse*).
3. CAUSES ARE FORCES (e.g., His reaction *forced me* to change my mind).
4. ACTIONS ARE SELF-PROPELLED MOVEMENTS (e.g., We are *moving forward* with our relationship).
5. PURPOSES ARE DESTINATIONS (e.g., They *reached the end of their journey*).
6. MEANS ARE PATHS (e.g., They took a *different path* to achieve their goal)
7. DIFFICULTIES ARE IMPEDIMENTS (TO MOTION) (e.g., I am trying to *get around* the problem).
8. EXPECTED PROGRESS IS A TRAVEL SCHEDULE (e.g., He is trying to *move on*).
9. EXTERNAL EVENTS ARE LARGE, MOVING OBJECTS (e.g., Things are *going slow*).
10. LONG TERM, PURPOSEFUL ACTIVITIES ARE JOURNEYS (e.g., My goal lies at *the end of my Ph.D. journey*).

Kövecses (2002, p. 39) states that generic-level metaphors are "defined by only a small number of properties, which is to say that they are characterised by extremely skeletal structures." In Lakoff (1993, pp. 219-229), EVENTS ARE ACTIONS and GENERIC IS SPECIFIC are two well-known, general-level metaphors. The GENERIC IS

SPECIFIC metaphor "singles out common generic structures from specific concepts" (Ruiz de Mendoza Ibáñez, 2000, p. 111). Regarding the EVENTS ARE ACTIONS generic metaphor, they are "events (like death) [which] are understood in terms of actions by some agent" (Lakoff, 1992, p. 27). Kövecses (2013, p. 269) exemplifies EVENTS ARE ACTIONS through the expression *"He passed away",* where *"death"* is an event and *"passing"* is a defined action. In it, we project entities from the source domain of space into the target domain of any event. For illustration, Alverson (1994) conducted a study about the generic-level metaphor TIME IS SPACE. The scholar claims that such a metaphor can exist in such various languages and cultures as English, Mandarin Chinese, Hindi, and Sesotho. According to Alverson, these metaphors are likely to occur across cultures particularly between languages that descend from the same linguistic family, such as English and German.

Specific-level metaphors, on the other hand, are context-sensitive cases that constitute specifications of source and target domains. They are special cases of generic-level metaphors like *dying, living* and *travelling.* Such events undergo changes as an effect of external forces and tend to be full of details. Specific-level metaphors are also fully established but less pervasive. Thus, EMOTIONS ARE LOCATIONS is a generic-level metaphor with special cases of concepts, for instance, FEAR IS AN ENTITY IN A CONTAINER manifested in expressions like *She is living in fear* where *fear* is the emotional location and *she* is the entity in the location. To clarify further, an example by Matsuki (1995) is used for greater explanation. Matsuki observes that all the English metaphors analysed by Lakoff and Kövecses (1987) exist in the Japanese language. However, the scholar points out that the Japanese language groups together all the metaphors related to anger and that these are connected to the concept of *"hara"* which translates to (literally) *belly* in English. The metaphoric concept ANGER IS HARA in

Japanese is significant to the culture of the Japanese people and, as such, the idea of relating anger to the *"hara"* is unique only to the Japanese culture and not distinctive for the English-speaking cultures. Thus, the concept is categorised as a specific-level metaphor.

2.1.4.2. Image-schemas: definition and characteristics

The contribution of the notion image-schema began when Lakoff and Johnson (1980a) were looking for answers about the complexity of metaphor concepts and how they are constructed. They relate it to the embodiment interpretation. Lakoff and Johnson presuppose that the "basic bodily (sensorimotor) experience of human beings" has a direct responsibility for the structure of these metaphoric concepts (Kövecses, 2010a). They emphasise that the physical actions of the human body are directly responsible for forming concepts.

Johnson (1987) postulates that our bodily experiences give rise to repetitive patterns of mental conceptual structures from a cognitive typology of everyday experience called image-schemas. Johnson (1987) claims that image-schemas organise information and provide the basis for abstractions in thought through the concrete entities in the source domain. This role that image-schemas play allows us to form mental representations of the world we live in. The use of image-schemas has helped enormously to establish a new moral philosophy in understanding the categorisation system of metaphors. There has, however, been implicit controversy and disagreement regarding the notion and the exact nature of image-schemas. Clausner and Croft (1999, p. 21) simply conclude that "one can define image-schematic domains only by enumeration." Johnson offered a detailed provisional definition on the notion and nature of an image-schema as a:

> Recurring, dynamic pattern of our perceptual interactions and motor programs that gives coherence and structure to our experience (…). These patterns are embodied and give coherent, meaningful structure to our physical experience at a preconceptual level (Johnson, 1987, p. 4).

The human body functions asymmetrically. This is due to its top and bottom verticality. To elaborate, if an unsupported object falls because of gravity, our human bodies will have a direct reaction of stooping downwards to pick it up. This direction of downwards is characterised as the human body's basic orientation UP/DOWN schema in space. This type of spatial schematic patterns identifies certain positive or negative cognitive connotations relative to the motor functions of the body (Lakoff & Johnson, 2003). Spatial terms are also used by people to refer to emotions. Consider this, with the human body's basic orientation in space (certain things are up or down, relative to the body), then being sad is generally considered when metaphorically implying *feeling down* and happy is generally considered when metaphorically implying *feeling up*. In this way, spatial terms provide more consistency with metaphorical ideas such as HAPPY IS UP and SAD IS DOWN expressed as in Lakoff and Johnson's (2003) following expressions:

(10) "That *boosted* my spirits".
(11) "My spirits *sank*" (Lakoff and Johnson, 2003, p. 15).

Lakoff (1987, pp. 476-477) states that there is a "systematic correlation between our emotions (like happiness) and our sensory-motor experience (like erect posture)". This means that metaphors allow us to conceptualise emotions in distinctly defined terms by correlating them to sensory-motor experiences (body functions) with general concepts like HEALTH and LIFE etc. In statement (10), there is an indication of a good experience associated with an upward metaphor represented by the spatial concept UP. In statement (11), there is an indication of a negative experience associated with a

downward metaphor represented by the DOWN spatial concept. Both the former and the latter happen when the spatial location of a stimulus is incidental. Lakoff and Johnson (2003) classify HAPPY IS UP, MORE IS UP and SAD IS DOWN, LESS IS DOWN as "orientation metaphors", represented by the UP/DOWN image-schema. To Liu and Zhao (2013, p. 156), orientational metaphors form as "spatialization", meaning that the mapping happens in a process of interaction with the "spatial and perceptual experience" (ibid.). Examples of orientational metaphors are seen in IN-OUT, FRONT-BACK, NEAR-FAR, UP-DOWN, LIGHT-DARK, and WARM-COLD schematic patterns, etc. (Lakoff, 1987; Lakoff & Johnson, 2003). Abnormality is seen as one of the spatial orientation image-schematic metaphors. It is represented by the IN/OUT and UP/DOWN schemas, resulting in metaphor projections such as leaving a place, location or a container. It illustrates a metaphoric understanding of the literal leaving the zone of normality, as in *He is out of his mind,* (see Lakoff 1999; Kövecses 2000). This, according to Meier and Robinson (2004), is an implicit human understanding (see also Schnall & Clore, 2004).

Orientational metaphors are, then, metaphorical concepts that can "orient concepts, refer to them, quantify them, and allow a structural elaboration through concepts" (Lakoff & Johnson, 2003, p. 15, 61). There are other kinds than orientational metaphors that represent different types of image-schemas such as structural and ontological metaphors.[12] Structural metaphors are grounded metaphors which structurally map a rich concept onto another. To exemplify, in the metaphor RATIONAL ARGUMENTS

[12] Lakoff and Johnson (2003) reject the three-type division which they provided in their earlier publication of *Metaphors We Live By* in 1980. In 2003, they state that the division was artificial and that metaphors are all structural and/or ontological, and many are orientational. Metaphors can also be classified in terms of their nature (knowledge-based or image-based), their conventionality (conventional or unconventional), their complexity (simple or complex), and so forth. (Kövecses, 2010a, p. 310).

ARE WARS, the target concept RATIONAL ARGUMENTS is structured in terms of the source concrete idea WARS. Ontological metaphors, on the other hand, are naturally imprinted and grounded metaphors in our everyday experience. They allow us to perceive the world beyond an orientational understanding of the perception of space. These metaphors, according to Lakoff and Johnson (1980a), are one of the most fundamental constructs for understanding the physical experiences around us. They are an organisational tool that conceptualise everyday general categories of abstract target concepts such activities, emotions, or ideas in interaction with clearer embodied concrete experiences, such as entities, substances, containers, or people. Kövecses (2000) simplifies this by means of understanding source domains and target domains. He states that the concrete source domain has a very clear and precise ontological status which contributes to the understanding of a broader and more general category of an abstract entity in the target domain that does not inherently have a parallel status in the source domain. Ontological metaphors are metaphors such as THE BODY IS A CONTAINER, where entities are represented as holders (Lakoff & Johnson, 2003, p. 28). Container metaphors are types of concepts with internal and external regions and have the capacity to be contained within a bounded region such as:

(12) It *fills me* with pride.

The metaphoric expression in (12) yields one of the container elements in an explicit way with the FULL-EMPTY schema. The concept of *me*, which refers here to the body, is conceived as a bounded region container. The action *to fill* indicates more intensity of the emotion than the emotion being contained in the body. This instance is seen under the generic mapping of INTENSITY OF EMOTION IS AMOUNT/QUANTITY (OF SUBSTANCE IN CONTAINER) (see Rull, 2002). In it, the person maps onto the container which is full of *pride*, the contained entity. Image-schemas, according to

Johnson (1987), act as mediators between the source domain and the target domain. They are "developed from our earliest bodily and spatial experiences and, hence, are immediately meaningful to us" (Radden & Dirven, 2007, p. 16). Mandler and Cánovas (2014, p. 510) state that schematic concepts are "the first conceptual building blocks" built from a basic level conceptual category called "spatial primitives", which cannot represent direct meaning and must be interpreted, such as FORCE and EMOTION concepts. Dodge and Lakoff (2005, p. 72) base primitive image-schemas on "specific types of neural structure" and postulate that this particular type establishes correspondences between image-schemas and the neural circuits of the brain networks. According to Lakoff and Johnson (1980b), the schematic structures come in different forms such as "audio, written and visual" and it is the visual aspect of the type that forms the image-schemas. Image-schemas have their own special characteristics, explained by Lakoff and Johnson and embodied in views from other scholars, summarised in the following points:

1. Image-schemas are integral to meaning and rationality, grounded in every metaphorical construction as they are in the body (Johnson, 1987).
2. Image-schemas are prototypical and are the most salient representations of the whole conceptual system, as they are the first to emerge as concepts in the human consciousness. Turner (1991, p. 296) conceives of them, as "extremely skeletal images", meaning that they are abstract in their own sense and can neither stand alone nor be conceptualised.
3. Image-schemas are preconceptual not linguistic structures. To clarify this by means of illustration, Johnson (1987) distinguishes between the image-schema FORCE, a metaphorical causal interaction like the metaphor LOVE IS A NATURAL FORCE manifested in expressions like *She was carried away by*

love and the normal linguistic word *force* used in everyday language which means power that involves physical strength such as gravity (Lakoff, 1980, p. 49; Johnson, 1987, pp. 13-15).

4. Image-schemas are non-propositional patterns. They are not expressed cognitively and do not hold a propositional conceptual structure.

5. Image-schemas are "experiential" and "embodied" patterns within the conceptual system that rise from sensory/human experience (Lakoff, 1987, pp. 459-461; Johnson, 1987, p. 4).[13]

6. Image-schemas are structured collections of experientially based imaginative images. They are useful in understanding literal expressions that lack rich images called "abstract" domains, (see also Lakoff & Turner, 1989, p. 94).

7. Image-schemas exist as non-representational patterns beneath the "Cognitive Consciousness" and are represented as "interactional" constructs (Lakoff & Johnson, 1999). Gibbs (2005) disagree that image-schemas' position are completely "unconscious", but Lakoff and Johnson (2002) justify and explain their claim explicitly in the following lines:

> As we said in *Philosophy in the Flesh*, the only workable theory of representations is one in which a representation is a flexible pattern of organism-environment interactions, and not some inner mental entity that somehow gets hooked up with parts of the external world by a strange relation called ('reference') (Lakoff & Johnson, 2002, pp. 249-250).

8. Image-schemas have fuzzy boundaries. They "represent schematic patterns arising from imagistic domains" (Clausner & Croft, 1999, p. 14). They are outcomes of patterns from concrete entities from the physical world used in the

[13] This issue was raised in 1945 by Merleau-Ponty in his multifaceted work "*The body as expression and speech".* The scholar suggests that every language and its structure and the concepts of meaning are tied together on levels where any level starts with first primitives arising from the body and seen as a new elaborated ground of a conventional meaning.

formation of conceptual metaphors, such as PATH, VERTICALITY, UP, DOWN, IN and OUT (Lakoff, 1987, pp. 440-444; Johnson, 1987, p. 26; Mandler, 2004).[14]

9. The internal structures of image-schemas, according to Johnson (1987, p. 4), exist "in a continuous, analogy fashion within our understanding" (see also Johnson, 1999).

10. Image-schemas are transformers. They can change from one structure of conceptuality to another. Turner (1996, p. 18; 1991, p. 171) categorised this as a static dynamic image-schema that relies on the human ability to perform transformation (see Gibbs Jr. & Colston 1995).[15]

11. Image-schemas are flexible. They can be reshaped at an abstract level as a result of the transformation ability they encounter in various experiential contexts. This means that they can extend to hold various different degrees of schematicity. Sub-image-schemas that contain rich imageries are grounded on and evoked from skeletal ones such as CONTAINER schemas (Turner, 1991).

To elaborate point (11) from the list above, consider Lakoff's (1987) CONTAINER schema. Lakoff demonstrates the CONTAINER schema with three productive inferential structural elements, interior: the bounded region of a container that has

[14] For contrastive ideas other than that of Lakoff and Johnson's in this matter see Langacker's (1993) cognitive grammar perspective. Unlike Lakoff and Johnson, Langacker's main argument is that image-schemas cannot be strictly identified according to one domain from the physical world but, rather, should capture both. He also claims that "the more abstracts are, the easier it is to think of them not as concepts but as basic cognitive abilities" (Langacker 1993, p. 3).

[15] Kövecses (2005) believes that image-schemas are non-static i.e., they are not characterised by a fixed condition nor do they lack vitality. For example, Dewell (2005, pp. 373-374) states that "it seems unlikely that a child's earliest image-schema related to containment will be pure static relations in timeless space … . It is much more likely that the earliest schema will involve activities and paths."

limited capacity, exterior: non-bounded region of a container with unlimited capacity of space and boundary: the gate between interior and exterior, represented in Figure 3.

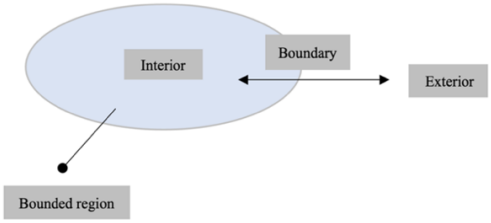


Figure 3. The CONTAINER schema adapted from Lakoff (1987).

Figure (3) raises the idea of extension to more specific schemas. For example, if two variants lexicalised by *out* are considered, the illustration of CONTAINER will then be different than in the original, as in examples (13) and (14) and illustrated in Figure 4.

(13) Sarah went *out* of the room.
(14) Pump *out* the water.

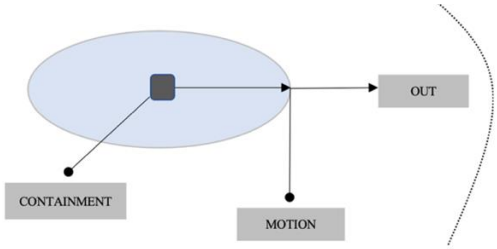


Figure 4. The CONTAINER schema lexicalised by *out*.

Looking at the statements in (13) and (14) and the diagrammed image-schema in Figure 4, we find them more detailed and conceptually subsidiary than the one in Figure 3. This is due to the emergence of two additional schemas: MOTION and CONTAINMENT (see Mandler, 1992, p. 593; Cervel, 1999, p. 191). On the basis of these observations, the expression in (13) shows some of the correspondences that exist as a manifestation of the basic mapping sketched in Figure 5.

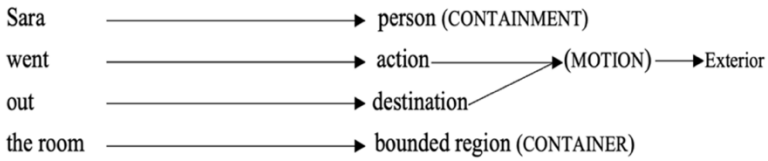


Figure 5. A detailed schematised sketch of the expression *Sara went out of the room.*

Figure 5 shows a motion of the contained element *Sara* from inside the bounded region of the container entity *room* to the exterior entity *out.* This clearly indicates what was earlier stated by Turner (1991, p. 296): that image-schemas are "extremely skeletal images". Turner exemplifies the significant relationship between image-schemas and rich image domains and how the interplay between the two creates coherence in the development of the process of conceptualising concepts:

> No rich image is wholly unique; rather, it shares skeletal structure with other, related images. We have a skeletal image of a scream that inheres within our rich images of particular screams. We have a skeletal image of flat bounded planar space that inheres within our rich images of individual tables, individual floors, individual plateaus. We have a skeletal image of verticality that inheres within our rich images of individual trees, individual buildings, individual people (Turner, 1991, p. 57).

Clausner and Croft (1999, pp. 1-15) discuss the basic "constructs" for cognitive linguistic theories, stating that "although the basic constructs of 'concepts', 'domains', 'construal' and 'category structure' go by different names, they are essentially the same among researchers in cognitive linguistics." These constructs are very much agreed upon and considered as the basis of all cognitive linguistic theories (see also Johnson, 1987; Lakoff, 1987, 1989).

Clausner and Croft and other scholars, however, hold a contrastive view to Lakoff's (1987) use of image-schema as a non-superordinated construct (see Pauwels & Simon-Vandenbergen, 1993 and Turner, 1993, 1997). Pauwels and Simon-Vandenbergen (1993, p. 375) propose a different hierarchy of image-schemas on the grounds that some of them seem to be more basic than others, which is due to "variables determining the

value judgment".[16] They challenge this view and rightly point out that it is not theoretically plausible to place all image-schemas within one category. Thus, starting off with Langacker's (1987) theory of domains, the scholars extended the list of main constructs, arguing that the image-schema is a "subtype of domain" (Langacker, 2008). Clausner and Croft (1999) went a step further and attempted to add a group of image-schemas into a list of the seven most frequent schematic slots. The inventory is represented as follows:

1. SPACE: UP-DOWN, FRONT-BACK, LEFT-RIGHT, NEAR-FAR, CENTER-PERIPHERY, CONTACT.
2. SCALE: PATH.
3. CONTAINER: CONTAINMENT, IN-OUT, SURFACE, FULL-EMPTY, CONTENT.
4. FORCE: BALANCE, COUNTERFORCE, COMPULSION, RESTRAINT, ENABLEMENT, BLOCKAGE, DIVERSION, ATTRACTION.
5. UNITY/MULTIPLICITY: MERGING, COLLECTION, SPLITTING, ITERATION, PART, WHOLE, MASS-COUNT, LINK.
6. IDENTITY: MATCHING, SUPERIMPOSITION.
7. EXISTENCE: REMOVAL, BOUNDED SPACE, CYCLE, OBJECT, PROCESS (Clausner & Croft, 1999, p. 15).

According to Lakoff and Johnson (2003, p. 57), "we live by [such image-schematic concepts] in the most fundamental way." However, it is important to point out that, in a

[16] See Pauwels and Simon-Vandenbergen (1993), Turner (1991) and Cienki (1997). Pauwels and Simon-Vandenbergen (1993, p. 375), for instance, proposed a different hierarchy of image-schemas on the grounds that some of them seem to be more basic than others. They state that "presence or absence of control and the type of control indeed appear to be important variables determining the value judgment. Its exact status in terms of links with the other image-schemas still needs to be examined, but so does, in our view, the status of Johnson's image-schemas. It seems possible, for instance, that some image-schemas are more basic than others, or, in other words, that there may be hierarchy of schemas."

metaphoric mapping process, source image-schemas are not always rich in images and might provide a basic or a fuzzy "structural outline of a definition" (Danaher, 2003, p. 443) that can be elaborated upon.

The major aim for section 2.1.4.2 has been to explore the dimension, definition and properties of image-schema in CMT. Image-schemas are repetitive patterns that structure our experiences and interactions with the world in a systematic and coherent way and may be grounded or embodied in a specific cultural cognitive system. Such image schemas are expected to potentially influence English-Arabic translation shifts of metaphors. With the development of cognitive linguistics, research has begun to address the universality of other abstract concepts along with other research areas, for example, emotions.

The line of the conceptual argument of metaphor established a robust interdisciplinary field of enquiry, exploring the relationship between emotions and metaphors. To be more specific, researchers have focused on how to conceptualise emotions and by what means within cognitive linguistic approaches they are expressed across languages and cultures. To address these aspects, scholars have proposed theoretical models that deal with how emotions are understood as terms, and how they are classified with more emphasis on how to define and identify these complex concepts within the cognitive paradigm. However, multidimensional research on emotions with its diversity of approaches and different views is extensive. Therefore, providing a comprehensive view would be beyond the aim of this study. Section 2.1.4.3. briefly introduces the prototypical, cultural and linguistic views with chief emphasis on studies that are relevant to the research question raised in this thesis.

2.1.4.3. Emotion Concepts

During the mid-to-late 19th century, emotions were treated as extras in psychology and were not seriously viewed as categories "of mental state" (Dixon, 2012, p. 338). Scientists and philosophers of Western culture such as Darwin and Prodger (1998) held strong beliefs that emotions are totally separate from rational thought. Such traditional assumptions regarding emotions have been challenged but continued to be present until the 20th century when a new age of evolutionary neurology and physiology spectra to explore the physical basis of emotions emerged (Gaulin & McBurney, 2001). The 20th century explorations continued to witness cognitive discoveries which provided empirical evidence that ran contrary to the idea of distancing emotions from the cognitive mind. Lakoff (2010) was one of the first to emphasise that "real reason is inexplicably tied up with emotion" and, thus, "you cannot be rational without being emotional." Fehr and Russell (1984) and many other scholars defended Lakoff's idea and showed that emotions are prototypically organised and contextually constrained concepts on multiple levels that emerge from the complex interactions of cognitive activity (see also Damasio, 1994).

In cognitive linguistics, emotions are viewed as anchored aspects in our bodies and minds. Lakoff and Johnson (1980a) view emotions as abstract concepts, which cannot be predicted but to a major extent structured, conceptualised, expressed and communicated through metaphors grounded in everyday experience. Kövecses (1990) also believes that emotions are complex mental states that comprise distinct and universal reactions ranging from bodily-based reactions, such as behavioural and physiological reactions, right through to expressive appraisal. When it comes to the relationship of emotions with metaphors, Kövecses (2000a) asserts that it is virtually

impossible to talk about emotions without conceptualising them metaphorically, confirming that metaphor is an effective and productive mechanism in the conceptualising of emotions. Kövecses' observation suggests that emotions are not chaotic but actually exhibit logic repeatable patterns and a systematic nature. This implies that language referring to different human emotions is heavily connected to both literal and figurative expressions (Kövecses, 1990, p. 4). In their own words Lakoff and Johnson state:

> Although a sharply delineated conceptual structure for space emerges from our perceptual-motor functioning, no sharply defined conceptual structure for the emotions emerges from our emotional functioning alone…. Metaphors allow us to conceptualize our emotions in more sharply defined terms (Lakoff & Johnson,1980a, p. 58).

Many emotion-related studies have shed light on psychological and cultural factors and how to seek universal patterns of emotion concepts and their impact on metaphorical thinking. The findings obtained from these studies had crucial implications for understanding embodied cognition (Maalej, 2004; Crawford, 2009; Ansah, 2014). Wierzbicka (1999, p. 276) claims that emotions are affected by physical, cultural and social experiences and are physiologically connected to the body in three ways: "bodily events, bodily sensations and figurative bodily images". In her own words, Wierzbicka confirms that:

> There is no real conflict between the view that human feelings can have a biological dimension and the view that they are socially constructed and have a cultural dimension as well as there is also no real conflict between a recognition of cross-cultural differences in the area of emotions and a recognition of similarities (Wierzbicka, 1999, p. 63).

Wierzbicka's views are seen as the emotional version of the Sapir-Whorf Hypothesis (1920) that suggests that every language is different and has its own special word characteristics influenced by culture. Wierzbicka's philosophy towards cross-cultural

differences in emotion concepts indicates that the non-existence of these emotion terms in a particular language does not necessarily mean that other languages and cultures neither have nor experience that exact emotion concept. Rather, every language has its own classification of emotion concepts and emotional experiences. This is why it is a mistake to assume that one conceptual term of an emotion in a particular language has an equivalent in another. Nonetheless, Wierzbicka (1972) asks if it is possible to define the meaning of emotion concepts in the following lines:

> What is the meaning of such words as *joy, sorrow, regret, fear, irritation, admiration, jealousy, pity, gratitude, worry*? Is it possible to define these words, i.e. to explain their meaning by means of semantically simpler ones and to make manifest the structural relations which obtain between the names of various emotions? (Wierzbicka, 1972, p. 57).

One of the most addressed lines oriented to the semantic structures of emotions in relation to meaning was her Natural Semantic Metalanguage (NSM) and semantic primitive approach, which describes emotion concepts in the form of shorthand abbreviations for complex expressions. The NSM aims "to explore human emotions from a universal, language-independent perspective" (Wierzbicka, 1996, p. 236). It looks at the meaning of each emotion term in a methodological procedure of definitions in the form of "certain prototypical scripts or scenarios, formulated in terms of propositions of thoughts, wants and feelings" (Wierzbicka, 1992a, p. 578). The metalanguage approach has been applied to study several emotion concepts as in German, Russian and English, amongst others. Wierzbicka's (1992a) proposal is originally based on the semantic theory, broadly defined as the construction of meaning of a word by its semantic content in the expressions of the language in which it is used (Haas, 1962). For example, in Johnson-Laird and Oatley (1989, p. 91) the word *regret* is defined as "sadness as a result of evaluating one's past action as harmful or wrong in relation to one's current standards." Johnson-Laird and Oatley (1989, p. 91) agree with

that the use of the semantic approach aims "to uncover the set of universal semantic primitives, and that it is possible to analyse the meanings of certain emotion terms, such as the ones denoting complex emotions into more basic components." However, Johnson-Laird and Oatley (1989, p. 91) argue that Wierzbicka's procedure is abstract and overly generalised in the sense that it "conveys only the conditions in which someone is likely to feel sad; it does not convey anything about what it feels like to be sad." For example, it only makes sense to say that the prototypical cause for *regret* is sadness but nothing about how it feels to be regretful. In the end, as argued by Semino and Short (2004), Forceville (2006), and Gibbs Jr. (2011), the first classic methods used by CMT are of an intuitive nature. True as this may be, the CMT introspective approach does not apply any semantic reference to the analysis of emotion concepts, it is unclear how Lakoff and Johnson (1980a) identified lexical units that express an emotion metaphorically. The present research aims to take this significant point into consideration with the application of the semantic approach. The semantic idea not only looks at which lexical elements belong to the emotion category and which are most strongly connected to the basic concept but also looks at the other emotions that are frequently associated therewith and how they overlap in a linguistic context.

According to Langacker (1987, p. 149) and Johnson-Laird and Oatley (1989), certain emotion concepts might be cognitively basic and unanalysable. This means they are already in their primitive form with common and salient features, which means, in this case, there is no way to break them down into more basic emotion concepts. However, beyond that, they are not always considered predominant. For example, FEAR, ANGER or JOY will be used as reference points to describe specific emotions like PANIC, RAGE or EUPHORIA, though not vice versa. Ogarkova and Soriano Salinas (2014, p. 8) categorise the conceptual representation of emotions into three levels: the super-

ordinate level where concepts can hold sub-levels of positive and negative emotions, the basic level, such as ANGER, FEAR, SADNESS HAPPINESS, or LOVE, and the subordinate level which covers more specific concepts. Ogarkova and Soriano Salinas (2014) views accord with Barbara and Rosch's (1978) position that primary levels of emotions can mean two things. The first is that these emotion terms stand between the vertical taxonomy of abstractions. In this sense, LOVE is more basic than INFATUATION and FEAR is more basic than NERVOUSNESS, and so forth. This means that LOVE and FEAR, as basic emotion categories, intersect the superordinate-level of the emotion category and the subordinate-level INFATUATION and NERVOUSNESS category (Barbara & Rosch, 1978). The other sense is that one emotion concept can be more "prototypical" than the other concept at the same horizontal position. These ideas have been extensively explored in the past by Fehr and Russell (1984) and Smith and Tkel-Sbal (1995) in Palau's Micronesian language and by Fehr and Russell (1984), examining Turkish.

From a cognitive linguistic perspective, Kövecses (1990) defends the fact that emotions are prototypically organised in a cognitive model. In his 1990 publication, he made a useful classification of semantically defined emotion vocabulary of fear with more focus on metaphors and metonymies. In his study, Kövecses (1990, pp. 74-82, 2003, p. 23) found 13 metaphoric concepts and 21 metonymic concepts that explain how fear is used to conceptualise conventionalised expressions in English. According to Kövecses' (1990, pp. 70-73) principle, expressions associated with an emotion whether or not they "indicate emotion (without directly referring to it)", inform two metonymic principles: "THE PHYSIOLOGICAL EFFECTS OF AN EMOTION STAND FOR THE EMOTION and THE BEHAVIOURAL REACTIONS OF AN EMOTION STAND FOR THE EMOTION" (Kövecses, 1990, p. 118). Based on his findings, Kövecses

(1990, p. 74) proposes two prototypical processes that reflect the folk understanding of the structure of fear in these concepts (with limitations and certain variations): the metaphor-based and the metonymy-based models. The former is characterised by a metaphoric structural system and goes through a causally connected five-stage scenario of: "Danger → Fear → Attempt at control → Loss of control → Flight" (ibid.). On the other hand, there exists a metonymy-based model characterised by metonymies which, according to Kövecses (1990, p. 74), reflects a folk understanding of fear in English. This metonymic model is applied to linguistic manifestations and is characterised by the metonymic structural system which goes through a causally connected three-stage scenario of: "Danger → Fear → Flight" (ibid.).

In 2003, Kövecses readdressed the prototypical aspect of emotions within Wierzbicka's approach in terms of "core" and "peripheral" meaning. His proposal is based on Lakoff and Johnson's (1980a) assumptions of universality, embodiment and invariance. The core or literal meaning is what is seen as denotative, conceptual, cognitive, etc. whereas the peripheral meaning is a matter of connotative (positive or negative), residual, and other similar meanings. In the former, the properties or components show the basic meaning of a word whereas the latter is built up from the former with properties that do not contribute to the cognitive content of words (Kövecses, 2003, p. 7). In addition to that, Kövecses (2003, pp. 7-14) addresses the prototypical aspect of emotions in relation to meaning based on previous attempts by scholars. These include the dimensional view, implication view, prototype view, social construction view and the embodied cultural prototype view.

Metaphors seem to serve as basic communicative tools to express fairly complex ideas and concepts like emotions efficiently, yet they have the potential to cause misunderstanding if the shared experience on which they rely differs between one language and another. It is also difficult to fully understand how emotions are conceptualised and structured in their cultures without referring to the conceptual systems of both languages. The use of these characteristics allows researchers to define universalities and specifications of emotion conceptualisations performed by metaphors between different languages and cultures. Kövecses' (1990) classification of fear concepts, for example, is important for grouping linguistic expressions of emotions under their concepts, and, thus, has been taken as a reference point for the analysis in this study. Moreover, Kövecses' attempt at classifying metaphoric and metonymic relations and types proves to be more valuable than that. It is considered a helpful method to provide bases for establishing not only conceptual mappings but also semantic correspondences between linguistic expressions of emotions across languages and cultures. This involves code switching of emotions, where the source and the target are encoded in different languages.

Yu (1995) was one of the earliest scholars to explore emotion metaphors particularly ANGER and HAPPINESS concepts between English and Chinese languages. In his comparative analysis, Yu observes that the metaphor HAPPINESS IS BEING OFF THE GROUND is non-existent in the Chinese languages. Yu also observes that the Chinese language shares many basic metaphorical domains with the English language, such as UP, LIGHT and FLUID IN A CONTAINER. Nevertheless, the Chinese language has an alternative metaphor that is not found in the English language and this is demonstrated by the expression HAPPINESS IS A FLOWER IN THE HEART. In a broader cultural context, Yu claims that medicine can have influence on the utterance of

emotions. According to the scholar internal organs like *"gall", "heart", "spleen"* and *"liver"* are employed in expressions related to anger and happiness due to the influence of the unique Chinese medicine culture. Türker (2013, p. 127) found that metaphors' properties are dependent on the "level of generality in that each of them has an established position in their language-specific hierarchical structures." In his study, Türker investigates three conceptual emotions, ANGER, HAPPINESS, and SADNESS between English and Korean. However, he believes that these hierarchies vary in terms of universality and cultural aspects. From a different angle, Maalej (2004) examines anger metaphors in Tunisian Arabic. Maalej found that anger in both English and Arabic draws upon parts of the body used to conceptualise redness in the face, body heat etc. However, he found that specific embodiments appear when some body parts are culturally linked with the emotion.

In his cross-mapping cultural perspective, Maalej (2007, p. 93) found that fear exhibits three kinds of embodiment: physiological, culturally motivated and culturally specific. Maalej (2007, p. 100) states that while English uses fear as A FLUID IN A CONTAINER as in "the sight *filled* her *with* fear" and FEAR IS BEING SURROUNDED FROM THE OUTSIDE as, in "be overcome by/with fear", Arabic uses fear only as a CONTAINER as in "X is living in fear". Therefore, Maalej (2007, p. 101) asserts that "there is need to consider other languages and cultures to see whether the same patterns hold for different languages in translating." The finding reached in Maalej's study are originally based on Kövecses (2000a, p. 169) "body-based social constructionism*"* that views emotions as (near) universal and originating from human physiology and culture-specific due to the different kinds of cultural elements. Thus, there is always the possibility that different cultures underlie different conceptualisations of emotions.

Various studies have compared and contrasted emotion concepts from a number of different perspectives such as American English (Lakoff & Kövecses, 1987; Kövecses, 1990) and other language varieties such as German-Slavic (Apresyan & Apresyan, 1993), Turko-Altaic (Matsuki, 1995; McVeigh, 1996), Sino-Tibetan (Yu, 1998), African (Ansah 2011, 2014; Emanatian, 1995), Indo-Iranian (Chand, 2008; Mashak et al., 2012) and English, Spanish and Russian (Ogarkova et al., 2018) etc., and have reported striking similarities in the metaphorical conceptualisation across different languages. Ansah (2014) explores shared fear domains between Akan (a West African, Kwa language) and English, and based her study on language-specific construal and elaborations. Ansah's analysis revealed similarities between the two languages and confirms that the embodied cultural prototype theory plays a role in the conceptualisation process of emotions across cultures, suggesting that "cultural embodied cognition appears to be grounded in sociocultural salience" (ibid., 2014, p. 57). Ansah's findings on English fear metonymies include INABILITY TO MOVE, SWEATING, DRYNESS OF MOUTH, LAPSES IN HEARTBEAT, BLOOD LEAVES FACE, HAIR STRAIGHTENING OUT, INABILITY TO BREATHE and DROP IN BODY TEMPERATURE. The shared metaphoric concepts between the two languages include A SUPERNATURAL BEING, AN OPPONENT, and AN ILLNESS/DISEASE, A BEING, THE HUMAN BODY and A CONTAINER. However, the source domains ILLNESS, FLUID IN A CONTAINER, TORMENTOR, BURDEN and NATURAL FORCE appeared exclusively in English, whereas FIRE IN A CONTAINER appeared only in Akan.

An important focus of section 2.1.4.3 has been to explore how metaphor research moved to be interdisciplinary, proposing new contributions based on the neighbouring field of emotion studies. The section summarised how emotions are defined, structured and conceptualised through languages and their cultures. It showed how the metaphoric

principles and the associated cultural models with emotions face methodological and theoretical limitations. In most cases, these problematic aspects were deemed to be due to the metaphoric nature and a consequence of the organisation of clausal structures of emotion concepts.

As outlined in this section, cross-cultural perspectives have been suggested to resolve some of these problematic areas. The conceptualisation of fear has been explored in languages such as English (Kövecses, 1990), Lithuanian (Sirvydé, 2006), Tunisian Arabic (Maalej, 2007), Akan (Ansah, 2014) and among others. The current research, however, is focused on exploring how these aspects influence and/or affect the translation of English fear metaphoric and metonymic concepts into Arabic and how the findings would contribute to the field of Translation Studies. In order to achieve this, an interpretative exploration of the studies that support or disconfirm theories and hypotheses in metaphor and metonymy in translation studies must be undertaken. This process is based on two tiers of investigation. The first is the theoretical tier and the hypothesis that the translation of metaphor should be approached as an omnipresent feature in language. Section 2.2 is dedicated to detailing the equivalence-based theoretical models and implications that have guided cognitive linguists to develop a whole new theory for metaphor in translation research. The second tier in section 2.3 discusses the theoretical areas and the hypothesis that the translation of metaphor should be a mapping process between cognitive domains between languages and their cultures, presenting the cognitive linguistic models and implications for this area of research. The same systematic review will be carried out with metonymies within cognitive metonymy theory in Chapter 3 of this thesis.

2.2. Metaphor as a Problem in Translation Studies

Metaphors are mental, linguistic and cultural constructs with "outstanding popularity" (Dobrzyńska, 1995, p. 595) and represent one of many problematic areas in Translation Studies, which began in the early years of the 20th century. Since then, there has been an enormous body of literature linked with translation scholars that have shown an interest in and discussed metaphor, but there have been far fewer metaphor scholars that have shown an interest in and discussed translation. The interest in metaphor translation has grown in importance due to the power it manifests in "violating the linguistic system", (Schäffner, 2004, p. 1256). As such, for many translators, metaphor is a great example of complexity in communication capable of conveying unpredictable meanings from the source language (SL) to the target language (TL). This is attributed to distinctive linguistic features and situations such as culture, climate, environmental elements, lifestyle and timing between the SL and the TL, thus presenting potential problems for translation (Menacere, 1992, p. 568).

For the last fifty years, the majority of empirical work in translation research has fallen into either "process" or "product-based" categories (see Rojo & Ibarretxe-Antuñano, 2013, p. 54). Such research approached metaphor as a linguistic construct whose usage is ornamental and restricted to the distinction between its figurative and literal use only. Many of these studies can be traced back to Nida (1964), Newmark (1981), Van den Broeck (1981), Aphek and Tobin (1984) and Toury (1995). All reflected on why some individual metaphorical expressions in particular text genres seemingly defy "translatability" and yield "inequivalence" (Newmark, 1981, 1988). This observation has transformed the debate regarding metaphor translation into a distinct and worthy territory of enquiry within Translation Studies.

Equivalence theories have hijacked linguistics-based approaches to metaphor translation under the name of "loyalty" and "non-fidelity" in reference to the target text (TT) (Reiss & Vermeer, 1984). These theoretical frameworks ignored cultural differences and contextual constraints between the SL and the TL in the translation process, focusing only on content, meaning and form and taking the view that metaphor is untranslatable (Catford, 1965). This view focuses predominantly on three main points: degree of translatability, text-typologies, and cultural-specific transference. Since then, cultural and contextual factors have been important linguistic features in the translation process, heavily inspired by fruitful research "within the framework of Descriptive Translation Studies" (Schäffner, 2004, p. 1255). Vinay and Darbelnet (1959) follow the decorative approach that treats metaphor only as a linguistic aesthetic that covers a literal meaning. The scholars ignore the cognitive role on the assumption that natural language is the only and the most trusted way to communicate and, thus, metaphor is type of language use that has no importance or significance in itself state:

> Any metaphor can be reduced to its basic meaning, which Bally calls the "terme d'identification". We must remember that metaphors are means and not ends in themselves. Translators must reproduce the meaning above everything else, and metaphor wherever possible (Vinay & Darbelnet, 1959, p. 211).

Vinay and Darbelnet (1959/1995, p. 2011) indicate metaphors as a *"mean"* which implies that a metaphor is an external reality described by language only. They ignore its cognitive role on the assumption that natural language is the only and the most trusted way to communicate and, thus, metaphor is just a particular way of language use that has no importance or significance in itself. Vinay and Darbelnet's approach emphasises the importance of "meaning" and its reproduction in the TL more than anything else. The scholars follow the substitution theory and propose to distinguish between two types of metaphors: "live" and "dead" (Vinay & Darbelnet, 1959/1995). Dead metaphors are

no longer figurative in meaning, have lost force and metaphoric sense, and have also lost the shock factor through frequent use. As a result, they become part of natural language such as "bottom" and "rise" (Newmark, 1988, p. 106). This idea is also exemplified in (15):

(15) The road has a *dead* end.

According to Vinay and Darbelnet's approach, expressions such as example (15) found their way into the lexicon and are therefore considered literal. Vinay and Darbelnet (1995, p. 210) advise that translators must be aware of not mixing up these two metaphor types, asserting that translating "a dead metaphor by a live one … would be a case of over translation". They propose a set of translation procedures for looking at an equivalent in the target text (TT). Richards (1936) emphasise that the distinction between dead and live metaphors requires a drastic re-examination.

Cognitive linguists are known for their experientialist views that depart from objectivist perspectives. They have criticised Vinay and Darbelnet's (1958/1995) "dead" and "live" metaphor distinction. Even though experientialists like Lakoff and Johnson (1980a) and various other scholars amongst them confirm the objectivist view regarding dead metaphors, they, however, agree that dead metaphors still have influence in thought and are viewed as unconscious manifestations of deep conventional cognitive metaphoric concepts (see Gibbs, 1993). Nida (1969, p. 220), meanwhile, alludes to the view that metaphors in the original language must be transferred to the target as non-metaphors by means of rewording. Kloepfer (1967, p. 116) agrees with Nida and states that metaphors are translatable and easily so with a word-by-word method, and, controversially, remarks that the more creative the metaphor is, the easier it becomes to repeat the image in other languages. Kloepfer's (1967) claim of repetition of metaphors

in other languages is what cognitive linguists refer to as universality. However, in his terms the universality occurs in the structures of imagination. Kloepfer's views on metaphor translation are based on his own conceptual perceptions. He believes that metaphors shouldn't be problematic in translation, since the process is primarily based on human cognition.

Dagut (1976, p. 32) comments on the influence of translatability, stating it is by no means acceptable. He points out that it is inadequate to draw general conclusions about the translatability of metaphor while paying no attention to the philosophical views and types of such construct, emphasising its significance and the major impact it has had on the translation of metaphor. Toury (1985) concurs with Dagut's (1976) position on this issue and refuses to support the translatability of metaphor, arguing that accepting such influence without being reflective would affect the adequacy of translation theory. Nonetheless, Van den Broeck (1981, pp. 74-85) points out that it must be possible to arrive at such conclusions about metaphor translation otherwise translation theory would be "incapable of accounting for the translation of one of the most frequent phenomena in language use." He categorises metaphor based on a "synchronous viewpoint" into three types: lexicalised, conventional and private types of metaphors (ibid.). Van den Broeck had already discussed factors of translatability and metaphor translation procedures in Translation Studies but focused on "categories of metaphor", "uses of metaphor" and "functions of metaphor" (ibid.). Based on these translatability factors, Van den Broeck (1981) suggests that:

> Translatability keeps an inverse proportion with the quantity of information manifested by the metaphor and the degree to which this information is structured in a text. The less the quantity of information conveyed by a metaphor and the less complex the structural relations into which it enters in a text, the more translatable this metaphor will be, and vice versa (Van den Broeck, 1981, p. 84).

Van den Broeck (1984, p. 78) calls for metaphor to be seen as an expression distinguishing between "decorative" and "literary" language use. He states that metaphor use and its function could be understood through the traditional linguistic classification of a typological view of texts, pointing out that fixed metaphors are easier to interpret compared to private and conventionalised ones, and vice versa. He also states that decorative metaphors are more relevant in function than literary ones. There is a clear indication here that metaphor translatability is dependent on the level of metaphor relevancy to the functional and pragmatic orientations of the textual context which they perform. It must be noted that Van den Broeck's (1981) distinction is different than that of this current research. The CMT framework is based on delimiting the boundaries of metaphors as conceptualisations and, thus, must be employed in texts where metaphoric expressed manifestations reflect the functional and pragmatic orientations of the textual context they appear in. Interestingly, later, much research on the use of metaphors in translation yielded great insight into investigating old, conventional, lexically-fixed metaphors and novel ones (see André, 2011).

Mason however, (1982) notes the ineffectiveness of the approach of this perspective as regards the translation of metaphor, and rejects the linguistic paradigm on the grounds that metaphor is a device that comes imbued with cultural significance between the SL and TL. She attempts to set boundaries for how to treat metaphors in a way that acknowledges their traits and sets out that the procedures of metaphor translation are similar to general procedures of translation. Mason (1982, p. 149) posits that there is no possibility of creating a unified metaphor translation theory, where metaphor is a vessel to be studied in isolation and asserts that this is only applicable to a theory of translation. Mason's (1982) conclusions made remarks on the issue but her conclusions were based on non-empirical findings. She neither exemplified nor illustrated any metaphorical

expressions nor addressed how they are processed in particular translations and translation contexts. Dagut (1987) calls for what Mason rejects: the establishment of a theory of metaphor translation based on what he refers to as "gradient translatability". Dagut criticises Mason's (1982) argument and states that the translation of metaphor is in relation to two variables:

> …the particular cultural experiences and semantic associations exploited by it, and the extent to which these can, or cannot, be reproduced non-anomalously in the TL, depending on the degree of ("overlap") in each particular case (Dagut, 1976, p. 32; 1987, pp. 81-82).

Debates about the translatability of metaphor continued. In his work that contrasts with Van den Broeck's (1981), Newmark (1988) rejects translatability, contending that not all metaphors can be translated. He investigates the translation of metaphor based on the perspective approach with the influence of both substitution and comparison theories, focusing his interest on the linguistic system. Newmark (1988) believes that decisions of metaphor translatability rely heavily on the type of metaphor. He also holds that metaphors may be translated appropriately via different translation procedures and depending on the level of the source text's (ST) image of the metaphor that the translator aims to render into the target text (TT). Newmark's prescriptive solutions for metaphor translation were the first discussions to be put forward and have been frequently implemented in the study of metaphor rather than in the area of translation. In retrospect, however, these ideas have been applied in the area. Newmark (1988, pp. 104-105), for example, proposed six types of conventionality under two main categories: fixed and non-fixed. The former metaphors are "dead", "cliché", and "stock" or "standard" metaphors that have lost their impact as metaphors due to overuse. The latter are "adapted", "recent" and "original". For Newmark, whether original or stock, the metaphor "always involves illusion" (ibid.). He also sets out an extensive taxonomy of

eight metaphor translation solutions in relation to their functions and contextual factors (see Newmark, 1988, pp. 88-91). These procedures are as follows:

1. To translate the ST metaphor by simile, retaining the image.
2. To translate the ST metaphor (or simile) by simile with sense.
3. To produce the same image in the TL.
4. To replace the image in the SL, with a standard TL image which does not clash with the TL culture and is equally frequent in the register.
5. To convert the metaphor in the ST to a sense in the TT.
6. To delete the metaphor if it is redundant.
7. To modify the metaphor when it is odd or too rhetorical.
8. To use the same metaphor combined with sense (Newmark, 1988, pp. 88-91).

Newmark (1988) concurs with Van den Broeck's (1981) findings that fixed metaphors are easier to render into another TL. These are metaphors that have lost their novelty and have become part of the lexicon and are exemplified by expressions such as formators, e.g., *beforehand,* single units like *positive thoughts*, and idioms like *fear the worst*. Newmark believes that even though cultural factors influence how metaphor is treated in a translation process, there is always a universal factor. Kloepfer (1967), however, does not agree with this view. This perspective also contrasts with Dagut's (1976) law of translatability which states that metaphor depends on two main factors: cultural experience and semantic association. Dickins (2005, p. 249) criticises Newmark's typology based on the fact that it is a "one-dimensional model" which, according to Dickins, seems to be "particularly problematic in analysing extended metaphors."[17] Newmark's (1988) eight procedures also fail to engage with the source text beyond

[17] According to Kövecses (2010a, p. 324), extended metaphors are "large-scale metaphors … that underlie other, more local metaphors". Kövecses also believes that this type of metaphors plays a role in organising "the local metaphors into a coherent metaphorical structure in the text" (Kövecses, 2010a, p. 324).

generating a word-for-word equivalence for the TT, leaving any thought/conceptual level behind. Toury (1995) criticises any non-descriptive study of metaphor translation. He remarks on the work of Dagut (1976), Newmark (1980) and Van den Broeck (1981) concerning metaphor in translation from the point of view that they were source-text based. Toury argues that the methodology adopted in these works lacks descriptive methodology thereby relying heavily on a source-text oriented approach which does not reflect the behaviour of the translator. Descriptive approaches to translation is about the use of "a description to translate a term or a phrase in the source by characterizing it instead of translating it directly" (Darwish 2010, p. 142). Moreover, the issue of context is largely neglected concentrating only on decontextualised examples. Toury's (1995) descriptive theory discusses whether there is a set of rules that controls translations within a particular polysystem, a concept extended by Even-Zohar (1990) to the field of Translation Studies defined as a holistic network of interrelated systems.

Fernández (2011, p. 268) also refuses to accept Newmark's (1988) approach. She claims that the list of procedures he offers lacks motivation or reasoning and criticises it for "its fuzziness". She argues that there was no consideration of "actual translation" nor "possibilities" like Toury's (1985) translation procedures e.g., in the case of transferring a non-metaphorical expression to metaphor or the creation of linguistic material from zero into metaphor. Toury (1985) attributes this to the fact that these scholars refuse to accept the "zero" replacements in the target as translation solution. Dickins (2005) asserts that there is no need to find an equivalent translation of the ST metaphors in the TT. He also states that non-metaphors in the ST may be translated into *"pseudo-metaphors"*, i.e., a turn of phrase, such as idioms. Like Newmark (1988), Dickins does not grant the fact that a zero element in the ST may be a metaphor in the TT.

Crofts (1988) takes a different view. She explores the problematic factors that hinder the process of metaphorical expression translation into a TL, adopting a comparative approach. She identifies three major elements of metaphor: topic, image, and the point of similarity between the former and latter. Crofts claims that metaphor is used to explain the unfamiliar to be familiar by using an easy and known entity and to enrich the literary platform via mental exceptional connotations. Crofts outlines five procedures for conveying metaphors: (a) literal translation, (b) into a simile, (c) change implicit properties of the metaphor to explicit, (d) avoid figurative rendering of metaphoric expressions, and (e) substitute of a TL metaphor that has a parallel SL metaphor (Crofts, 1988, p. 53). Kurth (1995, p. 19, cited in Schäffner, 2004) deals with this aspect in English/German literary translation and proposes nine clear translation procedures: "deletion, demetaphorisation, partial deletion, downtoning, adherence, enhancement, shifted image, new metaphorisation, and elaboration."

More languages then entered the investigation. In 2008, a comparative study of Persian image metaphors for colour translation was conducted by Shabani (2008).[18] His study determines how image metaphors of colours were conveyed to the TL which was, in this case, achieved by reviewing two English translations of the work based on Newmark's (1988) eight translation procedures. Shabani (2008) discovered two things. The first English translation featured five out of eight of Newmark's (1988) procedures. The second English translation applied all procedures in the translation of image metaphors

[18] The understanding of image metaphors in Lakoff (1987, p. 22) is limited to images only, a kind of resemblance-based metaphors They only map images in a source domain onto images in a target domain with no "recurrent experience with a generic structure but capture a specific experience" (Kövecses, 2002, p. 38). They are one-shot image mapping with rich sensory structure e.g., *Her eyes are the ocean*. The example has no conventional basis but has sensory imagery with underlying structure of image-schemas. However, it must be noted that a major aim for the current study is not concerned with this type of metaphor but with conventional conceptual metaphors with a domain-to-domain mapping. This does not mean they are completely ignored in the analysis, but more focus will be placed on the second type.

of colour with no further procedures detected. These results are in agreement with the idea that Newmark's procedures are sufficiently applicable to translate metaphors generally and image metaphors of colours in particular. However, even though Newmark's procedures proved to be feasible in this study, they are prescriptively applied and inadequate when it comes to accounting for a descriptive analysis such as in the case of this study, and, more importantly, when metaphor is not understood as a cognitive construct in his procedures.

As already discussed in section 2.2, many studies were devoted to the exploration of and views regarding linguistic research into metaphor in Translation Studies, focusing on all the established developments that concerned the difficulties of translatability, equivalence and meaning searching for further conventional types of metaphors and finding translation procedures based on the translational linguistic grounding. The problem with traditional approaches to metaphor is the focus on the prescriptive path to translation that aims to put in place rules and guidelines for translators to use in actual practice to transfer metaphor optimally and with no loss. However, this is not within the scope of this study and does not contribute much to the CMT framework for metaphor translation approached descriptively. Suffice it to say that traditional theories have caused little disagreement on how metaphors are best rendered and what constitutes adequate translation, and, consequently, have caused major theoretical drawbacks. In what follows section 2.3, there is a critical discussion of the implications of work conducted by scholars who took the initiative to readdress the theoretical issues in metaphor translation that have dominated the field of Translation Studies. The section will look at considerations of all the possible links connected to the context of Lakoff and Johnson's (1980a) CMT, where metaphors are examined at a deeper level as structural and cognitive constructs.

2.3. The Translation of Metaphor Takes a Cognitive Turn

Lakoff and Johnson (1980a, p. 57) postulate that the meaning of a metaphor "is partly culturally determined and partly tied to … past experiences." Indeed, metaphors are cognitive and cultural constructs. It is not possible to talk about, or study, cognition apart from our specific embodied interactions with the cultural world. Abstract concepts are structured by multiple ways of understanding and their mappings cover a wide range of human knowledge and experience. Therefore, Gibbs (1999) believes that what we see as meaningful in the physical world is highly constrained by our cultural beliefs and values. Lakoff (1987) also claims that languages might differ in the use of concepts and their expressed manifestations due to their cultural-specific conceptual systems which makes translation impossible. However, he believes that the impossibility of translation does not necessarily mean that understanding and learning are impossible. The possibility of learning emerges from the fact that learners have equal "conceptualising capacities" and "basic experience" (Lakoff, 1987, p. 312).

The main problem with metaphor as a linguistic-oriented translation is the illusion of equivalence. The implications for metaphor in translation research within CMT shifted the problem of translatability and equivalence from the linguistic to the conceptual level. To be more explicit, the application of conceptualisation theory in metaphor translation research is intended to establish a cognitive connection between the mental domains of a metaphoric expression in a ST and the mental domains in a TT rather than looking for linguistic similarities that the metaphoric domains might have in common. This intellectual task requires a multifaceted process that involves a decoding and recoding process that is different from the linguistic perspective. Rojo and Ibarretxe-Antuñano (2013, p. 22) describe this process as "decoding and recoding conceptual systems from

a source culture into a target culture." Yet, this time, the process focuses on underlying cognate sets and conceptual spaces. Cognitive approaches to metaphor handled some of the problematic areas such as translatability and equivalence in Translation Studies by abandoning the "traditional notion of referential truth" to the "experiential notion of meaning" (Rojo & Ibarretxe Antuñano, 2013, p. 7).

The first empirical steps for metaphor in translation as a conceptual mapping process emerged as early as 1993 with Tabakowska (1993), Stienstra (1993), Schäffner (1998), Kurth (1999) and many others. The main argument in these works revolved around the idea of establishing a theory of translation of metaphor as a mapping process. Tabakowska (1993, pp. 98-128) states that image metaphors are considered the "stumbling block in translation" that create obstacles and hinder the natural flow of the translation process. The scholar affirms that translating metaphors as concepts is much easier to handle than image metaphors for two reasons: first, the universality of the conceptual systems, stating that "although conceptual systems differ, the conceptualising capacity of a human being is universal" (ibid., p. 128).

The cognitive translation decoding process basically revolves around two main phases: the unpacking of the SL input and its reconstruction in the TL. The two processes involve establishing the conceptual system drawn upon in the metaphoric mapping used in the ST. The latter allows the recoding stage, which involves the search for a linguistic equivalence only for the purpose of recodifying the original source mapping in the TT. The mapping recodification is to establish a conceptual mechanism that could be, but is not necessarily, similar to those in the ST due to language and cultural constraints. The current research is intended to outline such matters through describing the translational processes employed, asking why translators choose to employ specific solutions, and

examining the impact of the translation on the target audience. This includes looking at the interplay between conceptual spaces, their rich images and the conceptual systems that belong to the source and target languages. The findings are intended to inform metaphor and metonymy translation typologies for translation procedures, particularly with respect to ones expressing the emotion of fear.

Stienstra (1993) promotes the cultural view with what she calls the pragmatic success notion in translation. She points out that translation should be concerned with both lexical and semantic aspects of metaphorical expressions. In her analysis of biblical metaphor translations of YHWH IS THE HUSBAND OF HIS PEOPLE into English and Dutch, Stienstra focuses on metaphoric concepts as coherent systems of meaning in which the cultural dependence of metaphor is a significant matter. Thus, like Van den Broeck, she distinguishes between three types: universality, culture-overlapping, and culture-specific metaphor, and holds that every type requires a different translation strategy. Stienstra (1993, p. 234) observes that the translated metaphors are maintained at the "micro-level", but their lexical manifestations are not necessarily accounted for, arguing that conceptual metaphors are universal, and that the linguistic realisations are culturally-dependent. Therefore, as previously mentioned, metaphors are not just cognitive but cultural and vary across cultures and within. It goes without saying, then, that both cognitive and cultural aspects are inseparable similar to that reflected in Sirvydė (2006, p. 86) work. Sirvydė explains that conceptual metaphors "trace back to the cultural worldview".

Deignan et al.'s (1997) emphasise the importance of recognising cultural differences in conceptual metaphors, and, as such, has had a major impact on the metaphor translation process. Deignan et al. (1997) demonstrate that a culture might be considered to provide

a set of existing non-literal senses for understanding reality not to mention the existence of cross-linguistic universality. Stienstra (1993) argues that the translatability of metaphor and how metaphoric expressions should be translated are not the only concerns for metaphor in Translation Studies and one should think creatively in pursuit of deeper understanding and better rendering. Stienstra confidently affirms the benefits of approaching metaphor translation with a conceptual approach, asserting it is "the best, if not the only way of dealing with metaphor in translation" (Stienstra, 1993, p. 234). This is explained well in her following excerpt:

> Translation theorists have restricted their attention to individual metaphors, discussing the possibility or impossibility, the desirability or undesirability of a literal rendering, weighing the cultural obstacles, suggesting alternative ways of translation, even drawing conclusions with respect to the (im)possibility to translate metaphor. However, they have not shown themselves aware of the formidable question as to the role of a metaphorical concept pervading a text (Stienstra, 1993, p. 216).

Conversely to Newmark (1988) and Snell-Hornby (1995), Mandelblit (1995) looks at the interplay between conceptual and linguistic metaphors detected across languages, particularly between the American/English-Arabic cultures. His goal is to aid the translation of metaphor in the TL. He offers two useful scenarios of mapping conditions: "Similar Mapping Condition" (SMC), and "Different Mapping Condition" (DMC). According to Mandelblit's hypothesis, the SMC is obtained if there is no conceptual shift happening between the metaphors of both the SL and the TL, and, of course, the case of DMC will be applied as a result of a conceptual shift in the metaphors between the two languages of concern (1995, p. 493). Thus, Mandelblit believes that the more different the cognitive domain a source text holds, the more difficult it is for the translator to process and translate. Kövecses (2018, p. 55) points out that "metaphor universality" is often a matter of the level of schematicity. The higher it gets the more universal it tends to be" (ibid.). On the same scale, Hiraga (1991) provides evidence of

the impact of cultural and linguistic variation on the conceptualisation of metaphors. Even though she does not refer specifically to translation, Hiraga explores an explicit scenario for *"comparative cultures"* between American English and Japanese, proposing four combinations of metaphor conceptualisation:

1. Similar metaphorical concepts and similar metaphorical expressions.
2. Similar metaphorical concepts but different metaphorical expressions.
3. Different metaphorical concepts but similar metaphorical expressions.
4. Different metaphorical concepts and different metaphorical expressions (Hiraga, 1991, pp. 151–161).

Concerning Hiraga's findings, in her first condition, both languages share TIME IS MONEY. In the second combination, she found that American English and Japanese both share LIFE IS A SPORT, yet do not correspond with respect to the specific type of game. The third condition is shown when she found that both languages share the concept of sweetness. However, while the conceptual mapping of SWEETNESS IS GOOD is restricted to English, Japanese shows an opposite mapping of SWEETNESS IS BAD. Hiraga's last combination links to the concept of ideas. Her analysis shows that there are no common conceptual and linguistic realisations between the respective languages, while the English mapping is found to be IDEAS ARE IN THE MIND, the Japanese is IDEAS ARE IN HARA (BELLY).

Hiraga (1991), Snell-Hornby (1995), Deignan et al. (1997), and Mandelblit (1995) all agree on the important role of culture in the process of transferring a conceptual metaphor from one conceptual system into another. However, the respective scholars approach their analysis with a top down method which presumes the existence of a conceptual metaphor or a conceptual domain. This shadows the movement process from

linguistic expressions to conceptual metaphors. Sweetser (1990) noticed that English and many European languages share the metaphor KNOWING IS SEEING, and the more general metaphor MIND IS THE BODY and, therefore, these could be regarded as (near) universal metaphors. Universal or near-universal metaphors are metaphors used across various unrelated languages (see Kövecses, 2000a, p. 37). Nevertheless, as Sun (2011) asserts, cultural universals or cultural similarities are something that cannot be granted general laws.

Other arguments give credence to Sun's (2011) claim. It has been customary for linguistic scholars to think about translation as replacing "a textual material in one language (SL) by equivalent textual material in another language (TL)" (Catford, 1965, p. 20). The reality takes more than simply pairing two texts on the level of language while ignoring cognitive aspects, real world knowledge, and how these serve to power the conceptualised experience. The use of metaphors facilitates connections with an abstract concept by using a more concrete image in our schemas. Thus, it is not about the linguistic equivalences of individual words nor about universal similarities between different languages and cultures but rather more about perceptions of experience and how to conceive them metaphorically.

Sun's (2011) idea is a point to consider in the analysis for the current research, and indeed, it shall be shown that it is significant on the grounds of the unrelatedness between English and Arabic and the greater cultural differences between their first language learners' populations, which confirm that there is a great chance of discrepancies whether on the level of a conceptual metaphor or the level of its linguistic realisation. Such a claim would be an incitement to study even more distinctive cultures for the appearance of new translational procedures for the cognitive and translation community.

Al-Harrasi (2001) takes this argument further, focusing his enquiry on the translatability of metaphor within the field of English/Arabic translation with an in-depth examination of political discourse. He puts the concept of image-schemas and its interplay with rich images to the test regarding how far it can take the results for describing metaphor translation. The following list of procedures features an extensive classification with reference to schema:

1. Instantiating the same conceptual metaphor.
    a. Same image schematic representation.
    b. Concretising an image schematic metaphor.
    c. Instantiating in the TT only a functional aspect of the image schema.
    d. Same image schema and rich image domains.
    e. Using a different rich image that realises the same image schema realised by the rich image in the source text.
    f. From the rich image metaphor to image schematic representation.
    g. Same mapping but a different perspective.
2. Adding a new instantiation in the TT.
3. Using a different conceptual metaphor.
4. Deletion of the expression of the metaphor (Al-Harrasi, 2001, pp. 277-288).

Schäffner and Shuttleworth (2013, p. 97) conclude that Al-Harrasi's taxonomy "offers much potential for translation studies research", and, as such, Schäffner (2004, pp. 1260-1267) takes this on-board and argues in support of cognitive approaches. She holds that metaphor translation should be conceived cognitively in terms of conceptualisation. In her study, Schäffner (2004) offers a process-oriented investigation by concentrating on the effect of translation on metaphor, drawing on the CMT approach, in the translation of German into English political discourse and approaching metaphor as an intertextual

phenomenon. Schäffner (2014, p. 1260) refers to general conceptual metaphor as "macro-level" and more specific ones as "micro-level". Schäffner demonstrates that, with an amalgamation of the functions of a text, the addressees and the conceptual systems between the two cultures, "not all individual manifestations of a conceptual metaphor in a source text are accounted for in the target text by using the same metaphorical expression" (ibid.). Her data analysis identifies the following five translation solutions:

1. Using the same conceptual metaphor in the ST and the TT "at the macro-level without each individual manifestation having been accounted for at the micro-level."
2. Replacing the image schema structure of the conceptual metaphor expression used in the ST with explicit components in the TT expression.
3. Elaborating the metaphor in the TT.
4. Using different metaphoric realisations in the ST and TT but which share the same abstract conceptual metaphor.
5. Using a TT expression that underlies a conceptual metaphor from a different perspective to the one in the ST (Schäffner, 2004, pp. 1260-1267).

However, Schäffner makes it clear that her findings are just observational results from the data obtained in her study and are not guidelines for translators. She concludes that the translatability of metaphors is linked to the level of conceptualisation between the ST and TT. Focusing on methods of metaphor translation, she postulates that conceptual metaphors are universal, but their lexical manifestations are not necessarily accounted for. Moreover, she emphasises that the literal translation must be avoided as it holds different sets of associations for any two different cultures. Accordingly, by adopting actual translations of more importantly multicultural or bicultural texts, Translation

Studies can look at cultural aspects of metaphoric concepts and can also account for all the different cultural aspects in their conceptual structures.

Kövecses (2005) touches very briefly on translation in his comparative study using Hungarian students to translate metaphors into English. His investigation looks at the TIME IS MONEY metaphor taking four parameters into consideration: "the literal meaning", "the linguistic form of the metaphor", "the conceptual meaning" and the "metaphorical meaning of the metaphor" (Kövecses, 2005, p. 141). Kövecses finds three distinct translation patterns. Of all these three patterns, the most frequent pattern was identical in both languages. The scholar perceives these patterns to be similar between Hungarian and English as a result of the universal bodily experience upon which these are all based. Kövecses (2005) observes that, although at generic-levels metaphors tend to be universal or near-universal, they become very different cross-linguistically when analysed at specific levels. Maalej (2007) argues that Kövecses' (2005) results cannot be generalised as they may not turn out to be identical should another study draw a comparison between other languages. In his cross-cultural findings, Maalej (2007) studies fear metaphors out of context.

The CMT framework is based on delimiting the boundaries of metaphors as conceptualisations and thus must be employed in contexts where manifestations reflect the functional and pragmatic orientations of the context in which they appear. Without the surroundings, it is logically impossible to learn about the communicative functions, and, thus, no theoretical findings can be valid and any attempt to comment on these cannot go beyond speculation. On the other hand, Maalej's cross-mapping cultural perspective is based on culturally limited data, as the language variety type used is Tunisian Arabic, which confers bias to his preconceptions and findings. Therefore, it is

significant to propose an extended study that considers a standard fixed dialect, which the current research taking a cross-mapping translational perspective accounts for. Hence, it goes without saying that the differences in the conceptualisation of fear metaphors found by Maalej (2007) could suggest different findings from the perspective of context, a fixed Arabic variety, and cultural specificity in metaphoric and metonymic expressions and lead to the proposal of a new perspective on their cognitive translation processes. Illustrative examples of such cases will be presented later in the findings of this study.

Few translation scholars have visited the English-Arabic field with attempts to offer cognitive theoretical framework contributions for metaphor in Translation Studies. Dickins (2005, pp. 227-235) proposes a new perspective on metaphor translation, combining Newmark's (1988) and Lakoff and Johnson's (1980a) "schemata theory" of metaphor. In his paper, Dickins (2005) explores the textual analysis of metaphor translation and offers a revision of Newmark's (1988) typology with an integration of two metaphor types: lexicalised and non-lexicalised metaphors. Dickins develops two models: a full model which he regards as an overall model that is adequate to offer a full account of metaphor and metaphor translation analysis, and a simplified model, designed for specific practical applications such as translation teaching.

Dickins (2005, p. 234) also classifies the purposes of metaphor into "denotative-oriented" and "connotative-oriented" types.[19] Dickins states that the former type "is the use of metaphor to express an open-ended denotation or potential range of denotations", whereas the latter "is to appeal to the senses, to interest, to clarify graphically, to please,

[19] Newmark (1988, p. 104) adopts a similar division, but uses two different terms: the 'referential purpose', and "pragmatic purpose" respectively.

to delight, to surprise" (Dickins, 2005, p. 235). Dickins' (2005) extension to considering Lakoff and Johnson's (1980a) view of metaphor is attributed to the importance of the schematic aspect metaphors hold as cognitive concepts. Dickins (2005, p. 244) uses his model to analyse Arabic into English translations specifically with "metaphorical use of verbs of motion". Dickins (2005) states that:

> Arabic has a relatively large number of verbs of motion which also have a lexicalized (stock) metaphorical 'informational' sense. English does make some metaphorical use of verbs of motion to describe the imparting of information ('Information has reached us that'). However, it more commonly uses either a metaphor of 'giving and receiving' ('We have received information that'), or non-metaphorical forms ('We have been informed that') (Dickins, 2005, p. 244).

Dickins exemplifies his point using reproduced examples from Arabic texts and comes out with three useful contrasting translation results. The translations below are all taken from Dickins (2005, pp. 244-247):

1. The motion metaphor in the Arabic ST is maintained in the English TT as in the following examples:

ST

وكانت قرطبة هي مدينة المدارس الموسيقية التي {وصلت} شهرتها الى الممالك المسيحية التي كانت تستدعي مطربي وموسيقى المدارس لإحياء أعيادها واحتفالات قصورها.

Literal TT

> And Cordoba was the city of musical schools, whose fame {*reached*} to the Christian kingdoms, which used to summon the singers and musicians of those schools to enliven their festivals and the celebrations of their palaces.

Idiomatic TT

> Cordoba was the city of musical academies. Their fame {*reached*} as far as the Christian kingdoms, where musicians and singers from these schools were employed to perform at religious festivals and palace gatherings.

2. The motion metaphor in the ST is different than the one in the TT, as in the following example:

ST

ولقد {ورد} الى برنامجنا "لكل سؤال وجواب" سؤال عن حقيقة جحا.

Literal TT

> [There] has {*reached*} to our programme 'For every question an answer' a question about the reality of Juha.

Idiomatic TT

> The BBC programme *An answer to every question* recently {received} a question about whether Juha was a real person or not.

3. The motion metaphor in the ST is not used in the TT, as in the following example:

ST

واخترط الزُّبير سيفه وقال: لا أغمده حتى يبايع علي؛ {فبلغ} ذلك أبا بكر وعمر، فقال عمر: خذوا سيف الزبير، فاضربوا به الحجر.

Literal TT

> And Az-Zubayr drew his sword, and said, 'I do not sheathe it until allegiance is pledged to Ali, so that {reached} Abu Bakr and Umar, and Umar said, 'Take the sword of Zubayr, and strike with it the stone'.

Idiomatic TT

> Al-Zubayr drew his sword, saying, 'I will not put it back until the oath of allegiance is given to Ali.' When Abu Bakr and Umar {heard about} this, Umar said, "Seize Al-Zubayr's sword and strike it with a stone." (Dickins, 2005, pp. 244-247, emphasis in original).

Dickins (2005, p. 247) claims that the schematic understanding of metaphor translation practice is significant in the case of non-fixed metaphors as in "redeploy . . . troops" as

opposed to fixed ones as in "[a] tree" in "A man is a tree".[20] He states that "the fact that any of dead, stock, recent, adapted or original metaphors may or may not fit into a metaphorical schema, and that such schemata may be more or less dominant suggests a two-dimensional type of extension" and these are schematic and non-schematic (ibid.).

Similar to Dickins (2005), AL-Hassnawi (2007) attempts to carry out a study between English and Arabic to explore the cognitive cultural issues in metaphor translation but incorporating Mandelblit's (1995) Cognitive Translation Hypothesis. While Mandelblit (1995, p. 493) aims to show that "the difference in reaction time is due to a conceptual shift that the translator is required to make between the conceptual mapping systems of the source and target languages", AL-Hassnawi (2007, p. 4) intends "to see how the members of that culture structure or map their experience of the world and record it into their native language."

AL-Hassnawi (2007) argues that the more the two cultures are similar, the easier the task will be for translators and this, in return, will produce a translation equivalence, otherwise Mandelblit's (1995) "different mapping conditions" apply, and the translation process becomes more difficult. The translation results may be similes or polysemies rather than metaphors. AL-Hassnawi (2007) asserts that metaphors can be translated, and the translation occurs with "a minimum degree of loss", stating that any attempt to render metaphors literally in the TL is a "bad product". Hasnawi analysis revealed three cognitive mapping patterns:

[20] Adapted and original metaphors were originally used in Dagut (1976, p. 22) and Newmark's (1988, pp. 112–113) classifications of metaphors.

1. Metaphors of similar mapping conditions due to cultural universals.
2. Metaphors having similar mapping conditions but lexically implemented differently due to religious and ethical systems in the TL being different than the source language.
3. Metaphors of different mapping conditions "the culture-bound SL metaphors" are mapped onto a domain different than the one in the target language (AL-Hassnawi, 2007).

It is noted, however, that the examples used for the analysis in AL-Hassnawi's (2007) study are decontextualised and not systematically selected. Vosniadou (1989) argues that metaphor comprehension depends heavily on the "metaphorical linguistic input but also on the situational context." Snell-Hornby (1988, p. 59) also emphasises the importance of "contextual features" in the process of metaphor translations, for example, the use of metaphor and their concepts to express beliefs and values in English and Arabic cultures may differ depending on the context used for these metaphors, which is then significantly reflected in the ultimate process of translation.

Similarly, Al-Zoubi et al. (2007) devoted their research to investigating cognitive-cultural issues of metaphor translation shifts based on Mandelblit's (1995) two cognitive translation possibilities, SMC and DMC, but through an elaborated focus on the cognitive equivalence of metaphors between Arabic and English. Their findings lead to a conclusion consistent with the views of Schäffner (2004) on the translatability of metaphor in cases where metaphor translation should be performed from the "macro-level", identifying a corresponding conceptual domain in the TL rather than identifying linguistic metaphor expressions in target text. According to Al-Zoubi et al. (2007, p. 237), performing the latter would lead to a major issue in the translation process, as it

fails to reproduce similar conceptual mappings in the TL. The scholars emphasise the replacement of a source conceptual metaphor by another that "does not clash with the TT culture" (ibid.). Their analysis revealed three cognitive mapping patterns which accord with Mandelblit's (1995) hypotheses:

1. Metaphors of similar mapping conditions with identical expressions in the SL and TL.
2. Metaphors of similar mapping conditions but manifest as different expressions in the SL and TL.
3. Metaphors of different mapping conditions with no equivalents in the TL (Al-Zoubi et al., 2007, p. 237).

According to Al-Zoubi et al. (2007), the above list is taken as continuum where similar mapping conditions at one end indicate that languages and cultures greatly converge from shared universal source concepts. These findings have opened doors for scholars to investigate whether CMT has any impact on the translators' metaphoric competence, that is to say, the underlying knowledge and skills translators have to communicate between languages. Barmellow (2008, p. 89) argues that metaphor translation research has to change direction to cover the pragmatic response from the translator. According to her, this requires an in-depth understanding of the underlying conceptual systems of metaphors. She states that following the cognitive approach would allow for a better translation analysis of source texts and would produce more than just "word-for-word equivalence in the target text" (ibid.). However, this situation is not applicable to qualified translators. Barmellow's assumptions were in line with what Andersen (2004, p. 57, cited in Sjørup, 2013, p. 68) found in his study. Andersen's analysis, though limited in scope, shows that translators at professional levels frequently lack linguistic,

cognitive and pragmatic knowledge of metaphor. His results have triggered a very important question regarding why so much cognitive effort has been applied to cognitive linguistic translation studies to resolve difficulties with metaphor typologies without any significant attention paid to how these typologies would be of benefit pedagogically. Trainee translators have been trained enough over a sustained period of time on how to seek linguistic equivalences for metaphors between languages, and this has acted as a normative principle. The researcher, therefore, believes that it is time to train translators to increase their awareness of the range of the cognitive linguistic options available to them and adopt them for classrooms through exercises using different text materials from different genres.

The objective of cognitive translation is to eliminate overtranslation and mistranslation and to develop systematic memorisation of conceptual metaphors and convey them to the TL and culture when needed. This type of cognitive translation practice could gradually educate trainees in the use of intuition to identify whether or not the rendered metaphorical expression into the TL is appropriate for the native audience. The current research offers more in this respect and proposes a CMT-inspired typological model that focuses on metaphorical and metonymical mappings. This typological model would guide emotion inferences and may assist translators in gaining useful insights into the cognitive mechanisms used during emotion production and understanding, thereby helping them to adjust the comprehension mechanisms of the ST audience and those of the target text audience. This model would also elaborate a systematic method to solve the problems implied in the object of analysis.

Maalej re-entered the frame in 2008 to investigate metaphors between Tunisian Arabic and English. He used a combination of three frameworks to reach his conclusion: Mandelblit's (1995) "Cognitive Translation Hypothesis", Hiraga's (1991) "Cultural Variation*"* and Kövecses' (2005) approach. Maalej (2008, p. 60) presupposes that if the two cultures have identical conceptual mappings and linguistic expressions then metaphoric expressions are realised under the same conceptual metaphor, otherwise to reach for "a pragmatic equivalent in the TT will be a complex task for translators." He remarks on the translatability of metaphor but remains convinced that it is a challenging process in terms of transferring information in the ST and source culture and repackaging it for the target text and its culture to establish an equivalent correspondence.

In his study, Maalej (2008) identifies four metaphoric clusters: NON-COMMERCIAL ENTITIES ARE COMMODITIES, THINKING IS A DISEASE AND ILLEGAL ACTIVITY, INEDIBLE ENTITIES ARE FOOD and NON-COMMERCIAL ENTITIES ARE MARKETABLE COMMODITIES. Maalej (2008, p. 69) states that "if literal translation sounds odd, shocking, or unintelligible to English speakers, (DMC) [Different Mapping Condition] applies." However, Maalej's preconception and results are, again, skewed in a certain direction. The selection of his data is based on a small sample of Tunisian Arabic examples that have been chosen for their representativeness and for their definite validity, which Holman et al. (2015) consider to be confirmation bias. Maalej (2008, p. 68), reports that this was due to a "lack of naturally occurring language corpora." Another issue is Maalej's reliance on the traditional literal translation step, stating that the translation will be judged as "good" based on its non-literal translation in the TT. Similarly, Ghazala (2012, p. 58) looks at the translatability of metaphor but from a cognitive stylistic perspective, claiming that "all metaphors are in

principle reflections and constructions of concepts, attitudes, mentalities and ideologies." Consequently, the way translators comprehend such cognitive devices is as a conceptualisation that has to be mirrored in the TL with cultural, ideological, political, social and mental environment and other elements. In his study, Ghazala (2012, p. 66) analyses three sets of English examples into Arabic to check the extent to which CMT is applicable based on practice in translation with a focus on one target domain: MISERY. Ghazala (2012, p. 67) found that the translatability of metaphor from a cognitive stylistic perspective has an "influential impact on translation theory and practice, emphasising that the way translators approach the understanding within CMT "has to be reflected and constructed in the target language" (ibid.). In 2012, Schmidt developed an applied systematic typology with the application of CMT in metaphor translation to a corpus of a literary text and its three different Croatian translations. His analysis revealed the following translation procedures:

1. Same expression of the same CM (1a).[21]
2. Same expression of the same CM, with an addition (1a+).
3. Same expression of the same CM, with an omission (1a-).
4. Different expression of the same CM (1b).
5. Different expression of the same CM, with an addition (1b+).
6. Simile (1c).
7. Simile, with an addition (1c+).
8. Different expression of a different CM, with a similar meaning (2).
9. Non-metaphoric paraphrase (3).
10. Deletion (4) (Schmidt, 2012, p. 110).

[21] In Schmidt (2012), the scholar used the numbers on the right-hand side to indicate the types of procedures as presented in the typology.

In 2014, Schmidt recombined Toury's (1995) typology and Kövecses' (2004) parameters for use on a corpus of a dialogue script from a Croatian movie and a set of English subtitles for that movie and revealed the following translation procedures:

1. (M→M)[22]
    a. *m* → *m* a metaphorical expression is translated by a metaphorical expression of the same conceptual metaphor with the same mapping and the same meaning.
    b. *m* → *m'* a metaphorical expression is translated by a metaphorical expression of the same conceptual metaphor with a different mapping and a similar meaning.
2. (M → M1)

    m → *m1* a metaphorical expression is translated by a metaphorical expression of a different conceptual metaphor with a different mapping and a similar meaning.
3. *m* → *non-m* a metaphorical expression is translated by a non-metaphorical expression with a similar meaning (also known as a paraphrase).
4. *m*→ Ø a metaphorical expression is translated by a zero-element (also known as deletion, omission or zero-translation).
5. *non-m* → *m* a non-metaphorical expression is translated by a metaphorical expression with a similar meaning.
6. Ø → *m* a zero-element is translated by a metaphorical expression (Schmidt, 2014, pp. 96-97).

[22] In Schmidt (2014), the scholar used M → M and M → M1 to refer to the higher, conceptual level.

Schmidt revisited the issue in 2015 and proposed a potential application for metaphor translation, which is shown below:

1. (CM → CM)[23] a. *m* → *m*	A metaphorical expression is translated by a metaphorical expression of the same conceptual metaphor with the same mapping and the same meaning.
b. *m* → *m'*	A metaphorical expression is translated by a metaphorical expression of the same conceptual metaphor with a different mapping and a similar meaning.
2. (CM → CM1) *m* → *m1*	A metaphorical expression is translated by a metaphorical expression of a different conceptual metaphor with a different mapping and a similar meaning.
3. *m* → *non-m*	A metaphorical expression is translated by a non-metaphorical expression with a similar meaning (also known as a paraphrase).
4. *m* → Ø	A metaphorical expression is translated by a zero-element (also known as deletion, omission or zero-translation).
5. *non-m* → *m*	A non-metaphorical expression is translated by a metaphorical expression with a similar meaning.
6. Ø → *m*	A zero-element is translated by a metaphorical expression (Schmidt, 2015, p. 257).

In all his findings, Schmidt confirms that the typologies are "adequate and sufficient for a complete description of the procedures" and "no further types were recorded"

[23] CM → CM and CM → CM1 refer to the higher conceptual level, i.e. whether the target expression belongs to the same conceptual metaphor, or to a different one, respectively. This higher level is in a way superimposed on a typology based on the more basic level of metaphorical expressions (Schmidt, 2015).

(Schmidt, 2012, p. 189) (see also Schmidt, 2015, p. 257). According to his claim, his findings account for all metaphor translation procedures that translators might use whatever the language, which diminishes the possibility of finding new types. In light of its findings, the current research finds Schmidt's conclusions to be an open area of enquiry for various reasons. Firstly, due to the different data and language combinations of expressions in his studies, and, secondly, due to the dimension his typology operates in. His selection of data is specific to metaphors in a literary context, with no specific domain or types chosen, which gives his analysis a broad perspective. Schmidt's statements regarding the analysis of metaphor cannot be generalised and might or might not be applicable in different domains, corpus materials, literary sub-genres and contexts, particularly in the context of this current study. With this kind of influence and these variables in mind, in addition to integrating metonymic thinking into the investigation, there is strong chance that more translation decisions will emerge.

One major drawback of Schmidt's (2012) methodology for his proposed typology is the absence of a systematic conceptualisation process, inferring or labelling the identified metaphoric expressions to the conceptual metaphor(s) they belong to. Even though Schmidt (2012) makes reference to the concepts within his analysis, that does not mean that his results are completely adequate. The conceptualisation process is a significant methodological step due to its role in determining the conceptual universality of these concepts between the source and target expressions and, more importantly, due to its impact on determining the final decision of the translation procedures applied. According to Lakoff (1987), a theory that does not conceptualise linguistic expressions within their conceptual system can result in misleading claims about translation. Lakoff's reference to translation in his claim is similar to the cultural concept of translation.

As shown above, to date, there has been limited research that has attempted to explore emotion-related metaphors and a cognitive approach to translation. Hanić et al. (2016) is one of the most recent developments found in CMT and emotion-related metaphor translation research. The scholars set out to investigate actual translations between the language combinations of English and Bosnian/Croatian/Serbian made by novice translators to discover the extent to which emotion concepts are shared by native speakers. Their study is related to metaphorical linguistic expressions in their emotion state. They examine the underlying conceptual patterns and their influence on the final translations. Hanić et al. (2016) found that significant numbers of the examples obtained in their study share the same mapping of conceptual metaphors and the translation solutions analysed show considerable similarity between translations provided by participants. To show the validity of their approach, Hanić et al. (2016, p. 99) suggest translation patterns in four main conditions, illustrated as follows:

1. Providing the equivalent linguistic means for the same conceptual domains in the ST and TT.
2. Lexicalising the same conceptual domain differently.
3. Providing a metaphorical expression for a different conceptual metaphor (in addition to the SL metaphorical expression).
4. Providing a metaphorical expression for a different conceptual metaphor only (Hanić et al., 2016, p. 99).

Their results indicate that the languages under consideration share a large number of emotion-related concepts and confirm that some concepts, particularly emotion concepts, are "deeply rooted in our thought" (Hanić et al., 2016, p. 99) and are shared across languages. The scholars also found "closer" translations between novice translators, as they opt for paraphrasing to convey metaphorical expressions to the TL

and rely heavily on their background knowledge in cognitive linguistics. Hanić et al.'s findings echo the conclusions of other scholars and share a common core of typologies of metaphor translation, albeit with variations (see, for example, Snell-Hornby, 1988; Schäffner, 2004; Kövecses, 2005; AL-Hassnawi, 2007; Schmidt, 2012; Schäffner, 2017). Hanić et al. (2016) conclude that the more translators have knowledge of principles of cognitive linguistics and metaphorical conceptualisations, the more productive the translation will be. In Lakoff and Johnson's (1980a) account of metaphor, it could be said that knowledge *is* translational power. In other words, it is a crucial point for this thesis.

2.4. Conclusion

This chapter provided a diachronic literature review of metaphor studies and metaphor within Translation Studies. The chapter also explained how the future of the field of metaphor in Translation Studies is expanding and demonstrated that it is moving towards the integration of approaches and methodologies. This thesis advocates for a study within this progression. Metaphor in translation research has undergone various interpretations, with differing notions, theories and implications from multiple perspectives. From Aristotle right up to the emergence of the second wave of Lakoff and Johnson's CMT and its turning point representing the modern understanding of metaphor underlying metaphor translation, metaphor translation research has placed itself between two respective poles: language and thought.

The results from CMT have yielded an answer to a question that is no longer centred on individual linguistic metaphors in terms of the translatability of metaphors. The fact that metaphors are influenced by the conceptual system and scholars must take into

consideration the different cultural values and beliefs of the source and target languages, particularly for languages stemming from distinct cultures. This chapter has also demonstrated that the proposed traditional linguistic translation procedures for dealing with metaphors are only lists from prescriptively grounded studies. Cognitive descriptive metaphor translation studies cannot be accounted for with such a source-oriented paradigm due to its focus on transfer, translatability and equivalence as the main aim of metaphor translation. Various CMT-based translation studies have been conducted to contribute theory-based models for the translation of metaphor with proposals of metaphor classifications. This is due to the undeniable role of culture, different languages and cultural conceptions of translation. Due to these limitations, the application of CMT in translation is still under-researched and needs further development.

On the one hand, the interest in the interrelation of emotions and metaphor in translation to clarify some translational aspects of metaphor is very recent, as is evident in some European studies. Yet, this aspect is sometimes still seen as neglected, as in the case of English/Arabic translation studies. The reason for the current lack of dialogue could be partly attributable to the limitations of CMT and the well-received understanding of metaphor in its traditional objectivist sense rather than in the world of experience and cognitive models. Additionally, it has been noticed that the correlations between metonymy and translation in metaphor translation analysis with CMT have hardly ever been undertaken as a separate path and still remain insufficient. On the other hand, the interplay between image-schema and metaphor translation has barely been explored until recently and it has only been applied to Arabic into English political discourse analysis (see e.g., Al-Harrasi, 2001 and El-Qader, 2018).

In short, while some attempts have already been made in this respect, a translation study to address these limitations and join these affective sciences with a focus on new methodological dimensions is essential. This study is intended to go some way to closing this gap in research. The subsequent chapter takes the discussion to the literature of metonymy and translation, addressing its role and implications in cognitive linguistics.

Chapter 3
Resisting the Power of Metonymy in Translation Studies

The previous chapter of this thesis discussed the history of metaphor research in Aristotle's classic theories, in addition to those by Richards (1936, 1990) and Black (1962) that were the subject of intense debate until the 1970s. These reputable scholars proceeded from Aristotelian conceptualisation research and proposed prominent theories in the history of metaphor enquiry. The limitations of their theories, however, were their focus on the understanding and analysis of metaphor and its function only, distancing it from the other side of the coin, metonymy. This, according to Al-Sharafi (2000, p. 17), is because unlike metaphor, metonymy "does not involve symbolism and double-unit signification as there is no transfer on the semantic plane." Aristotle himself "did not recognize the distinctive character of metonymy and reduced it to a subtype of metaphor" (Panther & Radden, 1999, p. 1).

Before the inception of Lakoff and Johnson's (1980a) CMT, linguists, including Jakobson (1971, p. 90), postulated that not only metaphor but also metonymy are a fundamental means of cognition mirrored in both human behaviour and language but that they are different means of conceptualising ideas. This view of metonymy allowed scholars to explore the variety of relationships between metonymy and metaphor and they found that the relationship is not binary but a continuum. Scientific evidence of this continuum has proved to be crucial in building elaborations of complex and combined forms of conceptual mappings (Lakoff & Turner 1989, pp, 103-104; Kövecses & Radden, 1998; Radden &

Kövecses, 1999). The interplay between the two constructs did not cease, but rather continued to explore the nature of this relationship within the different perspectives. For example, issues have been raised in connection with the nature of the relationship between metaphor and metonymy as concepts. This includes other complexities of how both constructs interrelate and are used to process emotions from a cognitive-cultural perspective (Kövecses, 1995, 2000, 2002; Barcelona, 2000, 2003; Riemer, 2003; Goossens, 2003).

As a reflection of early metaphor research, most CMT implications in translation research were also far away from metonymy. The inconsistency of how metonymy has been dealt with in cognitive linguistics has led scholars to neglect metonymy in translation research. The absence of metonymy, according to Mario Bardar (2003), is likely due to the limited role of metonymy outside the lexicon or to it being "typically more inconspicuous, or not as obviously figurative and poetic as especially novel metaphors" (Arvius, 2006, p. 8).

Regardless, recognising that metonymy is "no less important" than metaphor, in addition to the strong connection between them in constructing emotions, makes the engagement of metonymy in this research context far-reaching (Taylor, 1995, p. 122; Kövecses, 2000). This chapter aims to address these limitations. To provide more context, it looks at existing studies that have attempted to address the role of metonymy in shaping translation decisions away from metaphor within cognitive linguistic theories. However, as Radden and Panther (2005) point out, a comprehensive view of metonymy with its diversity of approaches is an overwhelming task that cannot be fully presented in one limited space.

This chapter limits the discussion on metonymy to particular aspects that are regarded as crucial to the aim of this thesis, and addresses the second part of the first research question in relation to metonymy: Within CMT, what are the new theoretical areas of metaphor, which have hitherto not been extensively studied in Translation Studies? This chapter provides a review of the relevant arguments and outlines the main ideas in metonymy and metonymy in translation research within CMT. Section 3.1 introduce overviews of metonymy research from the Western rhetoric with general definitions and characteristics with more focus on the studies which have addressed the nature of metonymy as a cognitive concept. Section 3.2 presents the nature of metonymy in Arabic classical rhetoric literature providing definitions and classifications. Section 3.3. presents how the cognitive view of metonymy started. Section 3.3.1 discusses the types of metonymy of cognitive relations. Section 3.3.2 and 3.3.3 delineate how the metonymic relations interact with metaphor in a cognitive network. Section 3.4 addresses the relationship between metonymy studies and Translation Studies. Moreover, section 3.4 investigates the translation aspects of metonymy within cognitive linguistic theories that can be used in the analysis of this thesis.

3.1. Metonymy in English

3.1.1 Metonymy: Sense and Reference

In traditional and classical rhetoric, metonymy, like metaphor, started as a figure of speech and a rhetorical mode of discourse that involves a substitution between entities. Like metaphor, metonymy was extensively used for its rhetorical power, illogical principles and the oddness of its grammatical and semantic states. The very first encounter with the use of the term metonymy (Lat. *denomination*), from

the Greek word *"metōnumia"* (literally "a change of name") (Li, 1998), was, according to Rosengren (2021), sometime between 86 and 82 B.C. Originally attributed to an unknown author in his treatise known as *Rhetorica ad Herennium or De ratione dicendi ad C. Herennium* (86-82 B.C.), his book is the oldest rhetorical treatise in Latin and one of the most studied books in European history. The author's theoretical framework of metonymy is based on his own thoughts and is not at all influenced by Aristotelian conceptualisations (see Koch, 1999, p. 140). The author states that:

> *Denominatio* [i.e., 'metonymy'] is a trope that takes its expression from *near and close things* and by which we can comprehend a thing that is not denominated by its proper word (translation by Koch, 1999, p. 141, emphasis in original).

The significant point in the author's definition is the representation of one of metonymy's important features: contiguity. In the broadest sense, contiguity means that the association and relation connecting two concepts, source and target, is such that one topic suggests another with which it is associated (Bredin, 1984). Webster (1900, p. 250) argues that "much of the force of figures of speech is derived from the suggestive quality of the specific words employed". Webster defines metonymy as:

> The substitution of the name of one thing for that of another to which the former bears a known and close relation. The most common of these known and close relations are those of cause and its effects, of container and the thing contained, and of sign and the thing signified (Webster, 1990, p. 250).

This rhetorical concept of contiguity remained until the 20th century as the basis for understanding metonymy. Scholars at the time, namely Bréal (1897) and Nyrop (1913), viewed metonymy as "a semantic link between senses of a lexical unit that is based on a relationship of contiguity between the referents of the

expression in each of those senses" (cited in Geeraerts, 1994, p. 2477).[24] The distinction between reference and sense is seen in the distinction between the word's generic meaning, its sense and its representation in the world (Frege, 1960). To elaborate, sense is what is found as a definition in a dictionary. For example, the definition of the word *stomach* in the online *English Dictionary* (Rundell et al., 2009-2021) is "1a. the organ inside this part of your body where food goes when you have eaten it." The referential function of metonymy, on the other hand, is the use of one entity to stand for another only when the referential effect "… replaces the name of one thing with the name of the adjacent object" (Barcelona, 2009). To put it simply, reference reflects the meaning of a word in an utterance, e.g., *Hollywood* is used as a reference for celebrity culture, *White House* for the United States president, a spokesman for the office, or the employees of the White House. *The Crown* acts as a metonymy for the monarchy, and *Shakespeare* is a noun used to indirectly refer to all his dramatic and poetic work. Both *The Crown* and *Shakespeare* have two ways of saying the same thing with each employing a single aspect to encode the whole. Another example uses the word *stomach* in a sentence, as in example (1):

(1) She has the *stomach* to fight.

With sense, the meaning of a whole word is complete while with reference it is partial. Within the whole-part view of metonymy, the semantic attribute in the word *stomach* in example (1) above is not meant to be used to denote the sense/whole but is taken to be a reference/part: a substitute expression for a location that indicates *courage*. In this case, the sentence is assumed to mean *She*

[24] See also Geeraerts' (2010) *"Theories of Lexical Semantics".*

has the courage to fight. However, this cannot be the whole meaning since the statement does not necessarily mean she is a brave person but can suggest that, most importantly, she has courage. Rhetorically, then, metonymy offers a notion in the form of change of meaning (Lausberg, 1973, p. 562 and 577), and it represents a process that "involves a transfer of words which have reference" (Kövecses & Radden, 1998, p. 37). Panther and Thornburg (1999) support the traditional view of metonymy and propose the substitution theory of metonymy, which is to some extent similar to Kövecses and Radden's (1999) in that it is limited to the vocabulary level. The key problem with traditional views of metonymy and those of other scholars in support of Kövecses and Radden's (1998) definition is that their definition exclusively depicts metonymic thinking as the only kind of replacement operation. Their claim ignores the contribution of metonymy at speech act level and prediction level, as they believe it does not occur above the phrase level.[25]

Peirsman and Geeraerts (2006) maintain Kövecses and Radden's (1998) view of prototypes as a stand for category that needs to "account for the wide variety of metonymic patterns that can be found in the linguistic literature" (Peirsman & Geeraerts, 2006, p. 270). The idea of the substitution theory of metonymy for cognitive linguists in the work of Barcelona (2009) and Lee and Park (2015) pays significant attention to the referential function. These scholars argue that prototype effects exceed more than just individual lexical categories. Warren (2006), for example, proposes metonymy as "nominals" i.e. noun phrases or proper nouns,

[25] There are other types in addition to referential metonymies such as predicational metonymy, illocutionary metonymy (Gibbs & Gibbs, 1994; Thornburg, 1998, 1999) and form-level metonymy (Jakobson, 1971).

"subjects, objects, predicative and prepositional complements" that can function syntactically (Warren, 2006, p. 17). For explanation, consider examples (2) representing referential metonymy (the metonymic expressions are in italics with their intended interpretation between square brackets):

(2)

a. "I'm not going to name *names* [person with a name]. Everybody knows who I'm talking about" (COCA 2015) (Panther & Thornburg, 2017, p. 280).
b. "We haven't been bombing. We haven't even just sent in *boots* [troops/soldiers] on the ground" (COCA 2015) (Panther & Thornburg, 2017, p. 280).

In example (2-a), a metonymic expression exists in a nominal noun phrase. The modifier is supported by the contextual surrounding that appears in the second part of the sentence *Everybody knows who I'm talking about.* The reference in (2-b) is implied in a conventionalised metonymic expression of a noun phrase case *boots on the ground.* This means that sentences containing a metonymic effect apply to items with modifying status that give access to the non-literal statements evoked, based on their violation of truth conditions that allows paraphrasing and referencing. These metonymic effects also focus on the salient aspects of a specific concept and use them as points of access to the entire concept. Similar cases can happen with different surrounding contexts. For example, if a shopper points at a coat in a store and says, *I like this coat,* an understanding of this instance would stand for a type where the type indicates the model of the coat including other linked features such colour, material and size. The contextual surrounding in metonymic cases such as those in (1) and (2) could give clues to the reader, thus granting the key reference for mental access to the target domains. For this, and as Radden (2009) claims, the sense-reference function in general is considered to be

a significant criterion feature for metonymy, and an inherent relation that serves the function of providing metonymic understanding. Radden also emphasises that moving between the two functions clearly involves a metonymic cognitive ability. In short, the history of metonymy continued to oscillate between reduced and abrupt definitions within classical linguistic boundaries in different languages and cultures. This is addressed in section 3.2, which looks at how metonymy is defined in the Arabic language.

3.2. Metonymy in Arabic

Metonymy (*Kenayah*) in Arabic is defined in *al-Qamus al-Moheet* (*The Surrounding Ocean*) by Fairuzabadi (729-817 A.H./1329-1415 C.E.) as:

> The use of a certain word to give a certain meaning, speak about something when you really mean something else, or to use a word that relates to the meaning literally or allegorically (Fairuzabadi, 729-817 A.H./1329-1415 C.E, my translation).

Al-Sakkaki (1937, pp. 213-220) states that metonymy interpretation is arrived at through logically considering the semantic features of the metonymical structure itself. For example, Al-Jurjani (400-471A.H./1010-1078 C.E., cited in Muhammad, 2017, p. 27) describes a woman as نؤوم الضحى **(**literally as "*late rise"*), which means she sleeps up to the mid-morning instead of waking up early in the morning. This metonymic expression is used to refer to a rich woman who is served and does not need to do anything by herself. Al-Baghdadi defines metonymy under the concept of contiguity or adjacency (irdaf) as:

> The process in which the poet intends a meaning but does not give a word conveying that meaning. Rather he gives a word that conveys a meaning contiguous or adjacent to that meaning (Al-Baghdadi, 1958, p. 113, cited in Al-Sharafi, 2000, p. 46).

As seen from this definition, Al-Baghdadi considers metonymy and contiguity as the same phenomenon. His ideas are similar to Jakobson and Halle's (1956) view that metonymy operates upon "contiguity" (see section 3.3). In his book *Dalail Al-I'jaz* (Intimations of Inimitability), Al-Jurjani (400-471A.H./1010-1078 C.E.) states that metonymy:

> Occurs when the speaker wants to give a certain meaning but without using the relevant direct word, which is designated naturally for that intended meaning in the language. He, instead, opts for using another word that is closely related to or suggested by the original to communicate his message (Al-Jurjani, 400-471 A.H./1010-1078 C.E., translation by Almijrab, 2021, p. 37).

Another contribution to metonymy is the one set out by Tabanah (1988), who devoted a whole section in his treatise *Mu'jam Al-Balaghati Al-Arabiyati* (*Lexicon of Arabic Rhetoric)* to metonymy. Tabanah (1988, p. 593) defines metonymy as a way to "refrain from naming something directly, opting for using a word that has a description of one of its qualities or features" (Tabanah, 1988, p. 593, translation by Muhammed, 2017, p. 28). Tabanah (1988) classifies metonymy in Arabic, based on the metonymic meaning as intended by the speaker, into three categories: metonymy of quality (*kenayah an sifah)*, metonymy of description (*kenayah an mawsoof*) and metonymy of attribution (*kenayah an nisba*). Metonymy of quality means to attribute a certain trait to the described object and it consists of three elements: the literal word, the described object, and the underlying message/the deep meaning intended (Muhammad, 2017, p. 29). An example of metonymy of quality can be exemplified in (3) as cited in Almijrab (2021):

وَمَا يَكُ فِي مِنْ عَيبٍ فَإِنّي*** **جَبَانَ الكَلبِ مَهْزُولُ الفَصِيلْ**.

(3) "And what a disadvantage to me is that the coward of a dog is a mocked platoon" (translation by Almijrab, 2021, p. 37, emphasis added).

In example (3), the *cowardly dog* جَبَانَ الكَلْبِ is a metaphor - as well as the *sloppy flock* مَهْزُولْ الفَصِيلْ and both expressions are meant to prove generosity. To explain further, in the past, Arabs used to live in tents across the deserts with dogs to protect them from strangers and wayfarers. However, some of the dogs stay calm and do not bark when strangers approach the tents. This is because these dogs have already established a background of trust and know how to act around these people. This reaction is originally due to the generosity of their owners i.e., by inviting the strangers over for a meal. For that, people have nicknamed him the 'cowardly dog'. Similar to this, the Holy Qur'an motions يُحِبُّ أَحَدُكُمْ أَنْ يَأْكُلَ لَحْمَ أَخِيهِ مَيْتًا فَكَرِهْتُمُوهُ {Would one of you like to eat the flesh of his brother when dead? You would detest it.} (Q49: 12)[26] This metaphor portrays backbiting as a person eating human flesh, and this is very appropriate because backbiting is only mentioning the faults of people, tearing their honour apart. The second type is the metonymy of description, which mentions the affinity and attribution but omits the modified object (Bunnduq, 1996, p. 69). By way of illustration, consider Ahmed Shawqi's (1868- 1932 C.E.) line from his poem *Salo Qalbi* (*Ask My Heart*):

ولِي بَيْنَ الضُّلُوعِ **دَمٌ وَلَحْمٌ** *** **هُمَا الوَاهِي الّذِي ثَكِلَ الشَبابَا**.

(4) "And within the ribs of my flesh and blood *** they are my broken heart that are bereaved of youth" (my translation).

In the Arabic lines of example (4), the literal meaning of دم ولحم is *flesh and blood*. However, the deep meaning of the expression in the context has an implicit and different meaning. The poet used the power of metonymy in his line هُمَا الوَاهِي الّذِي ثَكِلَ الشَبابَا (they are the deceitful that are bereaved youth) to indirectly refer to his

[26] Soura Al-hujurat (49): Aya/Verse (12). Sahih International Translation by Assami et al. (1997). Retrieved from the Quranic Arabic Corpus at: https://corpus.quran.com/translation.jsp?chapter=49&verse=12.

broken heart and the emotional pain he had without actually saying what he meant directly. This is because the use of such metonymic reference here provides a more articulate, eloquent and communicative message. The third type is the metonymy of attribution, which features the quality and the described object but entirely omits the attribution. An example of this can be seen in Al-Mutanabbi's following poetic line:

أنَا الذي **نَظَرَ الأعْمى** الى َأدبِي *** **وَأسْمَعَتْ** كِلمَاتِي **من بِه صمَمُ**.

(5) "I am who makes the blind see my literature *** And my words hear those who are deaf" (my translation).

The poet in example (5) used a metonymic of attribution to attribute this unique quality to himself. In his lines, Al-Mutanabbi uses the expressions نَظَرَ الأعْمى and أسْمَعَتْ ... من بِه صمَمُ as referential metonymies to emphasises his distinctive literary capabilities and the profound effect of his poems. Referential metonymy, as illustrated in (5), has a tendency to deviate from using normal language structure and truth conditions by using an ornament of language that violates the semantic meaning in some respect.

To sum up, section 3.2 briefly explores the properties of metonymy in Arabic, how it is defined and the main types of metonymy. As demonstrated in section 3.2, the Arabic language is rhetorically rich and extends its aesthetic metonymic value in its sumptuous style, making it one of the most unique Semitic languages (Almijrab, 2021). When it comes to the definition of metonymy, sections 3.1 and 3.2 showed that that Western and Arabic perspectives take metonymy beyond linguistic boundaries and include other dimensions like ontology where the nature of being and existence is the main concern. Some of the early views of metonymy, however, in the Western world neglected the cognitive view of metonymy and are

not integrated into a coherent model. However, Radden (2009, p. 327) believes that the traditional functions of metonymy involve a cognitive ability. It should be noted that the notions of contiguity and metonymy were used by Aristotle as an aid to memory and an evocative means of a cognitive view of rhetoric at the time. Almijrab (2021, p. 32) also notes that Arabic rhetoric is "logical, cognitive and with denotative content". This is mostly due to its relation to semantics in many areas because the meaning expresses "the feeling and emotions of the language producer" (ibid.). However, when rhetoric changed and was reduced to critically analysing figurative language in different texts, the part where memory/cognition plays a role fell away (Fahnestock, 2005, pp. 160-161). This engendered a gap between rhetoric and cognitive science in general (ibid.). Section 3.3 looks at how the cognitive theory of metonymy developed and how it was linked to metaphor and metonymy. This is discussed in three successive sections: the metonymic cognitive types and relations, the metonymy metaphor conceptual relations and the metonymic conceptual interaction with metaphor.

3.3. Towards a Cognitive Linguistic View

Until the period of the structuralist semantics movement, metaphor remained dominant. Scholars were developing approaches for word meaning by means of defined semantic elements (see Greim, 1983). Jakobson (1971) was the first to comment on metonymy. In his 1971 publication, he granted metonymy equal attention to metaphor and considered them both to be important principles for language. Jakobson's work came as a reaction to the lack of literature on metonymy in contrast to metaphor and metaphor's power over metonymy, relying

on two theoretical approaches: the paradigmatic and syntagmatic analysis.[27] His first views used objectivist and structuralist insights and their formal dimensions in language.

Jakobson and Halle (1956) oppose the idea that metaphor and metonymy have a bipolar structure representing the possibilities of the linguistic selection with two different views. They claim that metaphor is based on substitution and similarity, whereas metonymy operates upon "contiguity" or "contexture", which, according to them, has the "capacity for maintaining the hierarchy of linguistic units" (Jakobson & Halle, 1956, p. 71, 76).[28] Furthermore, on closer examination, it was obvious that metaphoric and metonymic relations exist at all language levels "lexis, morphology, syntax, discourse" in different forms of metaphors, metonymies or even literal linguistic functions (Radden & Kövecses, 1999, p. 21). Jakobson (1971) believes that metonymies are partial modifier-head constructions that do not necessarily, like metaphors, show more than paradigmatic relations, one (similar) relation to connect the two domains together. For scholars like Lodge (2015), the syntagmatic and paradigmatic distinction seems misleading. Lodge emphasises that even though metaphor and metonymy have a bipolar structure, they are both related on paradigmatic levels due to the presence of substitution principles.

[27] Paradigmatic linguistic analysis usually analyses the paradigms embedded within a text of the same category rather than the syntactic structure that applies to the syntagmatic analysis. The latter differs from the former in an analytical approach which combines the nature of entities in the use of language by combining multiple scopes of analysis: syntactic, phonetic and lexical-semantic.

[28] Contrary to Jakobson's ideas in cognitive linguistics, metonymic contiguity is not always a requirement in certain metonymic relationships as long as elements of a frame have some kind of link that can be perceived.

Before the emergence of Lakoff and Johnson's CMT, it was believed that Jakobson was probably the only scholar from the first generation of cognitive science who attempted to expound a cognitive theory on metonymy and its links with metaphor (Jakobson, 1971, p. 90, cited in Dirven & Pörings, 2009). Jakobson's chain of successive ideas allowed for new lines of thought that link the cognitive properties of metaphor and metonymy. After Lakoff and Johnson's (2003, p. 35) conceptual theory was published, like Jakobson, Lakoff and Johnson made it clear that metonymy is "one of the basic characteristics of cognition" based on the cognitive mechanisms of conceptual contiguity (ibid.). An illustration of that can be seen in the orientational metaphor MORE IS UP. In this kind of metaphor, a metonymy is viewed as a built-in mapping due to its "direct physical causal associations" (Lakoff & Johnson, 1980, p. 39), which will be discussed in detail in the coming sections of this chapter.

However, from the title of Lakoff and Johnson's book *"Metaphors we live by"*, it was above all the view that metaphors are the main mechanism guiding the way humans conceptualise the world that made metonymy somewhat subordinate in position to metaphor. Indeed, for over a decade, cognitive linguistic literature focused on metaphor research (see, e.g., Lakoff & Johnson, 1980a, 1999; Lakoff & Turner, 1989; Lakoff, 1987, 1993, 1996), giving metonymy in cognitive linguistics a comparatively minor role (see Li, 1998; Barcelona, 2009). Ruiz de Mendoza Ibáñez (2000, p. 1) states that the lack of interest for metonymy caused "less certainty" about the role of metonymy as a cognitive construct and, in many instances, it was clear that early cognitive linguistic research initiatives to study metonymy were overpowered by the steady flow of metaphor studies, thus granting the metaphor revolution in cognitive linguistics credit for being an

important component in the revolution of metonymy. Lakoff and Johnson's theory allowed scholars such as Kövecses and Radden (1998), Panther and Radden (1999), Barcelona (2000) and many other linguists to refine their ideas of metaphor into more elaborate theoretical extensions with regard to the cognitive values of metonymy in cognitive activities. As such, during the 1990s, the bias towards metaphor as the main intellectual mechanism that shapes thought and understanding of the world has gradually diminished and the status of metonymy was promoted to the same status as metaphor.

Panther and Radden (1999) outline a different view from Lakoff and Johnson's (1980) state of metonymy. They argue that metonymy plays a significant role in forming concepts and understanding. They also posit that metonymy provides a more basic meaning expansion mode compared to metaphor, considering metonymy as the basic way of thinking and behaviour among humans. The same view has also been put forth by Kövecses and Radden (1998) and Langacker (2008). They postulate that language is metonymic by nature and that it originates from metonymy not metaphor simply because it is a property of everyday cognitive processes, which makes the views of these scholars and other scholars who support their ideas less deterministic than Lakoff and Johnson's (1980a) ideas about metaphor.[29] Kövecses and Radden's (1998) views are opposite to Lakoff and Johnson's claim that language is metaphoric. Both views may seem extreme and radical; however, they could point cognitive linguistic scholars to new lines of research interests, as in the current study. The current research stands

[29] Many similar studies can be traced back to Geeraerts (1994), Ruiz de Mendoza Ibáñez (1997, 1999, 2000), Radden and Kövecses (1999), Barcelona (2000, 2003a, 2003b), Panther and Radden (1999), Riemer (2003) and Kövecses (2002, 2010) among many others.

somewhere between both views, and considers language to be "metaphtonymic" by nature (Goossens, 1990, p. 160). The researcher argues that the interaction between metaphor and metonymy, where one conceptual formation is based on another conceptual intervention, may impact the translation process. The crucial connection between these aspects may provide different results depending on the pre-existence of metonymic relationships in the target language (TL) and culture. Conventional metonymy might be produced or, as Panther and Radden (1999) suggest, established as potentially unforeseen relationships between the different metonymic entities that comply with the target culture. These points are pursued in the present study, which can shed light on these concerns. In the next entry, a brief discussion of the views of metonymic types and relations is provided.

3.3.1. Metonymic Types of Cognitive Relations

Unlike metaphor, metonymy has always been considered as conceptual, although it was never referred to as such in earlier works of rhetoric literature. In traditional rhetoric, scholars analysed metonymy and metonymic relations with "general conceptual notions such as CAUSE FOR EFFECT and CONTAINER FOR CONTENTS, etc." (Radden & Kövecses 1999, p. 17). This means, as already discussed in Chapter 2, that cognitive approaches existed many years prior to Lakoff and Johnson's (1980a) theory. The only difference between the two movements is that, in cognitive linguistics, scholars classify conceptual notions as mental constructs that have the ability to connect to other mental conceptual operations in the mind. Lakoff and Johnson (1980a, pp. 36-39) contributed to this development and proposed seven types of metonymies:

1. THE PART FOR THE WHOLE (e.g., We need new *faces* around here).
2. PRODUCT FOR PRODUCER (e.g., He bought a *Ford*).
3. OBJECT USED FOR USER (e.g., The *buses* are on strike).
4. CONTROLLER FOR CONTROLLED (e.g., *Napoleon* lost at Waterloo).
5. INSTITUTION FOR PEOPLE RESPONSIBLE (e.g., You'll never get the *university* to agree on that).
6. PLACE FOR INSTITUTION (e.g., *Wall Street* is in a panic).
7. PLACE FOR EVENT (*Watergate* changed our politics) (Lakoff & Johnson, 1980a, pp. 36-39, emphasis in original).

Other scholars, namely Norrick (1981), Radden and Kövecses (1999), Kövecses (2002) and many others have attempted to further classify Lakoff and Johnson's relations into more sophisticated lists. A good point of departure is Radden and Kövecses (1999), who devised a controversial notion of metonymy and its types of conceptual relations based on Lakoff's (1987) idealised cognitive model (ICM), an organised cognitive structure idealised to understand and represent reality from a certain perspective (Velasco, 2001, p. 490). Radden and Kövecses propose two main superordinate configurations: a whole ICM and its parts, and parts of an ICM that comes with a hierarchical list of ICMs. This means that the metonymic formula of subcategory X can stand for the whole category Y, resulting in the X FOR Y pattern of the PART-WHOLE relation.[30] Barcelona (2003b, p. 4) claims

[30] Groupe de Liege subsumes that metaphor and metonymy come as specific types under *"synecdoche". Macmillan Dictionary* (Rundell et al., 2009-2021) defines synecdoche as a "the use of a word or phrase, when a part of something is used in order to refer to the whole of it, or the whole to refer to a part."

that this formula is due to the "conceptual projection" that occurs during a metonymic mapping process. Radden and Kövecses' (1999) approach to analysing the types of ICM and metonymic processes uses three ontological realms of the semiotic triangle units for source and target: (1) the world such as things, events and people, (2) conceptualisations such as subjects, perceptions, images and interpretations and (3) language such as forms, culturally-entrenched language and given language. They demonstrate that ICM is not confined to specific entities of one of the three ontological realms but that it also crosscuts these realms. The results of such interrelations could generate different metonymic situations. One is when the form of one or more metonymies stands for the concept it signifies. According to Radden and Kövecses (1999, pp. 23-28), this type is called "sign metonymy" and it represents the basic nature of language $FORM_A$ FOR $CONCEPT_B$ such as *"dollar"* or the dollar sign *"$"* to stand for "currency" or "money". The second type is the "concept metonymy" from "Concept ICM" and it interconnects cognitive entities from the three aforementioned semiotic units. It may involve a shift in form from concept (A) to (B). The concept metonymy can be structured under four types:

1. $FORM_A$-$CONCEPT_A$ FOR $FORM_B$-$CONCEPT_B$: applies to words that have "two-form concept pairings". With this metonymy the metonymic shifts happen as a result of pragmatic situations and real-world knowledge connected to each other via the relationship of control. For example, the controlled entity *"bus"* from the category of "bus" stands for the controlling entity *"bus drivers"* from the category of "bus drivers".

2. $FORM_A$-$CONCEPT_B$ FOR $CONCEPT_B$: applies when the target concept is not linked to the name. For example, the word *"mother"* from the category of "mother" stands for "housewife mother" from the category of "mother" belonging to the CATEGORY FOR A MEMBER OF THE CATEGORY.
3. $FORM_A$-$CONCEPT_A$ FOR $FORM_A$-$CONCEPT_B$: applies to words with two forms of senses such as *"White House"* from the category of "place" to stand for *"White House"* from the category of "institution" belonging to the PLACE FOR.
4. $FORM_A$-$CONCEPT_A$ FOR $FORM_B$ - $CONCEPT_A$: a change in the form of an expression with a similar concept such as *"UN"* for "*United Nations"* belonging to SHORT FOR THE FULL INSTITUTION (Radden & Kövecses, 1999, pp. 23-28).

A third situation is when the target domain represents the real world. This is called the "reference metonymy" and it comes from the "Reference ICM". In this type one of three different metonymies could emerge:

1. The Standard-Reference ICM. Metonymies under this type are made up of signs from the mental model of reality. It can come in form-concepts or units to stand for things that have been referred to things or events. This type establishes the general metonymy FORM-CONCEPT FOR THING/EVENT as in the word-form *"cow"* for a real "cow". The reverse of this type may also occur in certain situations such as the English football player *David Beckham* standing for sportsmanship.

2. The Reference via Meaning ICM. Metonymies under this type are made up of words that have "inherent meanings (called intensions) and designate objects by virtue of those meanings" (Lakoff, 1987, p. 186, cited in Radden and Kövecses, 1999, p. 25). This ICM type forms the general CONCEPT FOR THING/EVENT metonymy where the meaning associated with a specific word is assumed to stand for the word itself in the real world. For example, the concept "cow" stands for a real "cow". With the set-theoretic account, however, the word "cow" "denotes the set/class of cows".
3. The Direct-Reference ICM. Metonymies under this type are made up of "proper names" such as *John Smith,* which refers directly to a name of a person (Radden & Kövecses, 1999, pp. 24-28).

It is also worth mentioning that unlike metaphorical mapping, metonymy is not unidirectional like metaphor and can represent reversible mappings e.g., PART FOR WHOLE and WHOLE FOR PART, CAUSE FOR EFFECT and EFFECT FOR CAUSE, FORM-CONCEPT FOR THING/EVENT and THING/EVENT FOR FORM-CONCEPT, GENUS FOR SPECIES and SPECIES FOR GENUS, etc. (see Radden and Kövecses, 1999, p. 22-28; Barcelona, 2002, p. 221). Littlemore (2015, p. 20) considers Radden and Kövecses' (1999) list "the most exhaustive and influential taxonomy to have been proposed to date." In 2002, Kövecses added six further types of metonymies, alongside an index of metaphor concepts, in order to provide greater understanding of what metonymies could be. His six additional metonymies were: PART FOR THE WHOLE, PLACE FOR PRODUCT, INSTRUMENT FOR ACTION, EFFECT FOR CAUSE, DESTINATION FOR MOTION and TIME FOR ACTION (Kövecses, 2002, p.

145). Years later, Panther et al. (2009) provided a list of over one hundred metonymies in the "metonymy and metaphor index" categorised under three main categories: WHOLE FOR PART, PART FOR WHOLE AND PART FOR PART. It is not the aim of this thesis to observe all the listings and possible types of metonymies, but rather to demonstrate that metonymic concepts will never be exhaustive and will always grow and go through changes. This is mostly due to language variability, dynamism, stylistic influence and the progression of meaning. Moreover, metonymies' non-universality across cultures and their intellectual sense allows scope for different concepts and categories to emerge and be ready for new classifications. Radden and Kövecses (1999, p. 20-21) claim that the notion of ICM operates not only within the real world but also within its cultural dimensions – not to mention the many different variations such as context that allow researchers to observe metonymy beyond the semantic level.

The complex subject of metonymic typologies is of great interest for cognitive linguistics research. However, this line of research cannot be comprehensively discussed in one section. The problem is that this chapter does not require a precise structure of metonymic taxonomies, but rather aims to investigate the translational aspect of metonymy through the emotion lexicon of fear alone. Looking at different types of metonymic relations could nonetheless be a valuable guide for finalising categorising decisions in terms of their higher-level metonymic concepts. It also begs questions about the creativity and intuition afforded by translators, or the creativity the translators afford themselves as part of problem-solving and decision-making when handling different types of metonymic concepts in translation. Wilss (1996) states that translation is a knowledge-based process, an intelligent type of behaviour, and a decision-making activity that

makes translators solve problems based on declarative and procedural knowledge. This aspect could also assist scholars in expanding their methodological approaches in defining translation decisions by offering significant advantages for metonymy in translation research.

3.3.2. The Metonymy-Metaphor Conceptual Relation

One major area of debate is the conceptual relation between metaphor and metonymy. Cognitive linguists have been debating whether metonymy is linked to metaphor in the sense that whatever applies to metaphor also applies to metonymy. It is generally accepted that metaphor and metonymy are fundamentally different (Warren, 2006). However, the Arabic Scholar Ibn-Kathir (cited in Tabanah, 1988, p. 549) argues that "metonymy is, in fact, a part of metaphor", but then he comments on how they are different. He states that metaphor uses direct expressive words to convey the intended meanings while metonymy uses indirect symbolic words to communicate its message. From a cognitive linguistic perspective, metaphor and metonymy are cognitive operations that involve mapping mechanisms and domains. However, there are four points of difference between them: mapping, directionality, the number of mappings taking place and the manner of domain mapping in a cognitive network. In a metaphor, the mapping arises from two domains, whereas in metonymy the mapping occurs within a single conceptual domain (Lakoff, 1987, p. 288; Dirven, 2002), as in example (6):

(6) "The best part of working at night is that *the suits* have gone home" (Littlemore, 2015, p. 5, emphasis in original).

The term *"the suits"* in statement (6) is used to refer to accountants and managers and it portrays them as individuals with powerful positions. The relation between the suits and the people wearing them can be figured in the same domain of CLOTHES. A part of the accountants and managers is therefore used to refer to the accountants and managers themselves. Lakoff and Turner (1989) put forward the concept of "domains", and their main goal was to re-establish a firm distinction between the interpretation of metonymy and metaphor. They define the domain account as a figurative manifestation in the source domain used for structuring a mapping of a literal target domain.

The two-domain approach embraces metonymy as a mental process of asymmetric mapping, with contiguity between elements brought together in a domain or (sub-domain), where one domain, usually the source, suggests the target to form a tangent system. However, Lakoff and Turner's claim regarding the domain approach faced criticism due to its vagueness and restricted applications of mappings. This promising approach is still lacking sufficient explanation regarding the relationship and borders between metaphor and metonymy. While Lakoff and Johnson argue in support of the two-domain idea, Feyaerts (1999, p. 319) rejects it, on the grounds that the domain principle cannot be a criterion for setting out the mappings of metaphors and metonymies within the delimited matrices of cognitive domains.

According to Radden (2002), the fuzzy borderline between the two domains makes it difficult to pinpoint the divergence in order to establish precise notions (see Goossens, 1990, 1995; Barcelona, 2000, 2002, 2003a, 2003b). In 2002, Taylor discovered that "domains overlap and interact in numerous and complex

ways" and confirmed that relations between the two cannot be strictly bounded and governed based on "separated configurations of knowledge" (Taylor, 2002, pp. 196-197). Peirsman and Geeraerts (2006) also reject the domain theory and propose their prototypical-based theory of metonymy instead. Like metaphors, metonymies are systematic; they "allow us to conceptualise one thing by means of its relation to something else" (Lakoff & Johnson, 1980a, p. 39). Their referential function allows the use of one entity in the domain to stand for the other in the same domain.

From the perspective of the Encyclopaedia of Semantics within Cognitive Grammar, Croft (1993, pp. 348-354) refines the understanding of metonymy. Based on his domain-based account, he considers metonymy to be a case of "domain highlighting", although in this mapping the entities and their semantic structures within a domain fail to correspond and match, unlike with metaphor's "domain mapping" (ibid.). Croft notes that metonymy can, in some cases, involve more than one domain in a mapping that "takes place within a domain matrix." In this mapping, a lexical unit offers access to a secondary domain and transfers it to a primary one somewhere in a wider domain of an idealised cognitive network (ibid.).

Barcelona (2002, p. 246) opposes Croft's (1993) views. He believes that metaphor and metonymy as concepts involve mappings between the source domain and the target domain and he distinguishes between them based upon the link between domains. In metonymy, both source and target are linked through "pragmatic functions" mapped within the same functional domain, whereas in metaphors they

have “different taxonomic domains” (ibid.). To illustrate, consider *heart* in example (7) with the intended meaning between square brackets:

(7) You have a *heart* [You have compassion].

In the example, a referential function is made where “*heart”* serves as the vehicle that has a mental access to the target, all within a single physiological domain highlighted metonymically by the requirement of compassion. The example expresses a general type of correspondence in a part-whole metonymy. The mapping process occurs between the domains BODY and EMOTIONS where the domain BODY falls under the domain matrix of EMOTIONS, along with other domains. Then, by using the metonymic formula, the metonymic mapping would be BODY FOR EMOTIONS. The partial nature of meaning encodes and highlights the chosen aspects as salient.

Given the above points, Radden and Kövecses (1999, p. 21) define metonymy based on Lakoff and Johnson’s basic terms, integrated with the terms descending from traditional studies, as “a cognitive process in which one conceptual entity, the vehicle**,** provides mental access to another conceptual entity, the target, within the same domain.” Initiatives to close the gap regarding how metaphor and metonymy relate have taken a different direction, such as in Radden and Kövecses’ (1999) work. The two scholars argue that the systematic nature of conceptual metonymy is manifested through a categorical structure within an ICM (Lakoff, 1987). They use the concept of domains along with the three angles of the semiotic triangle: the sign (object), the signifier (image or sound associated with the object) and the signified (language, form or meaningful unit) (Saussure, 1966, 1974, 1983). This led to more sophisticated interpretations. In 2006, Panther

proposed a claim based on Peirce's (1940) semiotic theory of signs. His account captures the importance of signification, reference, representation and meaning. In his approach, Panther (2006, pp. 151-156) posits that metaphoric mapping is represented in the semantic links between the source and target domains, while metonymic mapping is represented in the contiguity links between domains. Barcelona (2011) posits that, despite the divergence in the interpretation of metonymy and metaphor between scholars, there is still accordance in opinions regarding their "core elements", such as the "symmetrical" mapping in metaphor and the "asymmetrical" mapping in metonymy. Metaphor shows the systematic matching of entities between domains, whereas the semantic attributes of entities in the source of a metonymy fail to correspond with entities in the target. The question to be raised here is as follows: can the special mechanism of metonymy interact with metaphor in an ICM? This and other related aspects will be addressed extensively in the following section.

3.3.3 The Metonymy-Metaphor Conceptual Interaction

In 1989, Lakoff and Turner showed how the concepts of metaphor and metonymy can work together to form combined conceptual mappings. Years later, in his joint contribution with Lakoff in 1989, Taylor (1995) initiated an interactional view between metaphor and metonymy. He was one of the first 20th-century cognitive linguists to separately discuss the interaction phenomenon in one single work and his idea of the "metonymy-based metaphor" has been flagged as a major contribution to the field of cognitive linguistics. Reference should also be made to Grady (1997), who developed the interactional and continuum argument by proposing his primary metaphor theory. Grady's primary theory is based on a

classification of two general types of metaphors, “complex” (cultural) and “primary”, which Lakoff and Johnson more or less explicitly claim to be universal. Primary metaphors are metaphors where the source domain arises through our everyday sensorimotor experience by means of conflation, through which complex metaphors are then constructed. Grady aims to explain how more specific metaphors come from basic ones and why, in some cases, cross- domain correspondences involve “partial projections”, rather than large sets. He notes that some metaphors like DEATH IS A THIEF do not appear to have a strong experiential basis, yields a richer set of conventional correspondences, and motivates a wide range of specific metaphors. Grady’s (1997) theory opened up avenues of new debate, resulting in two opposing views. Kövecses and Radden (1998), Radden and Kövecses (1999), Kövecses (2002, 2010a), Barcelona (2000) and Radden (2002) claim that metaphors arise from our embodied conceptualisation system into “correlation/primary metaphors”. They posit that the relationship between metaphor and metonymy is not isolated, but rather closely connected. Ruiz de Mendoza Ibáñez (2000) justifies this close relationship as being a result of the subsidiary nature of metonymic conceptual structures, meaning that the domain-sub-domain mapping behaviour of metonymy falls under metaphor.

From a domain-based perspective, Ruiz de Mendoza Ibáñez’s explanation can be seen as rational since the metonymic (concrete and abstract) domains are sub-domains included and entirely based on one of the metaphoric domains in the conceptual mapping, either source or target. Grady (1997a, 1997b), on the other hand, rejects the idea that metaphor and metonymy are closely connected and argues that both constructs do not exist within the same conceptual network.

Grady considers both constructs as separate concepts with an independent existence. The author of this thesis, however, does not support Grady's conclusion in this regard and it argues that both concepts can exist in the same cognitive network, particularly through the cognitive mechanisms of emotions, due to their complex nature. Taylor's (1989) findings were refined by Goossens (1990/1995/2003). Goossens explores the categories of mixed conventional expressions, seeing them as a result of the interaction between metaphor and metonymy. He claims that both constructs work together in a continuous sequence and could be interpreted either way where it becomes almost impossible to disconnect them. Thus, he proposes a neologism of "metaphtonymy", where metaphor and metonymy come in a compound form (Goossens, 2003, p. 350).

Barcelona (2000, p. 31) found that, in a great many cases, the target domain and/or the source domain "must be understood or perspectivized metonymically." This process is not arbitrary but is motivated (see Radden & Panther, 2004). According to Barcelona (2000), metaphoric concepts need to be conceptually motivated by metonymic concepts. Cognitive motivation is the extension of the meaning of words. In Barcelona's study, cognitive motivation means that a metaphor cannot be understood on its own but requires a conceptual intervention by another network of a conventional metonymy. Radden (2000 in Benczes, 2015, p. 481) states that the majority of words are "polysemous" such as *glass, iron, turkey* and *tree* and once these words are extended in genealogy, they become motivated by metaphor. The mapping condition in such a case is based on the way the target domain is structured within a metaphoric mapping process. Barcelona (2000, p. 31) points out that the motivation does not necessarily follow a particular "sequential ordering of mappings" but can be simultaneous. In his analysis,

Barcelona found two types of metonymic motivations of metaphors. To illustrate the first type with a word of explanation, consider example (8), originally adopted from Taylor (1995):

(8) *"loud colour"* (Barcelona, 2000, p. 35, emphasis in original).

The metonymic understanding in statement (8) consists of two SOUND domains mapped onto COLOUR, a visual target. According to Barcelona, the example uses the adjective lexeme *loud* to describe the qualities of the vocal sounds' *tone* transferred to the target. The noun *colour,* on the other hand, describes the qualities of colour, more specifically, the shade or degree of brightness or luminosity. Integrating the adjective in the source domain with the noun in the target domain gives rise to a metonymic mapping understood within the same sub-domain, which makes *colour* the target with a "built-in norm". Out of the many characteristics the sub-domains have in both domains, only one takes precedence to represent the whole domain. The other type of motivation in Barcelona's analysis is a metaphor arising from metonymy, exemplified in (9):

(9) *"black mood"* (Barcelona, 2000, p. 35, emphasis in original).

In statement (9), there is a metonymic concept of DARK FOR NEGATIVE STATES CAUSED BY DARK, which is an extension of the metaphor NEGATIVE IS DARK. In his analysis, Barcelona demonstrates that all metaphors have a metonymic basis and, in this respect, are all motivated by metonymies. Other case studies, such as Geeraerts (2002, p. 16), focus on the interaction of composite expressions. Geeraerts proposes three categorical models of metaphor and metonymy interaction occurring in compound expressions: consecutive consequence, parallel consequence, and interchangeable consequence. The

consecutive model involves an interaction between metaphoric and metonymic concepts where one motivational link of the semantic structures used involves a sequence of two extensions of meaning. For example, the metonymy *rug rat* involves a metaphorical extension meaning a young child or a toddler and a metonymic expression where a child's physical energy is of that of a *rat*. The parallel model is opposite to the consecutive in the way it works. It presents different motivational links for the semantic structures used that happen to occur in a composite interaction. The interactional model, on the other hand, works in two different ways which, according to Geeraerts (2002, p. 19), involves "different configurations of metaphorical and metonymical links."

Ruiz de Mendoza Ibáñez and Velasco (2002) go beyond the initial findings put forth by Barcelona (2002) and Geeraerts (2002). Their study examines the interactional patterns based on image-schemas and propositional ICM. Ruiz de Mendoza Ibáñez and Velasco propose the "many space model", which claims that expressions that produce interactional patterns between metaphor and metonymy result from a third mental space of conceptual integration called the blended space or blended network. This network is produced from the integration of two existing domains, source and target, of a metaphoric mapping with the generic space where only one of the domains is created by a metonymy.[31] The blending output of metonymy in this case can hold emerging concepts with properties that did not exist in the original available input space. Other studies that touch on this aspect are evident in Bartsch (2002). Bartsch begins her line of argumentation by

[31] Ruiz de Mendoza Ibáñez and Velasco's proposal is originally propounded by Fauconnier and Turner (1998) through their blending theory, (see section 2.1.4.1).

distinguishing metaphors and metonymies based on two distinctive conceptual notions: "broadening" and "narrowing". The two processes are based on perspective and perspective change, which can be seen explicitly by using the form of questions. To clarify, consider example (10):

(10) Sara is a *peacock.*

According to Bartsch's theory, when speaking about a *peacock* under its basic perspective, one can ask, What is a peacock? and What kind of animal is a peacock? However, with *Sara is a peacock*, a change of behaviour-related perspective occurs, changing the question to What type of behaviour is this? This also extends to the question, Which cognitive entities in the source are mapped onto which target entities? Since the mapping is partial, the question also accounts for which entities remain during the metonymic mapping operation between domains within the same domain and how metaphor can be a part of this operation. Bartsch's (2002) study, however, does not analyse the continuum of metaphor and metonymy. Her study focuses on identifying "double metonymy" rather than mixed patterns like Goossens (1990).

Radden (2002) discusses the interaction between metaphor and metonymy with reference to post-metonymy phenomena. He identifies two extensions of conventional processes out of his version of post-metonymy: the "hypermetonymy" and the "hypermetaphor". According to Radden, the former occurs when meaning is extended from conventional metonymy without a metaphorical mechanism, whereas the latter obtains when the meaning is extended from conventional metaphor only, without a metonymic process. Croft and Cruse (2004, p. 220) exploit this spectrum of interactional phenomenon with the

intermediate function, while also recommending scholars be aware that not all processes are a result of the link but could also be a combination of two distinctive processes. In 2003, Goossens returned with fruitful interactional findings. He draw upon a corpus from the contemporary British database to investigate expressions denoting violent action, sound and body parts. Looking at his findings from the sub-corpus of body parts, Goossens (2003, p. 460) found a total of "109" expressions subdivided into "42" body-part pure metonymic and metaphoric expressions and "59" mixed cases of metaphtonymies. This indicates that more than half of the analysed body part data are mixed cases, thus emphasising the metonymical grounding of body part expressions. In his analysis, Goossens pivots on four mappings for mixed expressions:

1. The metaphor from a metonymy type.
2. The metonymy within metaphor type.
3. The metaphor within metonymy type.
4. Demetonymisation inside a metaphor (Goossens, 2003, pp. 360-369).

The domains in the first pattern are, according to Goossens (2003, p. 179), "conceptualised as joined together in one domain matrix." In this case, a linguistic expression has a specific metonymic basis and can transfer the scene into a metaphoric meaning constructed by a metaphoric generic mapping such as "close-lipped" (to mean silent or secretive) (ibid.). To elaborate more explicitly, consider example (11) adopted from Zheng (2014). The metonymic expressions are in Zheng's example and are illustrated in italics with the intended interpretation between single inverted commas:

(11) "We've got *new blood* in the organization" 'new people' (Zheng, 2014, p. 30, emphasis in original).

Example (11) above has a metonymic base that constructs a two-domain metaphor. Since the lexical unit *organization* is understood in terms of a person, as without people there are no organisations, *new blood* is understood, in thought, as new people who consistently provide strength and power to the organisation. The metonymic domain and sub-domain mappings are structured in the concept BODY PART FOR PERSON. This metonymy motivates an emerging metaphor with two discrete domains: ORGANISATION as the source and PERSON as the target, where the latter is understood in terms of the former. According to Goossens' findings, this pattern was the most frequent type in his analysis. Figure 6 is a visual illustration of a metaphor from a metonymy mapping adapted from Goossens (2003).

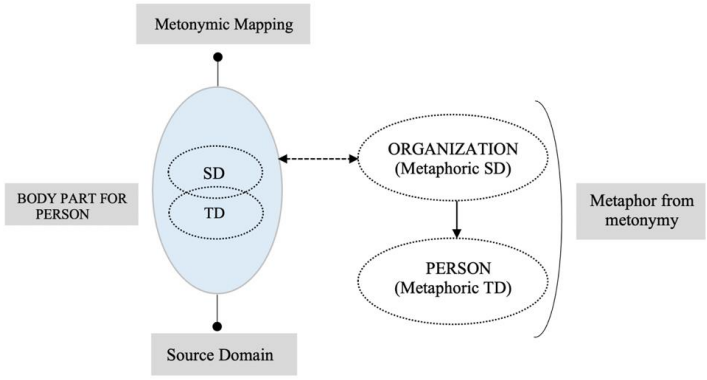


Figure 6. A metaphor from metonymy conceptual mapping for example (11).

Looking at Figure 6, we see a metonymic mapping of two domains on the left within one single domain. This metonymic mapping motivates an emerging metaphor with two separated domains ORGANISATION as the source and PEOPLE as the target. The two-ended arrow shows the "conceptual link" between the metonymic mapping and the metaphoric mapping (see Goossens, 2003). The second pattern in Goossens' mappings is the metonymy within metaphor type. This type of mapping involves a metaphor but with remaining metonymic

characters, a built-in metonymy that has shared elements from both metaphoric domains (source A and target B).[32] In this pattern, the metonymic elements within the target function metonymically, whereas the elements within the source are interpreted more literally or metaphorically. To illustrate how these shared elements function within the mapping, consider Goossens' following example in italics followed by his intended interpretation between single inverted commas:

(12) *"I should/could bite my tongue off"* 'be sorry for [regret] what one has just said' (Goossens, 2003, pp. 363-364, emphasis in original).

The expression in (12) yields a hyperbolic impact of regret, meaning the sense of deliberating the use of a specific word in language that is strong enough to not invoke literal meaning. This type of context in the target domain of biting one's tongue cannot be seen as something normal in everyday experience unless it is, as Goossens (2003, p. 364) points out, a "self-punishment". However, the non-ability to speak implicated in the metaphoric mapping (the main mapping) is invoked. The latter motivates a speech act from the metonymic organs of speech in the WHOLE element mouth to the specific salient PART tongue (ibid.) Note that the motivation in both examples did not motivate other parts of the body to emerge as a metonymic mapping, except for the part that denotes a linguistic action of speaking (ibid.). The metonymy within metaphor type mapping in Arabic in the Qur'anic verse:

{وَيَوْمَ يَعَضُّ الظَّالِمُ على يَدَيْهِ} (Q 25:27).

(13) {And The Day that the wrongdoer will bite at his hands} (Q25: 27)[33]

[32] In other cases, however, the shared elements can be within one cognitive domain either the source or the target.

[33] Soura Chapter Al-Furqan/The Criterion (25): Aya/Verse (27). Sahih International Translation by Assami et al. (1997). Retrieved from the Quranic Arabic Corpus at: http://corpus.quran.com/translation.jsp?chapter=25&verse=27.

The apparent meaning in (13) is biting hands but the hidden meaning is the feeling of extreme remorse or strong regret. The third type in Goossens' (2003, p. 366) classification is a pattern that is opposite to the previous one – a mapping that processes a metaphor with the awareness of metonymy. To explain how this type functions, Goossens uses the following expression:

(14) *"Be/get up on one's hind legs"* 'stand up in order to say or argue something, esp. in public' (Goossens, 2003, p. 366, emphasis in original).

Example (14) is a metonymy with a hint of metaphor. The source domain exemplified in the prepositional phrase *get up* is a metonymic interpretation of the whole *take a turn in public discussions*. However, the expression has an animal domain lexicalised by *hind*, which gives access to a metaphoric mapping within the metonymic window. The fourth case in Goossens' (2003) classification is a special but extremely infrequent pattern. It is what he refers to as "demetonymisation" in a metaphorical context. In this case, the expression has no clear image or, in some cases, the transparency of some of the used images is lost. To elaborate further, consider example (15):

(15) *"Pay lip service to"* 'support in words, but not in fact i.e., give loyalty, interest etc. in speech, while thinking the opposite' (Goossens, 2003, p. 365, emphasis in original).

The action of paying in (15) has a metaphoric mapping that means paying a benefit like money. The word *lip* in *lip service* stands for making a speech act. According to Goossens, a first impression of expressions of this kind may be that they seem like a metonymy within a metaphor but, in fact, they are not. He states that if the literal interpretation is paraphrased into *"*service as if with the lips only", then the

part will have no association with the whole and be *"demetonymised"*. This means taking the metonymic sense out, with the metaphoric sense still being in the matrix (Goossens, 2003, p. 365, emphasis in original). Goossens' findings sparked further research into the characteristics of the mixed expression phenomenon, as became evident in the work of Radden (2000/2002), Barcelona (2000, 2003a, 2003b), Kövecses (2002), Riemer (2003) and Croft (2002). However, Goossens' (1990/2003) given explanations and proposed patterns are not exclusive and could differ based on the context used. His approach seems promising if studied and applied alongside disciplines and domains other than the domain of HUMAN. Buchowski (1996, p. 309) emphasises that the spectrum of metaphor and metonymy in different languages, cultures and perspectives can yield distinctive results. Hence, different contextual aspects of distinctive cultures and language combinations are also worth further investigation, and could yield further patterns. The current research may provide further evidence of the interaction phenomenon, as one of the objectives of the research is to classify linguistic expressions into their concepts and to uncover new mixed expression types applied within the domain of EMOTIONS.

Reflecting on the interaction phenomenon, it is almost impossible to imagine that only a single dimension of several interactional possibilities between two different mapping processes can be created within space. Every concept is characterised through a mapping process in a domain network and every concept can become a domain for emerging concept(s). However, it must be noted that such an intellectual view can vary based on context, perspective and personal thinking, and, most importantly, based on the types and variations of similarity and contiguity variations involved between metaphor and metonymy as cognitive

processes. Langacker (2000) claims that the variations might result in a degree of vagueness and faulty conclusions in the understanding of original concepts, conceptual formation and their metonymic and metaphorical senses.

The interaction between metaphor and metonymy, indeed, offers an overwhelming scope. Various studies have provided scientific evidence of their continuum and contributed to the elaboration of combined forms of conceptual mappings (e.g., Lakoff & Turner 1989, pp. 103-104; Kövecses & Radden, 1998; Radden & Kövecses 1999). Section 3.3.3, however, presented the core of the interaction aspect in cognitive linguistics from which further developments have emerged. Yet it seems that the majority of achievements were examined within mainly European studies looking at the interactional measures from a purely cognitive linguistic perspective. In this thesis, some light is to be shed on this limitation with more focus on exploring the idea of incorporating metaphor and metonymy as a significant aspect but it pushes the idea even further. This study seeks to investigate the interactional phenomenon in translation and uncover how translators would handle the semantic components produced from an interactive mapping between domains from the source text (ST) to the target text (TT). In section 3.4, a discussion of how metonymic cognitive theories are used in the translation of metonymic expressions from a cognitive linguistic, is provided.

3.4. Cognitive Metonymy Theory and Translation

Over the years, scholars have proposed translation models for metaphor from different perspectives, confirming that what applies to metaphor also applies to metonymy as a part-for-whole kind of logic, thus combining them as one in translation analysis (see e.g., Al-Harrasi, 2001, Schmidt, 2012, Ghazala, 2012)

and many others. This absent position would be partly influenced by the close relation that metonymy has with metaphor. However, as pointed out before, each mental activity has its own cognitive mechanism. Thus, the revived interest in metonymy demonstrated by cognitive linguists deserves to be transposed to the context of translation research. With all of its data layers, the author of the current study believes that the potential scope of interaction will provide interesting insights into translation analysis, addressed by a new approach to current research analysis. Section 3.4 investigates the translation aspects of metonymy within cognitive linguistic theories that can be used in the analysis of this thesis. These ideas are then presented in this study in the context of a contributed translation model achieved via systematic methodological stages.

Panther and Thornburg (1999) were two of the first scholars who proposed a cognitive linguistic theory of metonymy in the context of pragmatic inferencing. Their study focuses on the strength of the metonymic links between the source and the target domains. To be more specific, in every metonymic relation such as part-whole, cause-effect and ability-action (which they designate as "scenarios"), the conceptual links between the source and the target "may vary in strength" and the strength of the metonymic links depends on the conceptual proximity and closeness between the source and the target (Panther & Thornburg, 2003, p. 6). This presumes that the strength of the bond is very culture-specific. Panther and Thornburg (1999) distinguish metonymies pragmatically into three types of relationships: referential, propositional and illocutionary. The first type is the most commonly known view of metonymy and this was discussed in detail in section 3.1. In referential metonymies, one statement is used to refer to another, such as the OBJECT USED FOR USER in *"the school uniform is walking"*. The school

uniform here refers to a student (Teraoka, 2016, p. 4614). The second type is predicational metonymy. This manifests as an instance of the general metonymic principle the POTENTIALITY FOR ACTUALITY, which is commonly used in English, as in example (16):

(16)

a. I will be clear.
b. I will be speaking clearly.

In this category, the first event in (16-a) that was expressed as a future possibility is metonymically associated with and linked to the actual occurrence in (16-b), which can be an incident, episode, or circumstance. The third type put forward acts beyond the propositional level called illocutionary (or intended speech act) metonymy, wherein one meaningful locutionary act stands for another illocutionary force.[34] In other words, the illocutionary force is based on the activation of particular parts within a cognitive model. To illustrate, consider example (17):

(17)

a. I don't know who that person is.
b. Who is that person?
c. Hand me the parcel!
d. Would you like to hand me that parcel?

In this case, (17-a) is an utterance that has an assertation locutionary act and a linguistic meaning of what is not known through the use of negation, but its illocutionary act is different. It is used in the form of a question, as in (17-b), which means that (17-a) could metonymically stand for (17-b) in the force of a question.

[34] See Austin (1975) and Searle (1975).

Another example is seen in (17-c) and (17-d). In statement (17-c), there is a structure of a locutionary act and a linguistic meaning of *Will you be able to hand me the parcel?* Its illocutionary force in (17-d), however, has the force of a polite imperative speech act *Please hand me the parcel* and, in this case, the former act metonymically stands for the latter. The central idea of Panther and Thornburg's model is the idea that experience and knowledge are organised in thought. Their theory could be viewed as vital in metonymic translation processing between elements encoded in different languages. This importance lies at the heart of the conceptual closeness of the semantic relations between an expression in an SL and its target. The stronger and closer the metonymic links and conceptual relations are, the more the sense in the ST is preserved. This will, in turn, influence the decoding and recoding process to the TL. An example of conceptual closeness can be seen in Sharifi's (2004, p. 60) example from the original Arabic expression احمد كثير الرماد as follows:

(18) *"*Ahmed has a lot of ash*"* (Sharifi, 2004, p. 60)

The expression in (18) has the meaning of Ahmed is so generous for his for consistency in providing food and all kinds of hospitality to his guests. Al-Sharafi (2004, p. 60) explains the conceptual sequence of generosity in this example through a chain of concepts: A LOT OF ASH STANDS FOR COOKING - A LOT OF COOKING STANDS FOR A LOT OF FOOD - A LOT OF FOOD STANDS FOR A LOT OF GUESTS - A LOT OF GUESTS STANDS FOR GENEROSITY. The expression in Sharifi's (2004, p. 60) example is manifest and the semantic relations between the source and the target elements are metonymically close, as they involve a source conceptual domain that gives access to a closely related target concept. Therefore, a literal translation is used with an

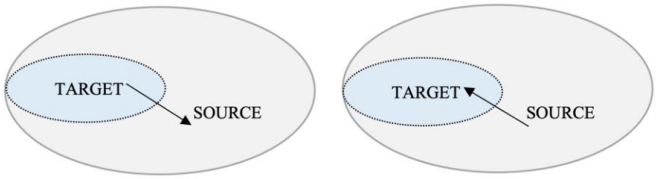
acceptable meaning in the TL. The main goal of metonymy translation within Thornburg and Panther's cognitive paradigm is to produce a translation that accords with Nida's (1964) equivalent principle between the target and its source. Yet, there are various metonymic senses that can still be difficult to translate into other languages. For instance, consider example (19):

(19) His birth records have been lost in bureaucratic *red tape.*

Statement (19) is difficult to translate into Arabic due to the weak association between the source and target entities. Arabic readers are not familiar with the metonymical use of *red tape,* which literally means a tape used to bind files. In this sense, the expression refers to the complicated procedures one could go through in order to get the required permits. This metonymic expression does not have a strong and salient but, instead, a rather weak contiguity and, therefore, requires more effort and creativity to be rendered by the TL. This can be assessed through the level of conventionality of the lexical unit that is mapped between senses, the level of closeness between metonymic relations and the conceptual type of both the source and target expressions: prototypical/basic or emerging/peripheral concepts (see Barcelona 2005, p. 314; Peirsman & Geeraerts, 2006).

Ruiz de Mendoza Ibáñez and Velasco (2002) developed an extended metonymic theory that classifies metonymies into two divisions based on the domain model: the source-in-target domain expansion and the target-in-source domain reduction. With the source-in-target metonymies the sub-domain, the source, grants access to the full main matrix domain, the target, through an expansion process. For example, *stuffed shirts are not coming*, where *stuffed shirts* is a sub-domain of

people in a position of authority. In the second type, the target is the sub-domain of the source, which conversely grants some access to the main source through a process of reduction. For example, *Shakespeare is not easy to read*, where *Shakespeare* is a sub-domain of the literary work written by Shakespeare (see Ruiz de Mendoza Ibáñez, 1997, 2000). Figure 7 is a visualised illustration for both types.



Target-in-source domain reduction Source-in-target domain expansion

Figure 7. Domain expansion and domain reduction in metonymic processing.

It is worth noting that the target-in-source metonymy makes use of a well-structured conceptual domain to refer to a less clear domain. Reduction metonymies tend to be more of a communicative resource than expansion metonymies. For example, in *Ford employed around 190,000 people between 2017 and 2019*, there is no need to be accurate about who employed the 190,000 employees. It could be the deputy head chief, HR manager or the whole board (see also Aleksandrova, 2019).

Interestingly enough, in Ruiz de Mendoza Ibáñez and Velasco's (2002) expansion and reduction phenomena are already in use in translation. An example of that can be seen in metonymic shifts between the ST and the target text (TT), where already established metonymic links in the SL do not exist in the TL. In other words, this occurs when there is limited or no exact correspondence between the source metonymic relations and the target, causing, as a result, a conceptual change of

the source concept to either simpler/broader conceptual material associated with a domain or more complex/narrower conceptual material associated with a domain in the TT (see Radden, 2018, p. 174). For example, Denroche (2019) conducted a study to look at how a group of 19 undergraduate translation students would translate an Italian cake recipe into English. He found that the word choice of *"cheese"* in the English translation of *"Torta alla ricotta"* is more general than using the word *ricotta*, which, in this case, can be seen as a case of domain expansion, as the target lexeme used underlies a concept more general than the one used in the source-text item (Denroche, 2019, p. 14).

Croft and Cruise (2007, p. 47) and Paradis (2004) distinguish three different types of metonymic processes. Paradis (2004, pp. 255-262), for example, takes metonymy as an ontology and construct within a model of meaning and categorises it into three unique schemes: metonymisation facetisation and zone activation. Metonymisation, according to Paradis, is the strictest of all three terms. It involves the use of an expressed non-conventional lexical unit that is mapped between senses with no "lexically encoded conventional overlap" (ibid.). By way of illustration, consider example (20):

(20) The *green shirts* are battling it out for the semi-finals.

The level of conventionality in (20) is low, yet the mapping between the source and target senses is contextually motivated and understood as a sports team whose shirts are green. Facetisation, on the other hand, is the most conventional and contextual reading of all three terms. Unlike metonymisation, in facetisation there is no interconceptual mapping, but a meaning facet is highlighted over the other

within one lexeme with no reference by one lexical unit to another, such as the COURT-type concepts illustrated in example (21):

(21)

a. "The whole *department* has read the National Curriculum".
b. "What worries me about *regional theatres* at the moment is that almost none of them have permanent companies".
c. "It's funny because much to my amusement some of them send their girls off to you know *local fee-paying schools* who are you know not nearly as good as we are" (Paradis, 2004, p. 259).

The image *department* in (21-a) highlights the concept of PEOPLE, the expression *regional theatres* in (21-b) refers to the INSTITUTION concept while (21-c) highlights two facets: BUILDING as suggested by the context of *send their girls off to* and STAFF/PEOPLE by *who are you know not nearly as good as we are* (Paradis, 2004, p. 259). Paradis' study is based on Langacker's (2000) claims that some metonymic expressions can be analysed in an active zone. His method of analysis incorporates relational predication e.g., verb, adjective, adverb or a preposition. This proposition, according to Langacker, could adjust the meaning of a semantic element to fit the semantic argument. According to Paradis (2004), zone activation or reference point activation is the most literal and omnipresent in all metonymic readings. Metonymy is viewed as a contiguity that functions between the access point and target. It involves a process of highlighting a specific aspect within a single sense. To illustrate, consider example (22):

(22) "The car is slow, but it is elegant" (Paradis, 2004, p. 249).

In statement (22), Paradis states that even though *slow* activates the function of CAR and *elegant,* its constitution "is perfectly acceptable" (Paradis, 2004, p. 249). Moreover, she claims that the focus on either of these qualities implies "a part-

whole configuration" (Paradis, 2004, p. 249). In any case, Paradis' perspective cannot be exhaustive and the problem behind this lies within Langacker's (2000) broadness in the use of "active zone" as a term. His defined concept makes the study of metonymy descriptively problematic in cognitive linguistic metonymy research and more complex in the case of the analysis of this thesis. To elaborate, consider the kettle/water relation in example (23):

(23) "The kettle is boiling" (Sato, 1997, p, 135).

It is often assumed that a container is used to refer to its contents. However, as pointed out before, the explanation of a conceptual configuration is intellectually dependent and the choice of profile is not always stable; rather, it differs from one perspective to another (Sato, 1997). In Sato's argument, statement (23), for instance, cannot be seen exclusively as an active zone metonymy. He states that water has come to boiling point when the steam is coming out and the kettle starts moving. In this case, accessing the secondary concept, i.e., the target, will not be conventional but as a WHOLE FOR PART of a metonymic inclusion that activates the concept of WATER (Sato, 1997, p. 135).

Barcelona (2005, p. 314) takes the metonymic theory of conceptual closeness and develops it based on the continuum of metonymicity: "a scale of metonymic prototypicality" (Barcelona, 2011, p. 26). He pivots his classification on three metonymic types: prototypical, typical and peripheral instances of metonymy. In prototypical metonymy, the source and target are clearly defined, and they are referential and show a domain (sub-domain) relationship. In typical metonymy, the source and target are also clearly defined, but it does not show any sense of reference. Rather, they are captured by highlighting a feature of a single property

with its salient aspects, as in *He walked with drooping shoulders.* The last type is peripheral or schematic metonymy where the target and the source are closely related and it involves a highlighting process at a sub-domain mapping level, as in *This book is highly instructive.* Here, the target, in Langacker's (1987) terms, is a primary or near-primary domain in the source (Barcelona, 2005, pp. 314-315). Barcelona (2005), Croft and Cruise (2007) and Paradis' (2004) findings seem easy to comprehend and fairly straightforward. However, their divisions could be more complex if mapped onto lexical units. Each lexeme has a distinct meaning ranging from general to more elaborate and specific. Therefore, a zone of one word may or may not correspond to the sense of another. Consequently, what is considered clearly defined or conceptually close, or what has a domain highlighted within a single domain mapping, is difficult to determine. If these views are to be considered as fixed, they will not accord with the cognitive linguistic understanding of concepts, which depends on the framing perspective.

From a linguistic perspective, metonymy can reflect particular choices of source reference points rather than the target. As such, some languages like English can access ideas that cannot necessarily be used in other languages. For instance, the CONTAINER FOR CONTENT in *put the kettle on* is seen as the most salient aspect to refer to in the process of making tea or coffee in English. However, the PROCESS FOR PRODUCT concept is accessed differently in other languages like Arabic, where it could refer to anything from making tea or coffee to cooking a whole meal. Bilingual examples, however, are not the result of active transfer from one language to another, but they are conventional expressions that have found their way into a language independently. As far as translation is concerned, the application of how to access metonymic concepts between languages through

translation proper is neglected in translation research. It is striking to see how many different studies have focused on tackling the problems of metaphors in the exact correspondence between languages and their cultures, with no discussions about metonymy and how it can be translated in different contexts. The transference of metonymic language lacks empirical evidence regarding the metonymic shifts between different languages in cognition. Limited studies have adopted the metonymic theories to explore how cognitive linguistics frames the metonymic nature. Thus, it is the focus of this research to address these limitations by investigating these theories to offer models for the translation of metonymic semantic relations.

To conclude, section 3.4 surveyed the theoretical metonymic contributions from different perspectives with the aim of developing a more precise path for metonymy in translation research. More particularly, it discussed previous literature of how and why complex/cultural types of metonymies and the different associations they comprise are rendered in the TL, and which different methods are employed to handle these expressions. It should be pointed out that the hypothesis outlined in the introduction to section 3.4, that metonymy in metaphor translation research suffers from theoretical reductionism, is valid. This is because the investigation conducted acknowledges that the translation of metonymy still lacks coherent stand alone translation models. This thesis takes this limitation to explore the accounts of metonymy in a translation-proper context through metonymic cognitive linguistic theories and different metonymic models that have already been discovered, in order to inclusively analyse metonymy as a concept within a real-world translation process.

3.8. Conclusion

This chapter sets out some of the main ideas connected to the definitions of metonymy amongst the rhetoricians and the most influential theorists in cognitive linguistics. According to Lakoff and Johnson (1980a), metonymies do not require similarity or shared properties. They do not necessarily involve a substitution of entities between domains in a cognitive network. Rather, the entities inter-relate to form a new meaning, making them less suggestive than metaphor.

As seen in this chapter, most research in the field of metonymy in translation research focuses on how to manage equivalents in meaning of primary/universal metonymic elements in the SL into the TL. It is, unfortunate, however, that these discoveries have not left much space for cognitive linguistic theories to describe translation shifts for metonymic inferences. The translation of metonymy tends to be restricted in many aspects relating to what has already been developed for metaphor translation. More explanation is required about how metonymic components and their pre-existence in the long-term memory structured in an active language are translated, in general, and with the state of emotions, in particular.

As pointed out in preceding chapters, emotion concepts have complex structures and metonymy, like metaphor, has a consequence for organising the clausal structures of emotion concepts. Approaching them both in a translation analysis could lead to theoretical and methodological limitations. The suggested theories in section 3.4 explained how the partial encoding structure of metonymy can be used to describe the translation shifts for metonymic manifestations through metonymic logic itself as a translation tool in a given context. This will not only

promote far more flexible translation solutions but will also meet the challenge of indeterminacy that makes the translation process more transparent and attainable. On these grounds, the thesis focuses on answering the questions below, which are further discussed in Chapter 6.

1. Does metonymic mapping remain unchanged or switched in the TL? If yes, why?
2. How would translators shift metonymic semantic components between domains to the TT?
3. Would translators reproduce new metonymic components between entities or just recycle these components in a way that seems familiar with the target audience?
4. How would such conceptual interaction impose any hindrance on the translation process?
5. How would translators assess the kind of the creative nature of the native language adopted?
6. How does the semantic field impact the cultural ratio, and, therefore, metonymic patterns in an emotion state between the SL and TL?
7. How would the role of metonymy capitalisation in already established metonymies and encoded in the source domain elements of the ST in one language be transferred in the source domain of the TL?

The above questions in addition to other elements will be further discussed in Chapter 6. Approaching the translational aspect of metonymy from a cognitive metonymic perspective will allow the pervasiveness of metonymy in the case of translation. It will contribute to proposing well-defined cognitive models for the translation of metonymy. These models will assist researchers in understanding

how to translate the metonymic semantic relations entailed between source and target elements encoded in two languages. The next chapter will answer crucial questions regarding methods and tools used and present the approaches within the analytical framework adopted to analyse the translation of metaphors and metonymies of fear.

Chapter 4
Theoretical Framework and Methodology

This research is empirical descriptive study and, like any other empirical research, it addresses two key aspects of study: firstly, it provides evidence and answers epistemological questions based on existing knowledge and theoretical findings, describing the object of analysis within a theoretical framework (Toury, 2012). Secondly, it discusses the philosophical assumptions of a phenomenon including the steps, tools and data collection methods used and the analysis employed to establish general principles in a framework. This chapter addresses the second research question: how could metaphor and metonymy in translation contributions approached by CMT provide us with a typological model to study the ways both constructs are translated in the new context?

In recent years, interdisciplinary research has brought new perspectives and paradigms to the field of Translation Studies. The multi-disciplinary platforms have created intellectual distinctions and aims, which has led to different principles, emphases, methodologies and approaches in translation research. The theoretical framework used in this research is based on the idea that Translation Studies cuts across related premises (Munday, 2016). The premises under which translation is observed via the approaches implemented in the current study include the cognitive linguistic perspective, more specifically, Conceptual Metaphor Theory (CMT) by Lakoff and Johnson (1980a) as the primary approach. This includes Lakoff's (1987) cultural embodied theory and Johnson's (1987) embodied schema hypothesis with insights from Kövecses' (1990)

structure of emotions as the secondary approach. According to Kimmel (2008, p. 275), the study of human cognitive science seeks to understand a phenomenon and "describe culture representations and how they are organised." He believes that the interaction between the phenomenon and the real world "offers a distinctive take to balance out some wide-spread assumptions" (ibid.). In order to achieve such understanding, the research must target an empirical aggregation of the phenomenon, its features, problematic areas, limitations, and findings in existing research areas related to the investigation. This allows the research question: to be narrowed down before setting out how the framework results will act on the analysis of data.

The crucial task of understanding a new and complex object of inquiry within a blended platform of disciplines, such as in this research, requires far more than just adopting traditional methods of investigation provided by a single paradigm. It requires the adoption of mixed-methods to engage with the different aspects of the research questions to validate data collection, analysis and interpretation. Mixed-methods research, according to Malamatidou (2018), combines qualitative and quantitative approaches to investigate a phenomenon within one project. In this research, the choice of methodology incorporates cognitive linguistic perspectives with Descriptive Translation Studies, or DTS, which is intended to. to describe the mapping decisions that translators may resort to as a way of rendering the mapping of semantic relations between cognitive domains from the source into the target textual context. According to Darwish (2010, p. 142), DTS uses "a description to translate a term or a phrase in the source by characterizing it instead of translating it directly". Toury (2012, p. 24) states that the descriptive approach to translation enables the researcher to build a testable set of theories and

hypotheses, thus helping to supply a comprehensive survey of a phenomenon. In other words, it will assist with answering the research questions and determining the research priorities at all levels of data collection and analysis, and refining the subject area to finally reach a logical theoretical base and findings (Milroy & Gordon, 2003).

In relation to empirical-experimental research, Lakoff and Johnson's approach to translation lacks its own corpus analysis toolkit to account for all the possible contexts of linguistic data and their concepts for the sake of determining their translation (see Gibbs, 2007). In other words, the CMT qualitative introspective approach cannot be used on its own to identify the linguistic and conceptual properties of the data. Hence, the main perspective of this research incorporates corpus-based tools as a supplementary step to design the research instruments in line with the requirements of data collection. It is noteworthy that the current study does not use a corpus-linguistic approach and it is not intended to examine lexical units that are distinctive as features of specific textual types. It does not look at patterns as being representative of language behaviour, but rather it examines lexical units and phrases of linguistic realisations that belong to deep conceptual systems in order to explore the ways they are translated.

To assess the extent to which these enquiries agree, an interpretation of results was drawn from sequencing information of qualitative and quantitative data collection methods. In other words, the primary methodology applied in this study was developed via an exploratory design that aims to explore and seek in-depth understanding of a phenomenon. The exploratory design, according to Creswell (2003), is based on the assumption that an exploration is required in order to

implement new integrative measures not available in the literature – perhaps the variables are unknown, or there is no guiding framework or theory. However, this study puts more emphasis on qualitative analysis than on quantitative since the analysis looks at textual data. The emphasis on qualitative analysis in this research comes from the aim to understand a phenomenon rather than predicting or explaining. The results of the qualitative phase in this research design helped to create the quantitative analysis that came after (Creswell, 2003). Findings from both phases are then combined in the interpretation phase (ibid.).

4.1. Corpora

The cognitive linguistic analysis by Lakoff and Johnson (1980a) forms the primary methodological approach to analyse the translated data, derived from خسوف/*Eclipse* (2009), فتاة القطار/*The Girl on the Train* (2015) and قرارات قاتلة/*Deadly Decisions* (2010). The texts are analysed and compared on a unit level, i.e. word or phrase level, not the whole text. These units are, in turn, examined at a cognitive and linguistic level. The corpus data is a collection of linguistic units involving mappings in which many source entities are mapped onto the entities of the target fear.

It is important to mention that the term "corpus" in this research context is not used in the sense in which is used in corpus linguistics – as a sample (usually very large) of naturally occurring language use, structured and stored in an available electronic database. Instead, in this research, the term corpus is used to refer to electronic collections of written texts assembled according to a specific criterion

and mobilised to examine translation processes. The mono-directional English Arabic parallel corpus (MEAPaC) is as follows:

Texts	Details
ST1	Meyer, S. (2007). *Eclipse.* New York, US: Little, Brown and Company.
TT1	Meyer, S. (2009). خسوف (Halabi. A. Trans.). Morocco: Sama Publishing House.
ST2	Hawkins, P. (2015). *The Girl on the Train.* New York, US: Riverhead Books.
TT2	Hawkins, P. (2015). فتاة القطار (Al-Nabhan, H. Trans.). Egypt: Dar Al Tanweer.
ST3	Reichs, K. (2000). *Deadly Decisions.* New York: Charles Scribner's Sons.
TT3	Reichs, K. (2010). قرارات قاتلة (Shamdeen, F. Trans.). Morocco/Lebanon: Arab Scientific Publishers, Inc.

Table 2. Corpus text references.

The choice of corpus was determined by popularity. Publishers tend to choose books based on high sales and reputation. They also take into account censorship factors to ensure that the work complies with all relevant criteria in the target culture (see Pegenaute, 1994). As such, best-seller status of the translations were considered. The above novels are thus best-selling books that meet the requirement of possessing the unique techniques of literary fiction constrained by a requirement – specifically, the presence of linguistic data featuring the emotion required for analysis, namely 'fear'. The corpus comprises TT1, a translation of S. Meyer's novel *Eclipse*, translated by Amal Halabi, edited and published in 2009 by Sama for distribution in Morocco. Amal Halabi is a professional translator with a Bachelor degree of Arts in French Studies. She took specialised courses in translation and linguistic studies at York University between 1992 and 1996. Halabi is also a member of the Teaching French as a Foreign Language for Adult Settlements Consultancy at the Arabic Community Center in Toronto. The second text is TT2, a translation of P. Hawkins's novel *The Girl on the Train*, translated by Hareth Al-Nabhan, edited and published by Dar Al-Tanweer, which is one of the leading publishing houses in Egypt. Al-Nabhan is a professional Syrian

translator with fifteen years of experience in translation. He originally decided to become a translator of non-fiction from English into Arabic, although later he switched to fiction. According to Djurov (2015, p. 1) Al-Nabhan's first attempt at translation was in 1991 when a friend asked him for a translation of a text and he produced a very good result. He has translated a wide range of works, for example, Noam Chomsky's *Year 501: the Conquest Continues*, Eric Hobsbawm's *The Invention of Tradition*, Pawla Hawkin's *Into the Water*, van Klíma's *Love and Garbage*, Stephanie Meyer's *Twilight,* and, most recently, A. J. Finn's *The Woman in the Window.* The third text is TT3, a translation of K. Reichs's *Deadly Decisions*, translated by Fatima Shamdeen, and edited and published by Arab Scientific Publishers, Inc. in two countries: Morocco and Lebanon. Shamdeen is a Lebanese freelance translator. She is an instructor at Lebanon University. Shamdeen has published translated short stories in Arabic, has translated for TV programmes and has devoted herself to working as a translator for the Lebanese Association for Hemophilia. It is important to mention that the corpus sample in this research is not monitored. It will not grow in size and can therefore offer the chance to quantitatively analyse the data within the text, making it easy to qualitatively manage the analysis of its linguistic data. This does not mean that the corpus could not be expanded with more works of the same genre in the future, but it was deliberately created this way for the purpose of the analysis of this study.

4.1.1. Criteria for Corpus Selection

Two key issues exist within DTS when corpus methods are used: firstly, deciding which type of corpus to use, and secondly how to design the corpus. These two tasks vary depending on the research questions formulated and the explicit criteria

chosen to conduct an analysis (see Baker, 2003). The selection of the corpus for this study was principally based on a specific criterion. The main aim was to select a corpus comprising texts from the same genre and historical period. This study adopts a corpus of popular fiction novels. As for the timeframe of the texts, the present study does not seek to examine how translations have developed or changed historically but rather it offers a synchronic investigation that describes the object of analysis at a particular period in time. This is, specifically, the present, allowing the study to sidestep the decades of differences between the source and target texts found in other corpora. The corpus in this study had to be digitised. The texts were collected from internet outlets in their digitalised forms. This avoids the problem of texts that have not been effectively digitised, that is, texts that have been reproduced and uploaded with bad scanning quality, with bad graphical representations or those that lack text-editing facilities. For example, this could include older works or works that have been translated over a long period of time, but which have yet to be effectively digitised. They are incompatible with format change, and, thus, cannot be adopted for this study. This mode was chosen to allow the corpus to be analysed. With the corpus constructed via this criterion, intensive content analysis was undertaken.

The researcher started the process of collecting a corpus of texts from a wide range of online material, namely Arabic publishing houses, book forums, electronic libraries etc. However, it is critically important, before obtaining any corpus, to determine whether the texts therein are good candidates for analysis. Thus, another aim was to systematically read and observe the content to identify language-related elements in texts. This is to say, to examine the linguistic content of texts, e.g., subjects, concepts, themes, and elements of language. This was achieved

through content analysis, which attempts, according to Patton (2002, p. 453), "to identify core consistencies and meanings" of distinctive patterns within text. The content analysis of texts requires an in-depth reading process to enable a schematic comprehension of all the features of the target language (TL). From the reading process, the researcher can check whether the linguistic and textual elements are present or not and whether they fit the purpose of the analysis. An additional priority was to check the accuracy and translation flow of the texts. This entails the academic judgement of the extent to which the translated text in question is a human translation and not electronic by means of, for example, Google Translate. The translations should have a natural cultural bias depending on the translators' positions within their culture and in relation to the society they are translating for. This requirement allows the translators to connect to the social-cultural context, provides quality and accuracy, and ensures that creative work as sensitive as metaphors and metonymies can be rendered with a cultural eye.

Toury's (1995) target-oriented approach to literary translation looks at this aspect since translators may be conscious of transferring sensitive elements as metaphors and metonymies that may not suit the values and norms of the TL and culture. According to Toury (1981, p. 16), "the study of actual translations is an empirical and observational phenomenon" that requires a framework which focuses on the "target pole". The target-oriented approach aims to study the corpora of texts in their environment in terms of the sociocultural norms of the TL, paying attention to language use, culture and the target reader (Toury, 1995, p. 55). These norms identify the procedures employed and the degree of suitability of the translation in its culture without being evaluated more than necessary (Pym et al., 2008). The norms determine the approach of translators as two polar types: if they follow the

textual relations and norms of the TL and these are preserved in the target text (TT) then the translation is acceptable. However, if the source language (SL) norms are preserved, the translation is judged as adequate (Toury, 1995, pp. 56-57). Toury (1995, pp. 268-275) classifies translation norms into two distinctive kinds, preliminary and operational norms. Further, Toury (1995, pp. 268-275) sets out two laws that descend from his translation norms: the law of growing standardisation and the law of interference. The former assumes that the translator disrupts the source text (ST) patterns in the TT to produce familiar and common patterns in the culture of the TL. The latter views the interference from the ST to the TT as a standard law, where the translator copies all the linguistic features of the ST over to the TT.

To illustrate some of the points from the target-culture approach, there are some cases in this study that have changed on all levels during the translation process. The part where it says 'The NERVOUSNESS IN THE STOMACH IS FEAR metonymy is originally realised by the metonymical expression my stomach dropped through the soles of my feet in the ST. The translator, however, changed the course of the physiological concept into an expression reasoned under the LAPSES OF HEART RATE IS FEAR metonymy, which takes the core location of fear to the heart instead of to the stomach in قلبي قد هبط إلى قدمي / my heart had dropped to my feet. It is clear that the Arabic language differs from English with regard to the association between specific body parts and fear.

Following this, the researcher decided to check the presentation of the translated text and culture. In some cases, translators may produce a translation without being aware of the presence of earlier versions. However, in most cases,

translators are aware of duplications. Toury (1995) insists on identifying the original translated text with emphasis on its existence, as some translations could be presented with no original STs. As such, before building the corpus database, it was important to cross-check the translated texts against existing versions and confirm that the adopted texts are active translations. This involved comparing the target to the source in parallel to determine the existence of counterparts. Toury (1995) also emphasises establishing a valid first-level generalisation about the counterparts. This is based on the adequacy of the source and the acceptability of the target culture and the relationship between them.

4.1.2. An Interpretation of Corpora

With regard to the number of corpus texts, it is worth noting that scholars have perennially argued about this subject. These arguments tend to fall into two camps: scholars who emphasise the importance of corpus size and how many texts or words a corpus should contain, such as Millikan (2016) and McEnery and Wilson (2003), and others who do not, such as Leech (1991). Leech argues that obtaining very large corpora is not always sufficient, and that various time-related problems can arise. Millikan disagrees with Leech and states that the larger a sample is, the more accurate the results will be. However, it is both efficient and timely to use a smaller corpus in the interests of establishing and investigating a new pilot, especially one in which large-scale linguistic patterns are not sought. This guarantees the reliability of the data collected and provides profound insights supported by established methodologies in corpus studies (see Bowker & Pearson, 2002, p. 48). As such, the study required what is more clearly defined as an approach to test and validate whether its hypothesis is plausible.

In this thesis, Chesterman's (2014) *"interpretive"* hypothesis was adopted, which pragmatically tests a hypothesis based on a given methodology. Chesterman (2017, p. 6) argues that all data, definitions, classifications and interpretations are based on interpretive hypotheses. Upon analysis of any research enquiry, there is always the possibility that a claim can be rejected (Chesterman, 2014, pp. 85-87). Therefore, "it is important to specify the scope of hypothesis, and to be open to the need to foster or restrict this scope." If the corpus is skewed in the same way as existing evidence, it will not be possible to prove that a claimed observation is correct. For this study, the scope was restricted to a particular language variation, genre and context of analysis. The range of metaphors and metonymies belongs to multiple sources of the target fear. Schmidt's (2012) position, is, to a degree, compatible with this study's own. In his work, his corpus comprises four texts consisting of three literary translations of the same source. His sample data (which he calls "tokens") established 270 tokens from a 293,463-word corpus of an English ST and its three Croatian translations (Schmidt, 2012, p. 163). His results yielded a total of ten procedures and six types. In order to evaluate Schmidt's results, a replication of his study using a similar methodology was first conducted and our sample data that established 616 tokens from 615,000-word corpus of an English STs and its Arabic translations, albeit extending and modifying it in several ways, employing a triangulation of corpus methods for data collection and identification methods applied with different approaches. These refining experiments assisted the researcher in determining whether or not the study could be replicated and whether there were any results that were not anticipated by previous findings. This allowed for precise evaluation, validation or falsification of previous evidence.

In his study, for example, Schmidt (2012) omits the classification discussion, i.e., eschewing the classification of linguistic expressions to the concepts they belong to, due to time limitations. For Lakoff (1987), a theory that does not distinguish the capacity to conceptualise linguistic expressions to their conceptual system can end with misleading claims about translation. Decisions such as these are crucial for translation studies due to their important role in determining the universality of concepts between the source and target linguistic data. The absence of this step influences the final decision of the translation procedures applied. This does not mean that Schmidt's results are not valid, but that more steps would provide more accurate findings.

After evaluation, it became evident that the new results from the pilot study were in line with the methodological assumption that variation creates other types of patterns, i.e., different datasets extracted from contradicting language combinations, different conceptual systems, and internal structures will yield different results. This shows that the replica with the adoption of a new corpus that is (near) equivalent, along with refined methodologies and approaches, can yield proportions that look statistically relevant and/or significant (slightly larger) in comparison to the original but can be explained. The number of types found in this study yielded a total of 14 procedures contained in nine major categories. Six of these procedures are new and were not anticipated in Schmidt's findings. This therefore builds on Schmidt's (2012) statement that his procedures are exhaustive for the analysis of metaphor translation. This evaluation leads to the overall conclusion that the number of corpus texts adopted for the analysis of this study is adequate for the analysis discussion.

4.2. Qualitative Analysis

4.2.1. Corpus-based Methods

According to Deignan (2005, 1999), there are two corpus-based methods that are used to search for linguistic expressions through their concepts in a corpus: the source-domain and the target-domain methods, each of which has its own structure for analysis. The source-domain is a good method to approach large sized corpora, as the pre-identified lexical units can be retrieved automatically depending on the source domain concepts (Deignan & Potter, 2004; Deignan, 2005). Within CMT, the source-domain method is an inductive method that assumes the existence of a set of particular conceptual mappings and their source domains, taken from an existing categorised list of established conceptual structures of source domains ready for empirical investigation. An advantage of the source-domain method is that all the lexical units associated with the source domains of a particular conceptual metaphor use an online thesaurus to detect all relevant occurrences in the text, along with their surrounding linguistic context (Stefanowitsch, 2006). For example, Esenova (2011, pp. 5-7) uses the source-domain method for this purpose. In her investigation, Esenova uses the following group of source domain concepts: CONTAINER, ANIMAL, SUPERNATURAL BEING, HIDDEN ENEMY, TORMENTOR, SMELL, TASTE, PLANT, MIXED SUBSTANCE and PURE SUBSTANCE (Esenova, 2011, pp. 5-7). The former concepts are mapped onto the targets FEAR, ANGER and SADNESS. The scholar adopts a corpus drawn from the *British National Corpus* (BNC), *The Online Dictionary, Encyclopedia and Thesaurus* (ODET), and the *Cambridge Advanced Learner's Dictionary* (CALD). In her first step, Esenova (2011) extracts the linguistic expressions with lexical units of the specific source domains

assigned for analysis, such as *"unbridled"*, which belongs to the domain of HORSE of the higher-level concept ANIMAL. The second step in the scholar's method is to search for the lexical units in dictionaries and/or corpora followed by categorising the linguistic expressions into the conceptual metaphors they belong to.

Often, if the researcher has an established basis for a conceptual system of a particular domain for the language adopted for the study, then the source-domain method is not a problem. However, it cannot be adopted if a list of source domains does not exist. Cases like these tend to use the target-domain method as an alternative method by looking for lexical units linked to a specific target domain (Deignan, 2005). In this technique, the researcher assumes the existence of linguistic expressions and does not necessarily require a priori knowledge of the source domains that the target domain may hold. This means that the technique is centred on linguistic expressions and their conceptual mappings of one specific target, for example, a number of source domains mapped onto fear only. The search process in the target-domain method moves deductively from the linguistic data in the corpus referring to the target domain to establishing the sets of concepts. The linguistic expressions identified by this technique are used to identify all the concepts and to establish the mappings associated with the specific target domain. For example, in his Korean study of SADNESS and HAPPINESS, Türker (2013) chose two lexical units from the free-listing study and then extracted sample data of each unit from the Korean corpus. With HAPPINESS, he selected *"haengbok",* which translates as *"happiness"* and *"gippeum" as "pleasure"* with the variations of *"gippeu"* (e.g., *gippeo, gippeul*) (ibid.).

Overall, regardless of the method the researcher wants to follow, one must know that each method places emphasis on certain elements. The target-domain method, according to Kövecses (2011, p. 32), mainly focuses on identifying "irregularities" in semantic behaviours that appear in linguistic expressions. The source-domain method, on the other hand, focuses on "regularities" in the metaphoric conceptual system (Kövecses, 2011, p. 32). The source-domain method does not account for the unique structures and semantic behaviours that the metaphoric expressions have, but rather it examines the internal structure of the conceptual metaphors more specifically, the mappings and what they entail.

According to Stefanowitsch (2006, p. 7), both source-domain oriented and target-domain-oriented methods "often complement each other" so, instead of making certain generalisations about the data and being selective about where the decisions made would cause some error in the data analysis, both methods were adopted in this study. Additionally, for validity of application to the adopted corpus, it was necessary for the identification methods to be based on a fully empirical metaphor identification procedure that identifies linguistic expressions in written texts. This also served the purpose of addressing the key question in the present research. Hence, the study adopted the Metaphor Identification Procedure (MIP) designed by Pragglejaz Group (2007) as a reliable methodological tool alongside the corpus methods for the retrieval of metaphorically used words. Section 4.2.2 examines the MIP in much detail, followed by a discussion in section 4.3 of how it can be refined to analyse metaphors and metonymies expressing fear in order to investigate the translation procedures used.

4.2.2. Identifying metaphoric linguistic expressions in written texts: Insights from applying Pragglejaz Group MIP (2007)

Pragglejaz Group (2007) designed an explicit set of instructions to identify metaphors at the linguistic level in texts and in discourse contexts.[35] It is suggested that they provide the researcher with a clear and detailed procedure based on reliable grounds upon which the metaphoricity of a lexical unit is determined in accordance with a semantic test; for example, checking its most basic sense, its occurrence in context and any meaningful interaction between the two. It also examines all structural, pragmatic, communicative and figurative features of the metaphors in different written texts and discourse types. These features are clustered and then used to make an assessment of whether lexical units are metaphorical. The MIP is intended to reduce the level of subjectivity involved in the identification process as much as possible, depending on the divergence and difference between the literal meaning and contextual meanings of a certain lexical unit. Moreover, the MIP follows a bottom-up approach, which is natural, since the top-down approach, comprising analysing a set of conceptual mappings to their linguistic realisations, can miss metaphors in discourse. The MIP model is presented as follows:

1. Read the entire text–discourse to establish a general understanding of the meaning.
2. Determine the lexical unit in the text–discourse.
3. Establish its meaning through the following steps:

[35] Steen and his group of researchers (2010) developed and refined a version of the MIP known as the Metaphor Identification Procedure Vrije Universiteit (MIPVU), which concentrates on identifying linguistic metaphors in different discourse types, chieves inter-coder reliability and identifies units that have the potential to be realized as metaphors in people's minds but does not identify conceptual metaphor in translation.

(a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.

(b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be:

- More concrete; what they evoke is easier to imagine, see, hear, feel, smell and taste.
- Related to bodily action.
- More precise (as opposed to vague).
- Historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

4. If yes, mark the lexical unit as metaphorical (Pragglejaz, 2007, p. 3).

To demonstrate how the above procedures are applied, the Pragglejaz Group analyses a newspaper article from *The Independent*. (1) A word-by-word reading process of the entire text–discourse is undertaken to gain full comprehension and understanding of the text. The reading process gives the researcher knowledge of the lexical units – single words, parts of words, or chains of words – used in the text against a single headword in the dictionary. After this step, all lexical units are separated using slashes to indicate the boundaries between lexical units as follows:

(1) /For/years/, Sonia Gandhi/ has/ struggled/ to/ convince/ Indians/ that/ she/ is/ fit/ to/ wear/ the/ mantle/ of/ the/ political/ dynasty/ into/ which/ she/ married/, let alone/ to/ become/ premier/ (Pragglejaz, 2007, p. 4).

In the following step procedure (2), Pragglejaz Group (2007, pp. 4-13) determine the lexical units excluding any collocational run-ons and follow it by procedure (3) to establish the basic meaning of these determined lexical units through the use of the monolingual *Macmillan English Dictionary for Advanced Learners* (Rundell & Fox, 2002), illustrated as follows:

Struggled

(a) *contextual meaning:* In this context, "struggled" shows effort, difficulty and a lack of success in achieving a goal, namely changing other people's negative views and attitudes.

(b) *basic meaning*: The basic meaning of the verb *to struggle* is to use one's physical strength against someone or something, as in *She picked up the child, but he struggled and kicked*. The evidence cited in the etymological dictionary consulted, the Shorter Oxford Dictionary on Historical Principles, also suggests that this meaning is historically prior (p. 2, 157).

(c) *contextual meaning versus basic meaning:* The contextual meaning contrasts with the basic meaning and can be understood by comparison with it: We can understand abstract effort, difficulty, opposition and conflict in terms of physical effort, difficulty, opposition and conflict.
Metaphorically used? Yes (Pragglejaz, 2007, pp. 5-6, emphasis in original).

Convince

(a) *contextual meaning*: In this context, "convince" means to persuade a large number of people to change their views about Sonia Ghandi's suitability as a political leader.

(b) *basic meaning*: The verb *convince* does not have a different, more basic meaning.

(c) *contextual meaning versus basic meaning*: The contextual meaning is the same as the basic meaning.
Metaphorically used? No (Pragglejaz, 2007, p. 6, emphasis in original).

As seen above, the MIP is mainly concerned with identifying metaphorically used words in language. It leaves what is considered a main focus for the source-domain method. In order to avoid this gap, it was decided, for this study, to aggregate the corpus-based identification methods with MIP with equal weight as a fully comprehensive identification protocol. This triangulation of methods would uncover the deeper meaning of the data. In other words, it would help in gaining a comprehensive understanding of how to identify linguistic data and their concepts within the corpus adopted on the levels of language, culture and mind. In particular, it would contribute new identification procedures for metaphor and metonymy for Translation Studies. This does not mean that the application of one of these methods independently is rejected, but, for the sake of robustness and in order to achieve granularity of results, a triangulation of methods was adopted. Section 4.3 addresses the three methods with reference to their application in empirical research on the corpus data of this study in order to investigate the translation procedures used.

4.3. Identifying Emotion-related Metaphors and Metonymies in Texts for Translation Studies: Pragglejaz and Beyond

This section reviews the MIP designed by Pragglejaz (2007, pp. 1-3) in order to propose an extended and modified identification procedure. The modified procedure will be especially designed to address the distinct ways in which metaphor and metonymies informing an emotion can be found. The procedure will highlight the metaphoric and metonymic lexical units – single words, parts of words, chains of words or phrases informing fear as a target domain and their conceptual use in texts, with the aim of observing how they are translated. The

reviewed steps and extended procedures will benefit from integrating additional identification methodological approaches, as detailed in the subsections below.

4.3.1. Identifying linguistic expressions

Step (1) in the MIP requires reading the entire text with conscious reflection on the content of the text – the wording and meaning – in order to understand it and search for lexical units. The process starts with reading the STs and the TTs. During this process, the researchers examine the entire sample of texts through a word-based task where they carefully read through the corpus to become familiar with the content of the texts. This also offers greater access to details, and a rich interpretation of the lexical units used, with their surrounding linguistic context. The reading method is a traditional search method that was used in early text-based studies of metaphor (see Semino & Masci, 1996) and was even used years after in the works of Koivisto-Alanko (2000) and Tissari (2003).

It is important to mention that texts were read as a unified corpus. There was no intention to look at how the translations might vary between the three translators. This was not done because primary data in the target texts adopted for this study feature a variety of Modern Standard Arabic within a Pan-Arabic language frame that employs a socially preferred literary variety. The Modern Standard Arabic advocates for the unified formation of a fixed language variety of Arabic language throughout the Arab World (Almijrab, 2021, p, 31). Adopting a universal variety for all Arab countries does not require a comparative analysis of how the translations of data vary between the translators even with different cultural contexts/situations. Upon completion of the reading task, the collected data were

entered into an initial Microsoft (MS) Word database. The same step was applied to all six texts, forming an aligned database as shown in Table 3.

Page	English (ST3)	Page	Arabic (TT3)
280	To work off my anger at Crease, my disgust with myself and my fear for LaManche.	275	ذهبت الى النادي الرياضي بغية التنفيس عن غضبي من كريز وحنقي من نفسي وخوفي على لامانش.
281	I felt constriction in my chest.	276	شعرت بضيق في صدري.
281	Heart pounding, I raced to the complex and into the vestibule.	276	بقلب يخفق من شدة الهلع.
281	I pushed fear to the corner of my head.	276	دفعت بمخاوفي الى زاوية عقلي.

Table 3. A work in progress database of (ST3) and (TT3) in MS Word.

For each ST and its target, a database is built in MS Word, yielding a total of three databases. Each database consists of four columns. From left to right, the first column is the page number where the linguistic expression appeared in the ST. The second column lists the ST entry of the linguistic expression. The third column is the page number where the linguistic expression appeared in the TT. The fourth column shows the corresponding Arabic translation.

It is understandable that metaphorical expressions are not lexically fixed and do not follow a specific syntactic form. Rather, they "are inherently flexible and emerge in different ways in different contexts of use" (Semino et al., 2013, p. 1). They may consist of anything from idioms and polysemies to similes. They may exist in single words, or multi-word unit expressions that can come in the form of phrasal verbs, phrasal nouns, fixed collocations, word class etc. (Pragglejaz Group, 2007, pp. 25-28). They can also appear in phrases ranging from statements to questions or exclamations with distinct parts of speech such as adjectives, verbs and nouns, for example. An important point to add is that the analysis in this study does not consider whether the metaphors and metonymies are explicit in specific

cases such as similes and analogies, or implicit such as in substitution or ellipsis. The substitution form can come in the shape of pronouns that act as substitutes for the actual lexeme. For example, the Qur'anic verse {كُلُّ مَنْ عَلَيْهَا فَانٍ} (Q55:26) literally means "All that is on it will perish" and the pronoun highlighted here means "Earth".[36]

Other cases, like ellipsis (nominal, verbal, clause elliptic phrases etc.), are grammatically used in the case of non-existent or omitted words or phrases that may be inserted into grammatical gaps without affecting the overall meaning (Herrmann, 2013, p. 105). Much manual work was required in order to identify linguistic data and discard non-candidate expressions. This is a logical consequence of Lakoff and Johnson's (1980a, 2003) claim that metaphors and metonymies operate at the level of thought. After the completion of the reading step, all the lexical units that had metaphorical potential and were related to the selected target domain were separated using slashes. This helped to indicate the boundaries between lexical units, as can be seen in example (2) drawn from the corpus:

(2) /Fear/ slithered/ along/ my/ nerves.

Although this manual reading step in the MIP has been widely used with no further modification, it still lacks logical application to the corpus adopted for this study. Pragglejaz Group analysed English texts from different domains amounting to 189,564 words. This study analyses a set of six English and Arabic texts combined from one domain with a total word count amounting to 615,000 words. The word

[36] Soura Chapter Al-Rahman/ The Most Gracious (55): Aya/Verse (26). Translated by Yusuf Ali. Retrieved from the Quranic Arabic Corpus at: http://corpus.quran.com/translation.jsp?chapter-55& verse-26.

count was collected online and cross-checked using the Microsoft Word (MW) count tool by converting the PDFs to Word documents. Furthermore, the MIP was conducted by a group of scholars from different disciplines, which clearly indicates that proposing a robust metaphor-identifying procedure is a difficult task for a single researcher to conduct in such a restricted period of time.[37] Thus, analysing the texts through traditional methods of reading does not appear to be practical in this case. It is time-consuming and requires far more engagement than just a manual reading task.

Koller (2011) states that the manual reading technique to identify linguistic data with their linguistic surroundings in a corpus is an unreasonable expectation, given the risk that potential expressions may be missed. This is a downside that cannot be completely avoided. In addition to this, moving between texts manually would not be practical. The aim was to look for a substitution that would make the quick transitions between various locations of all the texts easier and more efficient while reading and searching for metaphoric and metonymic lexical units. Due to all the limitations mentioned above, this step was undertaken using corpus-based tools with external systematic tools as a complementary method of tracing linguistic data. This allowed the researcher to examine the whole corpus with more precision and greater retrieval speed. The search for a toolkit that could facilitate the analysis was limited to compatible pieces of software programs with an easy user interface that could handle different languages, including Arabic. The MAXQDA (VERBI Software, version 1, 2020) was chosen for coding,

[37] The original members of Pragglejaz were Peter Crisp, Raymond Gibbs, Alice Deignan Graham Low Gerard Steen, Lynne Cameron, Elena Semino, Joe Grady, Alan Cienki and Zoltan Kövecses.

interpreting, and reporting data. Guetterman et al. (2015, pp. 146-169) state that the use of MAXQDA assists researchers with integration to create and develop joint displays of qualitative and quantitative data analysis. This tool has, to date, not been employed in metaphor translation corpus-based research. Three main integral parts of MAXQDA were incorporated: the lexical analysis was used to retrieve lexemes in their context, the coding system to build up a hierarchical structure of identified source domains and the quantative analysis to provide frequencies and to compare results.

Corpus-based tools, according to Stefanowitsch (2006), provide solid results more emphatically when metaphors and metonymies are called into question. The semi-automatic method was employed after the manual reading method in cases where the metaphoric and metonymic descriptions of emotions remained unidentified. The combination of a complementary approach such as a corpus-based one with the manual identification method results in a method that reduces the strenuousness of undertaking the manual task on its own (Koller, 2011, p. 9). Kimmel (2008, p. 15) also confirms that the use of a qualitative software is "more systematic and can manage a complex research agenda" for the analysis of a large corpus of several novels, as in the case of the corpus of this study.

The lexical analysis search process in MAXQDA required readable PDF formats. This, however, proved not to be possible since the corpora of all six texts were in read-only format and the software adopted does not support non-readable texts. Thus, it was necessary to convert the whole corpus of texts into a machine-readable format. This step required a program that has a built-in function of Optical Character Recognition (OCR) to pre-process document images and

convert them into editable texts before extraction. There are many kinds of OCR programs that convert texts into machine-readable format, but the study requires a program that works well with Arabic and also has the potential to avoid the common mistakes made by most software products, such as the ABBYY FineReader 9.0 Professional Edition program. The problem with the ABBYY reader is that it only operates on specific operating systems. In addition to this, it does not recognise all characters such as numbers, punctuation marks, chapter headers and footers, or visual materials like pictures, graphs, tables of content, indexes, and publishing data. It therefore cannot convert and reproduce the whole text accurately. Editing the text by eliminating all of the unwanted material and characters that are of no use for the analysis during the digitisation process is time-consuming and an unreliable way of dealing with such problems.

Although most software programs have specific issues and there will never be a 100% accurate software package, but it was nevertheless possible to find a program that is appropriate for the study. The best option was to use an accurate user-friendly software tool with no operating system requirements with text-editable actions. It also had to be capable of converting non-readable Arabic PDF texts without requiring any further adjustment to the texts. The Cisdem PDF OCR 6.4.0. converter was chosen for this step. It automatically recognises non-readable electronic texts in addition to other kinds of file types and converts them to machine-readable formats. The whole corpus of six texts was converted into an electronic machine-readable format that works as follows:

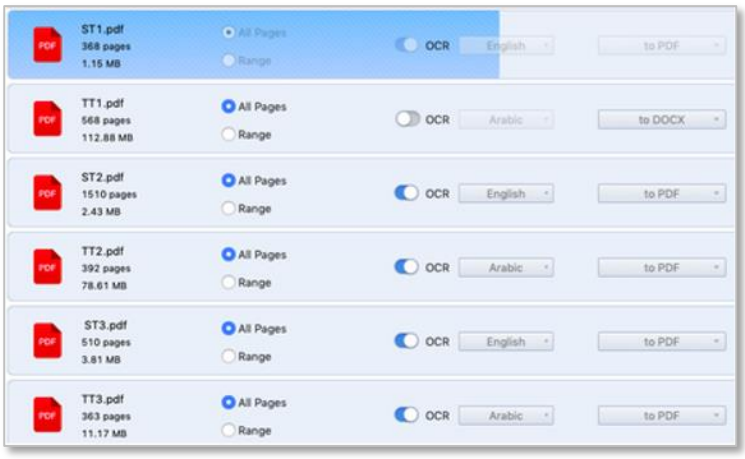


Figure 8. The main window of Cisdem with a scan process in progress.

After converting all texts, machine-readable texts in PDF format were obtained ready to import and use in the MAXQDA document system, as shown in Figure 9.

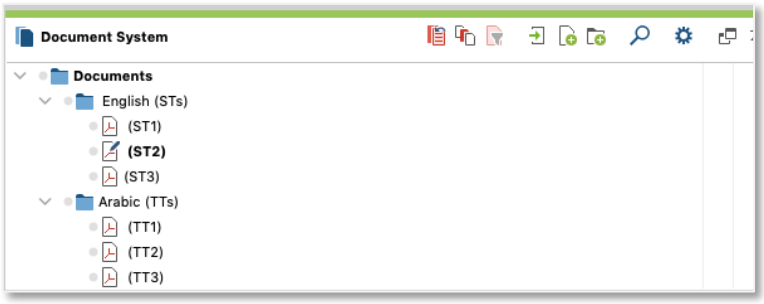


Figure 9. The document system window in MAXQDA.

In Figure 9, two document groups were created. The first group includes the three selected English STs. The second group includes the three TTs listed in parallel order to their originals in the first list. The lexical analysis was then performed with a keyword method to extract relevant lexical units in conjunction with the target-domain method. The keyword technique is borrowed directly from corpus linguistics methods (see Munday, 1998). Ooluhan (2004) describes it as a method that generates words through frequency lists. In this research, the keyword method used a list of semantically target-related lexical units from Wierzbicka's (1990) fear-related words with variations: afraid, fright, frightened, scared, terrified,

petrified, horrified, dread, alarmed, panic, anguish, anxiety, worried, concerned, apprehension, shame and embarrassment. Since the study has certain search variables with regard to languages, the lexical search had to be limited to a single document or group of documents that belonged to one document group, either English STs or Arabic TTs. After selecting the document group, the lexical search window appeared empty. To collect the target lexical units used in the corpus, a search was run using a string of lexical units from Wierzbicka's (1990) list added to the entry box. To illustrate this step, the lexical entry for *dread* was selected and added, as shown in Figure 10.

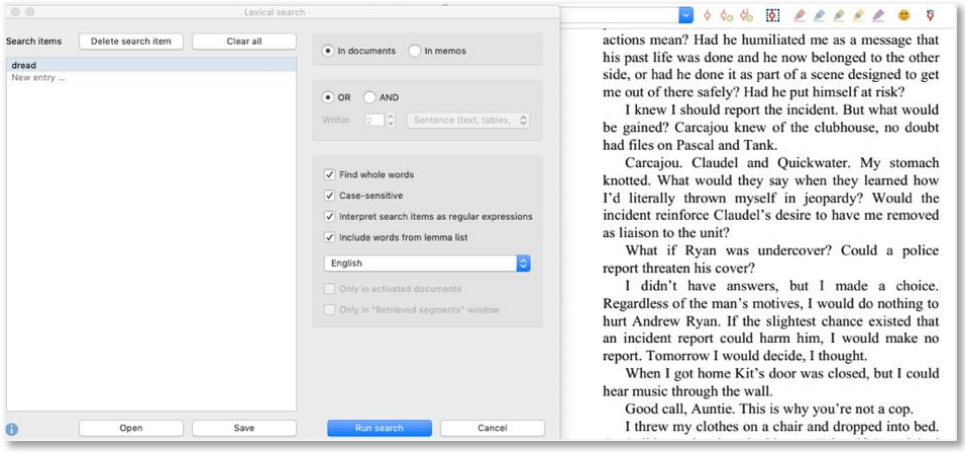


Figure 10. The lexical analysis window with the lexical entry for *dread*.

After completing the search process, the results were retrieved with a number of *dread* hits that ranged between metaphoric and non-metaphoric registers in all parts of speech, as illustrated in Figure 11.

	Preview	Beginning	End	Document group	Document name	Search item
=	I can't put it off any longer and I'm just dreading it	21: 2291	21: 2295	English (STs)	(ST1)	dread
≈	I can't put it off any longer and I'm just dreading it	21: 2291	21: 2298	English (STs)	(ST1)	dreading
=	Edward's mouth was hanging open, his eyes still wide with dread. "Yeah	205: 2223	205: 2227	English (STs)	(ST1)	dread
=	As the pain and dread eased, I found my way back to my body	329: 464	329: 468	English (STs)	(ST1)	dread
=	It comes over me like a wave: black dread. Something	196: 266	196: 270	English (STs)	(ST2)	dread
=	I checked the latest on Megan's case on my phone, and it's the news I've been dreading. "A	436: 252	436: 256	English (STs)	(ST2)	dread
≈	I checked the latest on Megan's case on my phone, and it's the news I've been dreading. "A	436: 252	436: 259	English (STs)	(ST2)	dreading
=	Flooded with dread and adrenaline, I see darkness coming	633: 251	633: 255	English (STs)	(ST2)	dread
=	I was right, this morning, when I felt that dread. I	653: 109	653: 113	English (STs)	(ST2)	dread
=	elation, tempered with something else: a nameless dread. I	678: 52	678: 56	English (STs)	(ST2)	dread

Figure 11. A list of *dread* units retrieved in the lexical analysis window.

Figure 11 shows the number of hits detected in all STs, sorted according to the number of hits in the documents. Some of the search strings were adjusted with specific characters, such as "<()" to help limit the search to lexical units that had similar beginnings to the search string. For example, <(dread)> would find *dread, dreading, dreadful,* and *dreaded* but not *cold*. The predefined lists of lexical units from the identified expressions were then used to build up an extended list of individual target-domain-related lexemes or set of lexical entries such as *creep, trepidation, horrified, panic* etc. This aided the identifying process further in order to locate more conventional expressions.

As pointed out in section 4.2.2, the study adopts an integration of data collection method. It employs corpus-based methods with the MIP to identify linguistic data for the validation of data analysis. In this step, the source-domain method was applied for this purpose. This means identifying linguistic expressions with lexical units instantiating a particular source-domain concept. From a qualitative point of view, the formulation process of underlying source domains entails knowing the set of mappings in the source and target domains of the identified units in a linguistic expression. For this reason, Kövecses' (1990) model of 34 source domains mapped onto fear was adopted.

Kövecses' description of the conceptual structure of fear is based on four levels: a system of conceptual metaphors associated with fear, a system of conceptual metonymies associated with fear, a set of fear-related concepts, and a prototypical cognitive model. These concepts are listed below, exemplified with Kövecses' linguistic expressions:

A. FEAR Metaphors:

1. FEAR IS A FLUID IN A CONTAINER (e.g., Fear was *rising* in him).
2. FEAR IS A (VICIOUS, HIDDEN) ENEMY (HUMAN OR ANIMAL) (e.g., He was *choked* by fear).
3. FEAR IS A TORMENTOR (e.g., They were *tortured* by fear of what was going to happen to their son).
4. FEAR IS AN ILLNESS (e.g., He was *sick* with fright).
5. FEAR IS INSANITY (e.g., Jack was *insane with* fear).
6. THE SUBJECT OF FEAR IS A DIVIDED SELF (e.g., I was *beside* myself with fear).
7. FEAR IS A SUPERNATURAL BEING (GHOST etc.) (e.g., It was a *ghostly* scene).
8. FEAR IS AN OPPONENT (e.g., Panic *overtook* them).
9. FEAR IS A BURDEN (e.g., be *weighed down* by fear).
10. FEAR IS A NATURAL FORCE (WIND, STORM, FLOOD etc.) (e.g., Fear *swept over* her).
11. FEAR IS A SUPERIOR (e.g., Fear *reigned* in their heart).
12. FEAR IS A SOCIAL SUPERIOR (e.g., be *governed/ruled* by fear).
13. FEAR GOES INTO A PERSON FROM OUTSIDE (e.g., They *threw a scare into* him).

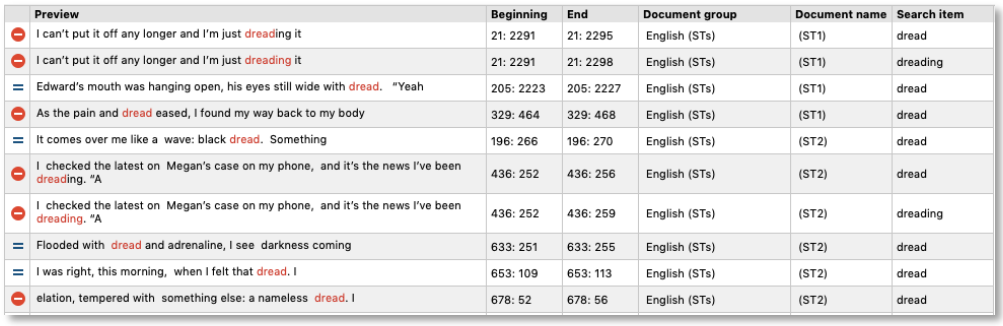
B. FEAR Metonymies:

1. PHYSICAL AGITATION IS FEAR (e.g., That gave him the *shakes*).
2. INCREASE IN HEART RATE IS FEAR (e.g., My heart *leapt* into my throat).
3. INCREASE IN PULSE AND BLOOD PRESSURE IS FEAR (e.g., His *heart pounded* with fear).
4. LAPSES IN HEARTBEAT (e.g., You made my heart *miss a beat* when you said you had left the money at home).
5. BLOOD TO LEAVE THE FACE IS FEAR (e.g., You are *white* as a sheet).
6. SKIN SHRINKS IS FEAR (e.g., That man gives me the *creeps*).

7. HAIR STRAIGHTENS OUT IS FEAR (e.g., That was a *hair-raising* experience).
8. DROP IN BODY TEMPERATURE IS FEAR (e.g., That movie was a real *chiller***).**
9. INABILITY TO MOVE IS FEAR (e.g., I was *rooted* to the spot).
10. DROP IN BODY TEMPERATURE and INABILITY TO MOVE IS FEAR (e.g., She was *frozen* in her boots).
11. INABILITY TO BREATHE IS FEAR (e.g., She *gasped* with fear).
12. INABILITY TO SPEAK IS FEAR (e.g., I was *speechless* with fear).
13. INABILITY TO THINK IS FEAR (e.g., My *mind went blank* with fear).
14. (INVOLUNTARY) RELEASE OF BOWELS or BLADDER IS FEAR (e.g., You scared *the shit out* of me).
15. SWEATING IS FEAR (e.g., The cold *sweat* of fear broke out).
16. NERVOUSNESS IN THE STOMACH IS FEAR (e.g., He got *butterflies in the stomach*).
17. DRYNESS IN THE MOUTH IS FEAR (e.g., My *mouth was dry* when it was my turn).
18. SCREAMING IS FEAR (e.g., She was *screaming* with fear).
19. WAYS OF LOOKING IS FEAR (e.g., There was *fear in her eyes*).
20. STARTLE IS FEAR (e.g., You made me *jump*).
21. FLIGHT IS FEAR (e.g., I *fled* from persecution) (Kövecses, 1990, pp. 74-82, 2003, p. 23, 2014, p. 16).

To illustrate how the source-domain method works, the researcher first selects a source domain, such as DROP IN BODY TEMPERATURE or INABILITY TO MOVE. The search keywords to extract the linguistic expressions for this domain are *freeze, froze, freezing, frozen* which belong to the higher-level metonymy CAUSE FOR EFFECT. After the completion of the search process, the results included all forms of conventional metaphoric and non-metaphoric registers. The coded expressions are then used to produce a concordance list of all the lexical units in order to search for more relevant lexical units and their linguistic

expressions. All literal and homonym fear hits detected in the corpus that are not coded as belonging to metaphorical or metonymical registers were discarded from the list, as indicated by a red "no entry" sign in the first lefthand column in Figure 12.



	Preview	Beginning	End	Document group	Document name	Search item
⛔	I can't put it off any longer and I'm just dreading it	21: 2291	21: 2295	English (STs)	(ST1)	dread
⛔	I can't put it off any longer and I'm just dreading it	21: 2291	21: 2298	English (STs)	(ST1)	dreading
=	Edward's mouth was hanging open, his eyes still wide with dread. "Yeah	205: 2223	205: 2227	English (STs)	(ST1)	dread
⛔	As the pain and dread eased, I found my way back to my body	329: 464	329: 468	English (STs)	(ST1)	dread
=	It comes over me like a wave: black dread. Something	196: 266	196: 270	English (STs)	(ST2)	dread
⛔	I checked the latest on Megan's case on my phone, and it's the news I've been dreading. "A	436: 252	436: 256	English (STs)	(ST2)	dread
⛔	I checked the latest on Megan's case on my phone, and it's the news I've been dreading. "A	436: 252	436: 259	English (STs)	(ST2)	dreading
=	Flooded with dread and adrenaline, I see darkness coming	633: 251	633: 255	English (STs)	(ST2)	dread
=	I was right, this morning, when I felt that dread. I	653: 109	653: 113	English (STs)	(ST2)	dread
⛔	elation, tempered with something else: a nameless dread. I	678: 52	678: 56	English (STs)	(ST2)	dread

Figure 12. Discarded *dread* hits in the retrieved lexical analysis window.

The above step allowed the researcher to easily remove non-metaphorical used lexemes and phrases. For validity purposes, this step helps to avoid the re-appearance of the removed data when a second lexical analysis is performed. The expressions that were coded as metaphorical or metonymical segments were then examined in terms of linguistic context. This assisted with determining the contextual meaning and basic meaning of the lexical units. In order to make firm decisions about whether or not a particular lexeme was metaphorical (step two in the MIP), a meaning for each lexical unit was established based on three elements: contextual, basic, and contextual meaning versus basic meaning (step three of the MIP), as illustrated by the following:

1. Contextual meaning

In this step, the study explored the contextual meaning of the lexical units while considering the surrounding lines of the linguistic context and the context of surrounding individual lexical units (what comes before and after the lexical unit).

In order to determine the contextual meaning, the researcher relied on three levels: linguistic, sentence and paragraph levels. The former includes all the information provided by a linguistic aspect. If it does not provide any information that can help to determine the meaning, the sentence or phrase level can be used. For some cases, the latter might not be as clear, and the researcher might struggle to determine the contextual meaning. In this case, moving to the paragraph level will assist with the final decision to identify the contextual meaning. For example, the following is an attempt to determine the contextual meaning for the lexical unit *slithered* in (3) from the corpus data:

(3) Fear *slithered* along my nerves (ST2, p. 369).

Contextual meaning: looking at the immediate linguistic context, the verb *slithered* with its preposition *along* means, here, to crawl in a sliding motion inside the body.

2. Basic meaning

In this step, the MIP establishes the meaning of a lexical unit in a context other than the context it actually appears in. The Pragglejaz scholars (2007) use the monolingual *Macmillan English Dictionary for Advanced Learners* (MED) (Rundell & Fox, 2002) paperback resource as a methodological reference tool to analyse the meanings of the identified items. Steen (2007, pp. 97-98) argues that dictionaries can be adopted not only as a reference tool but also as "a concrete norm of reference", which "reduces the degree of error and inconsistency and thereby increases the degree of interanalyst agreement" (Pragglejaz Group, 2007, p. 25). It should be emphasised, however, that the current study is bilingual, which means that the dictionaries adopted must serve the language combination used. To

determine the basic meaning of lexical units in the English corpus, the monolingual *Macmillan English Dictionary* (MED) (Rundell et al., 2009-2021) digital resource was used for its contemporary component and unique treatment of metaphors. Krennmayr (2008, p. 102) emphasises the importance of not relying on one dictionary as this would be an insufficient way of reflecting on the meaning or checking for any "replicating decisions". Thus, the digital resource of the corpus-based *Longman Dictionary of Contemporary English* (LDOCE) (Procter & Ilson, 1981) was also used.

As for how to establish basic meaning for the translated lexical units, the *Almaany Dictionary* (AD) (2010) was used. The AD provides monolingual meanings of the TT analysed lexical units from different Arabic dictionaries, such as the *Lexicon of the Modern Arabic Language (*LMAL, 2008), *Al-Qamus Al-Muhit*, which served as the basis of later European dictionaries and has about 60,000 dictionary entries, *Lisan Al-Arab Dictionary* with 80,000 dictionary entries and *al-Sihah* 10-11th century dictionary with about 40,000 entries, amongst many others. Additionally, the AD offers details of both basic and contextual meanings, which can be helpful for comparing the basic meaning of a lexical unit against its contextual one. In the MIP, Steen (2007) and Krennmayr (2008) suggest using dictionaries as methodological tools to determine and establish basic meanings. For example, the following is an attempt to help understand how to determine the basic meaning for the word *slithered* in statement (3), followed by the contextual meaning versus the basic meaning:

(a) Basic meaning*:* The concrete meaning found in the MED and LDOCE dictionaries for the verb *slither* entails the following basic meanings:

- In MED: 1) “to slide over a surface”, 2) “to move along the ground like a snake”.
- In LDOCE: “to slide somewhere over a surface, twisting or moving from side to side”.

(b) Contextual meaning versus basic meaning*:* The contextual meaning is different from the basic meaning. While *slither* in the corpus context of statement (4) entails the movement of the emotion as a living being like a snake, the basic meaning only describes the movement in its more general sense, and does not refer to an emotional reaction.

(c) Having determined the above steps, the next stage was necessary to determine the metaphoricity of the lexical unit (the last step in the Pragglejaz MIP): Metaphorically used? Yes.

Deciding the basic meaning of lexical units can sometimes be daunting. Goatly (1997, p. 83) argues that nouns that come in the form of single individual semantic units are often not problematic as they are easy to interpret due to their bounded grammatical characteristics. Word classes in the form of delexicalised verbs, adjectives, collocations, prepositions, demonstratives and different types of clauses like embedded, restrictive relative, finite and non-finite adverbial clauses can, however, raise issues during analysis (see Pragglejaz Group, 2007). For example, the corpus identified delexicalised verbs, such as *make*, and adjectives such as in the noun phrase *ferocious pace*, both represented in expressions (5) and (6):

(5) Fear would *make* the end worse for him (ST1, p. 117).

(6) My pulse beat at a *ferocious pace* (ST2, p. 375).

According to the Pragglejaz Group (2007, pp. 28-44), deciding the basic sense of delexicalised verbs tends to be more difficult than with nouns due to their "less concrete and precise" meanings, and their ability to operate across different grammatical forms. In statement (5), the verb *make* and other similar delexicalised verbs like *get, set, do* etc. "have almost lost an original, primary, literal meaning on the basis of which to make decisions about metaphoricity" (Pragglejaz Group, 2007, p. 44). Similar to delexicalised verbs that raise many problems are adjectives. Looking at the head noun, *pace* in statement (6) is modified by the adjective *ferocious.* Adjectives labelled as connotative in the corpus tend to be difficult when assigning basic senses compared with nouns. This could be due to their level of abstractness in the data. Nonetheless, this thesis hypothesises that this complexity might be less challenging as the level of abstractness in adjectives varies according to context.

4.3.2. Identifying emotion overlaps

As previously pointed out, linguistic expressions indicate abstract concepts of fear and thus no distinction between concrete and abstract is required. What is required, however, is to identify the emotion concept in the identified lexical units and their linguistic contexts. There are some cases where it is impossible to pinpoint the emotion or the exact meaning of the emotion term connoted in a linguistic context. This makes it difficult to identify an instantiated lexical unit, and could thus lead to confusion of interpretations. Wierzbicka (1986, p. 587) notes that "there are countless emotions that can be perceived as distinct and recognizable." This denotes that abstract emotion concepts are not always in their basic, or primary, form and can evolve, allowing for other sub-categories of complex (non-basic)

emotions to emerge at "junctures of social plans" (Oatley & Johnson-Laird, 1987, p. 29). From a psychological perspective, an emotion is basic only if does not overlap with or contain another emotion category, that is, if it represents a simple and irreducible construct. What is considered problematic, however, is that basic emotions and emerging ones seem to have a strong tendency to co-occur from the integration of basic emotions and cognitive functions, causing what is referred to as an emotion overlap (Ungerer & Schmid, 2006; Pessoa et al. 2002). Wierzbicka (1992a) states:

> Intuitively, it seems clear that for example, words such as *sad, unhappy, distressed, worried, sorry* and *upset*, are mutually related, and that their meanings overlap to a considerable extent. It is also intuitively clear that *sadness, anger,* and *fear* are closer to one another than any of them is to *happiness,* in so far as the former are 'bad' feelings where the latter is a 'good' feeling (Wierzbicka, 1992a, p. 539, emphasis in original).

Plutchik (1980) describes this relation as "combinations" or "mixed emotions" that emerge from basic or key emotions. He states that these "small number of emotions are considered primary, fundamental or basic, and that all other emotions are secondary, derived mixtures, or blends of the primary ones" (Plutchik, 1994, p. 54). These hybridised forms of emotions can be either similar cases such as fear—panic, fear—anxiety, fear—tension, anger—fury, anger—rage or contradicting ones such as fear—relational love. When an emotion overlap occurs in a textual context, it entails a linguistic expression in its state of emotion and it does not assume the exact basic emotion concept; rather, different emotion terms or new emerging ones grow out of primitive ones. To illustrate, consider the emotion concept LOVE. Similar to certain other emotion concepts, according to Shaver et al. (1996), LOVE never seems to come on its own but other emerging emotions come rushing in, such as excitement, trust, security, panic, tension,

disappointment, and could share some traits from these emerging categories of LOVE. To elaborate further, example (7) from the corpus is used to help understand what it is meant by emotion overlap:

(7) Dorsey ran a hand under his chin and the goatee curled around his fingers. He shifted the receiver to the other ear.
"Tell pus butt to ease off my case."
I stood to leave, but his next words *froze* me in place.
"Work with me and I'll give you the girl." (ST3, p. 245).

At this point in the novel, the main character, Tempe (Temperance Brenan), was feeling strong emotions as a result of being under threat from a dangerous group of gangster bikers. When one of the gangsters uttered the above words, Tempe froze. The author uses the word *froze* as a connotative physical experience to describe the character's inability to move. It also entails a lexical unit of a physiological condition that the character was experiencing. Yet, it assumes two possible emotional experiences. In other words, it is not clear whether the meaning of the physiological reaction portrayed is grasped through the basic emotion of fear or surprise. Based on Shaver et al.'s (1992), scholars have arrived at five basic emotions, and these are fear, anger, sadness, happiness and love. Ekman (1999), however, classifies emotions into six basic emotions. His list includes happiness, sadness, fear, surprise, anger and disgust. Plutchik (1980) divides the basic emotions into eight categories. Both, however, consider SURPRISE as one of the basic categories of emotion.[38] The argument about how to distinguish between core emotional terms or core emotions and their sub-levels has long been a subject

[38] Ekman's (1999) classification of primary, or basic, emotions are largely influenced by the naturalism position of emotions that focuses on the biological factors. Ekman assumes that the six emotions are basic due to their equal accessibility to many species other than human beings.

of debate – psychologists and linguists have tried to isolate them by providing lists and categories of basic emotions and sub-categories in order to avoid overlapping effects that usually lead to biased decisions (Ungerer & Schmidt, 2006). Cases where there is an overlap of emotions can create confusion as it becomes challenging to distinguish the dominant emotion concept of the identified lexical unit from the emerging ones. Plutchik (1994, p. 54) emphasises that "one needs to identify the basic emotions and then explain which mixed emotions or blends are derived from them." This aspect remains unanswered in Pragglejaz's MIP. From this perspective, it was necessary to answer the question of how to identify emotion overlaps. In other words, it was necessary to provide a proper understanding of how to elucidate the basic meaning of a lexical unit describing an emotion and its vocabularies and how to distinguish them in a textual-linguistic context. To solve the problem, this study adopted Wierzbicka's (1992a, p. 539) approach of Natural Semantic Metalanguage (NSM) and semantic primitives. The NSM is a methodological procedure is used to describe the semantic attribute of emotions as terms of the expressions of language. Based on the NSM, Wierzbicka (1990) defines the concept of fear as a noun embedded in a situational context:

Fear

X feels something (when X thinks of Y)
sometimes a person thinks something like this:
I don't know what will happen.
something very bad can happen.
I don't want this; I would want to do something.
I don't know if I can do anything.
because of this, this person feels something bad.
X feels like this (Wierzbicka's, 1990, p. 363).

According to Wierzbicka, semantic analysis will assist researchers in establishing basic primitives and performing comparisons between emotion concepts, including basic ones applicable across different cultures. If the researcher was able to clarify any emotion overlap between lexical units of the same or a different group of the emotion concept and establish a meaning for the emerging lexical units (including core ones), then it would be possible to study the meaning of these words appearing in linguistic contexts. This will show both their shared and contrasting features. In an attempt to use Wierzbicka's (1990, p. 363) approach with steps two and three in the MIP to determine whether there is an emotion overlap, with the experience in the previously quoted statement (7), the steps were as follows:

(a) Emotion overlap*:* in this context there is an emotion overlap between fear and surprise.

(b) Semantic primitive of fear: (see above for the basic meaning of fear).

(c) Semantic primitive of surprise is as follows:

Surprise

X feels something
sometimes a person thinks something like this:
something happened now.
I didn't think before now: this will happen.
if I thought about this I would have said: this will not happen.
because of this, this person feels something.
X feels like this (Wierzbicka, 1992a, p. 549).

(d) Dominance of fear in the linguistic context*:* No, the concept of fear is not dominant in this context.

(e) Dominance of surprise in the linguistic context: Yes, the concept of surprise is dominant in this context.

4.3.3 Identifying body-based metonymic expressions

In early metonymy identification studies, Gibbs and Gibbs (1994, p. 322) offered a simple way to determine a metonymic phrase through what they call the "like" test. To do this, the analyst simply explicates the expression by adding the word "like". If there is any sense in the expression at all, then it can be said that it is metaphorical, if not then it is metonymical. For example, for a fine-edged knife' the like phrase becomes *it is like a plain sharp knife.* This expression makes sense and so it is not metonymic, but the *White House is like a white painted building* does not make sense, foregrounding the colour of the paint. By the same token, a hand in *give you a hand* is not like the body part *hand*, and *oval* in the *Oval Office* is not like the rounded curved place but rather it stands for people who work in the office space of the President of the United States.

However, Gibbs and Gibbs's (1994) suggestion cannot be applied to this model. It does not provide information on how to determine lexical units related to bodily actions. Furthermore, the MIP provides a brief explanation about bodily actions. However, it does not explicitly provide a detailed semantic explanation for specific cases of mental access to metonymic expressions that capture the details of reactions accompanying emotions embedded in the context of these expressions. This refined step addresses this limitation. It looks at how the emotion content reflected in a lexical unit of the bodily nature of embodiment (special cases of physiological reactions activated as a result of the emotion structures stored in the brain) can be identified and determined as metonymical.

Kövecses (1986) views emotion-based metonymies as encapsulations of the "conventional beliefs (folk models)" about the effects – physiological or behavioural – of emotions on people (Barcelona, 2000, p. 47). Bodily-based reactions can be physiological, behavioural or expressive, conceiving the emotion as a cognitive arousal experience. According to Bayer et al. (2010), lexical units triggering an emotion as a cognitive arousal occur when the physiological and psychological reactions are activated as a result of stimulating sense organs to a certain point of thought. To illustrate how to identify lexical units of this type, consider example (8):

(8) I stayed to the middle of the platform, my *pulse* louder in my ears than any competing noise (ST2, p. 375).

Referring to the online MED (Rundell, 2009-2020), *pulse* has different senses:

- Sense 1: Usually singular medical: the regular movement of blood as the heart pumps it round the body.

  1a. The rate of someone's pulse, especially the number of movements that you can feel in a minute.

- Sense 2*:* An amount of physical energy, for example electricity, light or sound, that something produces for a short time.
- Sense 3*:* Mainly literary: a sudden strong feeling that affects you for a short time (pulse of)**.**
- Sense 4*:* A strong regular beat in music.
- Sense 5*:* Keep a pulse on something: to follow something closely.

In all the above senses, it can be seen that the contextual meaning of *pulse* in statement (8) is found to exist as a separate concrete sense, which confirms its

conventionality. This means that there will be certain cases where a lexical unit holds a two-fold meaning – a literal and another figurative interpretation at the same time (see Semino, 2008). According to Kövecses' (1990, pp. 70-73) principle, expressions associated with an emotion, whether they "indicate emotion (without directly referring to it)" or not, inform two metonymic principles: "THE PHYSIOLOGICAL EFFECTS OF AN EMOTION STAND FOR THE EMOTION and THE BEHAVIOURAL REACTIONS OF AN EMOTION STAND FOR THE EMOTION" (ibid.). This stipulates that the contextual meaning of the word *pulse* in statement (8) and other examples like *heartbeat,* signify that the embedded physiological reactions or symptoms of the portrayed character are metonymically invoked as a result of an emotional experience and not literally as happens, regardless of the culture, in a medical context (see Yu, 1995). In other words, *pulse* in this linguistic and contextual frame has no medical explanation but is seen as a reaction evoked by an emotion and is determined as being used metonymically. This modification in the MIP step does not mean that it is not suitable for the procedure, but that further steps were required for the sake of the analysis in this study.

4.3.4. Establishing source concepts

The premises of MIP methodology are clearly designed to identify linguistic expressions, which remains problematic. On the one hand, as pointed out by Steen et al. (2008) and Semino (2008), the MIP does not suggest the existence of conceptual metaphors. On the other hand, it does not have any steps to identify linguistic expressions to aim at identifying their concepts or to establish conceptual mappings across different languages and cultures. It is clear that the

MIP is not designed for CMT and it is not usually used as a tool to determine the conceptual proximity of lexical units, specifically the extent to which the identified lexical units represent the category of the conceptual domain. For example, the emotion concept represents the category indicated by particular lexemes, such as fear in the present analysis. In cross-linguistic research, scholars rely on an introspective approach that focuses on everyday common terms to reach an unbiased establishing of culturally defined conceptual structures. To obtain an inventory of conceptual structures, Lakoff and Johnson (1980a) suggest a three-step methodology: identifying source domains, classifying metaphoric expressions to their source domains, and, finally, extracting the underlying conceptual mapping. To be able to achieve this, the MIP was extended with the semantic approach. The semantic approach identifies the source domains according to a metaphorical expression relating to a specific semantic field.

According to Lakoff and Johnson (1980a), knowledge is the key; people can infer certain metaphoric inferences about domains when they read or listen to metaphoric expressions. In other words, if it is possible to understand basic and contextual meanings from specific entities that both the target and source domains hold, then this could help to infer underlying concepts (Semino, 2008). This requires the application of the semantic attributes used in Pragglejaz's (2007) three-step procedure: contextual meaning, basic meaning and contextual versus basic meaning. To illustrate the point, consider Semino's (2008) analysis of the following expression in Lakoff (1993, p. 223):

(9) "He's never let anyone *get* in his way" (Semino, 2008, emphasis in original).

The basic and contextual meaning of the lexical unit *"get"* is as follows:

(a) Contextual meaning: stop, prevent.

(b) Basic meaning*:* to obtain, receive, or be given something.

(c) Contextual versus basic meaning*:* basic meaning contrasts with contextual meaning.

Metaphorically used? Yes.

According to Semino (2008), if we consider the basic meaning of the verb *"get"* as an entity of the source domain JOURNEY and its contextual meaning as an entity of the target domain LIFE, then it becomes easy to infer the metaphoric concept as LIFE IS A JOURNEY. Semino's conceptual formulation proposal was the first to contribute to the MIP. The following discussion is an attempt to use the semantic field integrated with the MIP with the lexeme *pulse* in the previously quoted expression in (8):

Pulse

(a) Contextual meaning*:* An increase in blood pressure as a result of an emotion experience.

(b) Basic meaning*:* the regular movement of blood as the heart pumps it round the body.

(c) Contextual versus basic meaning*:* as explained in the section above, the physiological cognitive arousals evoked by emotions contrast with regular physiological reactions evoked by other reasons.

Metaphorically used? Yes.

Through the above basic and contextual meanings, it is possible to gain access to a cross-mapping where the basic meaning of *pulse* as an entity of the source domain INCREASE IN PULSE AND BLOOD PRESSURE corresponds to the

contextual meaning as an entity of the target domain FEAR, an emotion state. The underlying conceptual metonymy in this case will be INCREASE IN PULSE AND BLOOD PRESSURE IS FEAR. This technique, however, does not always seem sufficient for inferring concepts and it might give rise to problems. On the one hand, not all metaphoric or metonymic views contain a straightforward relationship between components that map a specific entity in a source domain onto another in a target, and, therefore, might contain semantic complexity. To exemplify, consider the following lexical units in the italicised noun phrase from the corpus:

(10) As Pascal shoved me down the hall, I knew with certainty I would not leave that house alive. My brain opted for *furious action* (ST3, p. 363).

Example (10) has a noun in *action* that can be referred to as an actual or intellectual entity that is easily assigned to the conceptual domain of process or movement. Adjectives such as *furious*, on the other hand, are seen as ambiguous and less precise. They denote specific properties of entities, which allows them to hold both literal and metaphoric status. This makes it, to some extent, difficult to identify which domain they belong to. The situation with *furious,* for example, can have a cross-mapping where a very fast action corresponds to effort or strength. What is interesting though is that the idea understood from *furious* has a direct relationship with the idea from the metaphorically identified lexical unit *action.* On this account, it can be said that the concept of *furious* is similar to the concept evoked by *action*. This means that the underlying concept of *furious* does not need to be related to domains of effort or strength only but can also be related to other domains such as those of emotion reaction. In order to address the limitations of the semantic approach, this study uses a reference-based method that takes

Kövecses' (1990, pp. 74-82, 2003, p. 23) lexical approach as a reference point for establishing source domains. In contrast to Wierzbicka's intuition-based methodology, Kövecses' (1990) lexical approach is an empirical approach that analyses conventionalised expressions of emotions from the cognitive perspective based on language. He believes that the lexicon of a particular language is a reflection of its conceptual system in thought (Kövecses,1990). Kövecses' model allows the researcher to navigate through complex structural systems of emotional concepts through the different types of conventional expressions. His approach runs contrary to other alternative "one-sided attempts" to theorise emotions (Kövecses, 2012, p. 5). These alternative cognitive approaches, e.g., questionnaires, were criticised for using biased methods that distort the experience of any given emotion (ibid.). Kövecses' method facilitates the identification of the source domain conceptual structures for the identified lexemes in the STs. It also assists with identifying concepts for the expressions identified in the TTs and it establishes new concepts through the originally identified concepts.

The abovementioned two methods create a multi-purpose knowledge base for the source domains in the conceptual representations of the source corpus data. These are then extended with existing evidence of source domains in the conceptual representations of the data presented in the STs. The two methods not only assist with establishing SL concepts but they are also new conceptual systems for the TL. However, it must be noted that the two methods adopted represent cognitive approaches, and there will always be divergent hypotheses about identifying conceptual domains among researchers, and this could lead, to some extent, to diverging conclusions.

4.3.5. Classifying linguistic expressions

To qualify the data for quantitative analysis, a step to classify each expression under its source domain was required. This step was approached based on Lakoff and Johnson's (1980a) hypothesis that metaphor is a hierarchical process based on two major conceptual types: generic-level and specific-level concepts. The study also used Kövecses' (1990, pp. 74-82, 2003, p. 23) comprehensive set of fear concepts as reference points that can be treated as contextual informants for the categorisation task of the semantically defined vocabulary of fear (see section 4.3.1). Both approaches allowed the researcher to access knowledge relating to the hierarchical class of the source domains and to extend it with new levels. They also acted as a foundation for illustrating the contrast between the source domains presented as special cases of fear. Based on this, a nontrivial coherent classification was established, clustered and categorised into five distinct source domain conceptual groups for fear, which is illustrated and exemplified from the corpus as follows:

1. Generic level: where a universal source domain is directly mapped onto a general target. For example, CONTAINER in EMOTIONS ARE CONTAINERS. In Kövecses' (2002, p. 39) sense, generic types are "characterised by extremely skeletal structures."
2. Specific level: an elaborative case of source domain constructed from the generic-level type. For example, the source domain in FEAR IS A LOCATION is an elaborative case from EMOTIONS ARE CONTAINERS where correspondence is realised in expressions like *They lived in fear*, where *fear* is the emotional location and *they* is the entity in the location. Based on these two major levels, the following metaphoric and metonymic

types, their source domains and the sub-types identified in the corpus are categorised as follows:

a. Physiological source domains: are formed by means of a well-grounded (rational) physiological response. With it we conceptualise abstract emotions in terms of concrete physiological experiences. It appeared in the corpus in two sub-types:

   i. External: involuntary bodily reactions that are mostly visible and may be expressed by literal expressions. For example, PHYSICAL AGITATION is realised in expressions such as *I've been shaking like this for hours* or turning white in BLOOD LEAVES THE FACE realised in expressions like *I felt the colour drain out of my face*.

   ii. Internal: invisible bodily reactions of the autonomic nervous system. They usually take place inside the body and happen with unconscious control. For example, heartbeats in the INCREASE IN PULSE AND HEART RATE are realised in expressions like *my heart kicked into fourth gear*.

b. Cognitive source domains have an ontological correspondence with the target. The source in cognitive metaphors is formed by means of irrational physiological reactions and it has an objective association with the target in the cultural type. For example, the OPPONENT IN A STRUGGLE metaphor is realised in expressions such as *I am seized with trepidation.* In the expression, the person experiencing the reaction is losing control over fear. The physical struggle seen in *seized* between the person experiencing the reaction and the opponent corresponds to a

struggle for emotional control. Even though the target looks physiologically superior, the focus is on the perception of one's own experience, which means that the association between fear and the opponent is one of a cognitive connotation.

c. Behavioural source domains: are formed by means of a behavioural reaction, classified into two sub-types:
    i. Physical behaviour: as in run, jump, leap. For example, STARTLE is realised in expressions like *I leaped to my feet.*
    ii. Non-verbal vocal behaviour: as in laughing, crying, howling. For example, SCREAMING is realised in expressions like *I screamed once in bewildered terror*.
d. Expressive source domains: are formed by means of voluntary reactions such as facial expressions. For example, WAYS OF LOOKING is realised in expressions such as *His eyes were huge, wide with panic*.
e. Cultural source domains: are culturally mapped onto the target by means of cultural factors. For example, GOOD IS LIGHT is realised in expressions like *She was beaming with happiness*. This metaphor maps the source LIGHT onto the target GOOD so that light consists in all goodness and positive knowledge (see Lakoff and Johnson, 1980a; Lakoff & Johnson, 1990; Kövecses, 1991).

Under each of the above five types**,** a variety of source domain concepts are further distinguished for complex reasoning, reflecting all the linguistic data that refer to each category. This was organised and clustered in MAXQDA's coding system as shown in Figure 13.

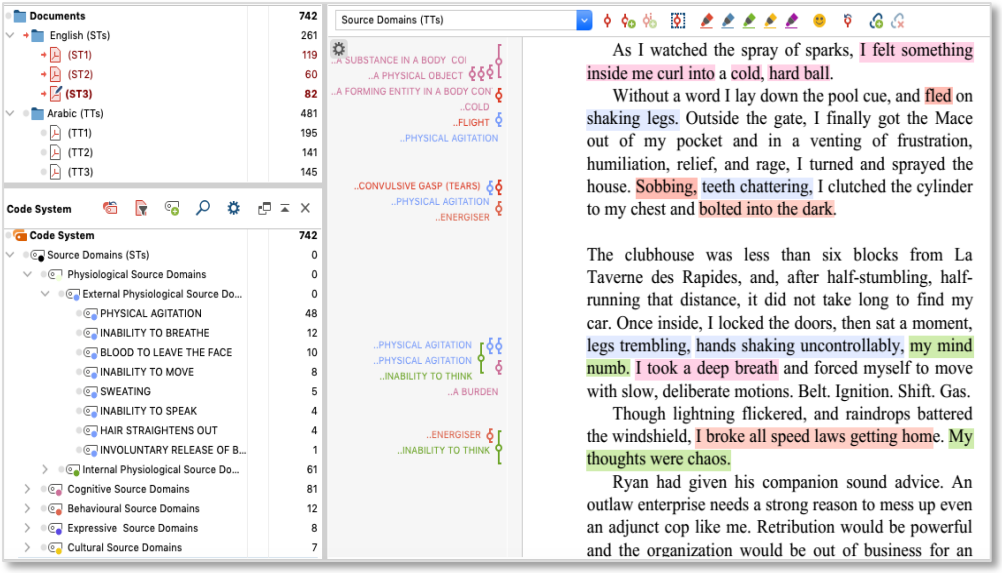


Figure 13. Classifying the STs' data by source domains via the coding system.

The left hand box in Figure 13 shows the code system window, a display that allows the construction of a hierarchical structure of source domains identified in the ST corpus. For this study, this feature was used to group the segments (linguistic expressions) into coherent groups representing the source domains. Each code consists of mother codes of source domains which, with some domains, like THE BODY IS A CONTAINER FOR FEAR, are further broken down into special cases of sub-codes of source domains. In MAXQDA, each group of codes and sub-codes is assigned a colour. These highlighters allow the linguistic expression to be identified with a colour similar to the colour code of the underlying source domain.

It is worth mentioning that the software tool makes sure that no code assigns the same segment more than once, unless the researcher codes them with a concept different from the one already used. This feature avoids overlaps within a single code of the same source domain. It is important to mention that the above classification is neither fixed nor mutually exclusive. It is, therefore, not expected

to provide an exhaustive account, but further/different levels could be classified depending on the nature of the research context. The classification of source domains and their sub-types was sufficiently complex to allow for a detailed illustration of the contrast between the source domains of the linguistic expression in the corpus. Using this method, the researcher was able to group the identified and conceptually labelled expressions in all ST corpora with their underlying concepts. Figure 14 shows some of the linguistic expressions coded under the physiological source domains from all three STs.



Document ...	Document name	Code	Beginning	End	Preview
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	326: 2003	326: 20...	I flinched away from them
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	232: 309	232: 317	I gasped.
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	333: 2319	333: 23...	Bree shuddered
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	152: 1878	152: 19...	cringed away from the knife
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	334: 1192	334: 12...	She shuddered again
English (STs)	(ST2)	Source Domains (STs)\ Physiological ...	553: 178	553: 232	I was trembling when Scott showed me into the kitchen
English (STs)	(ST2)	Source Domains (STs)\ Physiological ...	356: 391	357: 40	and trembling like a woman on her way to the scaffold.
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	333: 2181	333: 22...	"I don't know," she said, flinching again
English (STs)	(ST3)	Source Domains (STs)\ Physiological ...	419: 584	419: 658	on the left my throat tightened and my breath came in short, q
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	205: 1005	205: 1115	His face had turned so white that I had a hard time finishing.
English (STs)	(ST3)	Source Domains (STs)\ Physiological ...	164: 1237	164: 12...	When I turned his face looked eerily pale,
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	93: 274	93: 401	Rosalie looked at me suddenly, as if she'd forgotten I was ther
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	232: 266	232: 308	the blood drained from my face. "Charlie?"
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	152: 1464	152: 15...	found myself moving in the frustrating slow motion of dreamers
English (STs)	(ST2)	Source Domains (STs)\ Physiological ...	356: 376	356: 389	I was sweating
English (STs)	(ST1)	Source Domains (STs)\ Physiological ...	320: 125	320: 180	My own heartbeat should have been enough to drown it out
English (STs)	(ST2)	Source Domains (STs)\ Physiological ...	198: 42	198: 70	trying to slow my heart rate
English (STs)	(ST2)	Source Domains (STs)\ Physiological ...	1493: 19	1493: 40	My heart in my mouth,

Figure 14. A screenshot of coded segments under the physiological source domains.

From left to right, the first column in Figure 14 is the document group. The second column lists the document name within the code on the third column, which represents the source domain. The two columns that follow are the contextual position of the characters where the coded segment (linguistic expression) begins and ends. The sixth column in the table shows a preview of these segments. The most challenging task in this step was categorising mixed expressions under compound underlying conceptual structures. In many cases, it was often unclear whether an expression related to a single conceptual metonymy with its own distinctive mapping, or a mixed expression with a built-in structure. During the

initial analysis, similar cases caused massive confusion and led to misleading categorising decisions. This confusion is likely due to the nature of the domains used by the metaphors and metonymies (Kövecses, 2013, p. 78). To illustrate this connection, consider examples (11-a, b and c) from Kövecses' (2002):

(11)

a. FEAR IS COLDNESS and LACK OF BODY HEAT FOR FEAR.
b. ANGER IS HEAT and BODY HEAT FOR ANGER.
c. LOVE IS CLOSENESS and PHYSICAL (BODILY) CLOSENESS FOR LOVE (Kövecses, 2002, p. 4).

In the above concepts, Kövecses explains the crucial link between metaphor and metonymy. In (11-a), the metaphor FEAR IS COLDNESS is based on LACK OF BODY HEAT FOR FEAR. The same applies for the other two in (11-b and c). It must be noted that this interaction, however, is not seen in all metaphors of the type A IS B, unless, as stated by Kövecses (2013, p. 76), a partial structure of the B taken by A carries a 'metonymic character' where structures of A are activated to conceptualise part of the structures of B. As a consequence, this gives rise to A PART OF B FOR THE WHOLE OF B and A PART OF A FOR THE WHOLE OF A metonymies. Kövecses (1987) also postulates that the emotion-context mapping reveals a systematic interactional structure mentally evoked by means of the two generic-metonymies EFFECT FOR CAUSE and its specific mapping of EFFECT FOR CAUSE FOR THE EMOTION (Lakoff & Kövecses 1987). To illustrate from the corpus, consider example (12):

(12) The *icy splinters twisted uncomfortably in my stomach* (ST1, p. 78).

Statement (12) above represents a case of a mixed expression. In Kövecses (1990), the source domain for *icy* belongs to DROP IN BODY TEMPERATURE IS FEAR, the word *splinters* relates to FEAR IS A SHARP OBJECT and the verb

twisted is reasoned with FEAR IS A FORMING ENTITY. The remaining part of the phrasal verb can be seen as a manifestation conceptualised under NERVOUSNESS IN THE STOMACH IS FEAR, where the latter is invoked by the previous three concepts. The complexity of the physiological types of expressions is formulated in a particular extralinguistic situation, and captured in different emotional realisations in a linguistic context. Yet, in this type of metaphorical mechanism, the source domain constitutes sufficiently semantic structural components of independent and designated metonymic characters. Thus, the mapping between the source and the target is seen as partial.

4.3.6. Identifying schematic concepts in STs

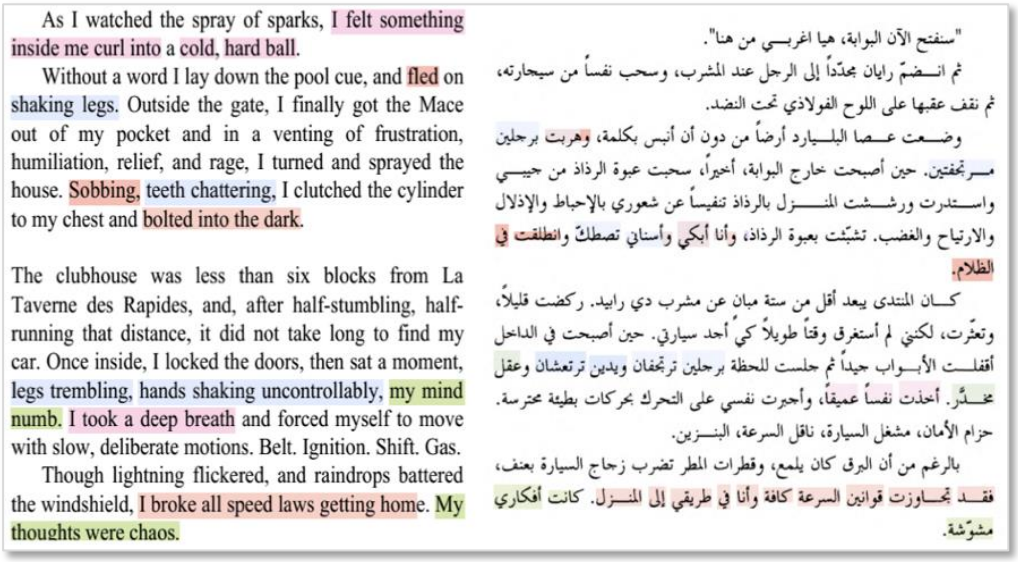
As already mentioned, mappings do not have an inherent structure on their own. Rather, they are realised with different types of repetitive schematic patterns (Lakoff & Johnson, 1980a, 1999). Gibbs (1993, p. 68) states that Lakoff and Johnson's (1980a) example of the idiom *"blow your stack"* is not only motivated by anger but also by a schematised image which implies pressure that releases the substance upwards. This step is designed to identify the schematic structures of the concept identified. To illustrate from the corpus, the image of the blood *draining out* is structured with a combination of two schematic structures: MOVEMENT and OUT schemas. In this deep level of schemas, an orientational pattern OUTSIDE is used to determine the specific structure of the rich image it contains. Images such as *froze in place* and *stared in horror* are also schematised collocations lexicalised by the preposition *in*, which reveals a structural pattern formed by the recurrent use of CONTAINER schematic structures.

4.3.7. Determining the metaphoricity and metonymicity in TTs

The MIP is limited with respect to a translational point which is important for this thesis. The procedure does not have clear steps that can be used to identify linguistic data in the context of Translation Studies. There are no clear methods to identify correspondences in the translated texts, and thus, there are no methods that can be employed cross-culturally in metaphor and metonymy in translation research**.** This step is proposed because of the translation requirements of this study. The aim is to identify the translation techniques for linguistic expressions and their concepts in TTs. This started with an aligning procedure that identified linguistic expressions with correspondences, usually paragraphs, words or sentences. It was then determined whether lexical units or phrases in the TL corresponded to the units of the linguistic expressions in the SL.

As for the question of whether the units determined in the ST corresponded to the units identified in the TT, it appears that the analysis of the former was similar to the analysis of the latter. This step is usually performed for credibility purposes. Further, the analysis provides the linguistic data with back translations. This will offer further comparability with the STs. The software adopted for this research does not have a built-in aligning feature for the implementation of the aligning procedure. The first attempt, however, used AntConc 3.5.8 software developed by Anthony (2005), but, like most programs, it comes with limitations. This includes machine, language and accessibility requirements. AntConc reads Arabic texts and no problems were observed with the right-to-left direction. However, the program requires encoded texts in UTF-8 and Unicode formats. It also behaves unexpectedly with some text words, as it "does not normalize diacritics" and does

not recognise all Arabic alphabets such as “Hamza” (Alfaifi & Atwell, 2016, p. 8). Moreover, technical issues, editing concerns and other issues can arise during the text alignment process using concordance tools. It was because of such issues the ST linguistic expressions were manually aligned with their translations using the interact, as shown in Figure 15.



As I watched the spray of sparks, I felt something inside me curl into a cold, hard ball.

Without a word I lay down the pool cue, and fled on shaking legs. Outside the gate, I finally got the Mace out of my pocket and in a venting of frustration, humiliation, relief, and rage, I turned and sprayed the house. Sobbing, teeth chattering, I clutched the cylinder to my chest and bolted into the dark.

The clubhouse was less than six blocks from La Taverne des Rapides, and, after half-stumbling, half-running that distance, it did not take long to find my car. Once inside, I locked the doors, then sat a moment, legs trembling, hands shaking uncontrollably, my mind numb. I took a deep breath and forced myself to move with slow, deliberate motions. Belt. Ignition. Shift. Gas.

Though lightning flickered, and raindrops battered the windshield, I broke all speed laws getting home. My thoughts were chaos.

"سنفتح الآن البوابة، هيا اغربـي من هنا".

ثم انـضمّ رايان مجدّداً إلى الرجل عند المشرب، وسحب نفساً من سيجارته، ثم نقف عقبها على اللوح الفولاذي تحت النضد.

وضـعت عـصا البلـيارد أرضاً من دون أن أنبس بكلمة، وهربت برجلين مـرتجفتين. حين أصبحت خارج البوابة، أخيراً، سحبت عبوة الرذاذ من جيبـي واسـتدرت ورشـشت المنـــزل بالرذاذ تنفيساً عن شعوري بالإحباط والإذلال والارتياح والغضب. تشبّثت بعبوة الرذاذ، وأنا أبكي وأسناني تصطكّ وانطلقت في الظلام.

كـان المنتدى يبعد أقل من ستة مبان عن مشرب دي رابيد. ركضت قليلاً، وتعثّرت، لكنني لم أستغرق وقتاً طويلاً كي أجد سيارتي. حين أصبحت في الداخل أقفلـت الأبـواب جيداً ثم جلست للحظة برجلين ترتجفان وبدين ترتعشان وعقل مخـدَّر. أخذت نفساً عميقاً، وأجبرت نفسي على التحرك بحركات بطيئة محترسة. حزام الأمان، مشغل السيارة، ناقل السرعة، البنـزين.

بالرغم من أن البرق كان يلمع، وقطرات المطر تضرب زجاج السيارة بعنف، فقـد تجـاوزت قوانين السرعة كافة وأنا في طريقي إلى المنـزل. كانت أفكاري مشوّشة.

Figure 15. The aligning of (ST3) and (TT3) in MAXQDA’s document window.

Figure 15 shows ST3 on the left side with its target on the right in a second document browser in MAXQDA. The lines of the two texts are aligned, without breaking the texts into lines. This process helped to match the coded linguistic expressions in all TTs and their originals simultaneously without any problems related to sentence separation and other technical issues. For example, WordSmith Tools 5.0 breaks down a whole sentence that contains a question mark into two sentences. This happens because of the sentence boundary programming, which can lead to inaccurate line-to-line correlations. Every Arabic corresponding expression was then coded under the source domain it belonged to and it was listed in the coding system under the TT source domains. After the STs’ linguistic data

had been classified into their concepts, a similar step to that shown in Figure 13 was repeated with the data identified in the TT corpus. Thus, the identified data in the TTs were assigned to the semantic field that referred to the source domains, and the concepts to which these linguistic expressions related were then examined. This is illustrated in Figure 16.

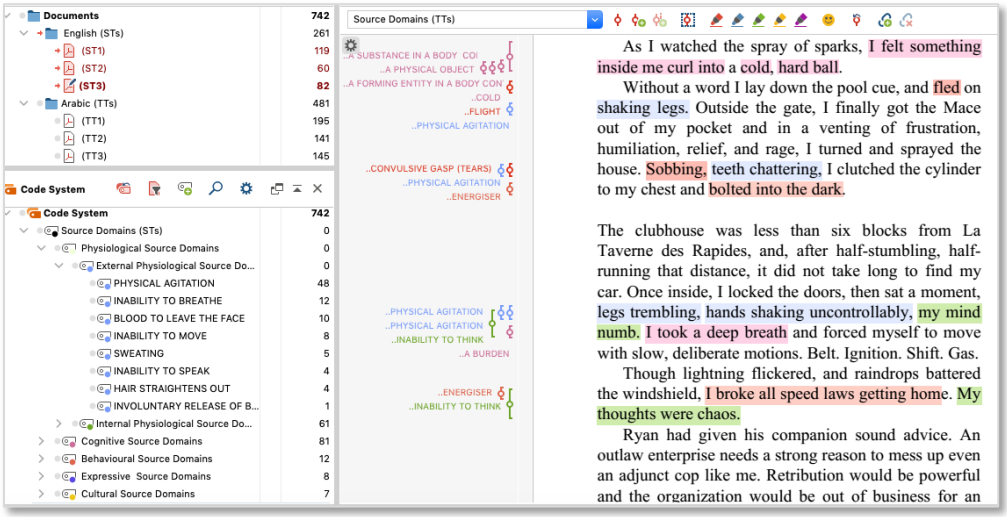


Figure 16. Classifying process of the (TT3) data via the coding system.

Figure 16 shows the classification process of the translated corresponding expressions in TT3 under the coded source domains they belong to in the coding system. The classified data in all TTs were examined and assigned to the semantic field that refers to the source domains and the concepts to which these linguistic expressions relate.

4.3.8. Identifying schematic concepts in TTs

Image-schemas are cognitive units, systematically and hierarchically structured to support the comprehension and acquisition of our knowledge. The choice of translation possibilities in this research draws on based on Lakoff and Johnson's (1980) and Johnson's (1987) schema hypothesis and takes image-schema as an

additional but also significant indicator for the translation analysis of metaphors and metonymies. Dickins (2005, p. 247) states that "metaphorical schemata raise another issue" in translation decisions. This step was added to address the idea of embodied image-schemas and their transformation in the cognitive functioning of fear expressed metaphorically and metonymically in the TL. More to the point, this step addresses translation shifts by looking at how an emotion concept that is structured by its image-schemas is reproduced in the TL.

Arguments about the continuity of some generic-level emotion concepts like EMOTIONS ARE CONTAINERS is likely to remain preserved in a conceptual mapping process to the TL. However, difficulties begin to arise when culturally defined aspects limited to a certain culture are used to metaphorically or metonymically structure these concepts. This is due to conventionality and the cultural variation of metaphors (Lakoff & Johnson, 1999, p. 202). Cultural properties, however, are not exclusive to concepts but also extend to the schematic structures, and, hence, they are considered as "important carriers of cultural imagination" (Maalej, 2007, p. 102).

Despite this, the universality of some image-schemas like FORCE and CONTAINER can still be localised in cultures that do not have similar source-domain structures. For example, seeing a metaphor like FEAR IS A CONTAINER as universal in both English and Arabic does not necessarily mean that both languages resemble each other in the way the emotion is metaphorically and metonymically expressed and schematically structured. Another explanation is that colligations such as *stand up* and *grow up* are language specific combinations and there are some words in English that colligate differently than they do in

Arabic. The centrality of human spatial concepts such as the IN-OUT orientation in sensory, motor and everyday functioning is universal between languages. However, these skeletal concepts do not form similar colligations between languages. For example, the corpus data identified intensive schematic use of OUT in English forms such as *choked out* and *drain out* which are not common in Arabic. To simplify, the word *choked* colligates with the adverbial preposition *out*, which literally translates as **اختنق خارج** but linguistically means only **اختنق**/*choked*. This means that the colligation of *choked* with *out* in this context cannot form a colligate in Arabic. Hence, it cannot be rendered without any cultural adaptation.

4.3.9. Identifying translation procedures

Up to this point, eight steps have been used to identify metaphors and metonymies expressing fear in order to investigate how they were translated in popular fiction texts. This final step examines the potential translations in the Arabic texts. The core typology used to analyse the procedures follows a specific structure to refer to the type of conceptual mapping processed between the source and target identified data. The translation solutions were classified according to a new typology, which uses Schmidt's (2012) translation typology as a reference point. Furthermore, the typology takes Lakoff and Johnson's (1980a) CMT approach to translation and Johnson's (1987) embodied schema hypothesis. Combining elements of all, the following typology was proposed:

1. (CM → CM) or (CMN → CMN): The metaphor or metonymy corresponds to the ST metaphor or metonymy linguistically and conceptually. This includes the following:

1. Same expression of the same concept.
2. Same expression of the same concept, with an addition.
3. Same expression of the same concept, with an omission.
4. Different expression of the same concept, with an addition.
5. Different expression of the same concept, with a different form of image-schematic concept.

2. (r-im→ I-S): A rich image is translated by an image-schematic concept of the same conceptual mapping (also referred to as abstracting).

3. (I-S → r-im): An image-schematic concept is concretised by using a rich image domain of the same conceptual mapping (also referred to as concretising).

4. The metaphor or metonymy does not correspond to the ST metaphor or metonymy linguistically and conceptually. This involves the following

    a. (CM → CM') or (CMN → CMN'): A metaphoric or metonymic expression is translated by a different expression with a parallel sequence of different mapping.

    b. (CMN → CM) or (CM → CMN): A metaphoric or metonymic expression is shifted to a different metaphoric or metonymic expression with a divergent sequence of different mapping.

5. ((CM → (CM+(CMN)) or ((CMN → (CM+(CMN)): A single metaphoric or metonymic expression is translated by a mixed metaphoric or metonymic expression with an overlapping conceptual mapping to the source.

6. (CM→ CM-P) or (CMN→CMN-P): A metaphoric or metonymic expression is translated by a different metaphoric or metonymic expression with a similar meaning conceptualised with a partial mapping to that in the source.
7. (CM → non-CM) or (CMN → non-CMN): A metaphoric or metonymic expression is translated by a non-metaphoric or non-metonymic expression (also known as a paraphrase).
8. (CM or CMN → Ø): A metaphoric or metonymic expression is translated by a zero-element (also known as deletion, zero-translation, demetaphorisation and demetonymisation).
9. (Ø → CM or CMN): A zero-element in the ST is translated by a metaphoric or metonymic expression underlying a conceptual mapping (also referred to as metaphorisation or metonymisation).

The above typology uses CM to refer to the higher conceptual level for metaphor. However, no abbreviation has been assigned to refer to conceptual metonymy in cognitive linguistics literature. To distinguish between the two, this study proposes the use of CMN to refer to the higher conceptual level of metonymy, which can also be used in future metonymy research. This thesis uses further specific symbols and acronyms as an indication of the type of mapping processed between the ST and TT. For example, the apostrophe in (CM → CM') or (CMN → CMN') is used to indicate a different mapping condition with a sequential ordering of mapping between the ST and TT. The short forms (-P), (I-S), (rim) are used to imply specific understanding of rendition. While (-P) implies that the TT expression is conceptualised with a partial mapping to that used in the ST, (I-S)

refers to the image-schematic representation and (rim) refers to the rich image used to express the concept. Furthermore, the symbol (Ø) signals that the expression in the target has been omitted. The arrow in this context represents the sequential manner of mapping from the ST to the TT. The above translation typologies are used to approach the analysis of fear metaphors and metonymies translation procedures applied to determine the presence or absence of Arabic counterparts in the TTs.

The above points had to be considered in the Pragglejaz MIP (2007) in order to propose a refined identification procedure that could be applied to the data of this research. This will allow theoretical findings about the translation procedures that render English metaphoric and metonymic expressions underlying an emotion concept into Arabic in popular fiction text. These findings can then be applied in similar research in the context of CMT. These extended steps are as follows:

1. Read thoroughly to establish a general understanding of all texts.
2. Determine the TD-related lexical units in STs.
3. Determine the existence of any emotion overlaps between emotion terms. Some linguistic expressions do not assume the exact basic emotion but involve different emotion terms or new emerging ones that usually evolve from a primitive one. This can be performed by:
    (a) Identifying the semantic primitives of the emotion unit.
4. Determine the metaphoricity and metonymicity of the identified emotion-related and bodily-based lexical units in the STs by:

(b) Establishing the meaning in context, taking into account the surrounding lines of the linguistic context, i.e., what comes before and after the lexeme.

(c) Determining the basic meaning of units as presented and explained by the Pragglejaz Group (2007, p. 3):

- More concrete: what they evoke is easier to imagine, see, hear, feel, smell and taste.
- Related to bodily action.
- For bodily-based lexemes, decide whether the word portrays the emotion as an arousal experience (added).
- More precise (as opposed to vague), or
- Historically older.

(d) Decide if the basic meaning contrasts with the contextual meaning. If yes, mark the lexical unit as metaphorical or metonymical.

5. Establish the conceptual structures of linguistic expressions in STs.
6. Identify the image-schematic concept.
7. Identify the translation by manually aligning the TT with its counterpart in the ST.
8. Determine whether the lexical unit in the TT corresponds to the unit in the ST.
9. Determine whether the TT expression is metaphorical or metonymical, and what concept it realises.
10. Determine whether the image-schematic structures in the TT correspond to their counterparts in the ST.
11. Identify translation procedures.

4.4. Overview of Issues Encountered in the Identification Process

Table 4 summarises the most frequently encountered problems during the identification analysis of fear-related metaphoric and metonymic expressions in the context of the ST corpus.

Issues	Example	ST	Page
1. Identifying the source domain with words.	I was numb, horrified, *deathly* afraid.	ST1	175
2. The relationship between the determined words, concepts and source domains.	*Pain crackled down my spine and lodged in my stomach.*	ST1	296
3. The type of source domain. Cases of expressions that can be viewed as literal physiological conditions and irrational physiological reactions. In such cases, one may wonder if the image entails a physiological reaction of an emotion or a cognitive synthetic feeling of oneself as a response to a certain situation.	I felt a *constriction in my chest.*	ST3	359
4. Nature of boundaries between source domains. Is it a metaphor, metonymy or metonymy-motivated metaphor (built-in) source domain?	*Icy splinters twisted uncomfortably in my stomach.*	ST1	78
5. The existence of an emotion overlap. Is it a basic emotion or emerging one?	*Panicked now, I cast desperate looks up and down the alley.*	ST3	374
6. The metaphoric analysis of non-fixed adjectives.	*My brain opted for furious action.*	ST3	376
7. The metaphoric analysis of non-fixed verbs.	*Fear would make the end worse for him.*	ST1	117
8. The overlap of source domains. In the example, is the reaction reasoned as a cognitive domain metaphor, as a physiological metonymy, or both?	She came back for me, I *choked out.*	ST1	47
9. The analysis of extended metaphors appearing and spreading along a cline that can belong to the same source domain.	The *icy fear pooled in my stomach.*	ST1	302
10. Cases of bodily-based expressions that can be viewed as both literal, as in physiological conditions and metonymical physiological reactions evoked as the result of an emotion.	*Heart rate goes up* *His face had turned so white that I had a hard time finishing.*	ST3 ST1	282 93
11. Issues related to identifying underlying schema. While some metaphors have clear recurrent pattern in experience such as CONTAINER or PATH, others like body-based metonymies do not.	My *mouth is completely dry.*	ST2	597

Table 4. Problems encountered during the identification process.

4.5. Quantitative Analysis

One of the advantages offered by corpus-based methodology is the ability to count the results. This is to say, it has the ability to provide frequencies and to compare results. The above qualitative data collection was, thus, followed by a quantitative investigation of the raw frequencies of the findings. A simple statistical analysis was performed on the numeric information relating to the linguistic data and their source domains identified in the corpus via MAXQDA tools. This analytical tool will assist with quantifying the results for fear source domains in the ST corpus. The initial quantifying process of the linguistic data was not straightforward, as some of the data could denote different source domains. In order to count these expressions, it was necessary to avoid any kind of conceptual overlap. Therefore, the expressions were separated, highlighted and counted more than once. To illustrate, consider example (13):

(13)

a. Once inside, I locked the doors, then sat a moment, *legs trembling***,** hands shaking uncontrollably, my mind numb (ST3, p. 282).
b. Once inside, I locked the doors, then sat a moment, legs trembling, *hands shaking uncontrollably*, my mind numb (ST3, p. 282).
c. Once inside, I locked the doors, then sat a moment, legs trembling, hands shaking uncontrollably, *my mind numb* (ST3, p. 282).

Example (13) is an example of an extended expression, a rhetorical technique that explains the idea of a concept appearing in the entire text. As noted by Werth (1994), these types of expressions run through the text with small successive single or a variety of sets of lexical units, representing different types of expressions such as similes, phrasal verbs, fixed collocations. This metaphorical undercurrent, according to Freeman (2009, p. 8), "brings structural unity to a

literary text and contributes to the emergence of a text's theme." The example here explains the idea of fear through a triplet of occurrences of linguistics expressions. Hence, was counted three times as *legs trembling* in (13-a), *hands shaking uncontrollably* in (13-b), and *my mind numb* in (13-c). The source domain for (13-a, b) is PHYSICAL AGITATION whereas (13-c) belongs to INABILITY TO THINK. Figure 17 shows how the expressions were coded separately, with the codes appearing on the left.

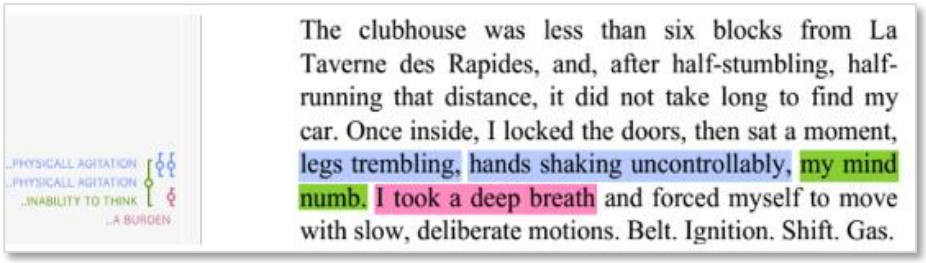


Figure 17. An extended expression coded under different source domains.

On the other hand, as already pointed out, many of the underlying source domains and their expressions can be candidates for Lakoff and Johnson's (1980a) "hierarchical structures", which allow more specific conceptual mappings to be included under more general ones. An example of this is the inclusive relationship between BODY IS A CONTAINER FOR FEAR, FEAR IS A SUBSTANCE IN A CONTAINER and FEAR IS A FLUID IN A BODY CONTAINER. Though the body is a container for the emotion, and it is a substance in a container, expressions of FEAR IS A FLUID IN A BODY CONTAINER like *fear began to ooze down my spine* were counted as expressions of the latter, taking into account the hierarchical relationship between all three levels of conceptual mappings. In order to investigate the frequencies of translation procedures identified, they were quantitatively evaluated based on their prominence in the TTs using the same analytical tools in MAXQDA. All of the identified translated expressions were

then classified and coded under the translation solutions employed, taking into account all five types of source domains, as shown in Figure 18.

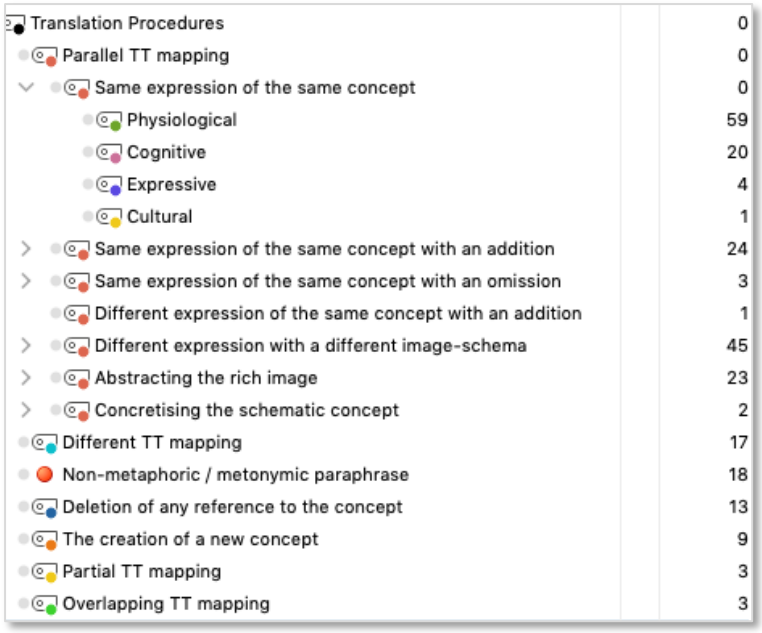


Figure 18. Classifying linguistic data into translation procedures.

Figure 18 displays a hierarchical organisation of the translation procedures starting from the most frequently used to the least. Each code consists of mother codes for procedures, in which some procedures, like parallel TT mapping, are further broken down into special cases of sub-codes of translation techniques. Each group of codes and sub-codes is further broken down into five codes that include the five types of FEAR source domains. This step used a similar coding method as that used in the coding process of source domains to assign the Arabic coding segments (translated linguistic expressions) under the translation procedures employed. The quantitative analysis of procedures facilitated an examination of the problematic areas of translating FEAR source domains and their expressions into Arabic. Implementing a quantitative enquiry in a mixed research design not only reduces subjectivity but also makes the patterns stand out more comprehensively. The emerging results from the quantitative stage of research may be helpful in the

interpretation of the function of English source domains in terms of their occurrences in the popular fiction genre of the texts adopted for this study. The numeric analysis may also assist the qualitative interpretation of the translation procedures identified for the TTs as it shows the types of mappings identified in both languages. This will lead to more reliable results concerning how metaphors and metonymies of fear are rendered in the TL. Thus, it is expected that integrating both methods will contribute to robust results and detailed responses to the research questions.

Despite its time-consuming nature, implementing a qualitative inquiry with mixed-methods research design allows researchers to work simultaneously on "the themes and the database until they establish a comprehensive set of themes" (Maxwell, 2008, p. 45). According to Creswell and Plano Clark (2011), cases where the results of quantitative analysis are built on qualitative data provide more narrowed-down descriptions of the research problem. The quantitative data and analysis refine these findings by explaining the numeric data and by exploring the qualitative data in more depth (ibid.).

Neuman (2014) emphasises that research studies that adopt multifaceted methodological plans foster knowledge of the phenomenon being investigated, in addition to enhancing the credibility of the findings obtained. Lund, (2012, p. 157) states that cases where the results of quantitative analysis are drawn from qualitative ones usually provide more valid inferences and reflect more on the hypothesis and future research. Accordingly, this enables researchers to comprehend the subtler differences and to generate credible and firm theoretical findings (ibid.). Further, mixed method approaches will lead to more reliable

results concerning the extent to which both metaphors and metonymies are rendered in the TL. Malamatidou (2018) argues that applying a mixed-methods analysis would be of great benefit. The arguments put forward by Malamatidou (2018) justify the application of both in this research analysis. Malamatidou believes that combining different data sources and different methods can provide translation scholars with a greater depth and breadth of understanding of the translational phenomena under observation, which might not be available via the application of a single approach in isolation.

The merging of methods is also claimed to be of great benefit in corpus/corpora-based research conducted in Translation Studies. In Translation Studies, corpus-based methods assist with investigating the influence of the SL on the TL. This enables researchers to make claims based on observable empirical data. It also paints a finer picture and enables researchers to comprehend subtle differences during the analysis of a single phenomenon. Wojciechowska and Juszczyk (2014), alongside Kövecses (2014), confirm and acknowledge that applying quantitative and qualitative methods within corpus-based methodology is considered a crucial complement to corpus analysis; they thus emphasise the need for an integration of approaches. According to Yan et al. (2010), integrating a corpus-based approach and quantitative analysis in a qualitative research, will greatly, from their view, enhance research into metaphor translation.

Saldanha (2009, p. 5) also believes that mixed-methods research can be quite influential as it provides a methodological framework that helps researchers to explore the hidden "motivations for translational behaviour in terms of the translators' culture and ideological positions, or in terms of the context of situation

or culture." Hence, it is expected that mixed-methods can contribute to the field with detailed interpretations of the research aim and questions, leading to solid conclusions. It must be noted, however, that these methods are not exclusive when conducting similar research and other researchers may disagree with such views.

4.6. Conclusion

This chapter provided a rationale for the methodological approaches adopted to explore the translational procedures of the metaphors and metonymies in the MEAPaC – a parallel mono-directional corpus of words and phrases. The corpus consists of three English popular novels from the same genre and their translations. The corpus of this research can be a useful complement for fields other than Translation Studies.

The translational procedures of both constructs were explored using a two-dimensional analytical perspective based on a corpus-based methodology. The first model cognitively analyses the source domains of the identified data in the English corpus. It operationalises Lakoff and Johnson's (1980a) basic CMT principles with Kövecses' (1990) lexical model. The second model draws on Lakoff and Johnson's approach as a basic paradigm that acts as a link between language, culture, and mind. This is based on qualitative descriptive methodologies. The intention is to test the adequacy and usefulness of existing evidence that combines CMT with previously discovered evidence to offer a contributed translation typology that serves as a map for the analysis of metaphor and metonymy translation procedures.

This chapter discussed the rationale behind choosing the elements of the MEAPaC and it also established the reasoning and criteria behind its modelling. This chapter also addressed the benefits of applying corpus-based methods to the processing stage – including which tools qualified the corpus for analysis. An evaluation of the tools used to prepare and build the corpus for data analysis was presented, as was an evaluation of how the tools were incorporated with the data identification procedures proposed in this thesis to analyse the MEAPaC in Translation Studies.

The chapter also addressed the consideration that went into preparing a corpus suitable for research projects in Translation Studies, highlighting the fact that obtaining very large corpora is not always the best option for all metaphor translation research, focusing instead on contextualised cases rather than on isolated ones.

The analytical process of data identification procedures has been reviewed, integrated and refined, proposing an extension that can be applied to analysing the research corpus for translation analysis. Methodological limitations have been outlined, shedding light on potential issues met when conducting this kind of research. The methodology proposed for this study is expected to suit the research requirement and to provide data to answer the different aspects involved in the research questions, evaluate the findings, and draw conclusions from them. It is also hoped that this thesis will open further arguments on methods and approaches that can be used to explore the translation of metaphor and metonymy of FEAR under the notion of CMT.

Chapter 5
Classifications of FEAR Metaphoric and Metonymic Source Domains

This chapter investigates the source domains (SDs) of FEAR employed in the corpus under analysis. It addresses the third research question: what are the source domains identified to structure the target domain? The analysis in this chapter uses the cognitive linguistic approach developed by Lakoff and Johnson (1980a) with influences from Kövecses' work (1990) on the prototypical structure of emotions. This chapter also takes up Johnson's (1987) embodied schema hypothesis, considering image-schemas as the preferred mechanism for discussing metaphor and metonymy in cognitive linguistics (see sections 2.1.4 and 2.1.4.3). Moreover, the schematic structures function as another layer to the underlying concepts in the identified linguistic data. The analysis illustrates the contrast between the source domains in terms of their mappings identified through their hierarchical categories and their sub-categories.

Section 5.1 focuses on the physiological metonymies and highlights the conceptual source domains addressed in this category. Section 5.2 discusses the cognitive metaphors and identifies their conceptual source domains. Section 5.3 presents the identified behavioural metaphors in the corpus of this study. Section 5.4 discusses the expressive source domains. Section 5.5 delineates the cultural metaphors and highlights the conceptual source domains identified under this category. Section 5.6 discusses the general findings of this chapter related to the presence of metaphors and metonymies in the corpus under study.

As previously mentioned, in Chapters 2 and 3, metaphors and metonymies are referred to as conceptual metaphors and conceptual metonymies. In some cases, these concepts can be, as Lakoff and Johnson (1980a) describe them, generic concepts or high-level concepts. These terms are also constructed via image-schemas, which are viewed as skeletal concepts due to their very salient representation of all conceptual systems. Some of the previous terms seem to be problematic as each term downplays a specific role for metaphor and metonymy. Given the multiplicity of ways these concepts can be approached, there is a danger that the discussion will not be easy to follow. For this reason, with respect to metonymic and metaphoric concepts, this chapter will, at some point, refer to them as types.

For the sake of orderliness, the selections of source domains are clustered and discussed based on their prominence. All source domains realisations will be described as linguistic expressions or expressed manifestations. The lexical units used in explanatory statements and sections that reflect these source domains are presented in italic typeface so they can be easily identified. The sequence of all excerpts is numbered progressively. In this chapter, all source domains under analysis and their schematic extensions are capitalised. Furthermore, the descriptions of image-schema only concentrates on describing the extensions of underlying concepts of the linguistic data selected for analysis.

It should be noted that the approaches adopted for the analysis of data in this chapter are based on cognitive theories, and there will always be different opinions from linguistic or stylistic perspectives that might not consider all of the expressions used as metaphoric or metonymic. This indeterminacy problem is significant in light of linguistic and cross-cultural research in that it could, to some extent, lead to diverging

conclusions. In this chapter, the analysis assumes the view of metaphor and metonymy as set out by the embodied cultural prototype view that incorporates Lakoff's (1978) cultural embodied theory and insights of Kövecses' (1990) prototypical structure of emotions and his lexical approach.

The results of the analysis yielded five types of source domains: physiological, cognitive, behavioural, expressive and cultural. The physiological type and cognitive types were found to be the most prominent in the ST corpus. Table 5 shows the frequency and percentage of physiological and cognitive source domains with the linguistic expressions they realised in the ST corpus:

	Frequency of Source Domains	Frequency of Expressions	%
Physiological	19	153	58.50%
Cognitive	34	81	31.30%
Behavioural	5	12	4.70%
Expressive	1	8	3.10%
Cultural	3	7	2.70%
Total	62	261	100%

Table 5. Frequencies of SDs and their linguistic expressions in the ST corpus.

It must be pointed out that, due to scope of this research, the discussion does not provide a full account of all identified physiological and cognitive source domains, their realisations, their perspectives, and the schematic extensions of the emotions under analysis. It is beyond the remit of this study to do so. The main purpose of this chapter is to assist the analysis of translation procedures in Chapter 7. As such, 11 out of 19 physiological domains and seven out of 34 cognitive domains with the highest frequency and percentages were analysed. This was also applied to the remaining less prominent behavioural, expressive and cultural source domains.

5.1. Physiological Source Domains

Like metaphors, metonymies play an important role in in structuring our experience (Ungerer & Schmid, 2006, p. 133). They allow mental imageries of many sensorimotor domains to be used to conceptualise FEAR. Physiological metonymic source domains are arguably one of the most used domains for portraying fear in the ST corpus. It is ranked first with the highest rate based on the frequency of the source domains and their linguistic expressions as shown in Table 5. A total number of 19 physiological source domains mapped onto FEAR were identified, reflecting a total of 153 linguistic expressions, accounting for 58.50% of all cases.

According to their recurrence, these expressions emerge from two physiological sub-categories: external and internal responses based on the generic-level concept established by Lakoff and Kövecses (1987): PHYSIOLOGICAL RESPONSES OF AN EMOTION STANDS FOR THE EMOTION. The external reactions come first with eight source domains (35.20% of the total) and these are: PHYSICAL AGITATION with the highest number of linguistic realisations, followed by INABILITY TO BREATHE, BLOOD LEAVES THE FACE, INABILITY TO MOVE, SWEATING, INABILITY TO SPEAK, HAIR STRAIGHTENS OUT and (INVOLUNTARY) RELEASES OF BOWELS OR BLADDER, realising 92 expressions (Kövecses, 1999).

The internal reactions come second with eleven source domains (23.30% of the total) and these are: INCREASE IN PULSE AND HEART RATE, NERVOUSNESS IN THE STOMACH, DROP IN BODY TEMPERATURE and INABILITY TO MOVE, DROP IN BODY TEMPERATURE, INABILITY TO THINK, DRYNESS IN THE

MOUTH, COLD, HORMONE RISE, INCREASE IN PULSE AND BLOOD PRESSURE, LAPSES IN HEART RATE and DIFFICULTY SWALLOWING, realising 61 expressions (see Kövecses, 1999). Table 6 shows the physiological source domains with the frequency and percentage of linguistic expressions realised in the ST corpus:

Physiological Source Domains	Linguistic expressions			Frequency	%
	(ST1)	(ST2)	(ST3)		
1. PHYSICAL AGITATION	32	5	11	48	18.40%
2. INABILITY TO BREATHE	8	2	2	12	4.60%
3. BLOOD LEAVES THE FACE	9	0	1	10	3.80%
4. INABILITY TO MOVE	4	2	2	8	3.10%
5. SWEATING	0	3	2	5	1.90%
6. INABILITY TO SPEAK	1	1	2	4	1.50%
7. HAIR STRAIGHTENS OUT	2	1	1	4	1.50%
8. SOMEONE (INVOLUNTARY) RELEASES OF BOWELS OR BLADDER	0	0	1	1	0.40%
9. INCREASE IN PULSE AND HEART RATE	4	11	7	22	8.40%
10. NERVOUSNESS IN THE STOMACH	7	1	4	12	4.60%
11. DROP IN BODY TEMPERATURE AND INABILITY TO MOVE	1	0	4	5	1.90%
12. DROP IN BODY TEMPERATURE	3	1	2	5	1.90%
13. INABILITY TO THINK	1	0	3	4	1.50%
14. DRYNESS IN THE MOUTH	0	1	3	4	1.50%
15. COLD	0	3	0	3	1.10%
16. HORMONE RISE	0	1	1	2	0.80%
17. INCREASE IN PULSE AND BLOOD PRESSURE	0	1	1	2	0.80%
18. LAPSES IN HEART RATE	0	0	1	1	0.40%
19. DIFFICULTY SWALLOWING	1	0	0	1	0.40%
Total	73	33	48	153	58.50%
N = Documents	1	1	1	3	3

Table 6. Frequencies of linguistic expressions for physiological SDs in the ST corpus.

The mapping of domains of expressions under the physiological type involves a situation in which the emotion correspondences activate specific and similar

physiological reactions between the entities in the source domain and the target domain. To elaborate, if fear is A (the subject) conceptualised in terms of B (the sense) which represents the physiological state of A, then the mapping will be A IS B. In this case, the linguistic expression of X feels A, where X is whoever experiencing the emotional state, indicates that X's body parts or internal organs experience a physiological state. Another scenario could be explained by the experience of the mind through the body, meaning that X's mind experiences a similar effect of that experienced by X's body parts in the physiological state. Thus, the analysis of linguistic expressions of the physiological-based source domains can be unpacked as a special case of a complex metaphor that triggers an emotional reaction.

5.1.1. External Physiological Source Domains

5.1.1.1. PHYSICAL AGITATION

Physical agitation is an embodied experience of bipolar disorder that occurs in the form of two types of disabilities – mental or physical. Mental disabilities come in forms like anxiety etc., whereas the physical type appear in psychomotor agitations such as trembling, flinching tapping, or fast talking etc. (see Roberts et al., 2018). The percentage ratios in the data analysis indicate that the instances that come under this metonymy represent the most prominent of the conceptual metonymies identified in the corpus. A total number of 48 realisations were identified in the source corpus, accounting for18.40% of all cases. According to Kövecses (2003, pp. 80-81), the concept of PHYSICAL AGITATION can manifest in two scenarios, each of which has a specific scope: 1) the cause ⇒ emotion and 2) emotion ⇒ response. In the cause ⇒ emotion version, the source is the object state A and the target is the rational self B. If the source A remains calm, then the target B remains emotionally calm until an external

cause creates agitation in A, resulting in it being physically agitated, which provokes B to produce emotional disturbance in oneself. The relationship between A and B in this scenario is metonymically conceptualised in a more direct manner in terms of PHYSICAL AGITATION. Thus, the EMOTIONAL DISTURBANCE is metaphorically mapped onto a PHYSICAL AGITATION response but metonymically stands for emotion. To put it simply, Kövecses (2003, p. 81) states that the "emotion is viewed as being defined by (emotional) disturbance, and the disturbed state of mind is used to stand for emotion as a whole." Expressions identified in the ST corpus that were found to fall under this version are as in examples (1), (2) and (3):

Version 1: cause ⇒ emotion:

(1) *She cringed***,** terrified that her ignorance might bring on another round of torture (ST1, p. 333).

(2) *I flinched*. As much as I worried about Jasper or Emmett getting hurt, it was nothing like the panic I felt at the idea of Jacob going up against Victoria (ST1, p. 73).

(3) Any one of them could have been hurt. I imagined the wolves would be in the most danger, but picturing tiny Alice next to one of the huge werewolves, fighting . . . *I shuddered* (ST1, p. 51).

Examples (1), (2) and (3) reveal an interaction between general metaphoric and metonymic principles aroused as a result of fear causing emotional disturbance in the character's self. The concept of EMOTIONAL DISTURBANCE in, *cringed*, *flinched* and *shuddered* is metaphorically understood as a PHYSICAL AGITATION but metonymically stands for FEAR. The second scenario, however, is different from the first in a way the bodily agitation is aroused from emotions and not as a result of a disturbed state of mind. To elaborate, if the source (the physical object A) remains physically calm, then the target (person's body B) remains bodily calm until an external force of emotion causes agitation in A which provokes B to produce a bodily agitation.

Expressions identified in all STs were found to fall under this version, and are embodied in examples (4) and (5):

Version 2: emotion ⇒ response:

(4) Outside the gate, I finally got the Mace out of my pocket and in a venting of frustration, humiliation, relief, and rage, I turned and sprayed the house. Sobbing, *teeth chattering*, I clutched the cylinder to my chest and bolted into the dark (ST3, p. 381).

(5) Once inside, I locked the doors, then sat a moment, *legs trembling, hands shaking* uncontrollably, my mind numb (ST3, p. 381).

In examples (4) and (5) above, a living being or part of the living being (body) moves as a consequent action of FEAR. The emphasised lexical units are not a state of EMOTIONAL DISTURBANCE. Rather they are metonymically used as direct designators for FEAR conceptualised in a more direct way in terms of PHYSICAL AGITATION partly schematised by the basic schematic pattern of FORCE. They were originally understood as realisations of the EVENT STRUCTURE metaphor CAUSES ARE FORCES. Expressions that are conceptualised under this type of source domain have a high presence in the corpus with a rate of 18.40% such as *flinched, shuddered, cringed, trembled, trembling, shaking, shaky hands, rubbery legs, teeth chattering, thrill of fear, gritted my teeth* and *shivered.*

5.1.1.2. INABILITY TO BREATHE

This metonymic source domain conceptualises FEAR in terms of a mental incapacity that prevents the person from the normal breathing function thus invoking that the physiological reaction as the emotion itself (Kövecses, 2003, p. 75). This source domain generates 12 linguistic expressions, representing 4.60% of all metonymic cases. The same holds true for INABILITY TO THINK, INABILITY TO SPEAK and INABILITY TO MOVE, All are categorised as specific-level concepts of the generic

metonymy MENTAL INCAPACITIES STAND FOR EMOTION (Kövecses, 2003). This image is carried by expressions such as *stopped breathing* and *frightened to even make my lungs work* which respectively conceptualise FEAR as causing an unpleasant sensation of suffocation or constriction in the throat and stopping the air from reaching the lungs. Consider example (6):

> (6) A vampire had been in the house looking for me while Charlie slept. Panic overwhelmed me, *closed my throat*. I couldn't answer, I just stared at him in horror (ST1, p. 117).

In example (6) above the author portrays the mental state of FEAR in the form of an action construction portrayed as blocking the way for air to pass normally through the character's throat. The mapping of the physiological attribute onto the emotion characteristics highlights struggle and the difficulty of the breathing process. This image is identified in the corpus though other metonymic tokens like *choked, squeezing my chest, couldn't breathe, couldn't catch my breath,* and *breath froze in my throat*, which are used to describe the fear resulting from certain horrific incidents. These types of images refer implicitly to the strong relation between physiological reactions and FEAR.

5.1.1.3. BLOOD LEAVES THE FACE

This metonymic source domain is the third most prominent domain in the physiological type. The corpus yielded a total number of 10 linguistic expressions under this source domain with a total rate of 3.80% of all cases. The BLOOD LEAVES THE FACE domain depicts a change in skin tone (Kövecses, 1999). To explicate, the human face is well supplied with blood vessels, meaning that normal colour of the face should not appear as pale or white in colour in its normal condition. However,

regardless of the skin tone, discoloration of the skin, according to neuroscience and brain research, is a physiological change that happens when a person is terrified or experiencing traumatic events (see also Folk, 2021). As a result, the body takes more blood from the vessels, routing blood from the surface of the skin to other parts of the body. The embodied experience in this concept goes well with metonymic expressions, especially ones that involve words such as *pale* and *white*, in addition to phrases like the one in example (7):

> (7) Edward groaned at my side and closed his eyes. "Damn it. Damn Laurent to the deepest pit of hell where he belongs" "Laurent?" I whispered, the *blood emptying from my face*, but Edward didn't respond, focused on Carlisle's thoughts (ST1, p. 157).

The image expressed above portrays an experience as conditioned physiologically with bodily symptoms describing the conceptual structure of FEAR. The semantic entities of the source domain in the example activate the sense of a verb plus a preposition combination in *emptying from*. The single form preposition entailed offers the metonymic expression a clearer understanding of the movement of the blood from the facial regions to other areas of the body that need it most in order to deal with the immediate threat. The physiological collocation in example (7) reveals a pattern formed by the recurrent use of the INSIDE-OUT and CONTAINER schema (see Johnson, 1987; Clausner and Croft, 1999 and Cervel, 1999). This source domain is expressed in the corpus by tokens ascribed with certain properties like *blood drained from my face, his face looked eerily pale, my face was as pale as hers, my face was as white as hers, his face had turned so white, I felt colour drain out of my face* and *his face was empty.*

5.1.1.4. INABILITY TO MOVE

The concept of moving is a common element in our everyday experience. It arises from embodied simulations of the motor or mental actions. The corpus yielded a total number of eight linguistic expressions under this source domain with a total rate of 3.10% of all cases. Johnson's (2000) study shows that these motor images or mental actions are essential in the prospective of judgement. To clarify, humans have the tendency to judge their different body movements before acting them. This happens through a series of thoughtful and well-planned simulated actions. Many metonymic realisations categorised under INABILITY TO MOVE concept, such as example (8), specify the intensity of fear. The non-moving element has aspects that allow a variety of linguistic realisations to activate a perceptual simulation of responses that show an entanglement causing a resultant inability to move. Consider example (8):

> (8) There was something bothering me, and I couldn't put my finger on it. *I was numb,* horrified, deathly afraid. And yet, under that, I could feel that I was missing something important. Something that would make some sense out of the chaos (ST3, p. 175).

The non-movement mental experience usually happens as a result of fear that paralyses the fearful person from normal movement. The same can be said with the adverbial phrase *deathly afraid.* By expressing the level of fear the character is experiencing by means of a concrete entity, death, an irreversible ending of all functioning including the ability to move, it is possible to reason and talk about the non-movement response to fear, an evasive entity. The corpus of STs identified expressions relating to this domain explicated by the recurrence of various phrases and lexical forms like *stuck-still, froze in place, almost numb, limbs were too heavy* and *froze momentarily.*

5.1.1.5. SWEATING

In a similar manner to the source domain INABILITY TO MOVE, the explication of the SWEATING concept along with the intended message conveyed is presented through mapping them physiologically onto FEAR. The corpus yielded a total number of five linguistic expressions manifesting under this source domain with a total of 1.90% of all the cases within the ST corpus. This symptom of fear is a condition that is commonly triggered by severe emotional events like the image portrayed in example (9):

> (9) By that time, *I was sweating* and trembling like a woman on her way to the scaffold (ST2, p. 356).

The SWEATING concept contributes to the structure of the target in a coherent way, representing an involuntary bodily reaction that is mostly visible as a consequence of a struggle with fear. The metonymic expression in (9) endows the character's fear with a negative connotative meaning of regulating the body temperature through sweat release. The ST corpus identified expressions relating to this imagery explicated by the recurrence of lexical forms such as *sweat at the base of my spine, sweating, sweat* and *sweaty*.

5.1.1.6. INABILITY TO SPEAK

This source domain is used in reference to mental incapacities. The INABILITY TO SPEAK domain generates four linguistic expressions with a total rate of 1.50% of all cases within the ST corpus. Expressions identified in the corpus under the inability conceptual mapping yield the generic metonymy MENTAL INCAPACITIES STAND FOR EMOTION (Kövecses, 2003, p. 75), such as example (10):

(10) I didn't want to be seen, I wanted to run away, but I couldn't, my limbs were too heavy, and when I tried to cry out, *I made no sound at all* (ST2, p. 818).

The linguistic expression in (10) reflects the FEAR IS AN INABILITY TO SPEAK metonymy. This image illustrates a shock reaction and a verbal shutdown caused by the non-anticipation of situations or incidents. This makes the speech act for the person experiencing fear more difficult to perform. The embodied experience in this concept goes well with metonymy and is found in the corpus to access FEAR via expressions like *no words came out, sounded wavery, made no sound* and *couldn't answer.*

5.1.2. Internal Physiological Source Domains

5.1.2.1. INCREASE IN PULSE AND HEART RATE

This metonymic concept depicts an internal physiological functioning to fear portrayed in linguistic expressions as an increase in pulse and heart rate. Experiencing such a physiological reaction in real life is mostly a step to prepare the person experiencing the reaction to move and/or strike in the event of unexpected dangerous situations. This source domain is found to be conceptualising FEAR with 22 linguistic expressions with a total percentage of 8.40% of all cases, as example (11) :

(11) I try to catch her eye, but she won't look at me. *My heart rises into my throat* as she turns to go upstairs, but it sinks again just as fast, because Tom is on his feet, his hand on her arm (ST2, p. 1427).

In example (11) there is an image governed by the container schematic structure, where the physiological image described by the *throat* relates to the PARTS OF THE BODY ARE CONTAINERS metonymy-based metaphor. The image activates the sense of a verb plus a preposition combination that reveals a pattern formed by the recurrent use of *into* which explicates the movement of the heart as ascending to the throat,

functioning as an accelerator to the normal blood circulation. In addition to its explanatory function, the INCREASE IN PULSE AND HEART RATE metonymy was found to emerge in various linguistic manifestations in the corpus through the expressions: *heart was racing, heart kicked into fourth gear, heart rises into my throat, heart picked up a beat, heart drumming, heart rate goes up, heart rate quickens, heart hammering, my heart was fluttering, trying to slow my heart rate, my heart crawls into my throat, my heart thudding in my chest, my pulse beat at a ferocious pace, my splintered heart throbbed out, my heart burst into a sprint.*

5.1.2.2. NERVOUSNESS IN THE STOMACH

Expressions identified in the corpus under this source domain portray fear in association with nervousness in the stomach as a reaction related to uncertainty or anticipation about a situation. The embodied cultural prototype view suggests the importance of body-based metaphors and metonymies or their entailments across languages. An example of this is found in different languages, where, along with the conceptualisation of the body as a container for emotions, the stomach is believed to hold different emotions like FEAR, ANGER, HAPPINESS, and JEALOUSY etc. in many languages (see Matsuki, 1995; Stefanowitsch, 2006; Chen, 2010; Ansah, 2011). A total number of 12 linguistic expressions manifested were identified under this source domain, representing 4.60% of all cases, as example (12):

> (12) I remembered my conversation with Ryan's partner, Jean Bertrand, and the thought of Ryan brought *the usual stomach clutch*. "God, please let him be safe!" (ST3, p. 448).

The metonymic pattern referring to the BODY concept in example (12) suggests that the character's fear is thought of as being contained in her stomach and causing

stomach pain. The container schema in this particular image is conceptualised as a fully enclosed stomach. The regularity of the recurrent mapping between FEAR as a target domain of the source NERVOUSNESS IN THE STOMACH evokes a cognitive scenario where the latter is seen as an extremely uncomfortable state which, for the most part, comes on suddenly. This is clearly demonstrated in the corpus in expressions such as *lodged in my stomach, twisted uncomfortably in my stomach, stomach lurched, to control my stomach, I had a shiver of pain that streamed down my back and settled in my stomach, my stomach dropped, stomach went tight with fear, fear pooled in my stomach, stomach dropped through the soles of my feet* and *stomach tightened.*

5.1.2.3. DROP IN BODY TEMPERATURE and INABILITY TO MOVE

A total of five linguistic expressions manifested under the temperature domain were identified, representing a total rate of 1.90% of all cases. Expressions of this concept are portrayed by physiological reactions based on an objective physical phenomenon from the real world. Moving around in space has a specific dimension, but the way we feel when frightened can evoke a mental image in the form of phase transition in a state of matter to a freezing point causing an emerging disability in one's movement. The DROP IN BODY TEMPERATURE and INABILITY TO MOVE concept is used in the understanding of the control aspect. Images of this concept can be seen instantiating relevant linguistic expressions with adjectives like *freezing* or *icing* as perceptions of our bodies, such as the expression in (13):

> **(**13) I stared, still *frozen in horror*, at Alice's new expression. Her face was alive with exultation, all the despair wiped clean from her perfect features (ST1, p. 218).

The metonymic expression in example (13) has an indication of an emotional mental state. It represent the idea of two trajectory events being correlated in experience, where one event stands metonymically for another in the same mental domain. The conceptual structure in this linguistic expression attracts conflicting mappings. This means other mental concepts emerge from the original domain and are ready for mapping as sub-mapping extensions of new concepts. The complex nature of mapping could be interpreted within the blending theory of mental space by Fauconnier and Turner (1998). To elaborate, in the metaphoric source exists a tangled metonymic component that yields a higher-level metonymy EFFECT FOR CAUSE: the effect is what we perceive, and the cause is what we infer from our perception. Further, it underlies a source-in-target general metonymy: EVENT FOR ACTION CAUSING THE EVENT (see Fauconnier and Turner, 1998). This metonymy-based metaphor develops the source of the metaphor where the sub-domain of FEAR (one of its physiological reactions, for example, not moving) stands for the WHOLE.

The physiological condition of freezing in (13) is regarded as the effect caused by the inferred emotional state of the emotion experienced with the connotations of bodily symptoms. This provides the basis of the conceptual mapping: DROP IN BODY TEMPERATURE IS FEAR (Kövecses, 1990). The source domain of this metonymy is grounded in the physiological experiences (drop of temperature) functioning from the physiological effect to the emotion. The target domain, however, provides access to a more general situation understood in terms of INABILITY TO MOVE IS FEAR in the same domain matrix. It observes an emerging feature in the character's body endowed with an internal power causing loss of movement. The question to be raised here, however, is which of these two concepts is more representative. The answer

might depend on the situation itself or it could be a matter of the sequence of the effects. On these grounds, FEAR can be either connected to the first physiological functioning underlying DROP IN BODY TEMPERATURE or the second, INABILITY TO MOVE. This complex mapping is expressed in the corpus by expressions like *I froze, froze me in place, breath froze in my throat* and *frozen in horror.*

5.1.2.4. INABILITY TO THINK

A total number of four linguistic expressions manifested under this domain, accounting for 1.50% of all cases. In similar manner to the source domain INABILITY TO MOVE and INABILITY TO SPEAK, this source domain sees FEAR as a "mental incapacity" (Kövecses, 2003, p. 75). This source domain emphasises the inability to think clearly and the impediments to conscious judgment when a person is affected by fear. The rich image of INABILITY TO THINK IS FEAR metonymy is reflected by the response of the character's fear representing the generic metonymic concept of EFFECT FOR CAUSE which is accessed from one sub-domain, the target. To illustrate, consider example (14):

> (14) Once inside, I locked the doors, then sat a moment, legs trembling**,** hands shaking uncontrollably, *my mind numb* (ST3, p. 282).

A person in severe fear states is commonly discerned as incapable of mental functioning, which is represented by rationale self. This is shown in example (14), when the character portrays her emotional state through the use of the word *numb.* According to MED (2009-2020), the adjective *numb* relates to "a part of your body that has no feeling", which indicates that the character was having a lack of mental functioning at the time of the incident. This metonymy is expressed by metonymic

tokens ascribed with certain properties like *thoughts were chaos, mind screamed conflicting orders* and *mind was stuck, stunned and useless as my body*.

5.1.2.5. COLD

This source domain is found to be conceptualising FEAR with only three expressions with a total rate of 1.10% of the total manifestations identified in the ST corpus. Apart from thought and metaphor as conceptual understanding, in literal terms we can distinguish different lexical elements from the aspect of COLD. Among these might be elements related to medical conditions like cold as a contagious viral infection. However, in cognitive conceptual terms, the semantic meanings of literal definitions do not capture the actual and rich information stored in the mental zone in relation to the drop of temperature concept. According to Lakoff and Johnson (1999), when we use the temperature perception to talk about an emotion, this is referred to as a "metaphorical correlation" grounded in real life experience. The correlation between fear and cold creates neural connections between parts of the brain affiliated with these two experiences, leading the cognitive mapping to envisage the two separate conceptual domains as if they were one based on their continuity of co-occurrences in the physical world. By way of illustration, consider example (15) from the corpus, as uttered by the character experiencing fear:

> **(**15) The police are here, Rachel, she says, and *my entire body goes cold*. They want to talk to you (ST2, p. 324).

In example (15), fear is conceptualised as a physiological symptom of a sudden shock of cold providing the basis of the conceptual mapping FEAR IS COLD. The metonymic image reflected through the response and symptoms of the character's fear represents the generic concept SYMPTOMS FOR CAUSE, which is accessed mentally

from one sub-domain. The source domain in such metonymic expressions have physiologically conditioned reactions and one element of the domain is the change in body temperature. This means that the experiential association of fear in these metonymic manifestations entail a lack of the physical sensation HEAT, which, in turn, is based on LACK OF BODY HEAT STANDS FOR FEAR metonymy as an effect of the conceptual metaphor FEAR IS COLD. This is clearly demonstrated in the corpus in expressions like *whole body goes cold* and *my entire body goes cold.*

5.2. Cognitive Source Domains

The cognitive source domains are usually concerned with our direct perception of the real-world (Lakoff & Johnson, 1980a). The corpus identified a total of 34 cognitive domains mapped onto the concept FEAR and reflecting a total of 81 linguistic expressions, bringing the total coverage to 31.30%. This type of source domain represents a polar opposite to the physiological source domains and is less subjective than the source domains in the cultural type.

The conceptual mapping of the cognitive type is a special case that looks at the similarities between the two domains which link the effect of the emotion on the mind to the effect of the concepts on oneself. The mappings in the cognitive type can be seen as metonymic, yet, not as much as they are seen metaphorically. They also trigger various complex interactional mappings in linguistic expressions where the target is mapped onto more than a single conceptual domain present in the source of a conceptual metaphor. Table 7 shows the cognitive source domains with the frequency and percentage of linguistic expressions realised under these domains in the ST corpus.

Cognitive Source domains	Linguistic expressions			Frequency	%
	(ST1)	(ST2)	(ST3)		
1. A FLUID IN A BODY CONTAINER	7	0	1	8	3.10%
2. A SUBSTANCE IN A BODY CONTAINER	4	3	1	8	3.10%
3. AN OBJECT THAT GOES INTO A PERSON FROM THE OUTSIDE	3	0	2	5	1.90%
4. A FLUID NATURAL FORCE IN A BODY CONTAINER	0	3	1	4	1.50%
5. A GROWING ENTITY IN A BODY CONTAINER	0	4	0	4	1.50%
6. AN ILLNESS	2	2	0	4	1.50%
7. COLD	1	1	2	4	1.50%
8. A PHYSICAL OBJECT	0	1	3	4	1.50%
9. AN OPPONENT IN A STRUGGLE	1	2	1	4	1.50%
10. AN ENTITY	2	0	1	3	1.10%
11. A WEAPON	1	0	2	3	1.10%
12. A MOVING ENTITY IN A CONTAINER	1	0	1	2	0.80%
13. A TERMINATOR	2	0	0	2	0.80%
14. TENSION	1	0	1	2	0.80%
15. A SUPERIOR THAT INFLICTS PAIN	1	0	1	2	0.80%
16. FORCE	0	1	1	2	0.80%
17. A NATURAL FORCE	0	1	1	2	0.80%
18. A DESTROYER	1	0	1	2	0.80%
19. A BURDEN	0	0	1	1	0.40%
20. A FLUID NATURAL FORCE	0	1	0	1	0.40%
21. A FORMING ENTITY	0	0	1	1	0.40%
22. DEATH	1	0	0	1	0.40%
23. A SUPERIOR	0	1	0	1	0.40%
24. SOMETHING THAT INCREASES FROM THE UNKNOWN	0	1	0	1	0.40%
25. HEAT	0	0	1	1	0.40%
26. BLINDNESS	0	1	0	1	0.40%
27. A LIVING OBJECT (AN ORGANISM)	0	1	0	1	0.40%
28. A SHARP OBJECT	1	0	0	1	0.40%
29. A MEMORY IMPEDIMENT	0	1	0	1	0.40%
30. SOMETHING THAT GOES UP WHEN IT BECOMES STRONGER	0	0	1	1	0.40%
31. NATURE	1	0	0	1	0.40%
32. AN ANIMAL BEING	0	0	1	1	0.40%
33. A LOCATION	1	0	0	1	0.40%
34. A VICIOUS ENEMY (HUMAN OR ANIMAL)	1	0	0	1	0.40%
Total	32	24	25	81	31.30%
N = Documents	1	1	1	3	3

Table 7. Frequency of linguistic expressions for cognitive SDs in the ST corpus.

5.2.1. The CONTAINER Metaphor

Rull (2002, pp. 181-183) states that CONTAINER metaphors capture "not only the intensity aspect of the emotion but also the aspect of control" in order to maintain balance and be in control over the emotion. Emotional control is an aspect that is viewed as a complex process with the ability to respond to ongoing demands of experience with emotions. The container mental activity involves regulating the state of the behaviour in a specific situation such as cognitive responses to irrational physiological reactions (thoughts). The self-regulation of non-controlled emotional balance permits spontaneous reactions that are usually portrayed as going through an emotional reaction on oneself, such as container metaphors. According to Lakoff (1987), CONTAINER metaphors allow a mental projection to map from a concrete source onto a target experiencing entity based on three structural elements: interior, exterior and a boundary. Moreover, CONTAINER metaphors portray the contained entities, whether positive or negative, as constricted elements in a bounded space, and this always affects the content. The corpus exhibited 29 linguistic expressions with a rate of 11.10% of all cases under the basic category of the BODY metaphor where different parts of one's body are regarded as containers for emotions, even fear itself.

5.2.1.1. A FLUID IN A BODY CONTAINER

This source domain is one of the most conventional fear metaphoric concepts as described by Kövecses (1990) and created by the generic concept EMOTIONS ARE FLUIDS IN A CONTAINER. It indicates a cognitive physical reaction to the experiencer's self. A total number of eight linguistic expressions were conceptualised under this domain, accounting for 3.10% in total, such as example (16):

(16) A cold trickle of fear began to *ooze down my spine*. What if the time had run out? What if Jacob and Edward got too close? What if Edward decided to join in the fight? (ST1, p. 302).

Rull (2002, p. 181) states that "the internal forces that may destabilize the person are commonly conceived of metaphorically as a fluid, air, something solid, an animal, an enemy or a force of nature." The imagery in example (16) evokes a sense of fear as a fluid that moves within the bounded region and is controlled by the major container BODY itself. The highlighted phrasal verb *ooze down* portrays FEAR in terms of A MOTION IN A CONTAINER instantiating a higher level mapping A MOTION IN A CONTAINER OF A FLUID IS THE EMOTION IN A CONTAINER. Moreover, the expression in (16) reveals a pattern formed by the DOWN orientation schema in *down my spine* which portrays the perception of fear as a fluid flowing towards the end of the interior container region. This metonymy is expressed by metonymic tokens ascribed with certain properties like *ooze down my spine, pooled in my stomach, churned in my head, drain out, empty from my face,* etc. Again, the parts spine, stomach and head stand for the whole, the person.

5.2.1.2. A SUBSTANCE IN A BODY CONTAINER

This source domain is the second most prominent cognitive source domain. The expressions identified under this mapping pertain to PARTS OF THE BODY ARE CONTAINERS FOR EMOTIONS. The target entity in this metaphor is endowed with fear as an emotional state realised with expressions reasoned by a container schema. A total number of eight expressions were conceptualised under this domain with a rate of 3.10% in total. Examples include the following:

(17) There is *fear in his eyes*, desperation (ST2, p. 885).
(18) But, before that reaction, her *face was full of stress and fear* (ST1, p. 216).

Both (17) and (18) reflect a dual rational emotive nature due to the container concept instantiating a higher level mapping DIFFERENT PARTS OF THE BODY ARE CONTAINERS FOR EMOTIONS. If fear is an entity in the interior subject's (parts of the head) *eyes* and *face* which are perceived as the locus of the emotion, then fear is the subject itself. The cognitive grounding of this metaphor arises from our everyday experience where, with certain containers, positive benefits ensue while, with others, negative outcomes follow. In both examples, the negative qualities of the contained element bring negative feelings to the person experiencing the reaction. This is demonstrated by the presence of the preposition *in* used in (17) and *full of* used in (18). The multidimensional aspect of FEAR in (17) extends to describe the degree of the intensity as an emergent aspect which yields INTENSITY OF AN EMOTION IS AMOUNT/QUANTITY OF SUBSTANCE IN A CONTAINER. This indicates that the intensity in (18) is higher than in (17). Thus, the larger the substance, the higher the intensity of the emotion and *vice versa*. Converging on the interplay between metaphor and metonymy, examples (17) and (18) exhibit a clear interaction where the parts, the eyes and face, stand for the whole, the person. This concept is detected in the source corpus through the recurrence of various metaphorical expressions such as s*ent a thrill of fear through me, panic surfacing in my eyes, terror in my eyes, felt something inside me* and *his eyes still fearful.*

5.2.1.3. A FLUID NATURAL FORCE IN A BODY CONTAINER

The corpus yielded a total number of four expressions under this domain, representing 1.50% of all cases. The FLUID NATURAL FORCE IN A BODY CONTAINER has aspects that allow expressions with containers to contain fear as a loaded natural force of a fluid kind, such as floods and waves. According to Kövecses (2000a, p. 71),

emotions like fear can act as the force of a fluid to express lack of control. As a result of these natural extreme forces, the affected self becomes controlled and vulnerable (Kövecses, 2008). The metaphoric expressions identified under this domain are structured and understood in terms of the COMPULSION schema (ibid.), as we can see in examples (19) and (20):

(19) *Flooded with dread*, I see darkness coming. I open my mouth to cry out, but I'm too late, he yanks me into the house and slams the door behind me (ST2, p. 634).

(20) I went to the pub, I got onto the train, I was at the station, I was on the street. Blenheim Road. I went to Blenheim Road. *It comes over me like a wave*: black dread (ST2, p. 198).

The part of the containment domain within the border of the BODY in examples (19) and (20) undergoes an elaboration, conjuring the concept of NATURAL FORCE. Here, the natural phenomenon *flooded* corresponds with FEAR. The emotion portrayed in the linguistic expressions, however, is lexicalised with a specific fluid form of the natural force. The expressions in (19) and (20) also yield the mapping AMOUNT OF FLUID IS THE AMOUNT OF THE EMOTION which describes the amount of the emotion experienced in terms of the amount of the fluid ascribed as an overflow of liquid beyond its normal limits. The corpus displays a number of recurrences of various lexical forms reasoned by this concept such as *flooded*, and active motions associated with words like *wave* and water forces such as *floodwater*.

5.2.1.4. A GROWING ENTITY IN A BODY CONTAINER

This source domain occurred at a rate of 1.50% with four linguistic expressions in the ST corpus. The mapping is derived from the physical experience propounded by Kövecses' (2000) metaphoric concept INCREASE IN THE INTENSITY OF THE

EMOTION IS GROWTH combined with the CONTAINER schema. This source domain semantically highlights the two polar ends, high and low, which portrays fear as reaching extreme limits. According to Rull (2001, p. 184), "the fluid with pressure corresponds to the emotion and the pressure on the container corresponds to the emotion forcing the person to respond." The application of mappings in this context emphasises the intensity of FEAR with the activation of the UPWARD orientation and its metaphoric extensions MORE IS UP and UP IS BAD. The UPWARD orientation is used to display a negative consequence caused by the increase of the intensity of the emotion. Take (21) as an example:

> (21) I know there's nothing out here, there's nothing to be afraid of, but it doesn't stop the *fear rising from my stomach to my chest and into my throat* (ST2, p. 1500).

This source domain can be seen in everyday linguistic expressions, which depict fear as an entity that tries to maximise in the body container from low to high levels, exerting pressure on oneself. This in turn uses a counterforce over the entity in an attempt to control the fear and keep it down. Johnson (1987, p. 46) defines the counterforce as "two equally strong, nasty, and determined force centres [that] collide face-to-face, with the result that neither can go anywhere." By logic, if there is an increase of a subject in an interior, then the response to the subject grows. The concept here is portrayed as an increase of the emotion where the *stomach* is understood to ascend to the *throat*, bypassing other organs of the *chest* and thus, metaphorically implying an increase in the emotional response. Other expressions found to attract this metaphor are *dread rising in me* and *panic rising in my chest.*

5.2.1.5. A MOVING ENTITY IN A BODY CONTAINER

This source domain occurred at a rate of 0.80% with only two linguistic expressions in the ST corpus. With this source domain, fear is conceptualised as an entity that changes its position in the body as expressed in (22):

(22) As I struggled for balance my gaze fell on Tank, and *a wave of terror travelled up my spine* (ST2, p. 375).

(23) *Pain crackled down my spine* and lodged in my stomach (ST1, p. 296).

The two highlighted motion phrases in (22) and (23) portray the emotion as an entity moving in a specific body part with a particular directional pattern, bottom to top. The image can be subsumed under a complex case of conceptual interaction between two generic metaphors FEAR IS AN ENTITY IN A CONTAINER and THE MOTION OF THE ENTITY IS THE MOTION OF THE EMOTION IN A CONTAINER. The import of the directional pattern in the example is schematised with UP and DOWN spatial schemas and its metaphoric extensions MORE IS UP, LESS IS DOWN and BAD IS UP/DOWN.

5.2.2. AN ILLNESS

A total number of four expressions were found to be conceptualised under this source domain with a rate of 1.50% in total. The potential effects of fear or chronic fear on overall health can cause physical symptoms such as illness. It provides a solid base for structuring the emotion as an embodied experience that occurs in many forms, for example, discomfort and unpleasant feelings in the body. The perceptual-based metaphor under this concept takes the reader beyond the cognitive base as a result of its deeply entrenched association with invasive and sometimes even contagious

abstract entities caused by the metaphoric representation in one's mind. To illustrate, consider examples (24) and (25):

(24) "A week", Edward said casually. "That ought to give us enough time." The icy splinters twisted uncomfortably in my stomach. *I was suddenly nauseated* (ST3, p. 179).

(25) I could feel the blood pulsing in my neck, sweat at the base of my spine, *the sickening rush of adrenaline* (ST2, p. 573).

The author in examples (24) and (25) the author linguistically conceptualises the characters' fear as an illness lexicalised in the words *nauseated* in (24) and *sickening rush of adrenaline* in (25). The corpus displays a number of recurrences of various lexical forms reasoned by this concept such as *sickening rush, felt green, felt sicker, sick with fear, punch of adrenalin that makes you feel sick*, which also exhibits further entailments of FEAR IS ILLNESS.

5.2.3. COLD

This source domain occurred at a rate of 1.50% in total with four linguistic expressions. The FEAR IS COLD metaphor characterises the entire system in terms of two basic domains: FEAR as the target domain and COLD as the source, as in example (26):

(26) "This is hard for him. He has kids."
"Kids?" I felt *something cold in my chest* (ST3, p. 116).

Moreover, the identified expressions in the corpus under this source domain are found to be structured with different image-schemas, and rich images in different lexical forms, such as *chilling* in example (27) where *smile* is the response to the cause:

(27) I remember the terror I felt when I saw her with Evie down by the fence. I think about that horrible, *chilling little smile* she gave me when I saw her outside the Hipwells' house (ST2, p. 849).

It must be noted, however, that linguistic expressions reasoned by FEAR IS COLD metaphor do not refer to physiological reactions but rather they are creatively employed to mark a cognitive state. This conceptual domain is expressed by tokens ascribed with certain properties, such as *cold trickle of fear*, *felt something curl into a cold hard ball* and *felt something cold in my chest*.

5.3. Behavioural Source Domains

The behavioural source domains are the fourth most prevalent identified domains in the ST corpus. A total of five source concepts were mapped onto FEAR, reflecting a total of 12 linguistic expressions, accounting to 4.70% of all cases. The action-based source domains describe fear by means of behavioural reactions which interfere with the ability of the person experiencing the reaction to behave through certain mechanisms stemming from the internal body system. Images of behavioural source domains are portrayed as a result of emotional disturbance and can be expressed in various ways. The ST corpus identified two major responses functioning as source domains to fear: physical behaviours and non-verbal vocal behaviours. Table 8 shows the coded segments of behaviour source domains with the frequency and percentage of linguistic expressions in the ST corpus:

Behavioural source domains	Linguistic Expressions			Frequency	%
	(ST1)	(ST2)	(ST3)		
a. Physical Behaviour					
1. AN ENERGISER	2	1	4	7	2.60%
2. STARTLE	0	0	1	1	0.40%
3. FLIGHT	0	0	1	1	0.40%
b. Non-verbal Vocal Behaviour					
4. CONVULSIVE GASP (TEARS)	0	0	2	2	0.80%
5. SCREAMING	1	0	0	1	0.40%
Total	3	1	8	12	4.70%
N = Documents	1	1	1	3	3

Table 8. Frequencies of linguistic expressions for behavioural SDs in the ST corpus.

5.3.1. Physical Behaviour

5.3.1.1. AN ENERGISER

The corpus yielded a total number of seven expressions under this domain with a rate of 2.60% in total. Expressions of this concept can conceptualise FEAR in terms of a physical behaviour reaction (Kövecses, 1990; Zibin & Hamdan, 2019). In such cases, the body tries to maintain balance through reactions to and interactions with behaviour responses the organism makes to threat stimuli. This is a direct response to the different environmental changes around the person experiencing the reaction, such as a sight of a predator, in order to survive or reproduce a certain act. To illustrate, consider example (28):

> (28) As one, the man and the wolf returned to the village on the harbour. The people *ran in fear*, shouting for the warriors to come. The warriors ran to meet the wolf with their spears. Utlapa, of course, stayed safely hidden (ST1, p. 145).

Example (28) describes human conduct as a reaction to fear. According to the author, the character's behaviour is described in terms of the corresponding emotion portrayed as an action behaviour under FEAR IS AN ENERGETIC BEHAVIOUR. Kövecses (1990, p. 74) suggests that the folk theory of fear can be characterised as a five-stage scenario: Danger → Fear → Attempt at control → Loss of control → Flight. Moreover, the general mapping of the manifestation expressed in (28) falls within the CONTAINER schema lexicalised by *in*, which portrays FEAR as the interior container. This concept is found to be expressed by a number of metaphorical expressions like *broke into a run, quickened my pace, I broke all speed laws, hurried down the hill, start to run, I raced to the complex* and *bolted into the dark.*

5.3.2. Non-verbal Vocal Behaviour

5.3.2.1. A CONVULSIVE GASP (TEARS)

This source domain depicts FEAR as communicative behaviour by means other than words. It occurs at a rate of 0.80% of all cases manifesting only two expressions in the ST corpus. Non-verbal metaphors may include implicit signals or sign messages through facial expressions, gestures through body language or different vocals such as tone of voice received by the sense organ of the person experiencing the reaction.

According to Forceville (2006, p. 6) "non-verbal metaphors often have targets and/or sources that are cued in more than one mode simultaneously." Such meaningful metaphoric responses are usually used to express automatic behavioural reactions. These variants would constitute what Forceville (2009, p. 6) refers to as monomodal visual metaphors of metaphors featuring "hybrids, contextual, simile, and integrated subtypes respectively." To give a fictive example, consider the expression in (29):

> (29) Outside the gate, I finally got the Mace out of my pocket and in a venting of frustration, humiliation, relief, and rage, I turned and sprayed the house. *Sobbing*, teeth chattering, I clutched the cylinder to my chest and bolted into the dark (ST3. p. 381).

According to the internal semantic relations, the lexeme *sobbing* in example (29) codifies directly the experience: FEAR: to a high degree and the physiological effect: TEARS. Rull (2002, p. 120) points out that the "internal semantic relations of lexical items, namely the relationships among signs … refer to the phenomenological experience." In example (29), the narrator's extension of the metaphor EMOTIONS ARE FLUIDS WITHIN A CONTAINER, opens the possibility for the description of the degree to which the character consciously allows her fear to controllably abduct her verbal abilities, giving access to non-verbal behaviour like *crying* and *sobbing*. A

non-verbal communicative act plays a significant role in human behaviour, one that is considered an important function in metaphoric expressions denoting an emotional state.

5.4. Expressive Source Domains

The expressive source domain is formed by means of voluntary reactions of certain facial expressions. The corpus yielded only one expressive source domain, reflecting a total of eight linguistic expressions and bringing the total coverage up to 3.10% of all cases. Table 9 shows the coded segments of expressive source domains with the frequency and percentage of the linguistic expressions realised in the ST corpus:

Expressive source domains	Linguistic Expressions			Frequency	%
	(ST1)	(ST2)	(ST3)		
1. WAYS OF LOOKING	6	0	2	8	3.10%
Total	6	0	2	8	3.10%
N = Documents	1	1	1	3	3

Table 9. Frequencies of linguistic expressions for expressive SDs in the ST corpus.

5.4.1. WAYS OF LOOKING

This source domain occurs at a rate of 3.10% in total manifesting only two expressions in the ST corpus. The domain conceptualises fear as expanding the sensory surfaces of the face to produce a direct eye-gaze in a specific way. To exemplify, consider example (30):

> (30) Panic overwhelmed me, closed my throat. I couldn't answer**,** I just *stared at him in horror* (ST1, p. 117).

The character's reaction described by *stared* in this example is an instinctive action produced as a prediction of imminent danger. This metaphoric image is used by the

author to trigger the negative evaluation in the reader's mind with regard to the enormous effect of fear in activating such a reaction (see Kövecses, 1990) . This mapping is reflected in the corpus by the appearance of linguistic expressions like *my eyes snapped open, desperate looks, looked away, stared, a wary glance* and *his eyes were huge* which conjures up different rich images formed by various schematic patterns.

5.5. Cultural Source Domains

The cultural source domains are formed by means of subjective pragmatic cultural associations with the target. Three source domains were identified under the cultural domain that give access to FEAR: COLOUR, SHADE and SUPERNATURAL, reflecting a total of seven linguistic expressions and bringing the total coverage up to 2.70% of all cases, as shown in Table 10.

Cultural source domains	Linguistic Expressions			Frequency	%
	(ST1)	(ST2)	(ST3)		
1. COLOUR	4	1	0	5	1.90%
2. SHADE	0	1	0	1	0.40%
3. SUPERNATURAL	1	0	0	1	0.40%
Total	5	2	0	7	2.70%
N = Documents	1	1	1	3	3

Table 10. Frequencies of linguistic expressions for cultural SDs in the ST corpus.

5.5.1. COLOUR

Colour manifestations are reasoned under EMOTIONS ARE COLOURS which, to Goatly (2007, pp. 230-232), are motivated by the generic-level EFFECT AS CAUSE metonymy. The colour source domain in this study was found to generate a total percentage of 1.90% expressions with a total of five linguistic expressions. Colours terms are more than just colours; they carry symbolic information and metaphorical

meaning and can convey certain emotions (Burgoon & Saine, 1987 as cited in Türker, 2013, p. 19). Lakoff and Johnson (1999, p. 105) point out that colours are not realistic physical objects of entities, but they are substances "created by our colour cones and neural circuitry together with wavelength reflections of objects and local light conditions." Lakoff and Johnson (1987, p. 25) define the common categories of basic colour terms as colours that can link to the "equivalent terms of the English colour categories" and these are "*black, white, yellow, green, blue, brown, purple, pink, orange and grey"*.

Empirical studies have shown that there is a strong physiological correlation between colour and emotions in our experience and that they may evoke both positive and negative emotional reactions (see Kaya & Epps, 2004; Ansah, 2011; Esenova, 2011; He, 2011, p. 1806). Colour source domains map the epistemic aspect of the colour onto the target i.e., our beliefs and knowledge about colours, but excluding all structural and functional aspects. Nonetheless, they are considered highly cultural because a conventional emotion in one culture is not necessarily one in another. For example, the English culture has the concept BAD IS BLACK, which represents a negative value in religious or spiritual terms as in *black magic, black soul, blacklist, black Friday* and *black art.* In other cultures, such as Arabic, the colour black would be positively valued, for example, *black petrol* to indicate power and wealthiness with the metaphoric base GOOD IS BLACK. The EVIL IS BLACK mapping can be found in many cultures other than the English culture, e.g., in Chinese, such as "black road", "black heart" and "black element*"* (Xing, 2009). Linguistic expressions linked with the COLOUR metaphor are found in the ST corpus to conceptualise FEAR in terms of BLACK, yielding the metaphoric base FEAR IS A BLACK ENTITY, where the

association between FEAR and COLOUR is cultural and possesses a negative connotation, as in examples (31) and (32):

(31) Is that why we're going back?" I whispered. Could I handle this? Images of *flowing black robes* crept into my unwilling mind, and I flinched away from them. I was close to a breaking point (ST1, p. 326).

(32) It comes over me like a wave: *black dread* (ST2, p. 196).

In example (31), Bella maps her fear onto The Volturi's (a coven of vampires) clothing used in the scene. This image, however, maps FEAR onto a combination of domains i.e., with a double metonymy. First is the BAD IS BLACK effect realised in The Volturi's black clothing. This concept has its roots in the English culture (see He, 2011). According to colour psychology, black has many associations, such as power, wickedness, fear, death and evil. In this example, the black colour associates dark values with evil. The second hidden metonymic idea portrays the colour's negative connotation to stand for fear, the target, as a spirit that can go into one's mind using the fact that FEAR IS AN OPPONENT.

The same holds true for example (32). The BAD IS BLACK effect realised in the colour metaphors are not always strictly cultural but can also be seen as a physiologically emphasised model or metonymic-based model which maps its target onto a source of a physiological nature. The cultural physiologically emphasised model is built on entrenched beliefs and occurs when a linguistic expression correlates with different body parts. For example, the corpus found physiologically emphasised expressions that portray FEAR as a change in facial colour, as in example (33):

(33) Rosalie looked at me suddenly, as if she'd forgotten I was there. I was sure my face was as *white* as hers. Unless it was *green* (ST3, p. 93).

The colour tones *white* and *green* in Bella's utterance in example (33) are realisations of the COLOUR domain. They are used to refer to a case of a physiological abnormality associated with high intensity fear. This indicates that, in this particular scene, Bella is not literally referring to the colours to describe direct bodily reactions, but to metaphorically portray how strong her fear was compared to Rosalie. The use of the colours *white* and *green* in this context instantiate the conceptual metaphor FEAR IS COLOUR, which is based on the metonymy CHANGES IN SKINCOLOUR STAND FOR FEAR, two subcategories of the generic-level concept EMOTIONS ARE COLOURS. While *white* refers to loss of facial colour e.g., BLOOD LEAVES THE FACE FOR FEAR, the *green* colour metaphorically refers to a change in the skin tone, which, according to Philip (2006, p. 63), is the state of "light refraction" (see also Kövecses, 1990; Esenova, 2011). However, Maalej (2004) states that colour manifestations of the cognitive principle THE EFFECTS OF AN EMOTION STAND FOR THE EMOTION in terms of changes in skin colour are a matter of cultural salience and cultural embodiment. Hence, no generalisation can be made as this all depends on the emotion the colour can designate.

5.6. Conclusion

This chapter demonstrated cases of fear source domains found to be underlying concepts for metaphoric and metonymic lexical units as represented in the selected ST corpus. This chapter analysed the source mental constructions within a cognitive perspective and used the concepts of image-schemas to identify the mechanism of metaphors and metonymies construction. Based on the qualitative analysis, the source domains identified in the ST corpus provide a solid basis for structuring fear. This remains valid in the corpus by the ability of these concepts to generate more concrete

mappings upon which fear is structured and clarified to the reader. Based on the quantitative analysis, the detected source domains are found to be prevalent in the selected genre of the English corpus. The mental conceptualisations of fear as a target domain are metaphorically and metonymically conveyed by 62 source domains representing 261 expressed manifestations. It must be noted that the range of linguistic expressions identified in the source corpus are not only single mapping cases but include of mixed expressions that reflect overlapping mappings between metaphoric and metonymic domains in a domain matrix like the DROP IN BODY TEMPERATURE and INABILITY TO MOVE. This is shown in the corpus in many conceptual metaphors and metonymies, particularly through the metaphorical implications of physiological and cognitive types that are more prolifically coded in linguistic expressions associated with BODY.

The analysis also revealed that, between all the 62 identified source domains, the physiological and cognitively-driven domains have the strongest interactions with fear experiences in the English culture. The considerable presence of physiological and cognitive source domains in the ST corpus has verified the discursive role they play as indispensable constructs in communicative and pragmatic functions. They assist the author not only in narrating and portraying the process of the abstract concept of the emotion in question to provoke the reader's attention, but also in visualising, simplifying and inducing the complex knowledge of fear, through concrete domains, in the reader's mind. This determines that physiological and cognitive domains offer a more effective way of comprehending fear through a systematic structure compared to other identified domains in the corpus. as pointed out earlier in Chapters 2 and 3, Kövecses and Radden (1998, p. 61) claim that "many conceptual metaphors derive

from conceptual metonymies." Barcelona (2000) also states that metaphoric concepts need to be conceptually motivated by metonymic concepts. Therefore, Kövecses and Radden's (1998) and Barcelona and Radden (2005, p. 25) believe that metonymies are the basis for all Lakoff and Johnson's (1980a) claims regarding metaphors and their embodiment of the real-world experience.

Further, results have shown that all identified lexemes that express fear exhibit distinctive schematised conceptualisations as well as discrepancies. This is important in understanding the range of translational patterns and behaviours of the phenomena addressed in this thesis. Chapter 6 addresses this aspect through the Arabic reflection and the way the translation is handled. It offers a contributed typology for translation procedures and classified based on existing evidence that combines the contemporary theories of metaphor and metonymy with metaphor and metonymy translation analysis.

Chapter 6
Cognitive Linguistic Analysis

This chapter addresses the fourth research question: what are the translation procedures identified within the translation context of this study? To answer this question, this chapter analyses how translators have handled a number of conceptual metaphors and metonymies and their linguistic expressions with aspects of fear as source domains in translation. In other words, the analysis looks at the cognitive and linguistic expressions of fear in the translated texts. The preceding quantitative analysis delivered a total of 14 procedures contained in nine major categories. These procedures were found to be prominent in the TT corpus, and, thus, were taken as the basis for the analysis in this chapter.

The findings for the procedures applied are analysed from Lakoff and Johnson's (1980a) cognitive linguistic perspective. The detailed description of how translations have been handled takes place by describing the procedures based on nine key points. These nine points are (1) the type of fear metaphor and metonymy and their conceptual structures and functions, (2) the cultural aspects of fear concepts, (3) the interaction between metaphor and metonymy, (4) the role of cognitive motivation links to the semantic structures used, (5) the cultural aspect of image-schema structures which arise from the fear conceptual mappings in English and Arabic, (6) the interplay between the image-schemas and rich images, (7) the semantic interpretation with emphasis on the similarities and differences between linguistic realisations in the source text (ST) and the target text (TT), (8) the mechanisms of the procedures and (9) the motivation for using a particular

procedure. The examples discussed in this chapter are derived from *Eclipse* (2009), *The Girl on the Train* (2015) and *Deadly Decisions* (2010) and their translations. The texts are analysed and compared on a unit level, i.e. word or phrase level, not the whole text. For coherence, the excerpts in this chapter follow a progressive numbering system. The analysis of this chapter provides the source linguistic data in italics and the translations in an underline typeface with back translation (BT) so they can be easily identified. The BTs also offer further comparability with the ST and serve the purpose of backing up interpretive claims made by the researcher. Based on the methodology, statistic tables of the frequencies of the translation procedures are used to support the qualitative discussion in the chapter.

6.1. Parallel TT mapping

This procedure involves producing an equivalent manifestation with a parallel mapping, where a similar mapping transition takes place between entities of the source and target domains of the source language (SL) and the target language (TL) expressions. According to the statistical analysis performed, reproducing linguistic expressions through a form of parallel mapping is by far the most frequently used mapping, accounting for 157 linguistic expressions with a total rate of 64.10% of all cases. This indicates that just under two thirds of the TT identified expressions were translated using the same mapping condition. This coincides with the assumptions of universality and the role of mapping in determining the translatability of both concepts across cultures. Table 11 shows the frequency of the linguistic expressions rendered with the parallel mapping procedure and its categories represented by physiological, cognitive and

behavioural, expressive and cultural source domains with low frequencies of expressive and cultural domains.

Parallel TT Mapping	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
• The same expression of the same concept					
Physiological	11	23	25	59	24.10%
Cognitive	3	12	5	20	8.20%
Expressive	1	0	3	4	1.60%
Cultural	0	1	0	1	0.40%
SUM	15	36	33	84	34.30%
• The same expression of the same concept with an addition					
Physiological	15	4	2	21	8.60%
Cognitive	0	1	1	2	0.80%
Cultural	0	1	0	1	0.40%
SUM	15	6	3	24	9.80%
• The same expression of the same concept with omission					
Physiological	1	0	0	1	0.40%
Behavioural	0	1	0	1	0.40%
Expressive	1	0	0	1	0.40%
SUM	2	1	0	3	1.20%
• Different expression of the same concept with an addition					
Physiological	1	0	0	1	0.40%
SUM	1	0	0	1	0.40%
• Different expression of the same concept with a different form of image schematic concept					
Physiological	14	8	9	31	12.70%
Cognitive	5	4	3	12	4.90%
Behavioural	0	0	1	1	0.40%
Expressive	1	0	0	1	0.40%
SUM	20	12	13	45	18.40%
Total of three texts	53	55	49	157	64.10%
N = Documents	1	1	1	3	3

Table 11. Frequencies of fear expressions rendered with a parallel mapping.

6.1.1. Same expression of the same concept

In many cases, the metaphor or metonymy is reproduced in the Arabic translation. A common feature of this procedure occurs when the mappings are met between

the different cognitive domains of two distinctive languages. It is a cognitive extension of Newmark's (1988) "retaining the image" but with cases of mental source domains that are associated with a close target. In each instance, the source domain plays the key role and can process any level of complexity (Lakoff & Johnson, 1980a). The mechanism of this procedure tends to keep the source's conceptual structure through a cognitive mapping between domains in the translation, and thus, the source and target expressions are considered conceptually identical. According to Mandelblit's hypothesis, the similar mapping condition is obtained if there is no conceptual shift happening between the metaphors of both the SL and the TL (Mandelblit, 1995, p. 493). Johnson (1993) and Lakoff and Johnson (1999), have shown that human reasoning is to a large extent dependent on the experience of the body (see also Al-Harrasi, 1999 and 2000). That is why the structural components of the base of these conceptual mappings are reflected in the target by a similar underlying image-schematic concept. It is worth mentioning, however, that this procedure does not exclusively limit the translation to a specific rich image domain but it could be part of the broader image-schematic concept used in the source. A total number of 84 expressions were reproduced using parallel mapping, representing 34.30% of all cases, such as examples (1), (2), (3) and (4):

(1)

ST3:	Charbonneau watched him walk down the corridor, then turned back to me. "This is hard for him. He has kids." "Kids?" I felt *something cold inside my chest* (p. 17).
TT3:	راقبه تشاربونو يجتاز الممر ثم التفت إلي. "هذا صعب بالنسبة إليه. لديه أولاد" "أولاد؟" أحسست بشيء بارد في صدري (ص. 66).
BT:	Charbonneau watched him walk down the corridor, then turned back to me. "This is hard for him. He has kids." "Kids?" I felt *something cold in my chest.*

(2)

ST1: Rosalie looked at me suddenly, as if she'd forgotten I was there. I was sure my face was as white as hers. *Unless it was green* (p. 93).

TT1: نظرت إلى روزالي، كنت أشعر أن وجهي بات شاحبا كوجهها، إن لم يكن قد مال إلى الاخضرار (ص.141).

BT: Rosalie looked at me suddenly. I felt my face was as pale as hers. *Unless it turned greenish.*

(3)

ST3: It's cheap trash removal "What are you talking about?" *My mouth felt dry* (p. 417).

TT3: إنها طريقة رخيصة للتخلص من هذه الحثالة. احسست بجفاف في فمي: عمّ تتحدثين؟ (ص. 320).

BT: It's a cheap way to get rid of this trash. "What are you talking about?" *I felt dryness in my mouth.*

(4)

ST2: I lie back and close my eyes and feel myself *sink into dread* (p. 1020).

TT2: أظل مستلقية مغمضة عيني. أحس انني أغرق في الذعر (ص. 269).

BT: I lie back with my eyes closed. *I feel myself sinking into dread.*

All of the above Arabic translations in (1), (2) (3) and (4) realise a concrete sense of the abstract concept FEAR. The TT expression in (1) instantiates an image-schematic representation of COLD by using a lexical unit that describes an aspect of that concept. The translation retains the same image used to conceptualise fear in the ST. Examples (2) and (3) are also metonymically manifested and maximally close to their ST expressions. All examples (1), (2) and (3) represent cases of source-in-target metonymy parallel to their originals – COLD in (1), COLOUR in (2) and DRYNESS IN THE MOUTH in (3) – that grant access to FEAR. The literal translation in (1), (2) and (3) is employed due to the close semantic relations and conceptual links between the SL and the TL. There may, however, be a shift in the syntactic structure of the ST expression when transferred to the TT without any change in meaning. This happens in example (3), where the translator applies a parallel shift and changes the adjective *dry*, used as a physiological reaction

associated with the high intensity of fear, to its noun form جفاف/*dryness* in the target. Similarly, the translator in example (4) used a parallel correspondence with fear to that used in the ST; however, a slight syntactic shift occurred in the use of أغرق/*sinking* so that it became relational in a more interesting sense than in the ST. With this procedure, the majority of identified expressions remain essentially the same. However, this procedure was found to have been used to render mixed expressions under compound conceptual mappings. This means that the ST expression was translated into a similar expression having the same meaning with an identical series of cognitive concepts, i.e., (CM + CMN) into (CM + CMN),[39] as in example (5):

(5)

ST1:	*Pain crackled down my spine and lodged in my stomach,* as I abruptly realized that this could be the last time I would see him (p. 296).
TT1:	انتابتني رعشة من الألم انحدرت من ظهري واستقرت في معدتي عندما خطر في بالي أني قد لا أرى جايكوب ثانية (ص. 465).
BT:	*I had a shiver of pain that streamed down my back and settled in my stomach*, when I realized that I would never see Jacob again.

Seen from this example, it is quite clear that there is a conceptual intervention by another conceptual space in both the ST and the TT. The mapping conditions of both expressions hold two conceptual applications. The first, which is represented in the source expression *pain crackled down my spine*, is a metaphorical application, whereas the second, *lodged in my stomach*, is a metonymic image motivated by the metaphorical mapping. Moreover, the compounds appearing in the ST and TT both rely on the be-in-something relation i.e., CONTAINER. The only point that needs to be raised here is the lexical shift of the ST phrase *my spine*

[39] In this chapter, CM and CMN are used to refer to the higher conceptual levels of metaphors and metonymies.

into ظهري/*my back* in Arabic. This shift did not affect the meaning of the expression since the spine is part of the back. This was governed again by conventionality measures the translator takes to reproduce the source in an idiomatic expression that is pervasive and widely used in the TL. The sequential ordering of mappings in this example shows a parallel rendition of ordering of mapping into the target. This, however, need not necessarily be the case as long as the translator transfers the expression within the same cognitive, linguistic and pragmatic boundaries and balances all the functional and communicative aspects in the target. In brief, despite the cultural and linguistic differences, there are certain conceptual mappings that seem to be favoured in producing parallel mental models for fear, in addition to preserving the textual and pragmatic functions in the TT. This seems subject to three main aspects. Firstly, these particular concepts are deeply rooted in both languages and exhibit high frequencies in everyday use. The second aspect is due to the functionality of the original fear imageries of metaphors and metonymies in this genre. As such, much attention was paid by translators to the functional appropriateness of these source images in the TT. The third aspect is based on the strong and salient contiguity in a metonymic reference. The stronger the association between the source and target entities in the ST expression, the more literal translation decisions made to render these metonymic images in the TT are.

6.1.2. Same expression of the same concept with an addition

This procedure elaborates the TT with a new element/element associated with the metaphoric/metonymic concept realised linguistically in the source text. With this procedure, the translator aims to generate a clear, more expressive, coherent, and

overt expression than the implicit one used in the ST, taking into account cultural functions. A total number of 24 expressions were reproduced using the parallel mapping but with an elaboration, accounting for 9.80% of all cases, such as example (6):

(6)

ST1: Jasper growled at her and *she cringed back* (p. 330).

TT1: أنبها جاسبر فانكمشت خوفاً (ص. 510).

BT: Jasper growled at her and *she cringed back with fear*.

Looking at the TT in (6), we find that the mapping of the TT exists in a similar action frame to that in the ST. This includes *Jasper*, the agent, who processed the action *growling* towards the affected entity, *the girl*, to create the bodily reaction انكمشت/*cringed back*. This simply means that the TT mapping is identical to that used in the source. It must be noted that while the ST implies PHYSICAL AGITATION as an indication of fear, the target domain concept FEAR is left implicit.

However, the metonymic components were transferred with more elements at the same location in the TT, where the physical reaction is mentioned explicitly. This was performed with the use of a morpheme in the form of an adverb of state خوفا/*with fear* placed after the modifying noun. The added prepositional phrase is meant to modify the construct-state of the verb. The fact that the translator has added more elements has made the physiological reaction appear more intensified, idiomatic and explicit for the target reader. It must be noted that the explication technique seems transparent and provides balance and harmony with the source; however, that does not mean that it is always justified, unless used with culture-sensitive cases. Vinay and Darbelnet (1958, p. 342) define explication as "[a]

stylistic translation technique which consists of making explicit in the target language what remains implicit in the source language because it is apparent from either the context or the situation." (Vinay & Darbelnet 1995, p. 342, translation of Vinay & Darbelnet, 1958). Examples (7), (8) and (9) exhibit a sort of explication:

(7)

ST2:	I didn't want to be seen, I wanted to run away, but I couldn't, *my limbs were too heavy* (p. 818).
TT2:	لم أرد أن يراني أحد، أردت أن أهرب بعيداً لكني لم أستطع. كانت ساقاي ثقيلتين لا تستطيعان الجري (ص،217).
BT:	I didn't want to be seen, I wanted to run far away, but I couldn't, *my legs* were *heavy, they couldn't run*.

The case of explication identified in the TT in example (7) is shown in the phrase لا تستطيعان الجري/*they couldn't run.* The expression relates to INABILITY TO MOVE of the generic-level ACTION FOR PROCESS metonymy, which is parallel to the originally used concept in the ST expression. The expression has a reification of the subject in *there*, where it seems like it is the legs that are (not) doing the running, rather than the person. The new phrase was contained to the target in order to give the target reader more emphasis and explicitness with regard to the physiological condition the person is encountering. The addition of new instantiations is a great way to show the translators' aesthetic style, taking into account all measures while producing a translation that is adequate enough for the target reader. Examples (8) and (9) represent similar cases:

(8)

ST1:	*Jasper shuddered*. I realized that I had never before seen him either afraid or horrified (p. 167).
TT1:	ارتعد جاسبر وهو يتكلم. ولم يسبق لي أن رأيته خائفاً أو مذعورا (ص، 252)
BT:	*Jasper* shuddered *while he was talking*. I have never seen him either afraid or horrified.

(9)

ST1:	"Oh, no, Jake! No, no no no," I choked out in horror. "No, Jake, no. Please, no." *My knees began to tremble* (p. 305).
TT1:	"كلا يا جايك، كلا أرجوك لا تقم بمثل هذا العمل أرجوك، أرجوك! " وشعرت بالرعب يخنقني وبركبتي ترتجفان وتتلويان تحتي (ص. 469).
BT:	"No, Jake! please no! don't do such a thing." I felt terror choking me and *my knees trembling and twisting underneath me.*

The linguistic expression in (8) is transferred without any linguistic changes to the TT, but an adverbial clause وهو يتكلم/*while he was talking* was added. The elaboration could be used to expand the comprehension of the target readers and to draw their attention to the situational context and exact time frame of the physical reaction. The metonymy implied in the ST of example (9) also adds a physiological reference تتلويان تحتي/*twisting underneath me* to level up the idiomaticity of the Arabic expression وبركبتي ترتجفان/ *knees trembling.* At the same time, the verb *began* is left out in translation and a continuous form is employed instead. Even though the correct form of the continuous tense is not applied, it is common to use verbal ellipsis with omission similar to the ostensive context in literature, where a modal, auxiliary, operator and/or lexical verb is left out for stylistic purposes. The elaboration technique helps the translator to produce a more readable expression that can provide clear cohesion to the sentence. Consider example (10):

(10)

ST1:	[…]—what was I going to say to Jacob? *My splintered heart throbbed out a painful, aching beat* (p. 324).
TT1:	ماذا كنت أريد أن أقول لجايكوب؟ دق قلبي المشطور إلى نصفين دقات مؤلمة (ص. 502).
BT:	[…]—what was I going to say to Jacob? *My halved splintered heart pounded into painful beats.*

The lexical choice in TT expression of example (10) employs a rich image with a physiological source domain parallel to the original. A few differences between the original and the translation are, however, worth observing. The first is the use of the verb دق/*pounded* instead of *throbbed out.* This non-structural shift can be used when a translator tries to match the word with the voice system of the TL (see Catford, 1965). The TT expression also came with the addition of a premodifier prepositional phrase إلى نصفين/*halved* to make the ST expression appear to have a more idiomatic sense that creates linguistic harmony with the linguistic convention of the Arabic language. In contrast to clause-level changes, phrase-level changes such as premodifiers do not affect the syntactic structure.

The significance of employing the addition tool in this example is that it makes the expression more expressive and more fluent than its original counterpart, or than if it had been rendered with literal translation. This, accordingly, met the communicative translation goals in the target. What is more interesting is that the singular form of the term *beat* has shifted into its plural form دقات/*beats* in the TT. This shift is used due to the morphological opacity of Arabic that "many patterns are the result of a series of derivational steps, some of which are semantically systematically" (Bateson, 2003, p. 2). Arabic like other Semiotic languages, is characterised by a non-linear morphological structure where the hallmark of which is a root and a derivational pattern, based on specific rules (see Larcher, 2006; Darwish, 2009; Saiegh-Haddad & Henkin-Roitfarb, 2014). Based on this, the translator applied the domestication strategy which used in the noun دقات/*beats*, a word derived from the verb دق/*beat* where the former has similar letters to the latter without the plural "s" (Venuti, 1995). According to Venuti, domestication is 'an ethnocentric reduction of the foreign text to target-language cultural values,

bring the author back home' whereas foreignisation is (Venuti 1995, p. 20). The application of morphological and derivational rules in this translation shift is meant to domesticate and naturalise the English term *beat* provide a more idiomatic effect in the TT expression so that the impact of foreignisation, mainly from English into Arabic, is delimited. Further, using a derivation will provide a more idiomatic effect in the TT expression. Another interesting point is that the metonymy implied in the ST undergoes a reduction. In ST of example (10), the author used two consecutive adjectives, *painful and aching*, to modify the noun *beat*. The target, however, solely describes the noun using the word مؤلمة/*painful*. The possible explanation for this is that it avoids the redundancy of linguistic items. The explication technique allows translators to not only ensure a precise and correct dissemination of the ST knowledge, but also to facilitate the target reader's comprehension of the ST existing information. Consider example (11):

(11)

ST2: *I'm blind with tears and terror* (p. 1174).

TT2: أعمتني دموعي – أعماني خوفي (ص. 306).

BT: *My tears blinded me – my fear blinded me.*

Similar to the ST, the TT in example (11) highlights the aspect of blindness as a metaphoric idea for understanding fear. The TT expression, however, undergoes a change of agency compared to the ST. It represents a case of an expression translated by a similar expression and belongs to the same metaphor FEAR IS BLINDNESS but with added elements. The addition is motivated due to the different use of the masculinity and the feminisation of verbs in Arabic. The translator shifted the word *blind* to a lexical passive voice in two different forms: أعمتني/*blinded me* and أعماني/*blinded me*. This rule is governed by the nature of the nouns used. In fact, a noun in Arabic can be categorised into two types with respect

to gender. Verbs that follow figurative feminine nouns, such as دموع/*tears*, are feminised, whereas verbs that follow masculine nouns like خوف/*fear* are masculinised. The pattern of the replacement in this metaphor is considered obligatory for syntactic reasons. The fact is that Arabic nouns, whether real feminine nouns with an explicit sign of femininity such as in women's names, or figurative non-living nouns ending with a feminine suffix, like سعادة/ *happiness*, or those that do not end in an feminine suffix but are regarded as one, like شمس/*Sun*, can make a verb feminine (see Sadiqi, 2006). Hence, it would be very unnatural to not modify and add a verb in the TT that concords with the masculine nature of the noun *terror*. The corpus has identified more cases where the shift affects the direct metacognitive function of the ST expression and the translator adds a whole new expression of a particular concept to the context, as in example (12):

(12)

ST1:	*I would wait for the sword to be removed from over my head* (p. 251).
TT1:	سأنتظر حتى يختفي الخوف تماما، ويبتعد السيف عن عنقي (ص. 388).
BT:	*I would wait until fear disappears completely and the sword to move away from my neck.*

While the original expression portrays the character's emotion explicitly in terms of a WEAPON, the translator implies the meaning with an equivalent phrase in the TT with no major change at a linguistic level. However, the translator was aware that using the exact ST image would not fully capture the metaphorical meaning used in the ST if it were rendered literally. Accordingly, it would not grant the target readers full comprehension of the original image used. This was tackled by using a new expression حتى يختفي الخوف تماما/*until fear disappears completely*, which belongs to FEAR IS AN ENTITY in the TT context. The fact that the translator used a new concept in Arabic changed the explicitly dynamic

nature of the English image to an implicit one in the TT. The elaboration in example (12) might indeed have affected the cognitive function of the ST expression. However, the application of this is meant to overcome the lack of pragmatic function that would occur if the same connotative conceptual links of the source were solely used in the Arabic text. Addition shifts in translation could be the solution for a variety of related syntactic and pragmatic issues, for example. Improper use of these rules, along with a lack of knowledge about the importance of linguistic and conceptual functions in translation, could lead to translation problems. An addition error occurs when the translator introduces irrelevant or superfluous semantic details in the TT that may lead to confusion. It should be pointed out that the added element(s) need not always belong to a mapping similar to the literally translated expression in the target. Rather, these elements could be mapped onto a different source domain of a different type, as shown in the expression in example (13):

(13)

ST1: *My stomach went tight with fear* (p. 430).

TT1: انقبضت معدتي من الخوف الذي تملكني (ص. 331).

BT: *My stomach tightened with fear that possessed me.*

Example (13) shows a case where the image of the NERVOUSNESS IN THE STOMACH metonymy is introduced. The Arabic translation opts for activating the OPPONENT metaphor as a subcategory of the BEING metaphor for fear by adding the relative clause الذي تملكني/*that possessed me* to conceptualise fear. The potential effect of this addition is creating a more explicit image. The use of such a technique changes the implicit into the explicit in the target context, where important images in the SL "may require explicit identification in the receptor language" (Nida, 1964, p. 227) that functions as a good way of explaining and

embedding. Another related effect of this conceptual activation is that it assists translators with adding a further view to the image used in the original. This, in general, may be subjective to the translator's linguistic knowledge and literary aesthetics.

6.1.3. Same expression of the same concept with an omission

This is a non-systematic technique. In contrast to the previous procedure, this procedure renders the images realised in the source literally with less or partly deleted information (a morpheme, word or phrase) to make the explicit in the source implicit in the target. A total number of three cases were reproduced under the same concept but with missing elements, accounting for 1.20% of all cases, such as examples (14), (15) and (16):

(14)

ST1: *I stopped breathing too — too frightened to even make my lungs work* as I realized that Edward had frozen into a block of ice beside me (p. 313).

TT1: توقفت عن التنفس أيضاً من شدة الخوف عندما لاحظت ان ادوارد قد تحول إلى تمثال من الجليد أمامي (ص. 483).

BT: *I stopped breathing too because of intense fear* when I realized that Edward had transformed into a statue of ice in front of me.

(15)

ST1: *His eyes were huge, wide with panic, dazed and horrified.* He could see that I was right, just as Alice had (p. 205).

TT1: اتسعت عيناه هلعاً فقد ترنحت الصورة أمامه واقتنع بما قلته مثلما اقتنعت آليس (ص. 317).

BT: *His* eyes *widened with panic*. The image faltered in front of him convinced just as Alice did of what I have said.

(16)

ST2: I walk past him and *start to run down the stairs* (p. 1363)

TT2: لا يرفع أس لينظر إلي، فأتجاوزه، وأبدأ بالجري إلى الأسفل (ص. 355)

BT: He doesn't raise his head to look at me, so I pass him and *start to run down.*

The omission in examples (14), (15) and (16) is relatively clear and easy to spot. In example (14), the TT expression does not explicitly express the ST physiological image but instead implies part of the meaning by keeping the first part of the clause *stopped breathing too — too frightened* and by omitting the second *to even make my lungs work.* Both parts relate to the same metonymy INABILITY TO BREATHE IS FEAR. Even though the omitted phrase has an equivalent in Arabic, the translator must have left it out for stylistic reasons. The source example in (15) is an instantiation of the WAYS OF LOOKING and the PERCEPTION FOR EXPERIENTIAL EVENT metonymies, as the *eyes* are presented as living entities capable of feeling the emotion and having perception. The same image is rendered in the TT but the translator drops the word *huge* and the cumulative adjectives *dazed and horrified.* It may be assumed that the translator considered these expressions to be repetitive that would be of no use in the TT and, therefore, eliminating them meant less redundancy and more quality in the TT. This, however, changed the syntax of the sentence, by changing the ST adjective *wide* into the past verb اتسعت/*widened* while keeping the same prepositional phrase هلعاً/*with panic.*

The omission procedure in (14) and (15) could also be motivated by the translator's firm confidence that the target reader would recover the missing information from the context. Example (16) is another case identified in the corpus that shows the translation of a behavioural manifestation that reflects the concept ENERGISER IS FEAR. Both the ST and TT expressions are structured via the schematic concept DOWN. While the ST uses *to run down the stairs,* the translator renders the expression without the word *stairs.* This decision was made based on the fact that, in Arabic, there is no need to use the noun *stairs* to indicate the action

of someone going down a staircase towards another lower floor, such as ذهب للأسفل/*went down*. By contrast, the use of *run down* alone in English, within the right context, would change the mental aspect of it from ENERGISER to REDUCTION. If a literal translation is to be employed, the expression ابدأ بالجري أسفل الدرج/*I start to run under the stairs* would be produced instead, which has a different semantic attribute to the source. Translators often avoid the concept of omission from the perspective that it could dilute the ST meaning or may yield a lack of communication in the TT. However, whether it is an omission that was needed in the target or an addition, both procedures can definitely cater for many problems such as semantic and cultural clashes and they can lure the target reader's attention to a specific source-target context. The omission shift, in general, conceals imperfections with the aim of producing smoother, less complex and more readable text.

6.1.4. Different expression of the same concept with a different form of image-schematic concept

In some cases, omitting existing semantic elements is not the best solution, as missing information cannot always be restored, and, thus, with such a challenging task, the translator attempts to find other solutions to tackle the problem. One way to overcome this is to simply replace the source expression with a different one in the TT within the same conceptual domain with no change in meaning. In this case, the translator obviously considers it necessary to reproduce a source image with close semantic components between entities in a way that seems familiar with the target readership, yet realises a different form of schematic concept. A total number of 45 cases were rendered with this procedure, representing 18.40% of all cases. This is shown in examples (17), (18) and (19):

(17)

ST1: "Laurent?" I whispered, *the blood emptying from my face,* but Edward didn't respond, focused on Carlisle's thoughts (p. 176).

TT1: سألته بهمس: لورانت؟ وشعرت بالدم يهرب من وجهي. لكن إدوارد لم يجب، وبقي مركزا على كارلايل (ص.271).

BT: "Laurent?" I whispered and felt *the blood fleeing from my face,* but Edward didn't respond, focused on Carlisle.

(18)

ST2: The pain in my head brings me back to myself. *My heart crawls into my throat* (p. 1460).

T21: يجعلني الألم الذي في رأسي أعود لنفسي. أحس بقلبي يصعد إلى حنجرتي (ص.379).

BT: The pain in my head brings me back to myself. I feel *my heart going up to my throat.*

(19)

ST1: Every time I hear footsteps on the steps, *my heart rate goes up* (p. 734).

TT1: تتسارع نبضات قلبي كلما سمعت خطوات تصعد السلم (ص.195).

BT: Every time I hear footsteps on the steps, *my heart rate accelerates.*

The shift of mappings to the TT in (17), (18) and (19) is less conventional and, therefore, the change affects the image-schematic structure of the ST expression. It must be noted, however, that with this procedure, both the original and the translation accord semantically. In example (17), the conceptual link between the ST and TT is established via the metonymy BLOOD LEAVES THE FACE IS FEAR (cause: fear; effect: blood empty; affected entity: the face). All the latter entailments acquire different degrees of prominence in the clause. The question to be raised here is how to transfer these entailments with no conceptual change to the target? The translator seems to be aware of the bodily based cultural assumptions. Thus, she replaces the ST lexical image *emptying* with a different one يهرب/*fleeing from* with no change in meaning. The major change, however, affects the way the relations between the source domain and target domain are encoded in the TT, in addition to the way they are schematically structured. The

word يهرب/*fleeing* has an underlying schematic running pattern formed with MOVEMENT, whereas the ST expression *emptying from* brings one of the container elements formed with the FULL-EMPTY schema. The link between the ST and TT in example (18) is established via the INCREASE IN PULSE AND HEART RATE IS FEAR metonymy. Again, there is a change in the schematic representation and rich image used. The ST portrays FEAR using the verb *crawl* constructed by the CONTAINER schema in *into,* whereas the TT shifts both aspects to a different image within the same domain using يصعد/*going up*, thus emphasising the schematic shift in terms of UP. The same solution is implemented in example (19). The translator shifts *my heart rate goes up* to a different expression تتسارع نبضات قلبي/ *my heart rate accelerates* with an asymmetrical schematic pattern but a similar meaning. Furthermore, the ST metonymy in (19) is formed by the UP orientation schema, while the translator diverts it to the SPEED schema in تتسارع/*accelerates* responsible for the construction of the same metonymic concept INCREASE IN PULSE AND HEART RATE IS FEAR that is used in the ST. In example (20) the translator is faced with expressions conceptualised with a shared concept. A close examination of both ST and TT, however, shows that there is a change in the schematic pattern used.

(20)

ST1: *The shrouded future sent a shiver down my spine (*p. 120).
TT1: أرسل التفكير بمستقبلي قشعريرة رعب في جسدي (ص. 182).
BT: *Thinking about my future has sent a shiver of terror in my body*

While the ST expression *sent a shiver down my spine* is associated with a DOWNWARD spatial orientation, the translator constructs the expression أرسل التفكير بمستقبلي قشعريرة رعب في جسدي / *Thinking about my future has sent a shiver of terror in my body* with an OUTSIDE/INSIDE spatial orientation along with the

CONTAINER schema. This indicates that the type of image-schematic representation used is not always identical and depends on the cultural factors that may affect the way the body is profiled in the target culture. The ST expression in (20) creates the sense that the level of the CONTAINER schematicity used in *my spine* to show the location of FEAR, in this context, is more specific than it is in the Arabic phrase رعب في جسدي/ *terror in my body*. The example also shows an action of addition and an omission. While the noun رعب/*terror* was added, the original word *shrouded* was omitted. Like the general addition and omission application, this procedure is another variant of the same expression of the same concept. The expression in (21) shows a similar case of schematic change in the TT image, used to portray the metonymic reaction, with no drastic change in meaning.

(21)

ST1: *I could feel the panic surfacing in my eyes* as I mouthed the reasons (p. 156).

TT1: كنت اشعر بالرعب يقفز من عيني وانا اعد الاسباب التي تستوجب تحولي (ص. 240).

BT: *I was feeling the terror popping out of my eyes* as I counted the reasons that necessitate my transformation.

The ST expression *panic surfacing in my eyes* has an underlying schematic pattern formed with CONTAINMENT, supported and proven by the presence of the preposition *in*. Both ST and TT expressions are reasoned with the same conceptual metaphor FEAR IS AN ENTITY IN A CONTAINER, which pertains to the higher-level concept PARTS OF THE BODY ARE CONTAINERS FOR EMOTIONS. The translator, however decided to render the metaphoric structure into الرعب يقفز من عيني/ *the terror popping out of my eyes* by drawing upon a different container orientational pattern formed with the OUT schema. This is supported by the presence of the preposition *out* in the TT expression. If we look

back at example (21), we will find an elaboration in the TT. The translator not only changed the image and its schematic construction but also added التي تستوجب تحولي/ *that necessitate my transformation* as extra elements. This, in general, may be subjective to the translator's style to explicate the cause of character's behaviour in the scene. In brief, the result of applying this translation solution comes from the non-existence of the exact collocative image in the TL. This would be hard to translate literally, so a different pattern is adapted and deployed with different images under the same generic concept. It must be noted, however, that the change of image-schematic representations is not always counterbalanced between the SL and TL and it may vary during the translation process (see sections 6.2 and 6.3).

6.1.5. Different expression of the same concept with an addition

In this procedure, the translator simply replaces the ST metaphorical or metonymical expression by a different expression of the same conceptual mapping, yet with more elements added. Example (22) is the only different expression that was reproduced in the target with this technique, accounting for 0.40% of all cases.

(22)

ST1:	*Could I handle this? images of flowing black robes crept into my unwilling mind* (p. 326).
TT1:	لم اتصور ان بإمكاني احتمال رؤيتهم بأثوابهم السود الفضفاضة التي عادت لتغتصب مخيلتي وتروعني (ص.504).
BT:	*I couldn't imagine that I could handle* seeing them in their *flowing black robes coming back to deforce my imagination and terrify me.*

Example (22) is a very interesting excerpt by Bella expressing her fear of the Volturis (a coven of vampires). She uses the expression *black robes* to refer to the

design and colour of the Volturis' clothing used in the scene. In this context, however, the collocational phrase qualifies as a metonymy PART FOR WHOLE with two objects under the general concept of DARK FOR NEGATIVE STATES CAUSED BY DARK, in which *black* has a reference to evilness and *flowing robes* stands for spirits. The metonymic source is combined with a proper metaphor, *crept into my unwilling mind,* cleverly extending the image with another, using the fact that FEAR IS AN OPPONENT. This gives access to a metaphoric mapping within the same metonymic window. If we look back at the TT, we will find that the first metonymy *black* and the second metonymic tier *flowing robes* associated with the target domain exist in the Arabic translation. This means that the translation into the TL was literal. The translator, however, decided to highlight the other half of the scenario and converted the word *crept* to لتغتصب/*to deforce* and the collocative phrase *unwilling mind* to مخيلتي/*my imagination*. This change might have taken the TT to another level of explicitness but it did not affect the overall meaning of the expression. In fact, this shift is lexically and syntactically motivated, as it would be difficult to find similar words with similar syntactic functioning of the source in the target context. There is also another change involved in this example: the translator elaborated the text with the adjunct ترعني/*terrify me* as an allusion to the character's emotional impact, which is not made in the source. This could be attributed to the translator's distinct style.

6.2. Abstracting the rich image

The linguistic paradigm views this procedure as shifting metaphor into sense. This is based on the assumption that all senses are literal and not figurative. According to CMT, however, all senses are abstract concepts, and are thus considered

metaphorical. With CMT assumptions, this procedure cannot be viewed as a deletion procedure but instead as a shift that changes the rich image to another conventional equivalent with the same concept. Simply put, the abstracting procedure contrasts with the concretising procedure (see section 6.3) as it keeps the image-schematic concept but changes the rich image it holds. Although it is of less value than the parallel technique, shifting a concrete rich image to an image-schematic representation was found to be the second most commonly applied technique in the corpus with 23 cases, representing 9.40% of all cases. Table 12 shows the frequencies of the realisations rendered with the abstraction procedure in the TT corpus followed by a series of examples that highlight some of these expressions:

Abstracting the rich image	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
Physiological	7	2	6	15	6.10%
Cognitive	1	3	4	8	3.30%
Total	8	5	10	23	9.40%
N = Documents	1	1	1	3	3

Table 12. Frequencies of fear expressions shifted to image-schematic representations.

(23)

ST3: I felt someone *light a match in my chest* (p. 321).
TT3: شعرت وكأن أحدا أشعل في صدري ناراً (ص.246).
BT: I felt someone *light a fire in my chest*.

(24)

ST3: I followed his gaze, and *fear shot through me* (p. 443).
TT3: تبعت نظرته، واخترق صدري الخوف (ص.246).
BT: I followed his gaze, and *fear penetrated my chest.*

(25)

ST2: *Flooded with dread and adrenaline* (p. 633).
TT2: يملأني الذعر والأدرينالين (ص.68).
BT: *Filled with terror and adrenaline.*

(26)

ST2: *Fear ebbing and flowing* (p. 224).
TT2: كان خوفي يتراجع ويزداد (ص.319).

BT: *My fear was receding and rising.*

(27)

ST3: *My heart felt dead in my chest* (p. 427).

TT3: أحسست أن قلبي قد توقف عن الخفقان داخل صدري (ص.329).

BT: I felt that my *heart stopped beating in my chest*.

(28)

ST3: On *rubbery legs* I staggered to the escalators (p. 436).

TT3: توجهت نحو المصعد بقدمين مرتجفتين (ص.336).

BT: I walked to the elevator on *trembling legs*.

(29)

ST2: *My heart hammering in my chest* (p. 427).

TT2: يدق قلبي في صدري كأنه مطرقة (ص.329).

BT: *My heart is beating in my chest like a hammer.*

The first three examples (23), (24) and (25) represent cases of expressions where the association between fear and the person experiencing the reaction has a cognitive connotation. In ST expression (23), FEAR is directly related to the HEAT metaphor, (24) is understood in terms of WEAPON/(GOES INTO THE BODY FROM THE OUTSIDE and (25) in terms of FLUID NATURAL FORCE. In all three cases, the author describes the ST metaphorical images explicitly, but the translators replace them with different expressions in the TT. In (23), the idea of HEAT is preserved through نارا/*fire*, which is a physical symbol of heat, yet it does not portray the exact explicit image as the original does. Instead, it realises an image-schematic representation of a more abstract concept. The same is applied to example (24), where the idea of going into the body from the outside, which is linked to the ST expression, is kept in the TT via the verb اخترق/*penetrated*. Similarly, the verb يملأني/*filled with* in (25) keeps the two schematic ideas of FLUID and FULL. It must be noted, however, that while the ST conceptualises fear in terms of a natural force phenomenon, no reference to natural force entailments were captured in the TT, and, thus they were left implicit. Example (26) is another realisation of FLUID NATURAL FORCE IS FEAR, which depicts

one's fear as the waves of the ocean moving, ebbing and flowing. This image interacts with the uncertainty of what will happen next, which may affect our emotions at the time of an incident. An equivalent of this imagery in Arabic, however, does not exist, and thus the translator had to use different binomials of two conjoined words, يتراجع ويزداد/*receding and rising*, that are already constructed in the TL, in order to retain the original idea in a more basic way. Similarly, this procedure has also been identified with the transference of metonymic expressions onto well-grounded (rational) physiological responses. In example (27), the *heart felt dead* from LAPSES IN HEART RATE is shifted to قلبي قد توقف/*my heart stopped*, and similarly, *rubbery legs* in (28) from PHYSICAL AGITATION is shifted to يقدمين مرتجفتين/*trembling legs*, which does not portray the exact explicit image used in the source. In (29), the expression *heart hammering* is shifted to يدق قلبي/*heart beating*, which again represents a case of abstraction, yet the translator chose to keep the image of hammering through an addition with the use of a simile *like a hammer*. Simile, according to CMT, is a type of metaphor in which the expression is formally marked with a word such as "like," "as" or "as if", (مثل، شَبه، شَبِيه، شَقِيق، مثيل، نظير) in the word form or in the letter form (كأن ، ك) in Arabic.

Generalisation of the abstraction technique appears to be one of the most common and effective solutions observed. Arab translators tend to move from more specific to less specific in the process of translating expressions of emotions. The employment of such abstract ideas is one of the most prominent and effective solutions applied, and it appears to have more influence on the target reader. It offers the target reader more opportunities to grasp the intended functions of the source metaphors and metonymies. The abstraction procedure is an adaptation solution that confirms Turner's (1996, p. 11) findings about how deeply

entrenched cultural meanings “fail to migrate intact across anthropological or historical boundaries”; however, they can be understood through their universally mapped generic-level concepts. These higher-level concepts “can give us a generic-level interpretation of a specific level proverb and then allows applying the generic interpretation to a specific case that has the appropriate underlying generic structure” (Kövecses, 2010a, p. 45). Therefore, a bodily based expression like *my heart was racing* translated as كان قلبي يخفق سريعا/ *my heart was beating fast* is, in fact, modified by substituting the unfamiliar English image with a familiar more abstract one in Arabic, hence providing the TT with more transparency and easy access for its readers.

6.3. Concretising the image-schematic concept

A common aspect of this procedure is shifting the expression of the original concept used in the ST, which does not directly involve the main idea of the concept, into a more concrete expression in the TT. In other words, the components of the base image-schematic concept are replaced in the TT by an expression that makes entailments more explicit, endowed with evocative and dramatic effects. A total number of two expressions were rendered with the concretisation technique with a total rate of 0.80% of all cases, as shown in Table 13. Example (30) highlights the use of this procedure.

Concretising the image-schematic concept	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
Physiological	0	1	0	1	0.40%
Cognitive	1	0	0	1	0.40%
Total	1	1	0	2	0.80%
N = Documents	1	1	1	3	3

Table 13. Frequencies of fear expressions concretised in the TTs.

(30)

ST2: *My heart thudding in my chest*, I stood there, morning commuters stepping around me as they continued on their way to the station (p. 318).

TT2: صار قلبي يخفق عاصفاً في صدري. وقفت هناك بينما راح الماضون إلى أعمالهم في ذلك الصباح يمرون من حولي متابعين يتابعون سيرهم باتجاه المحطة (ص. 89).

BT: *My heart was beating boisterously in my chest*. I stood there in the morning, while commuters were on their way to their jobs continuing on their way to the station.

In example (30), the ST uses a metonymic concept INCREASE IN PULSE AND HEART RATE IS FEAR without recourse to explicitly portraying a rich image domain. The translator, however, opts to transfer the expression to the TT with a more sophisticated rich image domain structured from the same ST image-schema. To elaborate, the ST uses the SOUND image-schema in *thudding* combined with the CONTAINER schema in the phrase *in my chest*. The translation, on the other hand, realises the same metonymy but with the use of concrete semantic entities in the form of an adverb of state عاصفا/*boisterously*, which is also combined with the CONTAINER schema في صدري/*in my chest.* According to the online *Macmillan English Dictionary* (Rundell et al., 2009-2021) the term *boisterous* reads as "lively and noisy", which accords nicely with the image-schematic concept used in the ST. The motivation for using the concretising technique could be the translator's desire to make the ST more concrete, assuming that the ST expression is too abstract to be easily understood by the target reader. Another reason could be due to the level of conventionality of the expression in both languages. It has been noted that the compound *heart thudding* is conventionally used in English to realise SOUND schematic patterns of heart function, but not in Arabic. This was checked with the Google search method using the exact sequence of the expression. The search retrieved 105 million hits,

including repetitions. A language like Arabic lacks such compounding as a word formation process due to specific syntactic and morphological constraints. The fact that the translator used this shift means that he is aware of the need to localise the ST image-schema in order to be not only fluently introduced but also to be accepted in the TL and culture.

(31)

ST2:	His words sank into my brain, slowly, one by one, and I couldn't breathe. *I choked out in horror* (p. 305).
TT2:	دخلت كلماته الى رأسي واستقرت واحدة بعد الأخرى. فضاق صدري وتقطعت انفاسي وشعرت بالرعب يخنقني (ص. 89).
BT:	His words went into my head and settled one after the other. *My chest went tight and my breaths cut off. I felt terror choking me.*

The characteristics of the images under mixed expressions could motivate image-schematic patterns to change during a transcultural process. Example (31) was found to be a candidate for this. The rich image in this example is formed by the recurrent use of the CONTAINER image-schema, extended with the orientation schema OUT, lexicalised in *out.* The expression controls the perception of the pronoun *I* as the entity in the container, the verb *choked* as the action processed towards the affected entity and the noun *horror* as the emotional container itself. However, the way in which the CONTAINER and its extension is used in the ST does not exist in the Arabic culture and, therefore, it does not share similar levels of conventionality. A closer look at the English expression reveals that it is not possible to manifest the exact metonymic reference without any changes to the TT. Furthermore, a literal rendition with the deletion of the word *out* would result in an ungrammatical translated Arabic expression اختنقت في الرعب/*I choked in horror*. The source schematic position of the source expression cannot be vacant in this case of rendition to the TT. Moreover, it cannot be used in the TT without

any modification, otherwise confusion of meaning will occur. Hence, it was obligatory for the translator to localise the image-schema and to modify the expression in order for it to be accepted in the TL and culture. It shifts the abstract nature of the ST schematic concept to a concrete rich image domain with the same meaning in the TT. This, taking into account all the associations and rich image domains of the TL, is finally rendered as شعرت بالرعب يخنقني/*I felt terror choking me*. This caused the structure of the schematic elements in the metonymic mapping to be different to their structure in the ST. This translation pattern was observed in the data of this study. Its application, however, seems to be less frequently implemented than other translation procedures used to render fear image-schemas in the target.

One of the possible explanations for using such a technique is the nature of image-schemas themselves. Some of them like SOUND in example (30) may provide abstract or fuzzy structural outlines of a definition in an SL that does not accord with the TL culture. Image-schemas may vary, depending on the domain that describes the metaphor or metonymy, as not all images have similar clear schematic structures (Kimmel, 2009, p. 161). This assumes that concepts of an SL that do not have a clear schematic structure (abstract) are culture-specific and may not be understood by the target reader, and, thus, loss of fluency will be caused. The opposite statement to the former is also correct. That is to say, concepts of an SL that have a clear schematic (concrete) structure may not exist in the target culture and, hence, cannot be used in the TL. These two aspects include semantic complexities in constructing meaning in addition to the interplay between the image-schemas and the rich images they hold. The deployment of the concretisation technique is seen as a way to localise and filter culture-specific

image-schemas through a familiar image that is properly realised in the TL and reflects the intended content of the source at the same time. Although it appears that literal translation is the most applied, there is a notable tendency to provide explicit, conventional and, most importantly, fluent cases of implication, explication, localisation, collocations, idioms, generalisation, and so forth. All variants of the parallel procedure employ the same conceptual mapping (CM → CM) or (CMN → CMN) in the target. The similarity in most conceptualisations found in both English and Arabic cultures seems to facilitate the rendition in the TL. The prominence of this procedure actually suggests that metaphors and metonymies of FEAR are capable of being put into another form or style across cultures. This is based on the universality factor, relaying all the ST cognitive, textual, and pragmatic functions to the target reader.

6.4. Different TT mapping

It is said that not only language itself but its extralinguistic reality (background knowledge) play a significant role in communication (Fairclough, 2004). This, however, is never stable and goes through constant change due to the continuous emergence of new concepts and categories that need to be lexically introduced. This requires language to be adaptable enough to allow possible changes across cultures. Strategically, this is achieved via the different mapping procedure. The different mapping procedure transfers expressions with underlying concepts that are built on deeply entrenched social values, certain cultural beliefs and different schematic structures; these cannot be combined under an abstract concept in the target. The change in the different mapping mechanism not only affects the lexical semantics and other aspects of meaning but also the deep structural mapping

responsible for conceptualising abstract physical entities. Expressions under this group require cultural filtering to allow for translation solutions that accord with the TL and culture to be applied. Therefore, and based on specific cultural requirements, translators replace the original concept with a different one realised under an already established concept encoded in the TL. In other words, the SL domains map all semantic associations, including social and cultural beliefs, onto the TL, using culturally specific metaphorised or metonymised concepts of entities. A total number of 17 expressions were rendered with this technique, accounting for 7.00% of all cases, as shown in Table 14.

Different TT Mapping	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
• Parallel sequence of different mapping					
Physiological	3	0	4	7	2.90%
Cognitive	6	1	2	9	3.70%
SUM	9	1	6	16	6.60%
• Divergent sequence of different mapping					
Cognitive	1	0	0	1	0.40%
Total	10	1	6	17	7.00%
N = Documents	1	1	1	3	3

Table 14. Frequencies of fear expressions rendered with a different mapping.

6.4.1. Different expression of a different meaning with a parallel sequence of different mapping

This technique involves the transference of the original expression under a different concept, realised by different lexical units in the target. A total number of 16 cases translated under this variant, accounting for 6.60% of all cases. As previously mentioned, this study views metaphor and metonymy as two different mappings. Thus, the sequential ordering of mappings between domains from the source to the target can either be parallel or divergent. The former refers to how

the source cognitive mapping transfers to the target in an ordered sequence, meaning that the source domains can be either transferred from a conceptual metaphor CM into another different CM' or from a conceptual metonymy CMN into another different CMN' in the target.[40] The divergent mapping, however, refers to the change of mapping sequence from the ST to the TT (see section 6.4.2). Cases translated with a parallel sequential ordering of mappings were identified, such as in example (32), in which the translator uses the metaphoric expression *I was dominated by extreme fear* in the TT to describe the intensity of fear. This is also evident in the BT, which supports the point:

(32)

ST1:	For a moment, the idea of Jacob's certain revulsion *overshadowed every other pain* (p. 15).
TT1:	عندما فكرت بجايكوب وتصورت ردة فعله على تحولي واشمئزازه، سيطر عليّ خوف شديد (ص. 27).
BT:	When I thought of Jacob and visualised his reaction towards my transformation and his revulsion, *I was dominated by extreme fear.*

It is quite productive in English to use lexemes for NATURE to refer to the action of shadowing an entity. A literal translation of this into Arabic, however, would not communicate what the original author intended. A language like Arabic might does not have the entailment involving the same idea or even lack semantic components between the source domain and target domain entities in the active language or certain collocations as a word formation process. For this reason, the translator resorts to other syntactic or morphological means to be able to render an expression that is semantically and culturally clear to the target. Looking at the Arabic translation, we find that the mapping of the TT expression سيطر عليّ خوف

[40] The (CM → CM') and (CMN → CMN') mappings are used to indicate a shift with different mapping conditions either metaphorical or metonymical, yet with a parallel sequential ordering of mapping between the ST and TT.

شديد/ *I was dominated by extreme fear* exists in a different cognitive metaphoric frame, where its source domain is OPPONENT. This simply means that the TT went through a leap in conceptual shift. However, both ST and TT semantic elements mapped from the source domain to the target domain between texts fall under an identical mapping type, that is, from a source CM to another CM in the target. When translators resort to this procedure, they intend to imply a shift in the whole proposition, as in example (33):

(33)

ST1: Relief washed through my mind at the same time that *my stomach dropped through the soles of my feet* (p. 314).

TT1: شعرت وكأن أثقالا قد رفعت عن كتفي ...، وفي اللحظة عينها، خلت أن قلبي قد هبط إلى قدمي (ص. 484).

BT: I felt that weights had been lifted from my shoulder and at the same moment *I thought my heart had dropped to my feet.*

Body-based metonymies are cultural constructive mechanisms. They dominate the cultural dimension due to their physiological prominence of embodiment in conceptualising emotions more than any other semantic category (Barcelona, 2000). The correlations to the body parts in the metonymic expressions used in the ST and TT are not biologically but culturally defined. Even if the physiological state is seen as universal that does not necessarily mean that the way the emotion is metonymically expressed is the same in every language and culture. The translator seems to be aware of these cultural assumptions, as there was no possible way of portraying the same bodily image connotated in the original in the TT. Therefore, the relocation of the *stomach* in *stomach dropped through the soles of my feet* in the ST was replaced by the relocation of the *heart* in قلبي قد هبط إلى قدمي/ *my heart had dropped to my feet.* The selection and transference in example (33) are not random, but rather interwoven with the cultural experience, which is

limited to the TL culture itself. It suggests a different degree of importance of specific body images in English and Arabic. While the *heart* is seen as the primary and core organ for sensing intense fear in the Arabic culture, English takes the *stomach* as the core affected organ for depiction. It is clear that the Arabic language differs from English with regard to the association between specific body parts and fear. In some of them, this association appears to be particularly elaborated and nuanced. The translation in this example uses a familiar and more common image with a conventional idiomatic sense to express the emotion in the Arabic culture. In contrast, then, to the ST approach that evaluates the original text to identify equivalence, the target approach evaluates the resultant translation based on the two principal factors: the target culture norms and the readership. This is done in order to decide the extent to which a particular translation is acceptable, not to mention following all the linguistic and cultural values established in that culture.

It must be noted that both the ST and TT in this example show an identical sequential manner of mapping i.e., from CMN to CMN between the ST and TT. Another interesting point to consider is the shift of schematic orientation between the original and the translation. The extended forms of image-schemas are viewed as cultural due to the different ways that body parts are profiled between the two cultures. Maalej (2007, p. 93) states that "culturally schematized expressions" are different from physiologically realistic expressions and they show a cultural difference in the physiological direction of embodiment, where what is said to happen to the part of the body profiled is culturally determined. In example (33), both the ST and TT reveal a shared pattern formed by the DOWN orientation pattern in the source *dropped* and the translation هبط/ *dropped* to structure the

perception of FEAR. The heart, however, must be anchored in its natural position and not DOWN. Hence, the image is conceptualised in terms of the metonymy LAPSES OF HEART RATE IS FEAR. This is how culture manipulates the body, not only with the locations of containers such as inner organs but also through their schematic structures (Maalej, 2007). The corpus contains further identified cases where different concepts were not shared and required a conceptual mapping change in the TT, as in example (34):

(34)

ST1:	Every time I hear the clacking of high heels, *I am seized with trepidation* (p. 734).
TT1:	وتداهمني موجة من الذعر كلما سمعت إيقاع كعب حذاء نسائي (ص. 198).
BT:	Every time I hear the clacking of high heels, *I get seized with a wave of terror.*

As has been demonstrated in the examples, emotions in general attract the use of various metonymies in English, many of which may seem unfamiliar to Arabic speakers. Some of these idiomatic and linguistic expressions may violate linguistic and conceptual norms or they may simply not exist in the language itself; thus, a change of concepts for these ST expressions is required in order for them to be accepted. This is what happens in example (34), where the translator implies a complete shift in the proposition. According to the online *Macmillan English Dictionary* (Rundell et al., 2009-2021), the word *trepidation* reads as "fear, or nervousness." The absence of OPPONENT WITH STRUGLE in the TT mapping in this example means that all entailments associated with it are also absent. Instead, fear is conceptualised in terms of FEAR IS A FLUID NATURAL FORCE in موجة من الذعر/*wave of terror*, which is completely different from the concept used to understand the emotional experience in the ST. Another reason for the difference could be to provide more collocational expressions that are

usually used in Arabic and which could fulfil the ST metaphorical expression function in the TT, as in examples (35), (36) and (37):

(35)

ST3: I figured he was a smackhead looking for Cherokee's rock, *I nearly shit my shorts*, because I knew the stuff was in the bedroom with me (p. 418).

TT3: تصورت بأنه يبحث عن المخدرات عند شيروكي. ارتعشت ركبتاي لأنني عرفت أن البضاعة كانت في غرفة النوم معي (ص. 321).

BT: I figured he was looking for Cherokee's rock. *My knees trembled*, because I knew the stuff was in the bedroom with me.

(36)

ST3: *Fear for Kit twisted in my gut,* overriding judgement and sense of duty (p. 436).

TT3: اجتاحني خوف كبير على كيت كألم جسدي متغلباً على الحكمة وحس الواجب (ص. 336).

BT: *I was overwhelmed by great fear for Kit as a physical pain* overcoming judgement and sense of duty.

(37)

ST3: Then he dropped his hand straight to his side and walked toward the swimming angel. *Fear shot through me* (p. 418).

TT3: ثم وضع سلاحه إلى جانبه وتوجه نحو التمثال .اعتراني خوف شديد (ص. 321).

BT: Then he laid his weapon straight to his side and walked toward the statue. *I was seized with extreme fear.*

The implication, in example (35) hints at a reaction of INVOLUNTARY RELEASE OF BOWELS OR BLADDER caused as a result of self-censorship. The translator, however, replaces the English expression with a different expression that appears to relate to PHYSICAL AGITATION IS FEAR. Another identifiable feature is the level of register. Register is "a variety of language defined according to the situation" (Wales, 2011, p. 361). In many of the identified cases in the corpus, translators managed to embed similar registers in the target. This is due to register universality, which allows the use of shared linguistic forms between two languages. According to the above ST contexts in (35), the register is realised by a specific style of linguistic pattern. The imaging

in *I nearly shit my shorts* yields a sense of informality in language. These marked lexical and grammatical features, as well as prevalent linguistic features, will assist the translator in unfolding the type of register employed. Looking at the TT expression ارتعشت ركبتاي/*my knees trembled*, it seems like the components were shifted to a much less informal register or euphemism. It is methodologically important for translators to identify the linguistic variation involved in metaphorical and metonymical structures used in the original text. The link between sociolinguistics and CMT would assist the translator's understanding of how and why languages vary and process information about variation, as well as how such complex interaction in the cognitive zone can impact the translation process.

Example (36) goes through a similar shift where the imaging under NERVOUSNESS IN THE STOMACH is replaced by another image domain that conceptualises fear as A SUPERIOR THAT INFLICTS PAIN in اجتاحني خوف كبير/*I was overwhelmed by great fear*. The translator resorts to a different Arabic expression since it conveys the metaphorical sense and reflects the concept used in a more conventional and appropriate way than its original use. The same holds true for example (37), where the ST metaphorical image *shot through me* for WEAPON and GOES INTO THE BODY FROM THE OUTSIDE goes through a complete shift to اعتراني خوف شديد/*seized with extreme fear,* which belongs to the FEAR IS AN OPPONENT metaphor. This procedure contributes to moderating certain ST metaphors or metonymies to match the accepted social norms of the target culture. It also intensifies the TT with more idiomatic and fluent expressions that serve to convey the metonymical or metaphorical contents of the source image. All of examples (35), (36) and (37) exhibit a change of source domains and

the expressions they realise, either from a CM to another or from a CMN to another of the same type. The fact that there has been no use of an exact concept in the TL does not necessarily mean that a particular source domain cannot be borrowed or that is unacceptable to conceptualise the target domain in the TL; it could be either unfamiliar, sounds peculiar or appear unintelligible to Arabic readers. It is an empirical fact, however, that linguistic expressions of concepts that do not exist in a conceptual system are less preserved in translation and thus more difficult to render to the target. This confirms Gibbs's claim (1999, p. 161) that "certain aspects of what is cognitive about metaphor, and other things, may be inextricably linked to social/cultural experience" (for similar claims see Mandelblit, 1995; Schaffner, 2004; AL-Hassnawi, 2007; Al-Zoubi et al., 2007).

6.4.2. Different expression of a different meaning with a divergent sequence of different mapping

This procedure is similar to the above in section 6.4.1 but the translator replaces the original image-schematic concept with another of a different type, realised under a concept already established in the TL. This means that the sequential manner of domain mapping from the source is divergent and changes during the mapping process to the target i.e., CM into CMN or a CMN into a CM. Only one expression was reproduced in the target corpus with this technique, accounting for 0.40% of all cases, such as example (38):

(38)

ST1:	*I felt green.* A vampire had been in the house looking for me while Charlie slept (p. 117).
TT1:	كان الذعر قد استولى علي. لقد دخل مصاص الدماء إلى بيتنا بقصد اصطيادي وكان أبي نائماً في غرفته (ص. 178).
BT:	*I was seized by fear. A* vampire had been in the house with the intent to hunt me and Dad was sleeping in his room.

The mapping in example (38) is classified under the physiologically emphasised model or metonymic-based model, which maps the target FEAR onto COLOUR, a source of physiological nature. Even though the ST mapping exists in the Arabic culture, an exact idea and a usage equivalent to the ST expression in this particular imaging would sound odd and unconventional in the TT. The colour *green*, in particular, would be more conventional in this context in Arabic if replaced by the colour yellow to conceptualise sickness or fear. However, the translator opts to replace the part-whole metonymic relation as a conceptual entailment with another metaphoric explicit voice in كان الذعر قد استولى علي/ *I was seized by fear* under OPPONENT WITH STRUGGLE IS FEAR.

Sometimes the reason for not rendering a metonymy in English with another of the same type in Arabic may be structural or it may be because its cultural specificity might be lost during translation due its unconventional status in the TL (see Catford, 1965). This means that parts of the TT will be less comprehensive because they are either not established in the language or used differently and may provide different realisations with different meanings. Hence, the target reader will not be able to draw on the rich knowledge necessary to understand the ST metonymy.

The double-action shift may also be viewed as a kind of adaptation to the TT conceptual system, where the metaphoric rich image used in the target is viewed as more idiomatic and more frequently used to express the emotion than the metonymic image-schema used in the original text. Metonymy can hold code-switching relations, not only between domains and sub-domains but also between different languages. Another explanation could be based on Panther and

Thornburg's (1999) hypothesis but modified to work in a translation event: the more distant the links between a speech act metonymic component in a TL, the weaker the ability to recall the ST scenario of metonymy to the TT. In other words, the less conventional the conceptual metonymic relations in the TL, the less likely that the exact ST components are reproduced as a stand-for relation for the whole in the TT. Thus, it will be replaced by different metaphoric counterparts. This will reinforce the existence and flow of figurative language in the text, thus triggering the emotive responses in the minds of the target readers and achieving the communicative goals of the translation.

6.5. The non-metaphoric or metonymic rendition

While the ST uses a particular image-schematic concept realised by a particular rich image, the translators eliminate the metaphoric, metonymic or conceptual blends completely and replace them with non-figurative equivalents that act as a derivative from the original target domain. They thus remove not only the structural aspects of the source domain but also its functional and connotative properties. The quantitative analysis has shown that out of all the translated instances expressing fear, 18 linguistic expressions were paraphrased for a total of 7.30% of all cases, as shown in Table 15. Examples (39), (40), (41) and (42) highlight the use of this procedure.

Shifting to non-conceptual reference	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
Non-metaphoric/metonymic rendition	16	1	1	18	7.30%
Total	16	1	1	18	7.30%
N = Documents	1	1	1	3	3

Table 15.Frequencies of fear expressions paraphrased in the TTs.

(39)

ST1: *They were rooted in place* (p. 1217).

TT1: كانوا يقفون في أماكنهم من دون حركة (ص. 335).

BT: *They were standing still without movement.*

(40)

ST1: Seth whined; it was an anxious, uneasy sound. *It made the hair on the back of my neck rise* (p. 325).

TT1: أصدر سيث أنيناً حزيناً جعلني أشعر بخوف شديد (ص. 503).

BT: Seth released a sad moan. *It made me feel extremely afraid.*

(41)

ST1: *Her words sent a thrill of fear through me* (p. 95).

TT1: أخافتني كلماتها (ص. 145).

BT: *Her words frightened me.*

(42)

ST2: *My heart in my mouth.* I wiped the rain from my eyes and looked again and saw that it was a priest (p. 1493).

TT2: أصابني الذعر، ومسحت المطر عن عيني ثم نظرت من جديد فرأيت أن الواقف بالباب كاهن (ص. 386).

BT: *I panicked.* I wiped the rain from my eyes and looked again and saw that it was a priest.

The Arabic expression in (39) is a non-metonymic paraphrase with a similar denotative meaning as the source. The entry of the word *rooted* in *Almaany Arabic Dictionary* (2010-2020) is an adjective with the equivalents: متأصل، مجذّر، مرسّخ, معرّق, and we already know from experience that the original meaning of the lexeme *root* is the hidden part of the plant that keeps it strongly attached to the ground. Even though a literal translation of this image would be clearly understood, it would not reflect the idiomatic sense and would sound unconventional. Therefore, a replacement of a collocational expression familiar to the target reader in يقفون في أماكنهم من دون حركة/*standing still without movement* is used instead. This shift, however, caused a loss of meaning of the rich image in translation confirming the fact that figurative expressions cannot be replaced by non-figurative ones without any loss in meaning. Similarly, the change of state in (40) is replaced in the TT by the state of fear itself in أشعر بخوف شديد/*feel extremely*

afraid. This scenario is possible under the metonymic concept THE WHOLE REACTION FOR THE INITIAL PART OF THE REACTION. The reason for this paraphrase is subjective, as applying a parallel connotative image would not be possible in Arabic. The TT in example (41) is far from imaginative, as a complete non-metaphoric paraphrase was adopted to render the ST expression and its concept, yet with a similar meaning. The expression *My heart in my mouth* in (42) alludes to the heart beating violently and which appears to leap upwards as a result of fear. While this sort of concept exists in Arabic, the specific imagery is not available in a way that describes a similar ascension schema in the TL and so is translated indirectly by using أصابني الذعر/*I panicked*. What is more conventional in Arabic, however, draws upon an image which is constructed under the same concept but with a downward schematic orientation instead (see, for example, the TT expression in 33). If a literal translation was to be applied, then an unconventional expression would be produced which may cause confusion for the TL audience.

The application of the paraphrasing procedure is attributable to the culturally-specific images confined to fear source domains and to the translator's adherence to the linguistic and social norms of the TT culture. It is worth mentioning that the translator had the choice to render these expressions into different linguistic expressions of a different conceptual mapping i.e., a CM into another CM or a CMN into another of the same type with a similar meaning, thus, keeping the metaphoricity or referential function of the text. However, the translators opted for an alternative non-figurative expression to convey the intended meaning. The fact that they made use of paraphrasing means the decision was more or less

subjective, yet, they knew that it would serve to provide cohesiveness to the context of the TT results in toning down the concept of the ST.

6.6. Deletion of any reference to the concept

This procedure is used to omit the ST reference to the concept of a particular image from the translation completely, or to neutralise it. Hence, no metaphorical or metonymical senses would be found in the text. The choice to omit the expression from the TT (CM→ Ø) or (CMN → Ø) is ranked sixth with a total number of 13 omitted expressions for a total of 5.30% of all cases, as shown in Table 16.

Deletion of conceptual reference	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
The expression is omitted	9	0	4	13	5.30%
Total	9	0	4	13	5.30%
N = Documents	1	1	1	3	3

Table 16. Frequencies of fear expressions omitted from the TTs.

(43)

ST1: The vacant look in her eyes told me that she was seeing something very different from the mundane lunchroom scene that surrounded us, but something that was every bit as real in its own way. Something that was coming, something that would happen soon. *I felt the blood slither from my face* (p. 23).

TT1: بدت عيناها معلقتان بمشهد بعيد جدا عن قاعة الكافتيريا حيث كنا، مشهد أعلم أنه حقيقي، وآت وقريب (ص. 40).

BT: Her eyes appeared to hang on a scene that was too far from the cafeteria hall where we were, a scene I know is real, coming and close.

(44)

ST1: I stared. *Still frozen in horror*. Her face was alive with exultation, all the despair wiped clean from her perfect features (p. 218).

TT1: واختفت عن وجهها جميع أمارات اليأس والخوف وابتسمت لجايكوب، فقابل ابتسامتها بمثلها (ص. 336).

BT: All the signs of despair and fear disappeared from her face, and she smiled at Jacob, and he smiled back.

(45)

ST1:	My stomach dropped *and the blood drained from my face*. "Charlie?" I gasped (p. 232).
TT1:	شعرت بانقباض شديد في معدتي، فقلت بهلع:" وماذا سيحل بتشارلي؟" (ص. 357).
BT:	I felt a lurch in my stomach. "What will happen to Charlie?" I said with horror.

The series of examples (43), (44) and (45) are better seen as a manifestation transferred with pragmatic strategies of translation that filter out all the cultural metaphors and metonymies that might be viewed as unusual by the TL audience. Looking at example (43), it is clear that the ST expression has a metaphoric and metonymic consecutive interaction, where one motivational link of the semantic structures used involves a sequence of two extensions of meaning. The first is of the blood transferring to other parts of the body and a metaphoric expression where the movement is of an animal being. This complex imagery, however, was omitted completely in the TT. The same happens in example (44). The deletion in both (43) and (44) can be justified for three reasons. Firstly, the ST compound expressions with the same word formation do not exist in the TL. Secondly, the exact image and its schematic structure used to form the metonymic concepts are not conventional in the TL. Thirdly, this method avoids redundancy. Images of BLOOD LEAVES THE FACE and NERVOUSNESS IN THE STOMACH in (43), for example, have been redundantly used in the ST, as in (45), and thus they were removed from the translation for stylistic purposes. The choice to omit the fear imageries from the TT is not very high in frequency, and this not only fortifies metaphor and metonymy translatability across English-Arabic translations, but also signifies the importance of maintaining fear imageries and their concepts in the text type adopted for this study.

6.7. The creation of a new concept

This is the process of introducing new metaphorical or metonymical expressions in the TT where no source counterparts are identified. The corpus shows that nine fear-related expressions reasoned under four TT concepts were created. The introduced expressions identified in the TT represent eight cases that hold cognitive ontological correspondence with fear, with one expression conceptualised in terms of a physiological domain. Metaphorising and metonymising the zero element in the ST to a new conceptual manifestation in the TT came fifth with a total number of nine expressions, representing 3.70% of all cases, as shown in Table 17. Examples (46), (47), (48) and (49) highlight the use of this procedure.

The creation of a new concept	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
Physiological	0	1	0	1	3.30%
Cognitive	4	4	0	8	0.40%
Total	4	5	0	9	3.70%
N = Documents	1	1	1	3	3

Table 17. Frequencies of fear expressions created in the TTs.

(46)

ST2: I called Kamal just after six. The silence was right on top of me and *I was starting to panic* (p. 326).

TT2: اتصلت بكمال بعد السادسة مباشرة. كان الصمت قد هزمني... بدأ الذعر يتملكني (ص. 346).

BT: I called Kamal just after six. The silence defeated me… *fear started to possess me.*

While the English text shows the character's reference to her non-metaphorical or metonymical condition of fear, the Arabic translation of the phrase الذعر يتملكني/*fear began to possess me* activates the OPPONENT IN STRUGGLE IS FEAR

metaphor. The potential effect of activating this conceptual creation is providing the target reader with an experience of losing control over fear. The physical struggle seen in the word *possess* between the person experiencing the reaction and the opponent corresponds to a struggle for emotional control. This choice of metaphorisation has also been identified in the TT1 and TT3 corpus, as in examples (47), (48) and (49):

(47)

ST1:	I'd believed enough of what he'd told me that *his words terrified me* (p. 94).
TT1:	الكلام الذي صدقته من أقوال كارلايل، أن حياتي قد انتهت ولا أمل في العودة، كان كافيا لإلقاء الرعب في قلبي (ص.143).
BT:	The words that I have confirmed from Carlisle, that my life is over, and I have no hope of return, *were enough to cast terror in my heart.*

(48)

ST2:	I half ran back to the car, *feeling needlessly afraid* (p. 1493).
TT2:	عدت إلى السيارة نصف راكضة وقد داهمني خوف لا موجب له (ص.386).
BT:	I half ran back to the car, *raided by needless fear.*

(49)

ST1:	Edward shook me. Bella? he asked, *truly anxious now* (p. 44).
TT1:	هزني ادوارد بعد ان اعتراه الخوف عليّ من شدة شرودي. بيلا؟ (ص. 69).
BT:	Edward shook me. Bella? after *he was seized by fear due to my severe absent-mindedness.*

The cases in (47), (48) and (49) exemplify the creation of the OPPONENT IN STRUGGLE IS FEAR metaphor. The expression in (47) is translated as لإلقاء الرعب في قلبي/*to cast terror in my heart*, a metaphoric expression for which there is no source conceptual reference in the ST. Similar to (47), the creation of the structural semantic entities in example (48) are seen in the words داهمني/*raided* , خوف/*fear* and لا موجب له/*needless,* which are meant to attract the target reader's attention to the many concrete concepts that can be used to explain the emotion, and, hence, provide the text with the clear communicative and explanatory

functions of the genre of the corpus. The same holds true for example (49), the ST is not metaphorical, while in the TT expression it is, and it becomes a linguistic manifestation and a part of the concept FEAR IS AN OPPONENT. The creation of a new concept plays a role in the lexical linking within the TT. This is achieved with the use of the compensation strategy "a standard lexical transfer operation" that happens to compensate for the omission, or plays down any loss of idiomatic features in certain parts of the source (Klaudy, 2008, p. 1). This operation may enrich any TT explicit imageries or stylistic effects that it may not have been possible to introduce at a previous point in the TT (Schmidt, 2012). An important point that translators should aware of, however, according to Beekman and Callow (1974, p. 143), is the extent to which other cultures welcome new metaphorical or metonymical expressions. Beekman and Callow argue that:

> If new metaphors are regularly being coined, then the translator may reasonably expect that no resistance will be offered to the metaphors of the Scripture. On the other hand, if new metaphors are not being created, the metaphors of the Scripture are likely to prove a real hindrance to understanding if retained in the form of a metaphor (Beekman & Callow, 1974, p. 143).

Beekman and Callow (1974, p. 144) also suggest that translators follow one of two ways before creating a new expression in the TT: (1) the "adjustment of the actual literary form of the metaphor or simile" or (2) "making explicit some part of the implicit information which is carried by the figure" (ibid.). The scholars also advise translators to "be sensitive to the reactions and difficulties of the RL (receiving language) readers on the one hand and flexible in his approach to translating these figures on the other." The implementation of creating a new expression, taking into consideration Beekman and Callow (1974) advise with the right level of idiomaticity, will however, greatly enhance the readability of the TT

with a natural and less foreign sense. The creation of a concept in this research is seen as an outsider procedure, which can be detected only if the investigation is conducted from a reverse point of view i.e., starting from the TT to the ST and not vice versa. Nonetheless, the procedure was included in the overall findings due to its direct connection to metaphor, metonymy and translation.

6.8. Partial TT mapping

6.8.1. Different expression, with a partial cognitive function and a similar meaning

As has already been discussed, CMT mapping principles consider metaphorical mapping structuring to be partial. This means that only part of the source domain is mapped to the target. The same notion applies to this translation procedure. The source expression is translated into another with a partial cognitive function having a similar meaning. A total number of three expressions were rendered using this procedure, representing 1.20% of all cases, as shown in Table 18. Example (50) highlights the use of this procedure.

Partial TT Mapping	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
Physiological	2	0	1	3	1.20%
Total	2	0	1	3	1.20%
N = Documents	1	1	1	3	3

Table 18. Frequencies of fear expressions rendered with a partial mapping.

(50)

ST3: Feeling a gun barrel against my temple, *I froze* (p. 373).

TT3: شعرت بمسدس يمس صدغي، فتسمرت في مكاني (ص.286).

BT: Feeling a gun barrel against my temple, *I was pinned in my place.*

The different mechanisms of metonymy and metaphor have and the nature of any interaction between them may affect the way that both are translated, which also marks the importance of context in the translation. The TT in example (50) was rendered with a different expression under the concept INABILITY TO MOVE IS FEAR. The question to be raised here is: in what way is the target expression similar to the source? The ST expression could have been translated into the word *froze* in Arabic but, instead, it was replaced by فتسمرت في مكاني/*I was pinned in my place*, using only part of the entailments embedded in the original concept.

It seems that the translator was trying to avoid using literal translation to avoid redundancy, as the number of *froze* lexemes in different parts of speech in the ST with metaphorical or non-metaphorical references totalled 81. As a consequence, another rich image with shared semantic properties and pragmatic functions to the one used in the ST was deployed. What essentially happened during the mapping process between the ST and the TT in (50) is that the translator rendered the ST metonymy FEAR IS DROP IN TEMPERATURE AND INABILITY TO MOVE with a selection of aspect(s) mapped onto the target domain in the TT, making only the INABILITY TO MOVE available for mapping. The transferred parts function as highlighter(s) while others remain unused in the mapping process to the TT. Expressions with compound reasoning may cause translation confusion and, therefore, translators tend to reduce them into a single mapping in the TT. Hence, the partial function translation procedure seems to have an effective role, not only in relaying part of the ST image function to the TT reader, but also in providing a more evocative image to the TT reader in comparison to the original. It should also be pointed out that the alternatives need not always involve a sequence of metaphors and metonymies similar to that in the ST with a single

partial mapping in the target. Rather, it may also be the case, for instance, that a combination of metonymies may be doubled or even tripled in the ST and shifted into an expression of a single partial mapping with a strong experiential basis in the TT. Consider the following expression translated with a partial mapping into a different expression sharing the same contextual word sense:

(51)

ST1:	What if Edward decided to join in the fight? *The icy fear pooled in my stomach* (p. 302).
TT1:	ماذا لو قرر إدوارد الاشتراك في القتال؟ واستقر الخوف في معدتي فتقلصت (ص. 456).
BT:	What if Edward decided to join in the fight*? Fear settled in my stomach, (and) so tightened.*

In example (51), there is a double metonymy with a hint of a cognitive metaphoric source domain. This is DROP IN BODY TEMPERATURE in *icy* and NERVOUSNESS IN THE STOMACH metonymy with A FLUID ENTITY IN A BODY CONTAINER metaphor in *pooled in my stomach*. The implementation of the exact ST word formation under this complex mapping would have been impossible in Arabic as it is unconventional. The only solution for this problem was to avoid the blend as far as possible and provide a fluent and idiomatic rich image that is well-entrenched in the TL. Hence, the translator renders the expression by a different one with the same meaning, but reduces it to a single metonymy under NERVOUSNESS IN THE STOMACH IS FEAR with the metaphor FEAR IS A PHYSICAL ENTITY lexicalised by استقر/*settled.* The partial mapping procedure is used when the level of conventionality of the ST image is low in the TL or there is no exact correspondence for the SL metonymic relations in the target culture. As a result, the ST metonymic sense is changed into a non-metonymic counterpart that belongs to the second metonymic tier, thus

keeping the metaphor in the same matrix. This means that the partial mapping procedure does not call for the deletion of the whole image in the ST, but instead it translates it into another image featuring a semi-cognitive function to the source mapping. All this implies that English mixed expressions with built-in conceptual mappings and high levels of metaphoric density would, in general, be more difficult to translate into Arabic.

Examples (50) and (51) demonstrate that Arabic, in some text types, has a tendency to accommodate expressions with less complex mappings and a lesser degree of metaphorical density (Dickins, 2005, p. 526). This could also be due to the fact that the different languages and language varieties, such as the Standard Arabic used in the corpus of this research, have a lower tendency to form complex linguistic structures than English, which means they are less open to mixed registers and creativity. Dickins states that:

> Standard Arabic may be much more metaphorically exuberant and dense than English. It is, however, frequently notably less idiomatic; that is to say, in many kinds of writing Standard Arabic typically uses markedly fewer idioms (semantically unanalysable or only partially analysable phrases) than English (Dickins, 2005, p. 268).

According to Dickins, in similar cases, the tendency is either to tone down the ST metaphors sufficiently in the TT or to create a new element which is insufficiently motivated. As for English, there are some reasons why the language, so to say, is more figuratively compounded than Arabic. This has to do with the structural factors of the English language itself. The issue of the tolerance for complex mappings in English and its avoidance in Arabic can be addressed using lexical strategies, which "require a change in the lexical perspective of the sentence, but the lexical translation equivalent is not covered" (Babych et al. 2014, p. 1338).

That is to say, in terms of lexical strategies that are based on reusing existing semantic components in words that seem familiar to the target audience, keeping in mind the stability of the linguistic system i.e., the structural outcome and cognitive mechanism of the original expression, as "multilingualism may initiate or reinforce diverging structural developments" (Braunmüller et al., 2014, p. 14) during the translation process.

6.9. Overlapping TT mapping

6.9.1. Different expression of an overlapping mapping with a different meaning

With overlapping TT mapping, the translator shifts the original simple expression into a composite one with properties that overlap with the original. That is, single mental operations are reproduced as a group of double concepts, joined together in one domain matrix in the target text. So instead of using an identical series of single metaphors or metonymies between the source and target, we may find an expression that belongs to a compound conceptual mapping form in the translation, which qualifies as a translation by means of a different concept that overlaps with the original mapping. This overlapping mapping also means that the sequential mapping between the source and the target overlap in the type of image-schematic concepts used and it may be transferred from a CM into a (CM + CMN) or from a CMN into a (CM + CMN). The quantitative analysis has shown that out of all the translated instances expressing fear, only three expressions were rendered with the overlapping mapping procedure, representing 1.20% of all cases, as shown in Table 19. Examples (52) and (53) highlight the use of this procedure.

Overlapping TT Mapping	Linguistic expressions			Frequency	%
	(TT1)	(TT2)	(TT3)		
Physiological	2	0	0	2	0.80%
Cognitive	1	0	0	1	0.40%
Total	3	0	0	3	1.20%
N = Documents	1	1	1	3	3

Table 19. Frequencies of fear expressions rendered with an overlapping mapping.

(52)

ST1: *I just stared at him in horror* (p. 117).

TT1: فألقيت على تشارلي نظرة شاحبة (ص. 178).

BT: *I looked at Charlie with a pale look.*

(53)

ST1: *The icy fear pooled in my stomach* (p. 302).

TT1: واستقر الخوف في معدتي فتقلصت (ص. 465).

BT: *Fear settled in my stomach, (and) so tightened.*

In example (52), there is an expressive ST concept consisting of two domains WAYS OF LOOKING mapped onto an abstract target domain FEAR, extended with a container image-schema. The integration of the two domains gives rise to a metaphoric mapping. The Arabic expression, however, is not reproduced in a parallel mental space to the original. Rather, it involves an overlapping notion to that used in the original. The translator shifted the expression to نظرة شاحبة/*a pale look*, which serves to provide a consecutive interaction between metaphor and metonymy. The motivational links of the semantic structures used in this TT expression involve a consecutive sequence of two extensions of semantics. The image *pale look*, in this context, is a special way of looking that involves a concrete metaphorical extension to the abstract concept of FEAR. Yet, the same image involves a metonymic image in *pale* as a physiological reaction of blood leaving the face, which also stands for fear. The TT combination of conceptual patterns in both (52) and (53) can be seen as productions from a third mental space, where a

conceptual integration between metaphor and metonymy structures is used interactively to establish complex or two-tiered concepts. Thus, the introduced TT lexemes in (52) and (53) gave access to a secondary domain that overlapped with the original and was transferred to the target to be a primary domain in a wider window of an idealised cognitive network.

The shift to more layered forms of expressions resulting from mixed functional conceptual types is implemented here for two reasons. The first is to avoid the structural aspects of the original container image-schema *in horror* due to its nonexistence in this exact idiomatic formation in the TL. The second reason for this application is to generate an explicit idiomatic image that is prevalent in the target culture. The reconstruction of the semantic process between the ST and the TT under this procedure could go in an alternative sequence. It must be noted, however, that when dealing with such patterns there is no fixed or principled sequence for the translators to use in order to render the ST single mapping as a blended one in the TT. In fact, this depends heavily on the conventionality of concepts in the TL and how they might contribute to cultivating a more idiomatic and fluent expression for the reader.

6.10. Conclusion

This chapter analysed the ways in which a number of English conceptual metaphors and metonymies in popular novels were translated into Arabic. The analysis was limited to the physiological, cognitive, behavioural, expressive and cultural properties of FEAR and their linguistic expressions and to tackling translation constraints/possibilities for some cases. The translation analysis of all

the identified procedures in the translated corpus focused on the mechanisms of the procedures, the semantic interpretation of the examples and the motivation for using a particular procedure.

The main aim of this analytical chapter was to investigate how the translators handled the metaphoric and metonymic concepts of fear and their linguistic expressions in the translation situation. The findings confirm the validity of possibilities in existing studies for the translation of metaphor in this research context and they suggest further solutions. They also confirm that the factors indicated earlier are viewed as significant influencers of the choice of translation procedures. This comes with the influence on the processes of image-schematic representations and rich image filtering, in addition to the interaction between metaphor and metonymy illustrated by the use of emotion concepts.

The results highlight that the translation of metaphor and metonymy is not only a matter of transferring cultural connotations with single mappings. Rather, conceptually, the mapping between domains features distinctive mechanisms during a translation between the source and its target. In other words, it entails the application of the double-action shifts of minimising conceptual blends and maximising single expressions with the transference of various conceptual sequences. Some of these procedures were motivated by the different grammatical and morphological systems that both languages have, in addition to the conceptual system and cultural requirements of the TL. Based on the findings, the transcultural process requires examining the ST and how it corresponds to the TL and culture based on three main aspects: image-schemas, conceptual mapping between domains, and the structural semantic elements appearing in a linguistic

manifestation. These levels examine the cultural knowledge of the semantic elements entailed in a source domain, and how the image domains are schematically structured and expressed in the TL.

A key point to consider, however, is that the results achieved (the distribution of categories of translation procedures) from the analysis of the data should not be viewed as exhaustive and do not cover all possibilities and could be investigated further, as they are exclusive to this research corpus alone. To test the above assumption, researchers could look at a different corpus with different language combinations or even at a similar corpus but exploring multiple translations of the same source. Similarly, obtaining a more reliable outline on the validity of the data obtained could be achieved by testing the corpus of this study and looking at the frequencies of procedures with another pair of languages. This would allow researchers to obtain tentative results for the current tendencies that can then be compared with the findings from the corpus of this thesis. Moreover, the typology found would provide researchers with a more translucent perspective on how to translate metaphors and metonymies of emotions in general from a cognitive linguistic perspective, which is worthy of further investigation.

Chapter 7
Discussion of Results

In the previous two chapters, a two-fold analysis was conducted to address how metaphors and metonymies were handled in Arabic translation of English popular texts. The analysis of these concepts was limited to their inherent properties which arise from the nature of fear mappings in each metaphor and metonymy. The study analysed the translation procedures from a target-text-oriented approach dealing with metaphor and metonymy as translation solutions and not as problems. This chapter begins in Section 7.1 with reiterating the problem statement through the research questions raised, and which directed this thesis to focus on the different areas of metaphors and metonymies in translation studies. The chapter interprets the data through a discussion along two main axes. First, it addresses the shortcomings of existing metaphor and metonymy translation theories. The second part discusses aspects of metaphor and metonymy in translation that arise from CMT and have not yet been addressed in the literature. Section 7.2 presents a summary of the ideas discussed in the chapter.

7.1. Revisiting the Research Questions

This thesis was intended to answer the following main research question:

- Can CMT provide additional insights into metaphor and metonymy translation?

Chapter 1 of this thesis justifies the need for this research, for four reasons. Firstly, it is important to understand metaphor as integral to the human body and mind, reflecting cultural, communicative, and functional considerations. As far as the

conceptual theory of metaphor in translation is concerned, this study suggested that there is a substantial need for research about the different dimensions of the treatment of metaphor in translation. Theory-based descriptions have remained relatively stable for a long time in literature. Scholars have been providing similar discussions about metaphor translation procedures, neglecting how they can be handled in different contexts. Secondly, it is necessary to explore how to translate metaphors expressing complex structures of emotional situations within a cognitive linguistic perspective. Thirdly, there is a lack of studies that have adopted CMT to distinguish metonymy from metaphor in translation. Therefore, one of the focus points of this thesis was to explore theories of metonymy in cognitive linguistic and the impact of these theories in a translation process. Fourthly, the research aimed to explore the ways fear metaphor and metonymy are translated with novel aspects that might demand new ways to translate. Thus, theoretical extensions from the field of emotions were necessary for further in-depth investigation. In addition to this, the decision was taken to use image-schemas as cognitive tools to expose the demands they place on translators. The core research question comprises five interrelated questions which are formulated to structure the remaining chapters of this thesis.

> **Q1**. Within CMT, what are the new theoretical areas of metaphor and metonymy, which have hitherto not been extensively studied in translation studies?

Chapters 2 and 3 answered this question and provided a detailed discussion of the cognitive linguistic properties of metaphors and metonymies that could be adapted to the current research in Translation Studies. The field of enquiry to which this study contributes focused for a long time on the translation of metaphor at the level of language until it shifted to approaching metaphor as a concept. More to

the point, the majority of early studies concentrated on the use of cultural models focusing on how to convey the imagistic similarities with their decorative and stylistic effect in the source language (SL) metaphor into the target language (TL) with as little translation loss as possible. This case is different in CMT.

Cognitive approaches to metaphor handled some of the problematic areas such as translatability and equivalence in Translation Studies by abandoning the referential truth to the notion of meaning. The main argument revolved around the idea of establishing a theory of translation of metaphor as a mapping process, affirming that translating metaphors as concepts is much easier to handle than image metaphors. The second reason is attributed to the different forms and characterisations of culture-specific elements that the image metaphors hold (Tabakowska, 1993). These claims go very well with Lakoff's point (1987, p. 312) that culturally determined conceptual systems will not affect understanding and learning, and concludes that possessing knowledge of the conceptualisation of metaphors "would necessarily" lead the translator to produce better translation outcomes. However, fundamental is the extent to which these contributions influenced Translation Studies. The cognitive linguistic approaches to metaphor still give the impression that it is metaphor and metaphor only that reflects our language, culture and mind. The translation research argument against this is that there is still too great a focus on the analysis of metaphor which leads the neglect of potential contributions to translation research. This includes the translation of metonymy. This possibility is receiving scant attention in Translation Studies. We should not forget that Lakoff and Johnson (1980a) made it clear that metonymy is one of the basic characteristics of cognition based on cognitive mechanisms of conceptual contiguity. Their example "She's just a *pretty* face" illustrates a

metonymic conceptual nature where the expression establishes a basic understanding about a person from the face making the FACE FOR THE PERSON an everyday metonymic concept (Lakoff & Johnson, 1980a, p. 37). Their claim is supported by Taylor (1995), Gibbs (1999) and endorsed in the work of Panther and Radden (1999) amongst many others, granting metonymy with an equal importance to metaphoric language.

The re-creational function of metonymy as a domain highlighter plays a strikingly important role in defining the different emerging categories of mappings and how they interact with metaphor. Compound conceptual mappings, in which these expressions are realised, are generated from simpler forms of concepts to be constructed in a blended cognitive network. They are cases where a metaphor and metonymy are combined to creatively establish a new meaning in thought. Multi-layered structures are generated by the complex interaction between the general metonymic and metaphoric principles (Kövecses, 2000a). They arise from the possibility of forming elaborated mappings in specific cases of physiological metaphor types to inform the metonymical value within. Studies have found that regardless of whether or not a metaphor carries the required features and characteristics, it still assists the mapping structure of metonymies and thus many extended examples are seen as built-in expressions (see Goossens, 2003; Barcelona, 2000a). All of the above indicates that the translation of metaphor and metonymy within this context can no longer be thought of as merely metaphoric or metonymic in isolation but must be thought of as interactive constructs that encompass cognitive-cultural factors and forces. This also means that it is necessary to coin a name for a new field in future research. I would like to propose the following new coinage: *Metaphtonymy in Translation. Metaphtonymy*

contributes to the interdisciplinary nature of metaphor studies and metonymy studies and how they interact (Goossens, 1990, p. 160). *Metaphtonymy in Translation* contributes to the interdisciplinary nature of metaphor studies and metonymy studies in translation. This is, an area of research concerned with investigating the ways metaphor and metonymy are handled as a continuum in translation. This includes the following topics:

- Procedures for treating metaphtonymy in translation.
- The recoding of compound semantic relations in different types of texts and discourse.
- The recoding of compound semantic components in different languages.
- Translation as a pragmatic and functional activity in handling metaphtonymies.
- The role metonymic thinking plays as a tool in the transference of metaphtonymies from one language and its culture into another.
- The role metaphoric thinking plays as a tool in the transference of metaphtonymies from one language and its culture into another.
- The demands which compound source domains place on translators.
- Managing compound/culturally-specific imageries in translation.
- The constraints of conceptual interaction on the translation process.
- The impact of the semantic field on the cultural ratio of a compound conceptual mapping between a SL and a TL.

Methaphtonymy in Translation Studies is a sub-field that explores phenomena related to the study of metaphor with metonymy as a continuum in translation. The main research strand under CMT is based on qualitative descriptive methodologies, which Toury (2012, p. 24) believes is one of the best approaches for testing and amending theories in Translation Studies. Descriptive methodologies can be used to analyse comparable corpora. According to Baker (1995), a comparable corpus is a collection of texts originating from different

geographical areas, drawn from diverse social verities and written in a specific language with their translations. Scholars in this field have the ability to build up a purposeful corpus where the units compared are extracted based on compound concepts of metaphtonymies and their linguistic expressions. These corpora can be used to explore related ideas of metaphtonymies in Translation Studies using corpus-based research methods (see Steen, 1999; Deignan, 2005; Stefanowitsch, 2006). The Arabic corpus would, thus, include the concepts and their realisations derived from texts of different genres written either originally in Arabic or translated into Arabic from English or other languages. The examples of comparable corpora can be restricted to either target-oriented metaphtonymies or to other different variations such as the following:

- The range of conceptual metaphtonymies of a given source and target.
- The range of conceptual metaphtonymies for a group of given sources and targets.
- The conceptual interaction between metaphor, metonymy and metaphtonymy of a given source and target.
- The conceptual interaction between metaphor, metonymy and metaphtonymy for a group of given sources and targets.
- The emphasis on metaphtonymy over metaphor and metonymy associated with a group of given sources, and vice versa.
- The emphasis on metonymy over metaphtonymies associated with given sources, and vice versa.
- The emphasis on metaphor over metaphtonymies associated with given sources, and vice versa.

With the use of corpus-based methods, these variations could be used to identify diverse metaphtonymical patterns of various concepts. Again, with the application of different methodologies, these concepts do not necessarily need to be tied to specific units from a concept as a specific target domain. Such corpora would yield

a wider and clearer picture of the extent to which these concepts exist in the translated texts in a specific language and their originals. Such corpus-based explorations would also provide further insights into the translatability of metaphtonymy from a cognitive linguistic perspective. They would result in generalisations about handling the translation of these compound constructs within CMT that are more robust than other existing results found in metaphor in translation literature. This is inclusive of normative statements regarding how these concepts and their realisations are translated correctly, in addition to generalisations made based on the comparisons of metaphtonymies in the original text with their counterparts in the translated texts such as the ones the current study presents.

The body of knowledge on metaphtonymy in translation promotes different perspectives about translation as an interdisciplinary field. The interdisciplinary nature of research in this area of enquiry brings, on one hand, new perspectives and paradigms to the whole field of Translation Studies, and to the interdisciplinary nature of metaphtonymies, on the other. A potential argument against this field would be, as scholars of metaphor and metonymy in translation believe, that metaphors and metonymies are categorical by nature. This means that they do not pose any problems on their own unless integrated with more general categories of languages and cultures (see Mason, 1982). Scholars like Gutt (1991) have been arguing about the need for translation theories based on their disbelief that a hypothesis is only assessed according to its origin. Gutt (1991/2009, p. 188) posits that translation rules and guidelines put forward by translation scholars are no more than practices for the "principles of relevance". However, Translation Studies has no interest in this beyond making translation stand out as an

idiosyncratic form of communication that entails different languages and cultures. Besides, translation theories and practices co-exist in a dynamic manner. The same argument can be used to respond to some of the arguments against the co-existence of metaphor and metonymy in Translation Studies. First, as pointed out earlier, both constructs reflect language, culture, and mind. Second, Metaphtonymy in Translation Studies is a field that is concerned with making metaphor and metonymy in cognition stand out more than other human cognitive-cultural and linguistic phenomena. The only difference between this field and Metaphor in Translation Studies is the synergy between metaphor and metonymy as concepts in cognition. Metaphtonymy in Translation Studies is concerned with what makes the compound mappings with the influence of cognitive aspects a relevant issue in translation, as all previously discussed metaphor-related areas of study do.

> **Q2**. How could metaphor and metonymy in translation contributions approached by CMT provide us with a typological model to study the ways both constructs are translated in the new context?

This question is answered in the chapter 4. By exploring existing translation models for metaphor and metonymy translation analysis, the current study highlights the importance of thinking about emotion concepts that affect how metaphor and metonymy are handled in translation. Instead of considering the links between emotional metaphoric and metonymic language and meaning as arbitrary, Lakoff and Johnson (1980a) and Panther and Radden (1999) argue that language is metaphorical and metonymical. That is to say that, where metaphors and metonymies exist, there is a deep level of thought in the form of a conceptual system. These concepts can be unfolded through separating the literal, real experience from the metaphorical and metonymical sense.

The CMT is expounded by characterising metaphors through a systematic cross-domain mapping to understand, for instance, that TIME, an abstract domain, is A PASSING MOTION. The grounding of these conceptual systems consists of prime schematic structures to further facilitate the understanding of abstract ideas like emotions (Lakoff & Johnson 1980; Lakoff, 1993; Kövecses, 2000). So, an expression like *X fell in love* is a manifestation of the concept LOVE IS A CONTAINER, which is based on the correlation with an object living within a bounded space. Metaphoric concepts can show special cases that account for a wide range of images. In certain cases, like *Your love runs through my veins*, the image *through* is actually a manifestation of the deeper schematic concepts MOTION and IN-OUT, where the object moves from the outside to the inside with a motion action in the process. Image-schemas are mental models that work as influencers in the way metaphoric and metonymic domains are processed and structured. These cognitive elements are what make a metaphor a metaphor and a metonymy a metonymy. Instead, they are mental constructs tightly constrained by conceptual structures.

The CMT has extended its reach to the emerging field of emotion studies. The main aim for this integration of fields is to explore the similarities and differences of emotion concepts within cultures. Lakoff (1987) and Kövecses (1990), among others, proposed the embodied cultural prototype view. This view incorporates social and cultural factors, as well as sensory-motor motivations, into the prototype theory. The cultural prototype view suggests that languages share universal structures of emotions at a general level due to our bodily experience. On the other hand, differences between these emotion structures are triggered by socio-cultural factors.

As seen in Chapter 4, the principles of metaphor and metonymy in cultural models associated with emotion concepts still face methodological limitations in cognitive linguistics. In most cases, these problematic aspects are due to the metaphoric and metonymic nature of the organisation of clausal structures of emotion concepts. The reason for this view point is that metonymies have close connection and coexistence in cognition with metaphors ruled by an emotion concept, which makes their relationship far more complex than any other (Kövecses & Radden, 1998). This thesis, for example, takes fear as the target domain, which remains the same in all mappings, and the change affects only the source. The data analysis has shown that, in some cases, the mappings would grant a metonymic expression indirect access to the target through a related source concept within the same domain. Ungerer and Schmid (2006, p. 133) point out that "the links between emotions and physiological symptoms reminds us of certain metonymic mappings, especially the cause-effect relationship." For example, expressions like *X froze* and *X looked with a pale look* for instance, is a hyperbolic physiological impact of fear. This type of context in the target domain cannot be seen as something normal in everyday experience unless it is processed literally. However, the non-ability of moving implicated in the main metaphoric mapping in the expression *X froze* is invoked. This blending structure motivates the emerging concept DROP IN BODY TEMPERATURE, which informs SYMPTOMS FOR EFFECT, a higher-level metonymic value within. The metaphors EMOTIONS ARE MOTIONLESS and LACK OF HEAT IS FEAR in the expression *X froze* and EMOTIONS ARE VOLUNTARY REACTIONS in the expression *X looked with a pale look* carry the required characteristic to assist the mapping structure of the metonymy, consequently structuring a compound

mapping of a mixed expression (*metaphtonymy*). This indicates that, in some cases, metonymy may not provide a rich and holistic conceptual structure on its own unless accessed via a metaphoric mapping whose source domain is associated with conceptual metaphoric connotations.

The interaction phenomenon is seen more as problematic, especially in understanding the essence of the relationship and the interplay in which both metaphor and metonymy feature. These basic assumptions of CMT have several implications for exploring the procedures employed by translators when dealing with metaphorical and metonymical concepts of emotions as realised in their linguistic expressions. As for the cultural differences, cognitive linguistic theories state that metaphors and metonymies should manifest quite similarly across languages but if they correspond to inconsistent lexicalised conventions, they may be quite variable across languages and cultures. Several studies, as seen in Chapter 2, have attempted to investigate this area across cultures. Based on their argument, scholars namely Hiraga (1991), Mandelblit (1995), Deignan et al. (1997), Sun (2011) and others conclude that conceptual metaphors and their realisations may differ between the source text and the target text on the basis of culture due to the cultural-bound metaphor type as proposed by Stienstra (1993) or specific-levels as labelled by Kövecses (2000a).

As for metonymy, Panther and Thornburg (2003, p. 6) state that the strength of the bond between metonymic links is very culture specific. Nevertheless, the theoretical and methodological aspects of cognitive linguistics caused major gaps in metaphor and metonymy in translation research on the grounds that these constructs are culturally-determined. Their conceptual borders can be complex

and, hence, unclear during their interaction, which makes them difficult to define (Barcelona, 2000b; Ruiz de Mendoza Ibáñez, 2000; Radden, 2002). This involves other complexities, in the sense of their role in constructing meaning and their interplay with image-schemas and rich images. Moreover, the universality aspect proposed by Lakoff and Johnson (1980a) that concept(s) may be shared between languages was problematic in the investigation of this study. For objective reasons, researchers in metaphor and metonymy in translation studies must be aware of misleading judgments when using the term *universalit*y and use more accurate wording such as *inter-cultural*. In this thesis, it is argued that the cultural aspect can be approached in relation to the following issues:

- The relationship between the conceptual system of emotion-related metaphors and the possibility of its conceptualisation in a particular culture.
- The relationship between the conceptual system of emotion-related metonymies and the possibility of its conceptualisation in a particular culture.
- The relationship between the interactive conceptual system of emotion-related metaphtonymies and the possibility of its conceptualisation in a particular culture.
- The hierarchical structure of metaphors, metonymies and metaphtonymies.

Lakoff (1987) states that the conceptualisation and conceptual systems are necessary aspects of translation claims. The data analysis in this study supports his claim and, thus, takes these two aspects as significant factors in understanding translation shifts. Related to this, Schäffner (2004, p. 1258) notes that "establishing the conceptualisation on which a particular metaphorical expression is based is relevant to translation, too" on the basis of the "level of conceptual

systems in the source and target cultures". It must be noted that this study does not normalise Lakoff's claim of universality in translation. If a particular concept like FEAR IS A CONTAINER exists in two cultures, that does not necessarily mean that it will appear in both the original and translated text. Another important point to note is that cultural properties are not exclusive to metaphoric and metonymic concepts but extend to the image-schematic structures responsible for constructing these concepts. This is due to the conventionality and cultural variation of these concepts (Lakoff & Johnson, 1999, p. 202). In his own words, Maalej (2007) states that:

> Cultural embodiment is not restricted to metaphor; *metonymy and image schema* are important carriers of cultural imagination (Maalej, 2007, p. 102, emphasis added).

For example, seeing the metaphor FEAR IS A CONTAINER as shared in English and Arabic does not strictly mean that the fear is schematically structured in the same way in the two languages. The data analysis in this study suggested that extended forms of image-schemas like UP-DOWN and IN-OUT etc. are viewed as cultural due to the different ways body parts are profiled between the two cultures. Maalej (2007) states that:

> Culturally schematized and culturally selective expressions (more than physiologically realistic expressions) *show a cultural to physiological direction of embodiment, where what is said to happen to the part of the body profiled is culturally determined* (Maalej, 2007, p. 102, emphasis added).

Going by Maalej's (2004) claims, image-schemas are then important conveyers of cultural elements. They can be transformed in the cognitive functioning between cultures through their realisations via a concretisation process to the target text. This means that patterns like UP-DOWN, FULL-EMPTY, MOTION

and CONTENT etc. can be accepted as intra-cultural or trans-cultural structures realised by rich images that belong to cultural-specific rich image domains. This cultural process is an important intervening stage between the two extremes of cultural specificity and transculturality in order for acceptance in the target culture.

It must be noted that image-schematic representations can sometimes be misleading. This is due to the different boundaries they have. For example, the mapping of a source domain onto a target in LOVE IS A JOURNEY structures a clear PATH image-schematic pattern. It must be noted that the image-schematic structures, however, are not clear with concepts like FEAR IS ILLNESS, as it does not show a clear schematic categorisation. In line with the above, aspects of a cognitive nature, more particularly the conceptual mappings of metaphor, metonymy and their image-schematic structures, are beneficial factors for assisting translators with conceptual systems. Image-schematic representations can also be useful in the cases of language acquisition and vocabulary enlargement, and will offer a new way to gain useful insights into the intellectual mechanisms used during emotional linguistic productions and understandings. These conceptual theoretical grounds will provide translators with a solid base in decision-making.

Finally, these assumptions would allow for further expansion in the theoretical and methodological areas in metaphor and metonymy in translation studies. However, it is obvious from the cognitive linguistic theories surveyed in Chapters 2 and 3 about the premise of this research are only valid in theory. In fact, when testing the hypothesis against existing evidence in Chapter 6, there was evidence that prior assumptions had to be refined, particularly in the case of English/Arabic

translation to clarify some of these translational aspects in popular fiction texts. All of this invites us to argue that applying CMT to the translation of metaphors, in its current state, requires further development. This again is based on the theoretical findings, some recently developed ideas in Translation Studies and the analysis of data in this thesis.

Q3. What are the source domains identified to structure the target domain?

The fourth question addresses the relationship between the source domains and the selected target domain for this study. The data analysis conducted in Chapter 5 showed that concepts of fear are ubiquitous in the genre of popular fiction texts. The quantitative analysis shows that 62 source domains were used to represent fear as a target domain. These source domains involve physiological phenomena such as external and internal bodily reactions, e.g., INABILITY TO BREATHE, BLOOD LEAVES THE FACE, INABILITY TO MOVE, SWEATING, INABILITY TO SPEAK, HAIR STRAIGHTENS etc., realising 153 expressions. These source domains are different to those presented by metaphors whose source domains are cognitive and are based on ontological correspondence with fear. The data also identified behaviour domains, in addition to metaphors and metonymies whose source domains are expressive knowledge of bodily reactions and others that have knowledge requirements of cultural-specific values.

However, the analysis have shown the pervasiveness of the physiological and cognitive source domains, which is reflected in the high frequency of expressed manifestations identified in the English corpus, given that 161 manifestations were employed to reflect these mental constructions. Furthermore, the findings of the analysis conducted in Chapter 5 suggest that the substantial varieties of fear, such

as physiological and cognitive reactions, are more prolifically coded in linguistic expressions associated with the BODY, i.e., metonymic types containing a body part in their manifestations as compared to other source domains associated with concepts of expressive, cultural and behavioural types. These findings echo Kövecses and Szabó's (1996) and Niemeier's (2000) claim that physiological bodily-based source domains are important concepts in deriving metonymic meaning.

Additionally, the generic features of the texts play a role in fulfilling communicative and pragmatic functions. According to the results, the low numbers of expressive, behavioural and cultural source domains in the English corpus, given that 27 manifestations were employed to reflect these mental constructions, play a concise role as constructs in communicative and pragmatic functions. They also have a limited role in portraying the process of the abstract concept and inducing the complex knowledge of fear, in the reader's mind.

Q4. What are the translation procedures identified within the translation context of this study?

Before we discuss the findings of procedures used in handling data derived from the empirical analysis, a brief discussion of Schmidt's (2012) procedures is provided. His study is limited to the translation analysis of metaphors in three different Croatian translations (Schmidt, 2012, p. 163). His class of procedures are relevant to the discussion in this study of how conceptual metaphors are handled, except that this study extended its analytical measures to explore the translation of metaphors. In order to account for the motivation of the different translational

solutions, Schmidt classifies his procedures based the combination of CMT with linguistic typologies in Translation Studies.

To evaluate Schmidt's results, this study replicated his with a similar methodology but included more refined and modified steps. This allowed for precise evaluation and validation of existing evidence. Schmidt's results yielded a total of ten procedures and six types for the translation of metaphor. Schmidt's procedures for dealing with the translation of metaphor are based on both the cognitive linguistic and linguistic approaches. The former approach views metaphor as a concept while the latter views metaphor as an expression. Schmidt's list, which illustrates the procedures, put forward by Toury's (1995, pp. 81-84) and Kövecses' (2004) parameters, might be successful for describing shifts for metaphors at the level of thought. However, the list fails when another cognitive operation such as metonymy with the role of image schema as source domain mapping for an emotion concept is accepted. Thus, the analysis of translation procedures for this research took Schmidt's group as a reference point supported by Lakoff and Johnson's (1980a) cognitive linguistic approach to translation to explain the choices of procedures the translators relied on.

The analysis provided interesting insights. In the analysis of three Arabic translations of three English novels, 14 procedures were found. For further clarification, Table 20 compares these procedures with those already discussed in Schmidt (2012). The reason behind this revisiting is to conclude which of the proposed procedures have been renamed or have already been discussed, and which are not evident in Schmidt's procedures using the CMT. This is shown table (20):

Procedures proposed in this study	Schmidt (2012)
1. Same expression of the same concept.	Same expression of the same CM.
2. Same expression of the same concept with an addition.	Same expression of the same CM, with an addition.
3. Same expression of the same concept with an omission.	Same expression of the same CM, with an omission.
4. Different expression of the same concept, structured with *a different form of image-schematic concept.*	Different expression of the same CM.
5. Different expression of the same concept, with an addition.	Different expression of the same concept with an addition.
6. Abstracting the rich image.	—
7. Concretising the image-schematic of the concept.	—
8. Different expression of a different meaning with a parallel sequence of different mapping.	—
9. Different expression of a different meaning, with divergent sequence of different mapping.	—
10. Different expression, with a partial cognitive function and a similar meaning.	—
11. Different expression of an overlapping mapping, with a different meaning.	—
12. The creation of a new concept.	A zero-element is translated by a metaphorical expression.
13. Non-metaphoric expression.	Non-metaphoric expression paraphrase
14. Deletion.	Deletion.

Table 20. Procedures of fear metaphor and metonymy translation.

Table (20) shows that the proposed findings of procedures (1, 2, 3, 5, 12, 13 and 14) have already been identified in Schmidt's (2012) analysis. However, Schmidt's findings feature the use of a different expression of a different mapping but with a similar meaning, in addition to the use of simile and simile with the case of explication as two different procedures for translating metaphor from the source text into the target. The conceptual theory of metaphor considers simile a type of metaphor that arrives at the same conceptualisation. This indicates that the

simile procedures can be viewed as variants of (1) and (2) in the proposed list above. Furthermore, as pointed out previously, this study introduced two aspects to the analysis of procedures: the idea of the image-schematic function that structures metaphoric and metonymic concepts and the interaction phenomenon between metaphor and metonymy. These two aspects had major repercussions for the classification of the remaining proposed procedures (4, 6, 7, 8, 9, 10 and 11) where the motivation positions may, in certain cases, cause a change in the sequence of the interacting mappings based on the way the target domain is structured within a metaphoric or a metonymic mapping process. The only difference is that, with procedure (4), the translators reproduced the source image with close semantic components between entities in a way that seems familiar with the target readership yet realises a different form of a schematic concept. It must be noted, however, that it is still not clear whether procedure (4) is different or a variant of Schmidt's procedure. This, however, can be discovered if the image-schema aspect is extensively used in future research.

In contrast to Schmidt's findings, this study demonstrated that the sequential ordering of domain mappings has an influence on the way the linguistic expressions are translated. Some go through a parallel sequencing manner of mapping (CM → CM') or (CMN → CMN') while others do not and tend to diverge (CMN → CM) or (CM → CMN) during the translation process. This may be viewed as an adaptation to the conceptual system of the SL, where the expression of a concept is viewed as more idiomatic and conventional to express in the TL. These procedures have not yet been suggested in the literature, which cannot be the case if the analysis does not focus on the conceptual interaction between metaphor and metonymy. Specifically, this would be the idea that, with

some metaphoric concepts, an intervention by another network of a conventional metonymy would be required. For example, Arabic translations with complex mappings are products of blended mappings created between domains during the translation process. The reason for this change of mapping is to structure a new experience in thought that is familiar to the target reader. As a result, the translated expression can either hold an overlapping mapping ((CM → (CM+(CMN)) or ((CMN → (CM+(CMN)) or a partial mapping condition (CM → CM-P) or (CMN→ CMN-P) between the source and its target. The partial mapping features a semi-cognitive function linked to the experience of the translated concept. The overlapping mapping, however, features a shift of conceptual mapping, where the translated expression overlaps with the source in the type of concepts it underlies.

The rationale for using a certain procedure could be for objective or subjective reasons. Objective reasons are involved with the metaphorical and metonymical features, the conventionality of the TL and asymmetric language features. Subjective reasons, on the other hand, are source-text orientated and range from the translator's desire to reflect the source features in the target, to elucidating the comprehension of the text for the readers, to various stylistic reasons such as adding more elements for figurative intensity, explication, implication, increasing the level of expressiveness, fluency of the source and avoiding redundancy in the target. Then, there are lexical and syntactic reasons, such as avoiding the cultural-specific structural outlines of schematic concepts, and complex mappings to provide more evocative, localised and idiomatic cultural-specific schematic images. The idiosyncratic reasons are more evident in the results and they emerge from the creativity and intuition drawn upon by translators in addition to further reasons that are yet to be discovered. The results have demonstrated that the

typologies that have been developed can be fruitfully applied to the translation analysis of metaphors and metonymies in different contexts.

7.2. Conclusion

This chapter has discussed the results of previous analysis chapters, revisited the research questions and discussed key issues that have to do with the development of CMT in translation. In regards to CMT in metaphor translation, this study suggests that there is a pressing need to study the interactional dimension of the treatment of metaphor with metonymy in translation under *Metaphtonymy in Translation Studies* a body of knowledge that focuses on descriptive qualitative measures and interdisciplinary, in the sense that it contributes to the interdisciplinary nature of metaphor studies, metonymy studies and Translation Studies.

As far as the question of emotions is concerned, this chapter proposed new avenues for the discussion of the relationship between metaphor and emotions as well as metonymy and metaphtonymy with the latter, and how they interact during a cognitive mapping to describe an emotion concept. The chapter highlights the significant role of metonymic function in defining the emerging categories of mappings and how they interact with metaphor, particularly in a translation process between English and Arabic.

The chapter proposed new horizons in terms of how metaphor, metonymy and their emerging concepts interact as well as with culture and the implications of this relationship for translation. This chapter also highlighted the significant role of Lakoff's (1987) hierarchical view of metaphor and the important role it plays

in the decision making in the translation process of cultural conceptual entities between a source and its translation. The chapter revisited the limitations of, and issues related to, metaphor translation procedures within CMT. It was suggested that cognitive aspects like image-schemas and rich images can exert great influence upon translation decisions. Emotion-based metonymies are encapsulations of the beliefs of folk models about the physiological or behavioural effects of emotions on people (Barcelona, 2000, p. 47). Hence, the chapter suggested that metonymies play a crucial role in the translation of fear concepts. In other words, it is an important part of understanding how to translate single metonymic mappings through the logic of metonymy itself.

The chapter also showed that metonymic thinking plays a key role in translating mixed mappings with the influence of metaphor translation procedures. The chapter also demonstrated, through the analysis undertaken in this thesis, that fear source domains are pervasive in the corpus adopted, and that these domains place different challenges upon translators. Finally, the chapter suggested that adopting metaphor translation procedures to translate figurative emotions in the context of this study had to be refined. These suggestions were made based on theoretical findings, recent CMT ideas in Translation Studies, and the analysis of data which this thesis drew upon. The final chapter of this thesis summarises the results, emphasising the contribution of knowledge this thesis offered, its strong points and limitations. Furthermore, this chapter will highlight some of the potential implications of CMT for the translation of metaphor and metonymy of emotions in practice, educational applications and future research.

Chapter 8
Conclusions and Implications

Chapter 7 presented a discussion of the implications of applying CMT for different topics associated with the issue of translating emotion-related metaphors and metonymies. That chapter demonstrated that looking at metaphor and metonymy as a continuum yields more significant results in translation than seeing them as single mappings. This chapter is an extension of the preceding chapter in that it situates the discussion in the two chapters of data analysis and the proceeding chapter in the wider field of Translation Studies. To be more specific, this chapter answers the fifth research question: what are the implications of CMT for how metaphors and metonymies are handled in translation, as illustrated in the context of this thesis? Section 8.1 notes some of the implications of the thesis findings for translation. It also explores how the results of this study contribute to the field of Translation Studies and translation training. Section 8.2 delineates the limitations of this research and points out some of the topics that deserve further research attention. Section 8.3. presents areas for future research on Translation Studies. Section 8.4 ends the chapter with conclusion remarks on the significant contribution this thesis has made to the wider field of Translation Studies.

8.1. Main Contribution

This thesis expands upon existing findings on the translation of metaphor and metonymy within Conceptual Metaphor Theory (CMT). The main goal is to investigate how metaphoric and metonymic expressions of fear are translated, and

so contribute to the growing fields of Translation Studies, cognitive linguistics and Arabic studies. As indicated in Chapter 2, existing studies have exclusively focused on exploring the translation of metaphor. The majority of these were conducted with the aim of finding theory-based models for the translation of metaphor, ignoring the cognitive approach to translation. The contribution of this study echoes some of the findings obtained in earlier research about CMT and metaphor in translation and confirms the validity of existing translation possibilities in the context of this research. The motivation for this study, however, cannot be restricted to the previous studies' rationales, and, instead, a number of aspects were considered. These aspects are detailed in the following points.

In terms of translation, the thesis highlights that the translation of metaphor and metonymy is not only a matter of transferring cultural connotations with single mappings but a process that extends to complex mappings. This is governed by nature and interplay between metaphor and culture as well as the latter with metonymy, within the borders of CMT, which has an influence on their treatment in translation. The exploration of metonymy in translation on the interactional perspective emphasises the importance of analysing the behaviour of translators when faced with metonymies.

As seen in Chapter 3, the majority of research findings in this area have not reserved much space for cognitive linguistic theories to describe translation shifts for metonymic inferences. Metonymy has long been studied under the umbrella of metaphor in translation, and this promotes the idea that the implications and limitations of one are influenced by the other. It is a somewhat naïve expectation, however, to think of ways to translate metonymy along the lines of strategies

proposed to translate metaphor. This cannot be possible since the mapping of both are different. While a metaphor has its own operation involving cognitive mechanisms and domains at the level of mental activity, metonymy involves an intra-domain highlighting process, and this affects the way both constructs are translated. Hence, work was certainly required to address metonymy in Translation Studies through cognitive metonymy theories, in particular, when we seek empirical confirmation of how and why cultural-specific metonymies and their different associations are rendered to the TL and how to handle these expressions are. The integration of metonymic theoretical models in the analysis of this research is a new contribution that will assist researchers to put more emphasis on the translation of metonymy and aim to develop a more precise path for metonymy in translation research.

The relationship between metaphor and metonymy is a highly productive dimension for clarifying some of the aspects related to the treatment of both in translation. In other words, the translation of embodied realisations in the context of this study is linked with the translation of metaphor as a phenomenon that works in with metonymy. The claims about this relationship between metaphor and metonymy in translation has allowed, within the selected corpus, the motivation of different translation solutions that can be used to handle the transference of single mappings in addition to motivated conceptual blends and their categories of mixed expressions. The synergy between metaphor and metonymy results suggested that the aspects of translating realisations, such as the use of mixed expressions, force a specific translation performance upon translators. Therefore, this thesis successfully addresses the gap with empirical findings from the current investigation, contributing as a new reference in metaphor and metonymy in

translation studies with respect to linguistic, cultural and cognitive traits and attributes of translating fear as an emotion concept in popular fiction. The logic behind the construction of metaphoric and metonymic concepts is related to the notion of the image-schema hypothesis. This has been taken as an indicator for the analysis to test its validity to explain how fear concepts that are structured by their image-schemas are reproduced. The study describes the significance of cultural-specific schematic embodiments and their transformation in cognitive functioning as powerful tools in the case of this study, particularly when dealing with culturally schematised experiences. The schematic concepts and their extensions require a specific and attentive rendition due to the constraints upon the way in which they structure and profile concepts, especially with categories that show certain cultural specificities grounded in sociocultural salience like emotions. This study suggests that the application of embodied image-schemas is beneficial. This particularly applies in expanding the methodological approaches related to defining translation decisions, offering significant advantages for metaphor and metonymy in translation research.

The analysis of this study and the results arrived at invite to note how the area of conceptual metaphor and metonymy of emotions in translation can be useful in translation training. That is, traditionally metaphor was regarded a s a problem in translation. Perspective translation scholars, such as Newmark and others, offered sets of procedures which if followed can assist translators overcome such problems. Thus, the current thesis offers up a number of training and educational contributions. Curriculum designers can benefit from the generated typology for translation training in general. A translation course can highlight the different points regarding the aspects of handling emotionally-expressed metaphors and

metonymies. This could acquaint the trainees with conceptual systems and their linguistic expressions through exercises. The following points are presented as examples of some significant aspects that can be provided:

- A clear explanation of the fundamental role of both metaphor and metonymy in human cognition and human language.
- Conceptual metaphors and metonymies and text production with examples from different types of discourse.
- Explanation of procedures used to deal with metaphor and metonymies of emotions with different mappings (those arrived at in empirical, descriptive studies).
- Exercises dealing with culture- or ideology-specific texts (depending on metaphor and metonymy).

The typology can also enrich and enhance the translator's metaphoric and metonymic comprehension of and competence in conceptual mechanisms and translation. Moreover, the model would allow translators to elaborate systematic methods of decision-making in how to choose between the most relevant elements in translation to solve the problems identified. Different source domains in metaphorical and metonymical or mixed mappings call for different translation treatments. For example, the analysis in this thesis has revealed that physiological and cognitive domains function differently with complex mappings and thus necessitate different ways of being handled. Some of these domains, however, include somewhat trans-cultural properties. The contribution of this study can be taught in translation, more specifically in educational classrooms. It can offer novice translators new ways to adjust and extend the comprehension mechanisms of the source text audience and those of the target audience, especially in textual

contexts of popular fiction. General knowledge of popular texts and particular knowledge of emotions and the target text would shed light on several areas. Without such knowledge, there is a risk that translators could make mistakes resulting from a lack of understanding of the nature of two significant points: the cognitive mapping of emotions and the interaction between metaphor and metonymy. A useful course in this regard would acquaint trainees with the potential risk arising from the ignorance of such cases. Additionally, all scholars, critics and researchers in the field can adopt such typologies as systematic methods and guides when conducting future research.

The contribution of this line of research would also emphasise ways that cognitive linguistic science, translation and sociolinguistics intersect in their methods. Such interdisciplinary interactions between areas from distant scientific disciplines, with different approaches and methodological horizons, could influence translation tendencies. The contextual analysis can be conducted by observing different genres, such as journal articles, news items, other types of literary works, audio-visual contexts, scientific texts, economic newspapers and subtitles of fiction films. This will show how the same figuratively-expressed emotion concepts can have a different meaning in different contexts. This can also be examined with different language combinations using different corpora for the purpose of reaching critical mass or for the purpose of comparability.

The findings also suggest that it would be of interdisciplinary interest to conduct a more profound study with the application of the model focusing on the translation of physiological source domains and the less aroused versions of behavioural, expressive and cultural source domains, involving different cultural

and historical backgrounds such as Arabic culture(s), Arabic Islamic culture(s), American culture(s), South American culture(s), African culture(s) and Asian culture(s).

As this thesis was established, there was no purpose-built corpus for investigating this area of research. It was noted that various online (English and Arabic) parallel corpora are either very limited and lack variety or are not publicly available. The absence of a qualitative corpus of texts was a methodological challenge for the study. Therefore, the only option was to gather appropriate texts, design and build a specialised corpus for the analysis undertaken in this study, that can be used to answer the question of this research. Moreover, building a new corpus offered the possibility of setting up a sample of data based on specific criteria rather than on a monitored and generally controlled one such as Charteris-Black's (2004) corpus (see also McEnery & Wilson, 2003). This allows the study to present a coherent overview of the linguistic data as a whole.

The creation of a specific English-Arabic corpus for the purpose of data analysis is a new contribution to the field of Translation Studies. For example, it can be delimited and used intentionally to help other investigations in examining linguistic metaphors and metonymies embedded in texts and establish the existence of their concepts to identify translation procedures. The corpus can be used for future translation research with more empirical sources of data to conduct corpus-based research, language acquisition or contrastive studies with alternative translations for the same language or for several languages. This would allow for the exploration of the matter at hand within different contexts. The first methodological contribution underlines the application of the CMT qualitative

approach within mixed-methods research to explore the mapping decisions the translators may resort to when conveying the semantic relations between cognitive domains from the ST into the TT. However, in this research, the emphasis on the qualitative analysis is greater than the quantitative analysis for the descriptive requirement of research analysis. The second methodological contribution is emphasised by the application of corpus-based tools guided by previous studies to examine translated texts (see Baker, 1995). The analysis started with the application of manual methods to extract the linguistic data. According to Koller (2011, p. 9), however, "it is almost logically impossible for a human to [read and] extract all expressions in a corpus without missing some of them." This integration of methods aimed to mitigate the major drawbacks of both cognitive linguistic analysis and corpora, such as the selectivity of linguistic segments in texts and subjectivity.

Moreover, the analysis of this study started with no pre-analytical expectations, and, thus, further questions emerged during the process of analysis and interpretation. The use of corpus methodology to exclusively extract data and detect patterns without prior assumptions, however, according to Tognini-Bonelli (2001), cannot offer a systematic approach to a corpus. Hence, adopting corpus-based analysis approach with the application of corpus tools was required. The use of the proposed tools in this study is a new contribution in metaphor translation corpus-based research and a supplementary step to the holistic analysis of the corpus in this study. Another point on the methodology that is worthwhile to mention here is the fact that the researcher investigated the translation of linguistic data expressing fear as an emotion concept. This required a new process of methods that have not yet been conducted in a new practice in corpus research

which proved useful. The process of methods in this research was designed to overcome the issue of selectivity in the methodological approaches. Thus, three distinct methods in which linguistic data and their concepts can be found in texts were adopted: source-domain and target-domain corpus-based approaches (see Deignan & Potter, 2004; Deignan, 2005) in addition to Metaphor Identification Procedure (MIP) by the Pragglejaz group (2007).

The choice of adopting source-oriented and target-oriented corpus methods was based on Stefanowitsch's (2006, p. 7) suggestion that the application of both approaches is often seen as complementary, and would help researchers to avoid analytical errors. For validity purposes, the combination of corpus methods was guided by MIP as an integrated methodological step to identify metaphoric units and to uncover deeper meanings in the data, which involves the case of metaphor identification in cognitive linguistics. The integration of all three methods helped in exposing discursive patterns found in the linguistic data. In terms of practical contributions, this new methodological procedure helps to maintain the objectivity of data collection methods. The triangulation of approaches concerns the way in which it is possible to collect linguistic data and their source domains of the emotion concept selected for this study with the aim of identifying translation solutions, by means of a nine-step procedure, contributing a new systematic procedure, and one that can be applied in similar research in metaphor and metonymy translation studies in the context of CMT.

8.2. Limitations of the Research

This research offers insights into the specific area of the translation of metaphors and metonymies. There were, however, some limitations associated with both contextual and methodological aspects of the thesis. The study can be seen as a target-oriented approach to translation where texts and, to a larger extent, their context offer an explanation of the translation of metaphor and metonymy since the source texts used for the analysis comprise indirect evidence. The findings of this research are enriched by empirical evidence, in which it exposes the ways metaphors and metonymies are translated from English into Arabic in popular fiction texts.

Although the classification of metaphors and metonymies adopted for this study is constrained by specific contextual and methodological requirements, there are still various methodological insights that have gone into this research that other researchers can use as a springboard for their own. The findings of this study are confined to fear as a target domain. The results suggest that the finer categorical distinctions are worth attending to with different combinations of languages and their cultures.

The model proposed in this research may have limited applicability in other cases. However, the typological model can possibly yield a theoretical generalisation of the applicability of findings in other settings. The model can be examined in a corpus of different styles and registers of texts and discourses of the same set of languages or different languages. Other categories of conceptual metaphors and metonymies of emotions like the level of generalisation, and conventionality need to be examined to provide more insights into their translatability from a cognitive

perspective. Moreover, this model is confined with a mono-direction English Arabic parallel corpus. However, the model can be examined with different corpus directions, for example, multiple translations for the same source, yet, contextually informed to avoid findings bias. Moreover, this research is restricted to a given target domain only, but there is always a possibility of exploring the current context with different variations of target and source domains. The historical period for choosing the corpus is restricted to a certain period of time due to methodological requirements. Future research can be either similar to this piece or extended to different time periods. This will ensure representativeness in the choice of the translation and avoids selection bias.

The corpus of texts adopted for analysis in this study were read as a unified corpus. There was no intention to look at how the translations of linguistic data varied between the three translators. This was not done because primary data in the target texts feature a variety of Modern Standard Arabic within a Pan-Arabic language frame that employs a socially preferred literary variety. The Modern Standard Arabic advocates for the unified formation of a fixed language variety of Arabic language throughout the Arab World (Almijrab, 2021, p, 31). Adopting a universally accessible variety for all Arab countries does not require a comparative study of how the translations of data may vary between the translators even with different cultural contexts/situations. However, observations regarding this aspect can be conducted in future comparative research with a different language frame that employs a different literary variety. This would show how social and cultural factors play a role in determining translation decisions. Furthermore, this thesis is limited to studying how the translators dealt with this phenomenon. During the analysis of the data, it was realised that some of the solutions arrived at had already

been determined. Translators seem to be aware of various cultural differences and with this comes the freedom of creativity. This may be down to two reasons: the nature of the source metaphors and metonymies, and the influence of social and cultural conditions governing the translation process. However, the typological model arrived at can be used to test the performance of translators when rendering semantic elements of emotion concepts involving the TL. It is also important to note that the motivations of translators were based upon the texts. Therefore, inferences made in the analysis of this thesis on translators' motives are based on their own cultural knowledge.

It is worth mentioning that despite the researcher's every attempt to avoid subjectivity in the methodologies applied, it still exists at levels of categorisation, typologies, and interpretation. This is due to the confined applications of the selected framework for this study. Therefore, there is always a possibility that other researchers might have diverging conclusions in regards to categorisations. However, this principle is widely accepted in empirical research and did in fact lead to the uncovering of new patterns in the context selected for analysis.

8.3. Recommendations for Future Research

Regardless of the various implications of CMT in translation studies, the idea of metaphor and metonymy as conceptual constructs consisting of the body in the mind still requires further exploration. These explorations necessitate the refinement of translational views of cognitive embodiment and, thus, would be more applicable in translation practice especially in the case of translating the context of metaphorical emotion language. The similarities between existing

arguments and the one put forward in Chapter 6 raise the question of whether these and other problematic aspects discussed in this thesis are limited in relevance to metaphor and metonymy translation studies or whether there is a possibility of applicability to other areas in Translation Studies. Moreover, future research need not be restricted to a given target only; there is always the possibility of exploring the current context with different variations. With the use of corpus-based methods, the different variations could be further used to identify diverse metaphorical and metonymical patterns of other emotion concepts that are not tied to specific lexical items from fear as the target domain with the application of different methodologies.

The contribution of this study may represent a foundation for many future projects to explore the translation of metaphor and metonymy in different languages and cultural settings. The results of this study do not just converge with the findings of CMT-based translation research. Rather, the results open up platforms for future research in other intellectual fields in Translation Studies. However, which best to start with is difficult to determine. The current research, however, found relevancy for sociolinguistic research into the translation of metaphor and metonymy from a cognitive linguistic perspective. We have come across one example (35) in Chapter 6, which highlights this area. This trend is seen in the convergence between social science, anthropology and cognitive science. The latter seems to represent a fruitful opportunity to unfold new models and theories through integrating the linguistic, cognitive and social aspects of metaphoric and metonymic languages and translation across different languages and cultures.

Finally, future research could conduct observations on the interactional phenomena between metaphor and metonymy in terms of conceptual elaborations using modern scientific discourse to analyse translation patterns (see Shuttleworth, 2017). The interactional negotiation could be further exploited within Deignan et al.'s (2019) model to address the networks of the translation of scientific knowledge between experts, educators, and young people. More focus on these areas might reveal new discoveries with more perspectives on the previously agreed practices regarding the translation of metaphor and metonymy.

8.4. Concluding Remarks

The translation of metaphor and metonymy is a very complex, rich and intellectual phenomenon for research. It involves a decoding process that unpacks and reconstructs the input of the source language elements in the target language via a mapping mechanism. Through the analysis of data, this thesis has attempted to focus on aspects that have been overlooked, particularly regarding existing evidence, in order to provide a refined account of the translation procedures of metaphor and metonymy in a new context. The proposed set of procedures has shown that the interplay between image-schemas and rich images in translation plays a crucial role in determining translation decisions. This thesis, however, only focused on translating linguistic units involving mappings in which the entities of many source domains are mapped onto one target, FEAR. What is further needed is to empirically explore the current context of translation to elucidate areas that are still under-researched and interventions that are insufficiently theorised. In conclusion, then, it is evident that CMT enriches our understanding of the treatment of metaphor and metonymy in translation, hence becoming far-reaching.

The contemporary theory of metaphor will arguably continue to develop and open up more avenues in Translation Studies. This thesis makes a significant contribution to our understanding of metaphor and metonymy across languages, depending not only on the internal and external reality of human cognition but also on the influence of language. It argues that translation production is not confined solely to linguistic structures but rather extends to involve various aspects of the mind. More specifically, this thesis examines the way that figurative language interacts with the human mind and works on the same basis as cognitive mechanisms, yet is tied to cultural factors. It is beyond imagination, however, that one study can account for all the aspects of a certain area of research and, thus, it is hoped that future work would involve exploring new models of interaction between metaphor and metonymy, expressing emotions under the influence of image-schemas and viewing their relationship with culture as crucial factors in determining translation decisions.

References

Abdul Raof, H. (2001) *Quran Translation, Discourse, Texture, and Exegeses.* Curzon Press. Surrey: Richmond.

Abdul Roaf, H. (2006) *Arabic RhetorictA Pragmatic Analysis*. Routledge: London and New York.

Al-Baghdadi, Q. (1958). In Naqdal-Shir. (ed.) *'i'saMikha'il Saba*. Beirut.

Al-Hadlaq, M. S., & Maalej, Z. A. (2012) Conceptualization of anger in Saudi and Tunisian Arabic dialects. In P. Wilson (ed.), *Dynamicity in emotion concepts* (pp. 198-223). Bern: Peter Lang.

Al-Harrasi, A. (2001). *Metaphor in (Arabic-into-English) translation with specific reference to metaphorical concepts and expressions in political discourse.* Doctoral thesis. Birmingham: University of Aston.

AL-Hassnawi, A. (2007). A Cognitive approach to translating metaphors. *Translation Journal*, 11(3). Retrieved from http://translationjournal.net/journal/41metaphor.htm [Accessed 8 September 2021].

Ali, A. Y. (2001). *English translation of the Holy Quran*. Lushena Books.

Al-Misned, O. A. (2001). *Metaphor in the Qur'an: an assessment of three English translations of Suurat Al-Hajj*. Doctoral thesis. Durham: Durham University.

Al-Jurjani, A. A. (d. 1078). *Asraar al-balaaghah [Secrets of Rhetoric]*. Daar al-Saudi Arabia: Madani li-l-Nashr.

Al-Jurjani. A. A. (1984). *The evidence of miracles.* Investigation by Mahmoud Muhammad Shaker, Al-Madani Press: Cairo.

Al-Jurjani. A. Q. (1988). *Dala'il I'jaz fi al-'Ilm al-Ma'ani, (The evidence of miracles in semantics).* In S. Rida (ed.). Beirut: Dar al-Ma'rifah.

Almijrab, R. (2021). The essence of Arabic rhetoric contributions from Arabic-English translation. *African-British Journals.* 4(1), 29-41.

Al-Sharafi, A. G. M. (2000). *Towards a textual theory of metonymy: a semiotic approach to the nature and role of metonymy in text*. Doctoral thesis. Durham: Durham University.

Al-Sharafi, A. G. M. (2004). *Textual metonymy – a semiotic approach*. London: Palgrave Macmillan.

Al-Sharif, A. K. A. O. (2007). *Metaphorical conceptualization of happiness and anger in English and Arabic: A Comparative Study*. Doctoral thesis, Jordan: Yarmouk University.

Al-Sakkaki, A. (1937). *Miftāhu al-cUlūmi (Key of the Sciences]*. Cairo: Al-BābΓ Al-HalabΓ.

Al-Zoubi, M., Al-Ali, M., & Al-Hasnawi, A. (2007). Cogno-cultural issues in translating metaphors. *Perspectives: Studies in Translatology*, 14(3), 230-239.

Aleksandrova, A. S. (2019). Source-in-target metonymy and target-in-source metonymy in texts on international affairs. *Studies in Linguistics, Culture, and FLT*, 5(1), 77-84.

Alfaifi, A., & Atwell, E. (2016) Comparative evaluation of tools for Arabic corpora search and analysis. *International Journal of Speech Technology,* 19(2), 347-357.

Alverson, H. (1994). *Semantics and experience: Universal metaphors of time in English, Mandarin, Hindi, and Sesotho*. Baltimore: Johns Hopkins University Press.

Andersen, M. S. (2004). Metaforkompetence – en empirisk undersøgelse af semi-professionelle oversætteres metaforviden. [Metaphor competence – an empirical study of semi-professional translators metaphor knowledge]. In *Copenhagen Working Papers* LSP. Copenhagen: Copenhagen Business School.

Ansah, G. (2011). The cultural basis of conceptual metaphors: The case of emotions in Akan and English. *Lancaster University Postgraduate Conference in Linguistics & Language Teaching*, 2-25.

Ansah, G. N. (2014). Culture in embodied cognition: Metaphorical/metonymic conceptualizations of FEAR in Akan and English. *Metaphor and Symbol*, 29 (1), 44-58.

Aphek, E., & Tobin, Y. (1984). The place of "place" in a text from Agnon: On the untranslatability of metaphor and polysemy in modern Hebrew. *Babel*, 30(3), 148-158.

Apresyan, V. Y., & Apresyan, Y. D. (1993). Metaphor in the semantic representation of emotions. *Questions of Linguistics*, 3, 27-35.

Austin, J. L. (1975). *How to do things with words*. Oxford and New York: Oxford University Press.

Awad, A. K. (2005). *Translating Arabic into English with Special Reference to Qur'anic Discourse.* Doctoral thesis. Manchester: The University of Manchester.

Assami, E., Kennedy M., Bantley, A. (1997). The Qur'ān Saheeh International Translation. Saudi Arabia: Dar Abdul-Qasim.

Babych, B., Sharoff, S., & Hartley, A. (2008). In LREC, *Generalising Lexical Translation Strategies for MT Using Comparable Corpora*. Marrakech: Morocco.

Baker, M. (1995). Corpora in translation studies: An overview and some suggestions for future research. *Target*, 7(2), 223-243.

Baker, M. (2003). Corpus-based translation studies in the academy. *Textologie und Translation: Jahrbuch Übersetzen und Dolmetschen*, 4, 7-15.

Barcelona, A. (2000). On the plausibility of claiming a metonymic motivation for conceptual metaphor. In A. Barcelona (ed.), *Metaphor and metonymy at the crossroads: A cognitive perspective* (pp. 31-58). Berlin and New York: De Mouton Gruyter.

Barcelona, A. (2003a). Names: A metonymic "return ticket" in five languages. *Jezikoslovlj,* 4(1), 11-41.

Barcelona, A. (2003b). Metonymy in cognitive linguistics. An analysis and a few modest proposals. In H. Cuyckens, T. Berg, R. Dirven, & K. U. Panther (eds.), *Motivation in Language. Studies in Honour of Günter Radden* (pp. 223-255). Amsterdam and Philadelphia: John Benjamins.

Barcelona, A. (2005). The multilevel operation of metonymy in grammar and discourse, with particular attention to metonymic chains. In F. Ruiz de Mendoza Ibáñez & M.S. Peña Cervel (eds.), *Cognitive linguistics: Internal dynamics and interdisciplinary interaction* (pp. 313-352). Berlin and New York: De Mouton Gruyter.

Barcelona, A. (2007). The role of metonymy in meaning construction at discourse level. In G. Radden, (ed.), *Aspects of Meaning Construction* (pp. 51-75). Amsterdam and Philadelphia: John Benjamins.

Barcelona, A. (2009). Motivation of construction meaning and form: The roles of metonymy and inference. In P. Klaus-Uwe, L. Thornburg & A. Barcelona (eds.), *Metonymy and metaphor in grammar* (pp. 363-401). Amsterdam and Philadelphia: John Benjamins.

Barcelona, A. (2011). Reviewing the properties and prototype structure of metonymy. In R. Benczes, A. Barcelona, & F. Ruiz de Mendoza Ibáñez (eds.), *Defining metonymy in cognitive linguistics: Towards a consensus view* (pp. 7-57). Amsterdam and Philadelphia: John Benjamins.

Bayer, M. Sommer, W., & Schacht, A. (2010). Reading emotional words within sentences: the impact of arousal and valence on event-related potentials. *International Journal of Psychophysiology*, 78(3), 299-307.

Bateson, M. C. (1967). *Arabic language handbook*. Washington: Georgetown University Press.

Beardsley, M. C. (1962). The metaphorical twist. *Philosophy and Phenomenological Research*, 22(3), 293-307.

Berkenkotter, C., & Huckin, T. N. (2016). *Genre knowledge in disciplinary communication*: *Cognition/culture/power*. London and New York: Routledge.

Black, M. (1962) [2019]. *Models and metaphors: Studies in language and philosophy*. New York: Cornell University Press.

Black, M. (1993). *More about metaphor*. Cambridge: Cambridge University Press.

Black, M. (1995). Metaphor. *Proceedings of the Aristotelian Society*, 55, 273-294.

Bloomfield, L. (1933). *Language*. New York: Rinehart and Winston.

Braunmüller, K., Höder, S., & Kühl, K. (eds.). (2014). *Stability and divergence in language contact: Factors and mechanisms*. Amsterdam and Philadelphia: John Benjamins.

Bredin, H. (1984). Roman Jakobson on metaphor and metonymy. *Philosophy and Literature*, 8(1), 89.

Bunnduq, M. (1996). Al-*Madkhalu fĪilmi al-Bayāni (An Introduction to the art of tropes)*. Cairo: Dar Al-Zahra Al-Sharqi.

Butcher, S. (1950). *Aristotle on the art of poetry*. Stockbridge: Liberal Arts Press.

Burgoon, J. K., & Saine, T. (1978). *The unspoken dialogue: An introduction to nonverbal com- munication*. Boston: Houghton Mifflin.

Catford, J. (1965). *A linguistic theory of translation*. Oxford and New York: Oxford University Press.

Cervel, M. S. P. (1999). Subsidiary relationships between image schemas: An approach to the force schema. *Journal of English Studies*, 1, 187-208.

Charteris-Black, J. (2004). *Corpus approaches to critical metaphor analysis*. New York: Springer-Verlag Publishing.

Chand, V. (2008). Fire and hot liquids: Anger in Hindi and English. *Multilingualism and applied comparative linguistics*, 2, 2-23.

Chen, P. (2010). A cognitive study of anger metaphors in English and Chinese idioms. *Asian Social Science*, 6(8), 73-76.

Chesterman, A. (2014). Translation studies forum: Universalism in translation studies. *Translation Studies*, 7(1), 82-90.

Chomsky, N. (1959). Verbal behavior (a review of Skinners book). *Language*, 35(1), 26-58.

Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge and Massachsettes, MA: MIT Press.

Cienki, A. (1997). Some properties and groupings of image schemas. In M. H. Verspoor, K. D. Lee, & E. Sweatser (eds.), *Lexical and syntactical constructions and the construction of meaning* (pp. 3-15). Amsterdam and Philadelphia: John Benjamins.

Cisdem [PDF Converter OCR for Mac]. (2020). Retrieved from https://www.cisdem.com. [Accessed 8 September 2021].

Clausner, T. C., & Croft, W. (1999). Domains and image schemas. *Cognitive linguistics*, 10(1), 1-32.

Crerar-Bromelow, G. (2008). Can an awareness of conceptual metaphor (Lakoff & Johnson 1980) aid the translator in his/her task? In N. L. Johannesson & D. C. Minugh (eds.), *Selected Papers from the 2006 and 2007 Stockholm Metaphor Festivals* (pp. 75–84). Stockholm: Stockholm University Press.

Creswell, J. W. (2003). A framework for design. *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousands Oaks: Sage.

Creswell, J. W. & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed). Thousand Oaks: Sage.

Croft, W. (1993). The role of domains in the interpretation of metaphors and metonymies. *Cognitive Linguistics*, 4(4), 335-370.

Croft, W. (2002). *Typology and universals.* Cambridge*:* Cambridge University Press.

Crofts, M. (1988). Translating metaphors. *Australian Review of Applied Linguistics*, 11(1), 47-53.

Dagut, M. (1976). Can "metaphor" be translated? *Babel*, 22 (1), 21–33.

Dagut, M. (1987). More about the translatability of metaphor. *Babel*, 33(2), 77-83.

Damasio, A. R. (1994). *Descartes, error: emotion, reason, and the human brain*. New York: Putnam and Grosset.

Danaher, D. (2003). A Cognitive Approach to Metaphor in Prose. Truth and Falsehood in Leo Tolstoy's The Death of Ivan Il'ich. *Poetics Toda*y, 3(24), 439-469.

Darwin, C., & Prodger, P. (1998). *The expression of the emotions in man and animals*. Oxford and New York: Oxford University Press.

Darwish, A. (2010). *A journalist's guide to live direct and unbiased news translation*. Melbourne: Writescope Publishers.

Darwish, A. (2010). *Translation and news making in contemporary Arabic television*. Writescope Publishers.

Davidson, D. (1978). What metaphors mean. *Critical inquiry*, 5(1), 31-47. A.

Deeb, K. A. (1971). Al-Jurjani's classification of istiara with special reference to Aristotle's classification of Metaphor. Journal of Arabic Literature, 48-75.

Deignan, A. (1999). Corpus-based research into metapho. Cambridge: Cambridge University Press.

Deignan, A. (2005). *Metaphor and corpus linguistics, converging evidence in language and communication research*. Amsterdam and Philadelphia: John Benjamins.

Deignan, A., & Potter, L. (2004). A corpus study of metaphors and metonymies in English and Italian. *Journal of Pragmatics*, 36(7), 1231-1252.

Deignan, A., Gabryś, D., & Solska, A. (1997). Teaching English metaphors using cross-linguistic awareness-raising activities. *English Language Teaching Journal*, 51(4), 352-360.

Deignan, A., Semino, E., & Paul, S. A. (2019). Metaphors of climate science in three genres: Research articles, educational texts, and secondary school student talk. *Applied Linguistics*, 40(2), 379-403.

Denroche, C. (2019). Employing cognitive metonymy theory in the analysis of semantic relations between source and target text in translation. *Metaphor and the Social World*, 9(2), 177-198.

Dewell, R. (2005). Dynamic patterns of CONTAINMENT. In B. Hampe & J. Grady (eds.), *From perception to meaning: Image schemas in cognitive linguistics* (pp. 369-393). Berlin and New York: De Mouton Gruyter.

Dickins, J. (2005). Two models for metaphor translation. *Target*, 17(2), 227-273.

Dirven, R. (2002). Metonymy and metaphor: Different mental strategies of conceptualisation. In R. Dirven, & R. Pörings (eds.), *Metaphor and metonymy in comparison and contrast* (pp. 75-111). Berlin and New York: De Mouton Gruyter.

Dixon, T. (2012). Educating the emotions from Gradgrind to Goleman. *Research Papers in Education*, 27(4), 481-495.

Djurov, K. (2015). *Hareth Al-Nabhan – George Orwell's translator into Arabic* 16 February [Blog post]. BNR Radio Bulgaria, Daily Webcast. Retrieved from https://bnr.bg/en/search?q=nabhan [Accessed 8 September 2021].

Dobrzyńska, T. (1995). Translating metaphor: Problems of meaning. *Journal of Pragmatics*, 24(6), 595-604.

Dodge, E., & Lakoff, G. (2005). Image schemas: From linguistic analysis to neural grounding. In B. Hampe (ed.), *From Perception to Meaning* (pp. 57-92). Berlin and New York: De Gruyter Mouton.

Ekman, P. (1999). *Basic emotions*. In T. Dalgleish & T. Power (eds.), *The Handbook of Cognition and Emotion* (pp. 45-60). Hoboken: John Wiley and sons Ltd. Retrieved from https://1ammce38pkj41n8xkp1iocwe-wpengine.netdna-ssl.com/wp-content/uploads/2013/07/Basic-Emotions.pdf [Accessed 8 September 2021].

Even-Zohar, I. (1990). *Polysystem studies*. Durham: Duke University Press. Retrieved from https://www.tau.ac.il/~itamarez/works/books/Even-Zohar_1990--PolysystemStudies%20%5BPT11-1%5D.pdf [Accessed 8 September 2021].

Fahnestock, J. (2005). Rhetoric in the age of cognitive science. In R. Graff, A. E. Walzer & J. M. Atwill (ed.), *The viability of the rhetorical tradition* (pp. 159-179). New York: State University of New York Press.

Fairclough, N. (2003). *Analysing discourse: Textual analysis for social research*. London: Psychology Press.

Fauconnier, G., & Turner, M. (1998). Conceptual integration networks. *Cognitive Science*, 22(2), 133-187.

Fawson, C., & Reutzel, D. (1994). Comprehending metaphor: Using a salient characteristic analysis technique (SCAT), *Reading Horizons*, 34(4), 6.

Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, 113(3), 464-486.

Fernández, E. S. (2011). Translation studies and the cognitive theory of metaphor. *Review of Cognitive Linguistics*, 9(1), 262-279.

Fernández, E. S., Sacristán, M. S. V., & Olivera, P. A. F. (2005). Translations we live by: The impact of metaphor translation on target systems. Lenguay sociedad: investigaciones recientes en la lingüistica aplicada, 61-82.

Freeman, M. H. (2009). Cognitive linguistic approaches to literary studies: State of the art in cognitive poetics. In D. Geeraerts & H. Cuyckens (eds.), *The*

Oxford handbook of cognitive linguistics (pp. 1175-1202). Oxford and New York: Oxford University Press.

Folk, J. (2021). Blanched, Blanching, Looking Pale, Pasty, Sick, Pale Face - Anxiety Symptoms [Blog post]. Anxitycentre.com. Retrieved from https://www.anxietycentre.com/anxiety-symptoms/blanched.shtml [Acsessed 29 March 2021].

Forceville, C. (2006). Non-verbal and multimodal metaphor in a cognitivist framework: Agendas for research. In G. Kristiansen and J. F. Ruiz de Mendoza Ibáñez (eds.), *Cognitive Linguistics: Current Applications and Future Perspectives* (pp. 379-402). Berlin and New York: De Gruyter Mouton.

Gaulin, S. J. C., & McBurney, D. H. (2001). *Psychology: An evolutionary approach.* New York: Pearson Publishing.

Geeraerts, D. (1994). Metonymy. In R. Asher (ed.), *The field's standard reference work for a generation* (pp. 2477-2478). Amsterdam: Elsevier.

Geeraerts, D. (2002). The interaction of metaphor and metonymy in composite expressions. In R. Dirven & R. Pörings (eds.), *Metaphor and metonymy in comparison and contrast*, (pp. 435–465). Berlin and New York: De Mouton Gruyter.

Geeraerts, D. (2010). *Theories of lexical semantics*. Oxford and New York: Oxford University Press.

Geeraerts, D., & Gevaert, C. (2008). Hearts and (angry) minds in Old English. In F. Sharifian, R. Dirven, N. Yu, & S. Niemeyer (eds.), *Culture, body and language: Conceptualization of internal body organs across cultures and languages* (pp. 319-347). Berlin and New York: De Mouton Gruyter.

Gentner, D., & Bowdle, B. F. (1994). The coherence imbalance hypothesis: A functional approach to asymmetry in comparison. In *Proceedings of the 16th Annual Conference of the Cognitive Science Society* (pp. 351-356). London and New York: Routledge.

Gentner, D., Bowdle, B., Wolff, P., & Boronat, C. (2001). Metaphor is like analogy. In D. Gentner, K. Holyoak, & N. K. Boicho (eds.), *The analogical mind: Perspectives from cognitive science* (pp. 199-253). Cmbridge and Massachsettes: MIT Press.

Gevaert, C. (2001). Anger in old and middle English: A hot topic? *Belgian Essays on Language and Literature*, 89–101.

Gevaert, C. (2007). *The history of ANGER: The lexical field of ANGER from Old to Early Modern English*. Doctoral thesis. Leuven: University of Leuven.

Gholami, S., Montashery, I., & Khorrami, M. (2016). Metaphors in Arabic and English texts: A case study of translation of metaphors in the English

versions of Al-Sahifah Al-Sajjadiyyah. *Journal of Literature, Languages and Linguistics*, 21, 56-66.

Giannakis, G. K., Bubeník, V., Crespo, E., Golston, C., Lianeri, A., Luraghi, S., & Matthaios, S. (2013). *Encyclopedia of Ancient Greek language and linguistics*. Lieden: Brill.

Gibbs Jr. R. W. (2011). Multiple constraints in theories of metaphor. *Discourse Processes*, 48(8), 575-584.

Gibbs Jr. R. W., & Colston, H. L. (1995). The cognitive psychological reality of image schemas and their transformations. *Cognitive linguistics*, 6(4), 347-378.

Gibbs, R. A., & Gibbs. Jr. R. W. (1994). *The poetics of mind: Figurative thought, language, and understanding.* Cambridge: Cambridge University Press.

Gibbs, R. W. (1993). Why idioms are not dead metaphors. In C. Cacciari & P. Tabossi (eds.), *Idioms: Processing, structure, and interpretation* (pp. 57-77). Hillsdale: Lawrence Erlbaum.

Gibbs, R. W. (1999). Taking metaphor out of our heads and putting it into the cultural world. *Amsterdam studies in the theory and history of linguistic science series*, 4, 145-166.

Gibbs, R. W. (2005). The psychological status of image schemas. *From Perception to Meaning: Image Schemas in Cognitive Linguistics*, 29, 113-136.

Gibbs, R. W. (2007). Why cognitive linguists should care more about empirical methods. In M. Gonzalez-Marquez, I. Mittelberg, S. Coulson & M. J. Spivey (eds.), *Methods in Cognitive Linguistics* (pp. 2-18). Amsterdam and Philadelphia: John Benjamins.

Glucksberg, S., & Keysar, B. (1990). Understanding metaphorical comparisons: Beyond similarity. *Psychological Review*, 97(1), 3.

Goossens, L. (1990). Metaphtonymy: the interaction of metaphor and metonymy in expressions for linguistic action. *Cognitive Linguistics*, 1(3), 323-342.

Goossens, L. (1995). Metaphtonymy: The interaction of metaphor and metonymy in figurative expressions for linguistic action. In L. Goossens, P. Pauwels, B. Rudzka-ostyn, A.M. Simon-Vandenbergen & J. Vanprays (eds.), *By word of mouth: Metaphor, metonymy and linguistic action in a cognitive perspective* (159-174). Amsterdam and Philadelphia: John Benjamins.

Goossens, L. (2003). Metaphtonymy. The interaction of metaphor and metonymy in expressions for linguistic action. In R. Dirven & R. Pörings (eds.), *Metaphor and Metonymy in Comparison and Contrast* (pp. 349-377). Berlin and New York: De Mouton Gruyter.

Grady, J. (1997). *Foundations of meaning: Primary metaphors and primary scenes.* Doctoral thesis. Berkeley: University of California.

Greim, B. (1983). The elliptical idiom: Change from icon and index to symbol. In I. Rauch & G. F. Carr (eds.), *Language change* (pp. 1-9). Bloomington: Indiana University Press.

Group, P. (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and symbol*, 22(1), 1-39.

Guetterman, T., Creswell, J. W., & Kuckartz, U. (2015). Using joint displays and MAXQDA software to represent the results of mixed methods research. In M. T. McCrudden, G. Schraw & C. Buckendahl (eds.), *Use of visual displays in research and testing: Coding, interpreting, and reporting data* (pp. 145-175). Charlotte: Information Age Publishing.

Harper, D. (2011). *Online etymology dictionary.* Retrieved from https://www.etymonline.com [Accessed 8 September 2021].

Hanić, J., & Pavlović, T. (2018). A cognitive approach to metaphor and metonymy translation: Resisting the power of the source. In E. D. Giovanni & F. Raffi (ed.), *Languaging Diversity*: *Language(s) and Power* (pp. 205-226). Newcastle upon Tyne: Cambridge Scholars Publishing.

Hanić, J., Pavlović, T., & Jahić, A. (2016). Translating emotion-related metaphors: A cognitive approach. *Explorations in English Language and Linguistics*, 4(2), 87-101.

He, G. (2011). A Comparative Study of Color Metaphors in English and Chinese. *Theory and Practice in Language Studies*, 1(12), 1673-1678.

Herrmann, J. B. (2013). *Metaphor in academic discourse: Linguistic forms, conceptual structures, communicative functions and cognitive representations.* Netherlands Graduate School of Linguistics: Amsterdam.

Hiraga, M. K. (1991). Metaphor and comparative cultures. In P. G. Fendos (ed.), *Cross-cultural Communication: East and West* (pp. 149-166). Taiwan: Tài Chèng Publishing.

Holman, L. Head, M. L. Lanfear, R., & Jennions, M. D. (2015). Evidence of experimental bias in the life sciences: why we need blind data recording. *PLoS biology*, 13(7), 100-190.

Ibn-Kathir A. (1984) *Tafseer Ibn Kathir (Explication of the Qur'an: part 3)* Beirut: Dar Al- Andalus.

Jakobson, R. (1971). Two aspects of language and two types of aphasic disturbances. *Selected Writings*, 2, 239-259.

Jakobson, R., & Halle, M. (1956). *Fundamentals of language*. The Hague: Mouton & Co.

Johnson-Laird, P. N., & Oatley, K. (1989). The language of emotions: An analysis of a semantic field. *Cognition and Emotion*, 2(3), 81-123.

Johnson, M. (1987). *The body in the mind*. Chicago and London: University of Chicago Press.

Jones, L. L., & Estes, Z. (2005). Metaphor comprehension as attributive categorisation. *Journal of Memory and Language*, 53(1), 110-124.

Josef, S. (2006). Metaphor, literal, literalism. *Mind & language*, 21(3), 243-279.

Kaya, N., & Epps, H. H. (2004). Relationship between color and emotion: A study of college students. *College Student Journal*, 38(3), 396-405.

Kimmel, M. (2008). Metaphors and software-assisted cognitive stylistics. In S. Zyngier, M. Bortolussi, A. Chesnokova & J. Auracher (eds.), *Directions in empirical literary studies* (pp. 193-210). Amsterdam and Philadelphia: John Benjamins.

Kimmel, M. (2009). Analyzing image schemas in literature. *Cognitive Semiotics,* 5, 159-188.

Kirstein, L. (1971). *Movement and metaphor: Four centuries of ballet*. London: Pitman Publishing.

Kittay, E. (1987). *Metaphor: Its Cognitive Force and Linguistic Structure*. Oxford: Oxford University Press.

Klaudy, K. (2008). Compensation in Translation. mit den beiden Lungenflügeln atmen. *Zu Ehren von János Kohn. München*: *LINCOM*, 163-175.

Koch, P. (1999). Frame and contiguity. In P. Klaus-Uwe & G. Radden (eds.), *Metonymy in Language and Thought* (pp. 139-167). Amsterdam and Philadelphia: John Benjamins.

Koller, V. (2011). Analyzing metaphor and gender in discourse. In F. Manzano (ed.), *Unité et diversité de la linguistique* (Cahiers du Centre d'Etudes Linguistique) (pp. 125-158). *Atelier Intégré de Publication de l'Université* Jean. Lyon: Moulin – Lyon 3 University.

Kövecses, Z. (1990). *Emotion concept.* New York: Springer-Verlag Publishing.

Kövecses, Z. (2000a). *Metaphor and emotion: Language, culture, and body in human feeling*. Cambridge: Cambridge University Press.

Kövecses, Z. (2000b). The scope of metaphor. In A. Barcelona (ed.), *Metaphor and metonymy at the crossroads: A cognitive linguistic perpective* (pp. 79–92). Berlin and New York: De Mouton Gruyter.

Kövecses, Z. (2002). Emotion concepts: Social constructionism and cognitive linguistics. In S. R. Fussel (ed.), *The verbal communication of emotions: Interdisciplinary perspectives* (pp. 9-124). London: Psychology Press.

Kövecses, Z. (2003). Metaphor and linguistic expressions. In Z. Kövecses (ed.), *Metaphor in Culture: Universality and Variation* (pp. 130-140). Cambridge: Cambridge University Press.

Kövecses, Z. (2005). *Metaphor in Culture*. *Universality and Variation*. Cambridge: Cambridge University Press.

Kövecses, Z. (2006). Embodiment, experiential focus, and diachronic change in metaphor. In R. W. McConchie, O. Timofeeva, H. Tissari & T. Säily (eds.), *Selected proceedings of the 2005 symposium on new approaches in English historical lexis* (pp. 1-7). Somerville: Cascadilla Proceeding Project.

Kövecses, Z. (2010a). *Metaphor: A practical introduction.* Oxford and New York: Oxford University Press.

Kövecses, Z. (2010b). Metaphor, language, and culture. *Documentação de Estudos em Lingüística Teórica e Aplicada*, 26, 739-757.

Kövecses, Z. (2011). Methodological issues in conceptual metaphor theory. In S. Handl & H. J. Schmid (eds.), *Windows to the mind: Metaphor, metonymy and conceptual blending*, (pp. 23-40). Berlin: Walter de Gruyter.

Kövecses, Z. (2014). Conceptualizing emotions. A revised cognitive linguistic perspective. *Poznan Studies in Contemporary Linguistics*, 50(1), 15-28.

Kövecses, Z. (2015). *Where metaphors come from: Reconsidering context in metaphor*. Oxford and New York: Oxford University Press.

Kövecses, Z., & Radden, G. (1998). Metonymy: Developing a cognitive linguistic view. *Cognitive Linguistics* (includes Cognitive Linguistic Bibliography), 9(1), 37-78.

Kövecses, Z., & Radden, G. (1999). Towards a theory of metonymy. In In P. Klaus-Uwe & G. Radden (eds.), *Metonymy in Language and Thought* (pp. 17-60). Amsterdam and Philadelphia: John Benjamins.

Kövecses, Z., & Szabco, P. (1996). Idioms: A view from cognitive semantics. *Applied Linguistics*, 17(3), 326-355.

Kövecses, Z. (2018). Metaphor universals in literature'. *Literary Universals Project*, English Department. Connecticut, University of Connecticut. Retrieved from https://literary-universals.uconn.edu/2018/02/04/metaphor-universals-in-literature/# [Accessed 8 September 2021].

Krennmayr, T. (2008). Using dictionaries in linguistic metaphor identification. In N. L. Johannesson & D. C. Minugh (eds.), *Selected Papers from the 2006 and 2007 Stockholm Metaphor Festival* (pp. 193-210). Stockholm: Stockholm University Press.

Kurth, E. N. (1999). Altered images. Cognitive and Pragmatic Aspects of Metaphor Translation. In J. Vandaele (ed.), *Translation and the (re) location of meaning : selected papers of the CETRA research seminars in translation studies, 1994-1996* (pp. 97-116). Leuven: CETRA.

Kurth, E. N. (1995). *Metaphernübersetzung: dargestellt an grotesken Metaphern im Frühwerk Charles Dickens in der Wiedergabe deutscher Übersetzungen*. Frankfurt am Main: Peter Lang.

Lakoff, G. (1987). *Women, fire, and dangerous things*: *What categories reveal about the mind.* Chicago and London: University of Chicago Press.

Lakoff, G. (1994). *Moral Imagination: Implications of Cognitive Science for Ethics*. Chicago and London: University of Chicago Press.

Lakoff, G. (2010, February 21). *Why "rational reason" doesn't work in contemporary politics* [Blog post]. Truth Out. Retrieved from http://legacy.buzzflash.com/commentary/george-lakoff-why-rational-reason-doesnt-work-in-contemporary-politics [Accessed 8 September 2021].

Lakoff, G., & Johnson, M. (1980a). *Metaphors we live by*. Chicago and London: University of Chicago Press.

Lakoff. G., & Johnson, M. (1980b). The metaphorical structure of the human conceptual system. *Cognitive Science*, 4(2), 195-208.

Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh*. New York: Basic Books.

Lakoff, G., & Johnson, M. (2002). Why cognitive linguistics require embodied realism. *Cognitive Linguistics*, 13(3), 245-264.

Lakoff, G., & Johnson, M. (2003). *Metaphors we live by* (2nd ed.). Chicago and London: University of Chicago Press.

Lakoff, G., & Kövecses, Z. (1987). The cognitive model of anger inherent in American English. In D. Holland & N. Quinn (eds.), *Cultural models in language and thought* (pp. 195-22). Cambridge: Cambridge University Press.

Lakoff, G., & Ross, J. R. (1976). Is deep structure necessary? In J.D. McCawley (ed.), *Notes from the linguistic underground* (pp. 159-164). Leiden: Brill.

Lakoff, G., & Turner, M. (1989). *More than cool reason: A field guide to poetic metaphor.* Chicago and London: University of Chicago Press.

Langacker, R. (1987). *Foundations of cognitive grammar: Theoretical prerequisites.* Stanford: Stanford University Press.

Langacker, R. (2008). *Cognitive grammar: A basic introduction*. Oxford and New York: Oxford University Press.

Langacker, R. W. (1993). Reference-point constructions. *Cognitive Linguistics*, 4(1), 1-38.

Langacker, R. W. (2000). *Grammar and conceptualization*. Berlin: Walter de Gruyter.

Larcher, P. (2006). Derivation. In K. Versteegh (ed.), *The encyclopaedia of Arabic language and linguistics* (pp. 375-579). Manchester: Manchester University Press.

Leech, G. (1991). The state of the art in corpus linguistics. In K. Aijmer & B. Altenberg (eds.), *English corpus linguistics* (pp. 20-41). London and New York: Routledge.

Li, S. (1998*). A study of English rhetoric*. Changsha: Hunan People's Press.

Littlemore, J. (2015). *Metonymy*. Cambridge: Cambridge University Press.

Liu, X., & Zhao, G. (2013). A Comparative study of emotion metaphors between English and Chinese. *Theory and Practice in Language Studies*, 8-29.

Lodge, D. (2015). *The modes of modern writing: Metaphor, metonymy, and the typology of modern literature*. London: Bloomsbury Publishing.

Lund, T. (2012). Combining qualitative and quantitative approaches: some arguments for mixed methods research. *Scandinavian Journal of Educational Research*, 56(2), 155-165.

Maalej, Z. (2004). Figurative language in anger expression in Tunis- Arabic: An extended view of embodiment. *Metaphor and Symbol*, 19(1), 51–75.

Maalej, Z. (2007). The embodiment of fear expressions in Tunisian Arabic. In F. Sharifian & G. B. Palmer (eds.), *Applied cultural linguistics*: *Implications for second language learning and intercultural communication* (pp. 87-104). Amsterdam and Philadelphia: John Benjamins.

Maalej, Z. (2008). Translating metaphor between unrelated cultures: a cognitive-pragmatic perspective. *Sayyab Translation Journal*, 1, 60-82.

Malamatidou, S. (2018). *Corpus triangulation: Combining data and methods in corpus-based translation studies*. London and New York: Routledge.

Mandelblit, N. (1995). The cognitive view of metaphor and its implications for translation theory. *Translation and Meaning*, 3, 483-495.

Mandler, J. M. (1992). How to build a baby: Conceptual primitives. *Psychological Review*, 99(4), 587-604.

Mandler, J. M. (2004). *The foundations of mind: Origins of conceptual thought*. Oxford and New York: Oxford University Press.

Mandler, J. M., & Cánovas, C. P. (2014). On defining image schemas. *Language and Cognition*, 6(4), 510-532.

Matsuki, K. (1995). Metaphors of anger in Japanese. In J. R. Taylor & R. Maclaury (eds.), *Language and the cognitive construal of the world* (pp. 137-151). Berlin: Mouton Publishers

Mason, K. (1982). Metaphor and translation. *Babel*, 28(3), 140-49.

Maxwell, J. A. (2008). *Designing a qualitative study. The SAGE handbook of applied social research methods* (pp. 214-253). Thousand Oaks: Sage.

MAXQDA [VERBI Software]. (2020). Retrieved from https://www.maxqda.com/ [Accssesd 8 November 2021].

McCawley, J. D. (1988). Review of Chomsky's knowledge of language*:* Its nature, origin, and use. *Language*, 64, 355-356.

McEnery, T., & Wilson, A. (2003). Corpus linguistics. *The Oxford Handbook of Computational Linguistics* (pp. 448-463). Oxford and New York: Oxford University Press.

McVeigh, B. J. (1996). Standing stomachs, clamoring chests and cooling livers: Metaphors in the psychological lexicon of Japanese. *Journal of Pragmatics*, 26, 25-50.

Meier, B. P., & Robinson, M. D. (2004). Why the sunny side is up: Associations between affect and vertical position. *Psychological Science*, 15(4), 243-247.

Menacere, M. (1992). Arabic Metaphor and Idiom in Translation. *Meta*, 37 (3), 567–572.

Merleau-Ponty, M. (2002). The body as expression, and speech. In M. Merleau-Ponty (ed.), *Phenomenology of perception* (pp. 223-253). London and New York: Routledge.

Miller, G. A. (1993). Images and models, similes and metaphors. *Metaphor and thought*. In A. Ortony, A. (ed.), *Metaphor and thought* (pp. 2-25). Cambridge: Cambridge University Press.

Muhammad, A. G. A. (2017). *Translating Metonymy in the Holy Qur'an: Surat an-Nisa as a Case Study*. Masters dissertation. American University of Sharjah.

Müller, R. (2005). Creative metaphors in political discourse: Theoretical considerations on the basis of Swiss speeches. *Metaphorik. de Journal*, 9, 53-73.

Munday, J. (1998). A computer-assisted approach to the analysis of translation shifts. *Meta*, 43(4), 542-556.

Munday, J. (2016). *Introducing translation studies: Theories and applications*. London and New York: Routledge.

Najjar, S. A. (2012). *Metaphors in translation: an investigation of a sample of Quran metaphors with reference to three English versions of the Quran*. Doctoral thesis. Liverpool: Liverpool John Moores University.

Neuman, W. L. (2014). *Basics of social research*. Boston: Pearson and Allyn and Bacon.

Newmark, P. (1981). *Approaches to translation.* Oxford: Pergamon Press.

Newmark, P. (1985). The translation of metaphor. In W. Paprotté & R. Dirven (eds.), *The ubiquity of metaphor: Metaphor in language and thought* (pp. 295- 326). Amsterdam and Philadelphia: John Benjamins.

Newmark, P. (1988). *A textbook of translation.* London: Pearson Education.

Nida, E. (1969). Science of translation. *Language*, 45(3), 483-498.

Nida, E. A. (1991). Theories of translation. *Traduction, Terminologie, Rédaction*, 4(1), 19-32.

Niemeier, S. (2000). Straight from the heart–metonymic and metaphorical explorations. In A. Barcelona (ed.), *Metaphor and metonymy at the crossroads: A cognitive perspective* (pp. 195-213). Berlin: Walter de Gruyter.

Nöth, W. (1985). Semiotics aspects of metaphor. In W. Paprotté & R. Dirven (eds.), *The Ubiquity of metaphor* (pp. 1-16). Amsterdam and Philadelphia: John Benjamins.

Oatley, K., & Johnson-Laird, P. N. (1987). Towards a cognitive theory of emotions. *Cognition and Emotion*, 1(1), 29-50.

Ogarkova, A., & Soriano Salinas, C. (2014). Emotion and the body: A corpus-based investigation of metaphorical containers of anger across languages. *International Journal of Cognitive Linguistics*, 5(2), 147-179.

Olohan, M. (2004). *Introducing corpora in translation studies*. London and New York: Routledge.

Ortony, A. (1979). Beyond literal similarity: *Psychological Review*, 86, 161-180.

Ortony, A. (1993). *Metaphor and thought*. Cambridge: Cambridge University Press.

Panther, K. U. (2006). Metonymy as a usage event. In G. M. Kristiansen, M. Achard, R. Dirven & F. J. Ruiz de Mendoza Ibáñez (eds.), *Cognitive linguistics: Current applications and future perspectives* (pp. 147-185). Berlin and New York: De Mouton Gruyter.

Panther, K. U., & Radden, G. (1999). *Metonymy in language and thought*. Amsterdam and Philadelphia: John Benjamins.

Panther, K. U., & Thornburg, L. (2003). *Metonymy and pragmatic inferencing*. Amsterdam and Philadelphia: John Benjamins.

Panther, K. U., Thornburg, L., & Barcelona, A. (2009). *Metonymy and metaphor in grammar*. Amsterdam and Philadelphia: John Benjamins.

Panther, K. U., & Thornburg, L. L. (1999). The potentiality for actuality metonymy in English and Hungarian. In P. Klaus-Uwe & G. Radden (eds.), *Metonymy in language and thought* (pp. 333–357). Amsterdam and Philadelphia: John Benjamins.

Panther, K. U., & Thornburg, L. L. (2017). Metaphor and metonymy in language and thought: A cognitive linguistic approach. *Synthesis Philosophica*, 32(2), 271-294.

Paradis, C. (2004). Where does metonymy stop? Senses, facets, and active zones. *Metaphor and symbol*, 19(4), 245-264.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks: Sage.

Pauwels, P., & Simon-Vandenbergen, A.M. (1993). Value judgement in the metaphorization of linguistic action. In R. A. Geiger & B. Rudzka-Ostyn (eds.),. *Conceptualizations and mental processing in language* (pp. 331-367). Berlin: Walter De Gruyter.

Pegenaute, L. (1994). Censoring translation and translation as censorship: Spain under Franco. In J. Vandaele (ed.), *Translation and the (re)location of meaning, Selected papers of the CETRA chair seminars in Translation Studies* (pp. 83-96). Leuven: CETRA.

Peirsman, Y., & Geeraerts, D. (2006). Metonymy as a prototypical category. *Cognitive linguistics*, 17(3), 269-316.

Pender, E. E. (2003). Plato on metaphors and models. In G. R. Boys-Stones (ed.), *Metaphor, Allegory and the Classical Tradition: Ancient Thought and Modern Revisions* (pp. 55-81). Oxford and New York: Oxford University Press.

Pessoa, L., McKenna Gutierrez, M.E., & Ungerleider, L. G. (2002). Neural processing of emotional faces requires attention. Proceedings of the *National Academy of Sciences*, 99(17), 11458-11463.

Philip, G. (2006). Connotative meaning in English and Italian colour-word metaphors. *Metaphorik*, 10, 59-93.

Plutchik, R. (1980). A general psychoevolutionary theory of emotion. In R. Plutchik & H. Kellerman (eds.), Emotion: Theory, research and

experience, *Theories of emotion* (pp. 3-33). Cambridge and Massachsettes: Academic Press.

Plutchik, R. (1994). *The Psychology and Biology of Emotion*. New York: Harper and Collins Press.

Postal, P. M. (2004). *Skeptical Linguistic Essays*. Oxford and New York: Oxford University Press.

Procter, P., & Ilson, R. F. (1981). *Longman Dictionary of Contemporary English.* London: Longman.

Pym, A., Shlesinger, M., & Simeoni, D. (2008). *Beyond descriptive translation studies: investigations in homage to Gideon Toury*. Amsterdam and Philadelphia: John Benjamins.

Radden, G. (2002). How metonymic are metaphors? In R. Dirven, & R. Pörings (eds.), *Metaphor and metonymy in comparison and contrast* (pp. 407-434). Berlin and New York: De Mouton Gruyter.

Radden, G. (2009). Generic reference in English: A metonymic and conceptual blending analysis. In P. Klaus-Uwe, L. Thornburg & A. Barcelona (eds.), *Metonymy and Metaphor in Grammar* (pp. 199-228). Amsterdam and Philadelphia: John Benjamins.

Radden, G., & Dirven, R. (2007). *Cognitive English grammar*. Amsterdam and Philadelphia: John Benjamins.

Radden, G., & Kövecses, Z. (1999). Towards a theory of metonymy. In P. Klaus-Uwe & G. Radden (eds.), *Metonymy in language and thought* (pp. 17-60). Amsterdam and Philadelphia: John Benjamins.

Radden, G., & Panther, K. U. (2005). Towards of theory of motivation in language. In *9th International Cognitive Linguistics Conference.* Seoul: Yonsei University.

Radden, G., & Panther, K. U. (2004). Introduction: Reflections on motivation. In G. Radden & K. U. Panther (eds.), *Studies in Linguistic Motivation (Cognitive Linguistics Research)* (pp. 1-46). Berlin and New York: De Mouton Gruyter.

Reiss, K., & Vermeer, H. J. (1984). *General Foundations of Translation Theory*. Tübingen: Niemeyer.

Richards, I. A. (1936) [1990]. *The philosophy of rhetoric*. Oxford and New York: Oxford University Press.

Riemer, N. (2003). When is a metonymy no longer a metonymy. In R. Dirven & R. Pörings (eds.), *Metaphor and Metonymy in Comparison and Contrast* (pp. 379-406). Berlin and New York: De Mouton Gruyter.

Ritchie, D. (2004). Metaphors in conversational context: Toward a connectivity theory of metaphor interpretation. *Metaphor and Symbol*, 19(4), 265-287.

Rojo, A., & Ibarretxe-Antuñano, I. (ed.), (2013). *Cognitive linguistics and translation studies: Past, present and future: Advances in some theoretical models and applications.* Berlin and New York: De Mouton Gruyter.

Roberts, J. Canales, A.G., Blanthorn-Hazell, S., Boldeanu, A. C., & Judge, D. (2018). Characterizing the experience of agitation in patients with bipolar disorder and schizophrenia. BMC psychiatry, 18(1), 1-8. Retrieved from https://bmcpsychiatry.biomedcentral.com/articles/10.1186/s12888-018-1673-3 [Accessed 8 September 2021].

Romero, E., & Soria. B. (2014). Relevance theory and metaphor. *Linguagem em (Dis)curso*, 14(3), 489–509.

Rosengren, A, (2021). 2000 years of latin prose | history and literature chapter 4 – ad herennium: the art of memory. Latinituim. Retrieved from https://latinitium.com/2000-years-of-latin-prose-ad-herennium/ [Accessed 8 September 2021].

Barbara, B. L., & Rosch, E. (eds.). (1978). *Cognition and categorisation*. Mahwah: Lawrence Erlbaum Associates.

Ruiz de Mendoza Ibáñez, F. J. (1997). Metaphor, metonymy and conceptual interaction. *OAI*, 19(1), 281-295.

Ruiz de Mendoza Ibáñez, F. J. (1999). From semantic underdetermination via metaphor and metonymy to conceptual interaction. In T. Komendzinski (ed.), *Essen Series A: General & Theoretical Papers; to appear in Theoria et. Historia Scientiarum* (pp. 107-141). Torun: Nicolaus Copernicus University.

Ruiz de Mendoza Ibáñez, F. J. (2000). The role of mappings and domains in understanding metonymy. In A. Barcelona (ed.), *Metaphor and metonymy at the crossroads: A cognitive perspective* (pp. 109-132). Berlin: Walter de Gruyter.

Ruiz de Mendoza Ibáñez, F. J., & Perez Hernandez, L. (2011). The contemporary theory of metaphor: Myths, developments and challenges. *Metaphor and Symbol*, 26(3), 161-185.

Ruiz Mendoza Ibáñez, F. J., & Velasco, O. I. D. (2002). Patterns of conceptual interaction. In R. Dirven & R. Pörings (eds.), *Metaphor and metonymy in comparison and contrast* (pp. 490-532). Berlin and New York: De Mouton Gruyter.

Rull, J. C. P. (2002). The emotional control metaphors. *Journal of English Studies*, 3, 179-192.

Rundell, M., Potter L., Maxwell, K., Kary, S. & Nicholls, D., (2009). The Online Macmillan English Dictionary. Retrieved from https://www.macmillandictionary.com [Accessed 8 September 2021].

Rundell, M., & G. Fox, (eds.), (2002). *Macmillan English dictionary for advanced learners.* Oxford: Macmillan.

Sadiqi, F. (2006). Gender in Arabic. *The Brill Encyclopedia of Linguistics*, 2, 642-650.

Sato, A. (2017). *Toward a unified account of metonymy*. Doctoral thesis. Bangor: Bangor University.

Saiegh-Haddad, E., & Henkin-Roitfarb, R. (2014). The structure of Arabic language and orthography. In *Handbook of Arabic literacy* (pp. 3-28). Springer: Dordrecht.

Schäffner, C. (1998). Action (Theory of Translational action). In M. Baker & K. Malmkajer (eds.), *The Routledge Encyclopedia of Translation Studies* (pp. 3-5). (1st ed.). London and New York: Routledge.

Schäffner, C. (2004). Metaphor and translation: some implications of a cognitive approach. *Journal of Pragmatics*, 36(7), 1253-1269.

Schäffner, C. (2017). Metaphor in Translation. In E. Semino & Z. Demjén (eds.), *The Routledge Handbook of Metaphor and Language* (pp. 247–262). London and New York: Routledge.

Schäffner, C., & Shuttleworth, M. (2013). Metaphor in translation: Possibilities for process research. *Target*, 25(1), 93-106.

Schmidt, G. (2012). *A cognitive-linguistic approach to the translation of metaphor from English into Croatian.* Doctoral thesis. Croatia: Josip Juraj Strossmayer University of Osijek. Retrieved from https://bib.irb.hr/datoteka/580531.Goran_Schmidt_disertacija-edited-1_4.pdf [Accessed 8 September 2021].

Schmidt, G. (2014). Metaphor translation in subtitling. In A. Azamat (ed.), *Applying intercultural linguistic competence to foreign language teaching and learning* (pp. 934-944). Sarajevo: International Burch University.

Schmidt, G. (2015). Applying Conceptual Metaphor Theory in cross-linguistic and translation research. *Dimenzije Značenja*, 243-265.

Scholz, O. (1987). Some issues in the theory of metaphor. In J. S. Petofi (ed.), *Text and Discourse Constitution*. Berlin: Walter de Gruyer and Co.

Searle, J. (1975). A Taxonomy of Illocutionary Acts. *Language, Mind, and Knowledge, Minneapolis Studies in the Philosophy of Science,* 7, 344-369.

Searle, J. (1993). *Metaphor*. In J. Searle (ed.), *Expression and Meaning: Studies in the theory of speech act.* Cambridge: Cambridge University Press

Semino, E. (2008). *Metaphor in discourse*. Cambridge: Cambridge University Press.

Semino, E. (2010). Descriptions of pain, metaphor, and embodied simulation. *Metaphor and Symbol,* 25(4), 205-226.

Semino, E., & Masci, M. (1996). Politics is football: Metaphor in the discourse of Silvio Berlusconi in Italy. *Discourse and Society*, 7(2), 243-269.

Semino, E., & Short, M. (2004). *Corpus stylistics: Speech, writing and thought presentation in a corpus of English writing*. Londonand and New York: Routledge.

Semino, E., Deignan, A., & Littlemore. J. (2013). Metaphor, genre and recontextualisation. *Metaphor and Symbol,* 28, 41–59.

Semino, E., Heywood, J., & Short, M. (2004). Methodological problems in the analysis of metaphors in a corpus of conversations about cancer. *Journal of Pragmatics*, 36(7), 1271-1294.

Shabani, A. (2008). A Comparative Study of the Translation of Image Metaphors of Color in the Shahnameh of Ferdowsi, *Translation Directory. com*. Retrieved from and [Accessed 8 September 2021].

Shaver, P. R., Morgan, H. J., & Wu, S. (1996). Is love a "basic" emotion? *Personal Relationships*, 3(1), 81-96.

Shaver, P. R, Wu, S., & Schwartz, J. C. (1992). Cross-cultural similarities and differences in emotion and its representation. In M. S. Clark (ed.), *Review of personality and social psychology, Emotion* (pp. 175-212). Thousand Oaks: Sage.

Shelestiuk, H. V. (2006). Approaches to metaphor: Structure, classifications, cognate phenomena. *Semiotica*, 161, 333-343.

Shuhood, B. N. (2007) *AI-khulassah fi aloum albalaagha*. The Islamic Said AI-fowad e- Library.

Shuttleworth, M. (2017). *Studying scientific metaphor in translation*. London and New York: Routledge.

Sirvydė, R. (2006). Facing fear: A corpus-based approach to fear metaphors in English and Lithuanian. *Man and Work,* 8(3), 81-88.

Sjørup, A. C. (2013). *Cognitive effort in metaphor translation: An eye-tracking and key-logging study*. Doctoral thesis. Copenhagen: Copenhagen Business School. Retrieved from https://www.econstor.eu/bitstream/10419/208853/1/cbs-phd2013-18.pdf [Accessed 8 September 2021].

Smith, K. D., & Tkel-Sbal, D. (1995). Prototype analyses of emotion terms in Palau, Micronesia. In J. A. Russel, J. M. Fernández-Dols, A. S. Manstead

& J. C. Wellenkamp (eds.), *Everyday conceptions of emotion* (pp. 85-102). Berlin and Heidelberg: Springer Science and Business Media.

Snell-Hornby, M. (1988). *Translation Studies: An integrated approach*. Amsterdam and Philadelphia: John Benjamins.

Snell-Hornby, M. (1995). On models and structures and target text cultures: Methods of assessing literary translations. *La traducció literaria,* 43-58.

Sommer, E., & Weiss. D. (1996). *Metaphors Dictionary*. Canton: Visible Ink Press.

Sperber, D., & Wilson. D. (1986). *Relevance: Communication and Cognition*. Cambridge, MA: Harvard University Press.

Stefanowitsch, A. (2006). Words and their metaphors: A corpus-based approach. *Trends in Linguistics Studies and Monographs,* 171, 63-105.

Stienstra, N. (1993). *YHWH is the husband of his people: analysis of a Biblical metaphor with special reference to translation*. Leuven: Peeters

Ströbel, L., Flip, H., & Indefrey, P. (2016). *Sensory motor concepts in language and cognition*. Düsseldorf: Düsseldorf University Press.

Sun, S. (2011). Think-aloud-based translation process research: Some methodological considerations. *Meta*, 56(4), 928-951. Retrieved from https://www.erudit.org/fr/revues/meta/2011-v56-n4-meta0154/1011261ar.pdf [Accessed 8 September 2021].

Sweetser, E. (1990). *From etymology to pragmatics: Metaphorical and cultural aspects of semantic structure*. Cambridge: Cambridge University Press.

Tabakowska, E. (1993). *Cognitive linguistics and poetics of translation*. Tübingen: Gunter Narr Verlag.

Tabanah, B. (1988) *A Study in the Development of the Rhetorical Thought and its Major Sources*. Cairo: Dar Almanarat.

Taylor, J. (1995). *Linguistic categorisation. prototypes in linguistic theory*. Wotton-under-Edge: Clarendon Press.

Taylor, J. R. (2002). Category Extension by Metonymy and Metaphor. In R. Dirven & R. Pörings, (eds.), *Metaphor and metonymy in comparison and contrast* (pp. 323-324). Berlin and New York: De Mouton Gruyter.

Taylor, J. R., & Mbense, T.G. (1998). Red dogs and rotten mealies: How Zulus talk about anger. *Speaking of Emotions: Conceptualisation and Expression*, 10, 191-226.

Teraoka, T. (2016). Metonymy analysis using associative relations between words. In *proceedings of the tenth international conference on language resources and evaluation,* 16, 4614-4620.

The Quranic Arabic Corpus. (2009-2017). *The Quranic Arabic Corpus.* Language Research Group. Leeds: University of Leeds. Retrieved from https://corpus.quran.com/translation.jsp?chapter=19&verse=4 [Accssesd 8 November 2021].

The Quranic Arabic Corpus. (2009-2017). *The Quranic Arabic Corpus.* Language Research Group. Leeds: University of Leeds. Retrieved from https://corpus.quran.com/translation.jsp?chapter=49&verse=12 [Accssesd 8 November 2021].

The Quranic Arabic Corpus. (2009-2017). *The Quranic Arabic Corpus.* Language Research Group. Leeds: University of Leeds. Retrieved from https://corpus.quran.com/translation.jsp?chapter=55&verse=26 [Accssesd 8 November 2021].

The Quranic Arabic Corpus. (2009-2017). *The Quranic Arabic Corpus.* Language Research Group. Leeds: University of Leeds. Retrieved from https://corpus.quran.com/translation.jsp?chapter=25&verse=27 [Accssesd 8 November 2021].

Thomason, R. (1972). A semantic theory of sortal incorrectness. *Journal of Philosophical Logic*, 1(2), 209-258.

Toury, G. (1985). A rationale for Descriptive Translation Studies. In T. Hermans (ed.), *The Manipulation of Literature* (pp. 16-41). Kent: Croom and Helm.

Toury, G. (1995). *Descriptive translation studies and beyond*. Amsterdam and Philadelphia: John Benjamins.

Toury, G. (2012). *Descriptive translation studies – and beyond*: Revised Edition (2nd ed.). Amsterdam and Philadelphia: John Benjamins.

Trim, R. (2007). *Metaphor Networks: The comparative evolution of figurative language*. London: Palgrave Macmillan.

Türker, E. (2013). A corpus-based approach to emotion metaphors in Korean: A case study of anger, happiness, and sadness. *Review of Cognitive Linguistics. Published under the Auspices of the Spanish Cognitive Linguistics Association*, 11(1), 73-144.

Turner, M. (1991). *Reading Minds*: *The Study of English in the Age of Cognitive Science*. Princeton: Princeton University Press.

Turner, M. (1996). *The Literary Mind*: *The Origins of Thought and Language*. Oxford and New York: Oxford University Press.

Tversky, A. (1977). Features of similarity. *Psychological Review*, 84(4), 327-352.

Ungerer, F., & Schmid, H. J. (2006). *An Introduction to Cognitive Linguistics* (2nd ed). London and New York: Routledge.

Van den Broeck, R. (1981). The Limits of Translatability Exemplified by metaphor Translation. *Poetics Today,* 2 (4), 73-87.

Van Dijk, T. (1975). Formal Semantics of Metaphorical Discourse. *Poetics,* 4(2-3), 173- 198.

Venuti, L (1995). The Translator‘s Invisibility: A History of Translation. London and New York: Routledge.

Vinay, J. P. & Darbelnet. J. 1958. *Stylistique comparée du français et de l’anglais*. Paris, Didier.

Vinay, J. P., & Darblenet, J. (1995). *Comparative stylistics of French and English: A methodology for translation* (trans. J. Sager, & M. Hamel). Amsterdam and Philadelphia: John Benjamins.

Vosniadou, S. (1989). Context and the development of metaphor comprehension. *Metaphor and Symbol*, 4(3), 159-171.

Warren, B. (2006). *Referential metonymy*. Stockholm: Almqvist and Wiksell.

Werth, P. (1994). Extended metaphor - A text-world account. *Language and Literature,* 3(2), 79-103.

Wierzbicka, A. (1972). *Semantic primitives* (trans. A. Wierzbicka, & J. Besemeres). (Frankfurt and M.): Athenäum-Verl.

Wierzbicka, A. (1986). Human emotions: Universal or culture-specific? *American Anthropologist,* 88(3), 584-594.

Wierzbicka, A. (1990). The semantics of emotions: fear and its relatives in English. *Australian Journal of Linguistics*, 10(2), 359-375.

Wierzbicka, A. (1992a). Defining emotion concepts. *Cognitive Science*, 16(4), 539-581.

Wierzbicka, A. (1992b). Talking about emotions: Semantics, culture, and cognition. *Cognition and Emotion,* 6(3-4), 285-319.

Wierzbicka, A. (1995). Emotion and facial expression: A semantic perspective. *Culture and Psychology*, 1(2), 227-258.

Wierzbicka, A. (1996). *Semantics: primes and universals: Primes and universals.* Oxford and New York: Oxford University Press.

Wierzbicka, A. (1999). *Emotions across languages and cultures: Diversity and universals*. Cambridge: Cambridge University Press.

Wilss, W. (1996). *Knowledge and skills in translator behaviour*. Amsterdam and Philadelphia: John Benjamins.

Wojciechowska, S., & Juszczyk, K. J. (2014). Metaphor metonymy and emotions. *Poznan Studies in Contemporary Linguistics*, 50(1), 1-13.

Xing, J. Z. (2009). Semantics and pragmatics of color terms in Chinese. In J. Zing (ed.), *Studies of Chinese Linguistics: Functional Approaches*, 87-102. Hong Kong: Hong Kong University Press.

Yan, D., Noël D., & Wolf, H. G. (2010). Patterns in metaphor translation: a corpus-based case study of the translation of FEAR metaphors between English and Chinese. In R. Xio (ed.), *Using corpora in contrastive and translation studies* (pp. 40-61). Newcastle upon Tyne: Cambridge Scholars Publishing.

Yu, N. (1995). Metaphorical expressions of anger and happiness in English and Chinese. *Metaphor and Symbol*, 10(2), 59-92.

Yu, N. (1998). *The contemporary theory of metaphor: a perspective from Chinese*. Amsterdam and Philadelphia: John Benjamins.

Zibin, A., & Hamdan, J. (2019). The conceptualisation of FEAR through conceptual metonymy and metaphor in Jordanian Arabic. *International Journal of Arabic-English Studies*, 19(2), 239-262.

Appendices

Appendix A. FEAR linguistic expressions in (ST1-TT1) based on the frequency of source domains

(ST1)	Page	(TT1)	Page	Back Translation
It looked like the school was shaking, like there was an earthquake, but I knew it was *my own trembling* that caused the illusion	47	لم تكن هزة ارضية كما ظننت لبر هه، **انما ارتجافي أنا**	74	It was not an earthquake, as I thought for a moment, but it was *my own trembling*
I imagined the wolves would be in the most danger but picturing tiny Alice next to one of the huge werewolves, fighting. *I shuddered*	51	**ارتعدت** عندما تخيلت أليس النحيلة الجسم، تصارع أحد الذئاب الضخمة	80	*I shuddered* when I imagined skinny Alice , wrestling with one of the huge wolves
I shuddered; of course, she would be back	62	**ارتعدت خوفا** لا اشك ان فكتوريا ستعود	97	*I trembled with fear*; of course, Victoria would return
I flinched. As much as I worried about Jasper or Emmett getting hurt, it was nothing like the panic I felt at the idea of Jacob going up against Victoria	73	**كلماته سببت لي الهلع**. ان خوفي على جاسبر وايميت من الاذى، لا يقاس برعبي من تصور جايكوب يصارع فكتوريا	113	His words *caused me to panic*. My fear of Jasper and Imit is harmless, to counteract my fear of the perception of Jakob fighting Victoria
He made it sound so inevitable. *I shuddered*	105	شعرت في تلك اللحظة بان لا مناص من الحرب، **فارتعدت ذعرا**	161	I felt at that moment that is there is no escape from war, so *I shuddered with fear*
Who else would leave Charlie alive? *I shuddered*	118	**ارتعدت خوفاً** عندما وقعت تلك العبارة على مسمعي	179	*I shuddered* with fear when that I heard that phrase. *I shuddered*
I cringed at my father's name	119	**ارتجفت خوفا** لدى سماع اسم والدي فتمتمت ايزمي كلاما لطيفا لتهدئ من روعي	181	*I trembled* with fear when I heard my father's name
The thought of Victoria made me *tremble*	120	التفكير بفيكتوريا **يرعبني**	182	The thought of Victoria *terrifies me.*
I cringed away from the knife	152	**رميت السيف من يدي**	234	*I threw the sword from my hand*

The three words that had caught my eye were drank his blood. *I shuddered*	153	لفتت نظري كلمتان: أشرب دمه، **فارتعدت خوفاً**.	236	The two words that had caught my eye were 'drank his blood. *I trembled with fear*
I felt a thrill of fear as I leaned closer to read the front-page story	161	عندما شرعت في البحث عن صفحة النشاطات المتنوعة، **توقفت مذهولة** امام عنوان آخر من تلك العناوين المخيفة	247	when I started searching for the multi-activities page, *I stood there perplexed* at another heading from those terrifying ones
It took me three tries to read the last sentence, and I realized the problem was *my shaking hands*	161	**كانت يداي ترتجفان** وانا احمل تلك الصفحة من الجريدة فاضطررت إلى استعادة الفقرة الأخيرة ثلاث مرات قبل التمكن من استيعاب مضمونها	249	*My hands were shaking* when I was holding that page from the newspaper and had to retrieve the last point three times before I could grasp its content
I shuddered. 'No'	163	**ارتعدت خوفاً. كلا!**	250	*I shuddered with fear*. 'No'
I shuddered at the image in my head, at the word feed	166	فكرت في تلك الصورة وفي كلمة مرعى، **فارتجفت**	255	I thought about that image and the word grazing land, *I shuddered*
I shuddered	167	(Zero translation)	257	(Zero translation)
Jasper shuddered	167	**ارتعد جاسبر وهو يتكلم**	258	*Jasper shuddered while he was talking*
She cringed in horror of the word. I can't imagine how awful that must feel. Being normal? Ugh	199	**تظاهرت بالاشمئزاز**، وقالت: اف! لا يمكنني ان اتصور صعوبة ان يكون المرء طبيعيا	308	*She pretended she was disgusted.* I can't imagine how awful that must feel Being normal? Ugh
All three pairs *of hands were trembling*	217	لكن **أيديهم** وحدها **كانت ترتجف**	335	But their *hands were trembling*
"Charlie?" *I gasped*	232	**فقلت بهلع**: "وماذا سيحل بتشارلي؟"	357	*With panic I said*: what will happen to Charlie?

'No, no. I'm not afraid of that. I just …I can't let him go. If he didn't come back …' *I shuddered*, closing my eyes to escape the thought	279	كلاّ، انا لست خائفة من هذا الأمر. اخاف عليه ان يذهب. لأنه لو لم يعد... **وارتعدت خوفاً واغمضت عيني هروباً من الفكرة**	428	'No. I'm not afraid of that. I fear letting him go because if he didn't come back . . .' *I shuddered with fear and closed my eyes to escape the thought*
My knees began to tremble	305	**وبركبتي ترتجفان وتتلويان تحتي**	369	*My knees trembling and twisting underneath me*
I flinched, remembering what exactly it had been before — what was I going to say to Jacob?	324	عندما تذكرت ما حدث قبل **وارتجفت** ..، ماذا كنت اريد ان .هجوم فيكتوريا اقول لجايكوب؟	502	*I trembled*, when I remembered what exactly had happened before Victoria's attack — what was I going to say to Jacob?
I flinched away from them	326	(Zero translation)	504	(Zero translation)
Jasper growled at her and *she cringed back*	330	انبها جاسبر **فانكمشت خوفاً**	510	Jasper growled at her and *she cringed back with fear*
I gritted my teeth	333	ورحت **أصر على اسناني**	514	*I started grinding my teeth*
She cringed, terrified that her ignorance might bring on another round of torture	333	**ارتاعت خوفاً من التعذيب بسبب جهلها العدد بدقة**	515	*She panicked, terrified from torture because of her ignorance of the exact number*
Flinching again	333	**قالت بارتياع**	515	*Said with fear*
Bree shuddered	333	(Zero translation)	515	(Zero translation)
She shuddered again	334	(Zero translation)	516	(Zero translation)
Her eyes rested unwilling on me for one short second. *I shivered*	334	فاستقرت عيناها على خلال ثانية من غير قصد واضح **فارتجفت**	516	Her eyes rested unwilling on me for one short second. *I shivered*
She came back for me, *I choked out*	47	**وصرخت بصوت مخنوق** انها فكتوريا عادت لتنتقم مني	74	*I screamed with a muffled voice*: it's Victoria. She came back to take revenge on me

‘Victoria?’ *I choked*	117	**وقلت بصوت مخنوق:**" فكتوريا؟"	178	*With a smothered sound I said*: “Victoria?”
Closed my throat I couldn’t answer	117	**شعرت بارتخاء في لساني** ولم أستطع الإجابة بأي حرف	178	*I felt feebleness in my tongue* and I couldn’t answer anything
fear was squeezing my chest, making it hard to breathe	117	كان **الخوف يعصر قلبي حتى صعب عليا التقاط انفاسي**	178	*fear was squeezing my heart making it hard to catch my breath*
‘They are coming here,’ *I choked out*	217	"هل سيأتون هنا؟" سألتها وقد **اختنق صوتي**	334	I asked her and *my voice was cracked*: “Are they coming here?”
His words sank into my brain, slowly, one by one, and *I couldn’t breathe*	305	دخلت كلماته الى رأسي واستقرت واحدة بعد الأخرى. **فضاق صدري وتقطعت انفاسي**	469	His words went into my head and settled one after the other. *My chest went tight and my breaths cut off.*
I choked out in horror	305	**وشعرت بالرعب يخنقني**	469	*I felt terror choking me*
I felt the blood slither from my face	23	(Zero translation)	40	(Zero translation)
Rosalie looked at me suddenly, as if she’d forgotten I was there. I was sure *my face was as white as hers*	93	نظرت الي روزالي. **كنت اشعر ان وجهي بات شاحبا** كوجهها	141	Rosalie looked at me. *I felt* my *face went pale*
I felt the blood empty from my face	117	**شعرت بالدم يهرب من وجهي**	177	*I felt the blood run away from my face*
‘Laurent?’ I whispered, *the blood emptying from my face,* but Edward didn’t respond, focused on Carlisle’s thoughts	176	سالته بهمس: لورانت؟ **وشعرت بالدم يهرب من وجهي.** لكن إدوارد لم يجب، وبقي مركزا على كارلايل	271	‘Laurent?’ I whispered and *felt the blood fleeing from my face*, but Edward didn’t respond, focused on Carlisle
His face had turned so white that I had a hard time finishing	205	**اختفى اللون من وجهه بينما كنت أكلمه،** فتوقفت عن المتابعة	317	*The colour disappeared in his face* while I was talking to him, so I stopped

His face was empty like a stone	212	(Zero translation)		(Zero translation)
I felt the colour drain out of my face	217	**شعرت بالدم يهجر وجهي**	334	I felt the blood leaving my face
The blood drained from my face	232	(Zero translation)	357	(Zero translation)
Their *faces were empty as his*	333	(Zero translation)	357	(Zero translation)
Found myself moving in the *frustrating slow motion of dreamers*	152	**شعرت بثقل في ساقي**	234	*I felt weight in my legs*
I was numb	175	**أحس بالخدر**	270	*I feel numbness*
They were rooted in place	217	**كانوا يقفون في اماكنهم من دون حركة**	335	*They were standing still without movement*
I was too numb to feel more than a mild shock when I realized what it was	330	**كنت في حالة من الخدر** لم تسمح لي سوى برد فعل خفيف امام المشهد الذي ما لبث ان توضح امام عيني	509	*I was in a condition of numbness*
I couldn't answer	117	**لم أستطع الإجابة باي حرف**	178	*No letters came out for an answer*
My hair was standing up on the back of my neck, though I didn't understand the meaning of anything the beautiful creatures were saying	169	**شعرت بالرعب**، برغم أتي لم افهم شيئاً من حديث تلك المخلوقات الجميلة	260	*I was terrified*, though I didn't understand the meaning of anything the beautiful creatures were saying
Seth whined; it was an anxious, uneasy sound. *It made the hair on the back of my neck rise*	325	أصدر سيث أنيناً حزيناً **جعلني اشعر بخوف شديد**	503	Seth whined; it was an anxious, uneasy sound *it made me feel extremely afraid*
I tried to explain to myself why *my heart kicked into fourth gear* when I heard him. It was just fear of what I was going to have to do now, that was all	304	حاولت أن أفسر لنفسي سبب **تسارع ضربات قلبي** عندما سمعت صوته. فقلت انه الخوف	466	I tried to explain to myself why *my heart rate went up when I heard his voice.* I said it is fear
My own heartbeat should have been enough to drown it out	320	**وحتى ضربات قلبي كان بإمكانها أن تعلو فوقه**	493	*My heartbeat should have been able to rise above it*

My splintered heart throbbed out a painful, aching beat	324	**دق قلبي المشطور الى نصفين دقات مؤلمة**	502	*My halved splintered heart pounded into painful beats*
My heart burst into a sprint as I scanned the clearing, but I couldn't see anything past the thick pall of smoke	331	نظرت في الاتجاه المقصود **بقلب يكاد ينفلق من شدة الخفقان** ولكني لم أرى الدخان الكثيف	511	I looked at the aimed direction and *my heart almost split because of the hard beat*
The icy *splinters twisted uncomfortably in my stomach*	178	**شعرت بالسكاكين تتحرك مجددا في معدتي**	276	*I felt knives moving again inside my stomach*
My stomach lurched	217	**شعرت بمعدتي تتقلص**	334	*My stomach twisted*
My stomach dropped	232	**شعرت بانقباض شديد في معدتي**	357	*I felt a lurch in my stomach*
Pain crackled down my spine and lodged in my stomach	296	**انتابتني رعشة من الألم انحدرت من ظهري واستقرت في معدتي**	465	*I felt a shiver of pain streaming down my back and lodged in my stomach*
My stomach dropped through the soles of my feet	314	**قلبي قد هبط إلى قدمي**	484	*I thought my heart had dropped to my feet*
I gritted my teeth, hoping to *control my stomach*	333	**شعرت بتقلص في معدتي ودوار في راسي**	514	*I felt lurch in my stomach and dizziness in my head*
The icy fear *pooled in my stomach*	302	**واستقر الخوف في معدتي فتقلصت**	465	*Fear settled in my stomach, (and) so tightened*
The ice locked around my heart	303	**وإذا بشعور جليدي يحبس قلبي**	466	*An icy sensation locks up my heart*
Still *frozen in horror,* at Alice' s new expression	218	(Zero translation)	336	(Zero translation)
My mind was stuck, stunned and useless *as my body*	322	**شعرت بفكري مكبلا عن الحركة مثل جسدي**	498	*My mind was cuffed, as my body*
I tried to swallow	218	**شعرت بانسداد في حنجرتي فبلعت ريقي بصعوبة**	335	*I felt blockage in my throat and barely swallowed my saliva*
A *cold trickle of fear began to ooze down my spine*	302	اخذت اشعر **بقشعريرة الخوف الباردة تسري من راسي الى أسفل ظهري**	465	*I felt a cold shiver of fear began to flow from my head down to my back*

Her words sent a thrill of fear through me	95	**اخافتني كلماتها**	145	*Her words frightened me*
I could feel *the panic surfacing in my eyes* as I mouthed the reasons	156	كنت **اشعر بالرعب يقفز من عيني** وانا اعد الاسباب التي تستوجب تحولي	240	*I could feel the terror popping out of my eyes* as I counted the reasons that necessitate my transformation
Before that reaction, *her face was full of stress and fear*	216	كان من السهل **قراءة القلق والخوف على وجهها**	333	It was easy to *read anxiety and fear on her face*
Edward hesitated a few feet from me, his hands still in the air, *his eyes still fearful*	322	أصبح ادوارد على بعد خطوات مني، كان يمشي مترددا ويداه لا تزالان مفتوحتين و**عيناه خائفتين**	499	Edward became a few feet away from me, he was walking with hesitance, his hands still open and *his eyes fearful*
I was suddenly nauseated	179	**كدت اتقيأ**	276	*I was* suddenly *nauseated*
I felt sicker	333	**فاشتد شعوري بالغثيان**	514	*I felt sicker*
Alice's expression was something I recognized — an expression that *sent an automatic shock of panic through my body*	23	لم يكن وجه آليس في تلك اللحظة غريبا علي، فقد **أرسل تيارا من الرعب في جسدي**	40	Alice's face was familiar at that moment it *sent a stream of terror into my body*
The shrouded future *sent a shiver down my spine*	120	أرسل التفكير بمستقبلي **قشعريرة رعب في جسدي**	182	The future thought *sent a shiver of terror in my body*
My concentration was ripped to shreds by my fears	327	**تركيزي كان مشرذماً بفعل الخوف**	505	*My concentration was ripped to shreds by my fears*
His eyes were wary as they flashed across my face	262	رأيت **في عينيه حذراً وخوفاً**	402	I saw prudence and *fear in his eyes*
His eyes were as wary as if I were another enemy — more than wary, they were afraid	322	**قرات في عينيه حذراً وخوفاً** لم افهم اسبابه	498	*I read fear and prudence in his eyes* that I did not understand its reasons
Panic overwhelmed me	117	**استولى الذعر علي**	178	*Panic overwhelmed me*

I would wait for *the sword to be removed from over my head,*	251	سأنتظر حتى **يختفي الخوف تماما، ويبتعد السيف عن عنقي**	388	*I would wait until fear disappears completely and the sword to be moved away from my neck*
I hoped the *fear would make the end worse for him*	94	**كي يموت رعبا** قبل ان يموت موتا حقيقيا	144	To *die out of terror* before he dies a real death
I was close to a breaking point	326	**كنت على حافة الانهيار**	504	*I was at the edge of a breakdown*
Before I could *collapse with fear*	303	قبل أن **استسلم للرعب وأسقط أرضاً**	466	Before *I surrender to terror and fall to the ground*
I was numb, horrified, *deathly afraid*	175	أحس بالخدر، والرعب **والخوف المميت**	270	I feel numbness, horror and *deathly fear*
For a moment, the idea of Jacob's certain revulsion *overshadowed every other pain*	15	عندما فكرت بجايكوب وتصورت رد فعله على تحولي واشمئزازه، **سيطر على خوف شديد**	27	When I thought of Jacob and visualised his reaction towards my transformation and his revulsion, *I was dominated by extreme fear*
They called it The Cold One, the Blood Drinker, and *lived in fear* that it was not alone	148	**وخيمت عليهم مشاعر الرعب** من خطر وجود آخرين مثله	226	*They were seized by horror* from the risk that there might be others like him
The people ran in fear	145	**ذعر الاهالي لدى رؤية الذئب**	220	*The locals were horrified* by the sight of the wolf
I broke into a run	152	**حاولت الهرب**	234	*I tried to escape*
I screamed once in bewildered terror and dropped to my knees beside him 'Edward! Edward!'	325	**صرخت** ووقعت على ركبتي إلى جانبه: إدوارد! إدوارد!!	503	*I screamed* and dropped to my knees beside him 'Edward! Edward!'
I just stared at him in horror	117	فألقيت على تشارلي **نظرة شاحبة**	178	I looked at Charlie with *a pale look*

My *eyes snapped open* to the quiet darkness of my bedroom	152	**وفتحت عيني مذعورة**، لأرى أني كنت في غرفتي، وان ادوارد لا يزال إلى جانبي	234	*I opened my eyes, terrified* to see that I was in my room and that Edward is still next to me
His eyes were huge, wide with panic, dazed and horrified	205	**اتسعت عيناه هلعاً**	317	His eyes *widened with panic*
I stared	218	(Zero translation)	336	(Zero translation)
Jasper threw a *wary glance* toward Edward,	226	**رمق جاسر إدوارد بنظرة فيها خوف**	348	Jasper glanced at Edward with a look full of fear
Could I handle this? images of flowing *black robes crept into my unwilling mind*	326	لم اتصور ان بإمكاني احتمال رؤيتهم **بأثوابهم السود الفضفاضة التي عادت لتغتصب مخيلتي وتروعني**	504	I couldn't imagine that I could handle seeing them in their *flowing baggy robes that came back to deforce my imagination and terrify me*
Unless *it was green*	93	إن لم يكن **قد مال الى الاخضرار**	141	Unless it *turned into greenish*
I felt green	117	كان **الذعر قد استولى علي**	178	*I was seized by fear*
You look kind of green, Bella, 'Alice commented	178	قالت آليس: ما بالك يا بيلا، **لونك يميل إلى الصفرة**	276	*You are turning yellow*, Bella, 'Alice said '
Edward shook me. Bella? he asked, truly anxious now	44	هزني ادوارد بعد ان **اعتراه الخوف عليّ** من شدة شرودي بيلا؟	69	Edward shook me. Bella? after *he was seized by fear* due to my severe absent-mindedness
I'd believed enough of what he'd told me that his words *terrified me*	94	الكلام الذي صدقته من اقوال كارلايل، ان حياتي قد انتهت ولا امل في العودة، كان كافيا **لإلقاء الرعب في قلبي**	143	The words that I have confirmed from Carlisle, that my life is over, and I have no hope of return, was enough *to cast terror in my heart*

Appendix B. FEAR linguistic expressions in (ST2-TT2) based on the frequency of source domains

ST2	Page	TT2		Back Translation
I get out of bed. I'm naked. I catch sight of myself in the full-length mirror on the wardrobe. *My hands are trembling*	200	انهض من السرير انني عارية! المح نفسي في المرآة الطويلة على الخزانة. **يداي مرتجفتان**	57	I get out of bed. I'm naked. I catch sight of myself in the full-length mirror on the wardrobe. *My hands are trembling*
I was sweating and *trembling like a woman on her way to the scaffold*	356	كنت أتعرق طيلة ذلك الوقت **وأرتجف مثل امرأة يسوقونها إلى خشبة الإعدام**	98	I was sweating all that time and *trembling like a woman leading her way to the execution scaffold*
I was trembling when Scott showed me into the kitchen	552	**كنت أرتعد** عندما أشار إلى سكوت بالدخول إلى المطبخ	148	*I was trembling* when Scott showed me into the kitchen
I was trembling	933	**ارتعد لكني كنت**	247	*I was trembling*
Legs felt shaky, unsteady		**غير ...احسست أن ساقي تهتزان ثابتتين**		*I felt that my legs are shaking, unsteady*
I'm still *shaky, my legs trembling* as I sit down in my seat	1065	**تهتز ساقاي** عندما **.لا أزال أرتجف** أهم بالجلوس على الكرسي	280	*I'm still shaky, my legs trembling* as I sit down in my seat
I'm breathing deeply	198	**أتنفس عميقاً**	56	*I'm breathing deeply*
I couldn't catch my breath	225	**لم أستطع التقاط أنفاسي**	63	*I couldn't catch my breath*
My breath catching in my throat	1363	**وانفاسي عالقة في حلقي**	355	*My breath trapped in my throat*
It's that *fear that woke me* just after five this morning, soaked in sweat	1320	هو ذلك **الخوف الذي أيقظني** بعيد الخامسة هذا الصباح	345	It's that *fear that woke me* just after five this morning
My limbs were too heavy	818	كانت **ساقاي ثقيلتين لا تستطيعان الجري**	217	*My legs were heavy, they couldn't run*
I tried to cry out, *I made no sound at all*	818	وعندما حاولت الصراخ **لم أستطع اصدار أي صوت**	217	When I tried to cry out, *I couldn't make any sound*
It gave me the creeps	939	**تجعل القشعريرة تسري في جسمي**	248	*Makes the creepiness move in my body*
Trying to slow my heart rate	198	**أحاول تهدئة ضربات قلبي**	56	*Trying to calm down my heart beat*
My heart was racing	225	**كان قلبي يخفق سريعاً**	63	*My heart was beating fast*
My heart thudding in my chest	318	**صار قلبي يخفق عاصفاً في صدري**	89	*My heart was beating boisterously in my chest*

My heart was fluttering like a trapped bird	346	كان قلبي **يرفرف مثل عصفور أطبق عليه فخ**	96	*My heart was fluttering like a bird snapped by a trap*
My heart hammering in my chest	541	**يدق قلبي في صدري كأنه مطرقة**	144	*My heart beating like a hammer in my chest*
My heart rate quickens	596	**تسارعت نبضات قلبي**	159	*My heart rate quickens*
Every time I hear footsteps on the steps, *my heart rate goes up*	734	**تتسارع نبضات قلبي** كلما سمعت خطوات تصعد السلم	195	Every time I hear footsteps on the steps, *my heart rate accelerates*
My heart hammering against my ribs	1373	**قلبي يخفق عنيفاً، يضرب أضلعي** اتبعها حذرة، ثم أتوقف عتد الباب المتزلق	358	*My heart beats ferociously hitting against my ribs*
My heart rises into my throat as she turns to go upstairs	1427	**يصعد قلبي إلى حلقي** عندما أراها تستدير وتهم بالصعود الى اعلى	371	*My heart rises up to my throat* as he turns to go upstairs
My heart crawls into my throat	1460	**أحس بقلبي يصعد الى حنجرتي**	379	*I feel my heart going up to my throat*
My heart in my mouth	1493	**أصابني الذعر**	386	*I panicked*
I felt that lurch in my stomach	225	**احسست بذلك الانقباض في معدتي**	63	*I felt that contraction in my stomach*
Then I think about that day when Rachel came to the house and took Evie, and my *whole body goes cold*	940	لكني أفكر عند ذلك في اليوم الذي جاءت فيه ريتشل إلى البيت وأخذت ايفي... **فيبرد جسمي كله**	248	Then I think about that day when Rachel came to the house and took Evie, and my *whole body goes cold*
I can hear Scott laughing, and my *entire body goes cold*	1180	أسمع ضحك سكوت **فيتجمد جسدي كله**	308	I can hear Scott laughing, my *entire body freezes*
That punch of adrenaline that makes you feel sick and excited and scared all at once	226	**هجمة الأدرينالين** التي تجعل المرء، يشعر بالغثيان والإثارة والخوف معاً	63	*That adrenaline attack* that makes you feel sick and excited and scared all at once
I could feel the blood pulsing in my neck, *sweat at the base of my spine*, the sickening rush of adrenaline	573	احسست بالدم نابضاً في رقبتي **وبالعرق أسفل ظهري** باندفاعة الأدرينالين المدوخة	153	I could feel the blood pulsing in my neck, *sweat at the base of my spine*, the sickening rush of adrenaline
He must have seen *the terror in my eyes*	653	لابد أنه رأى **الذعر في عيني**	174	He must have seen *the terror in my eyes*

There is *fear in his eyes,* desperation	885	أرى **خوفاً في عينيه** أرى قنوطا	234	When he comes back to himself, back to me, *I see fear in his eyes,* desperation
There must be *terror in my eyes* because he starts to laugh	1185	لابد أنه لمح **الذعر في عيني** لأنه راح يضحك	309	He must have glimpsed *the terror in my eyes*
I wake up, *sick with fear*, sick with myself	143	أستيقظ مع **ذعر يصيبني بالغثيان**	175	*I wake up with fear* which is making me feel sick
I could feel the blood pulsing in my neck, sweat at the base of my spine, *the sickening rush of adrenaline*	573	احسست بالدم نابضاً في رقبتي وبالعرق أسفل ظهري **باندفاعة الادرينالين المدوخة**	153	I could feel the blood pulsing in my neck, sweat at the base of my spine, *the sickening rush of adrenaline*
It comes over me like a wave: black dread	196	**يجتاحني هذا مثل موجة** مثل ذعر اسود	56	*It comes over me like a wave* like a black dread
Flooded with dread and adrenaline	633	**يملأني الذعر والأدرينالين**	168	*Filled with terror and adrenaline*
Dread rising in me like floodwater	1229	**الخوف يتزايد في داخلي كأنه طوفان**	320	*Fear increases inside me like a floodwater*
to quell he panic rising in my chest	198	**أحاول لجم الذعر المتصاعد في صدري**	63	*I am trying to quell the panic escalating in my chest*
I can *feel panic rising in my chest*	876	**أحس الذعر يعلو في صدري**	232	*I feel panic rising in my chest*
It doesn't stop the *fear rising from my stomach to my chest and into my throat*	1499	هذا لا يستطيع وقف **الذعر المتصاعد من معدتي الى صدري والى حنجرتي**	388	It doesn't stop *the fear escalating from my stomach to my chest and into my throat*
I had a panic attack on the way home last night	224	**أصابتني موجة ذعر** عندما كنت عائدة إلى البيت الليلة الماضية	63	*I had a wave of panic* on the way home last night
Suddenly *gripped by the completely irrational fear*	1263	**خوفاً يداهمني فجأة**	329	*Fear suddenly raided into me*
I am seized with trepidation	734	**وتداهمني موجة من الذعر** كلما سمعت إيقاع كعب حذاء نسائي	195	*I get seized with a wave of terror*
I think about that horrible, *chilling little smile* she gave me when I saw her outside the Hipwells house	850	وأتذكر تلك الابتسامة الصغيرة **المخيفة التي جعلت الدم يتجمد في عروقي** تلك الابتسامة عندما رأيتها خارجة من بيت سكوت هيبويل	225	I remember that *scary little smile* that made my *blood freeze in my veins* when I saw her walking out from the Hipwells house

I lie back and close my eyes and feel myself *sink into dread*	1021	**أحس** .أظل مستلقية مغمضة عيني **انني أغرق في الذعر**	269	I lie back with my eyes closed and feel myself *sink into the dread*
Fear *ebbing and flowing*	1224	كان **خوفي يتراجع ويزداد**	319	*My fear was receding* and *rising*
It's that *fear that woke me* just after five this morning*, soaked in sweat*	1320	**استيقظت غارقة في العرق**	345	*Woke up drowned in sweat*
I'm frightened, but I'm not sure what I'm afraid of, which *just exacerbates the fear*	199	انني خائفة؛ لكنني لا أعرف من أي شيء خائفة أنا، **وهذا يزيد ذعري**	57	I'm frightened, but I'm not sure what I'm afraid of, which just *increases my panic*
I'm *blind with tears and terror*	1174	**أعمتني دموعي--- أعماني خوفي**	306	*My tears blinded me--- my fear blinded me*
to quell he panic rising in my chest	198	**أحاول لجم الذعر المتصاعد في صدري**	63	*I am trying to quell the panic escalating in my chest*
I can *feel panic rising in my chest*	876	**أحس الذعر يعلو في صدري**	232	*I feel panic rising in my chest*
It doesn't stop the *fear rising from my stomach to my chest and into my throat*	1499	هذا لا يستطيع وقف **الذعر المتصاعد من معدتي الى صدري والى حنجرتي**	388	It doesn't stop *the fear escalating from my stomach to my chest and into my throat*
I had a panic attack on the way home last night	224	**أصابتني موجة ذعر** عندما كنت عائدة إلى البيت الليلة الماضية	63	*I had a wave of panic* on the way home last night
I end the call but am suddenly *gripped by the completely irrational fear*	1263	**خوفاً يداهمني فجأة**	329	*Fear suddenly raided into me*
Every time I hear the clacking of high heels, *I am seized with trepidation*	734	**وتداهمني موجة من الذعر** كلما سمعت إيقاع كعب حذاء نسائي	195	Every time I hear the clacking of high heels, *I get seized with a wave of terror*
I think about that horrible, *chilling little smile* she gave me when I saw her outside the Hipwells house	850	وأتذكر تلك الابتسامة الصغيرة **المخيفة التي جعلت الدم يتجمد في عروقي** تلك الابتسامة عندما رأيتها خارجة من بيت سكوت هيبويل	225	I remember that *scary little smile* made my *blood freeze in my veins* when I saw her walking out from the Hipwells house

I walk past him and *start to run down the stairs*	1363	لا يرفع رأسه لينظر الي، فأتجاوزه، **وابدأ بالجري إلى الأسفل**	355	He doesn't raise his head to look at me, so I pass him and *start to run downstairs*
I stopped dead as I looked into the darkness this morning, because I could suddenly see myself	318	**توقفت جامدة** عندما نظرت إلى الظلمة هذا الصباح لأنني استطعت أن أرى نفسي فجأة	89	*I froze in place* as I looked into the darkness this morning, because I could suddenly see myself
It comes over me like a wave: *black dread*	197	**يجتاحني هذا** مثل موجة **مثل ذعر اسود**	56	*It comes over me* like a wave *like a black dread*
I see darkness coming	634	**أرى الظلمة قادمة**	168	*I see darkness coming*
I *was in a panic* by the time I got back to the flat last night	325	**انتابني الذعر** عندما عدت إلى البيت الليلة الماضية	91	I was *afflicted by panic* on my way home
I get such a fright that I forget myself	623	**اصابني ذعر جعلتي أنسى نفسي**	165	*I get such a fright made me I forget myself*
I see darkness coming	634	**أرى الظلمة قادمة**	168	*I see darkness coming*
I remember the terror I felt when I saw her with Evie down by the fence	850	**وأتذكر الذعر الذي انتابني عندما شاهدتها، حاملة ايفي**	225	I remember *the terror that afflicted me* when I saw her with Evie down by the fence
I woke from the dream with a sense of dread	1066	**استيقظت من حلمي مذعورة مرتجفة**	280	*I woke up from the dream terrified and tremulous*
The silence was right on top of me and *I was starting to panic*	1323	كان الصمت قد هزمني... **بدأ الذعر يتملكني**	346	The silence defeated me… *fear began to possess me*
I was in a panic	1460	**ينتابني الذعر**	379	*I was afflicted by panic*
Feeling needlessly afraid	1493	**وقد داهمني خوف لا موجب له**	386	*Raided by needless fear*

Appendix C. FEAR linguistic expressions in (ST3-TT3) based on the frequency of source domains

ST3	Page	TT3	Page	Back Translation
With shaky hands I returned the jar and note to the mailer	166	**بيدين مرتجفتين** اعدت المرطبان الى المغلف	123	*With shaky hands* I returned the jar and note to the mailer
Inwardly trembling, I sat and folded my hands on the countertop	240	**برعشة اعترت جسدي** جلست الى الطاولة وثنيت يدي فوقها وأنا أرى أمامي رجلا هزيلا يكاد جسمه أن يكون كالعود	180	*With a tremble overtaking my body*, I sat and folded my hands on the countertop
With shaking hands, I unlocked the front door	359	فتحت الباب الأمامي **بيدين مرتجفتين**	276	I unlocked the front door *with shaking hands*
Fled on shaking legs	381	**هربت برجلين مرتجفتين**	292	*Fled on shaking legs*
Sobbing, *teeth chattering*, I clutched the cylinder on my chest and bolted into the dark	381	أنا أبكي **وأسناني تصطك** انطلقت في الظلام	292	I am sobbing and my *teeth are chattering,* I flinched in the dark
Legs trembling, hands shaking uncontrollably my mind numb	381	جلست للحظة **برجلين ترتجفان** ويدين ترتعشان وعقل مخدر	292	*Legs trembling*, hands shaking uncontrollably my mind numb
Legs trembling, *hands shaking* uncontrollably my mind numb	381	جلست للحظة برجلين ترتجفان **ويدين ترتعشان** وعقل مخدر	292	Legs trembling, *hands shaking* uncontrollably my mind numb
I read it in place, afraid to trust my *unsteady hands*	427	وجدت ملاحظة معلقة على البراد قرأتها وهي في مكانها خوفاً من أن تخونني **يداي المرتعشتان**	329	A note was stuck to the refrigerator I read it in place, *afraid that my shaky hands would betray me*
On rubbery legs I staggered to the escalators	436	توجهت نحو المصعد **بقدمين مرتجفتين**	336	I walked to the elevators *on trembling legs*
My hands still trembled as I let myself into my silent condo	438	كانت **يداي لا تزالان ترتجفان** حين دخلت شقتي الساكنة	337	*My hands were still trembling* as I let myself into my silent apartment
My lips trembled, but no words came	448	**ارتعشت شفتي**	345	*My lips trembled*
My breath froze in my throat	276	**وتجمدت انفاسي في حلقي**	209	*My breath froze in my throat*
My throat tightened, and my breath came in short, quick spurts	419	**تقلصت حنجرتي**	322	*My throat tightened*

My breath came in short, quick spurts	419	**انقطع نفسي**	322	*I lost my breath*
I jumped at the sound of Kit's voice When I turned *his face looked eerily pale*	164	حين التفت كان **وجهه شاحباً على نحو مخيف** وملامحه مظلمة ومشوهة	122	When I turned *his face looked eerily pale*, his features dark and distorted
I was almost *numb with fear*	370	كنت **كالمخدرة من شدة خوفي**	284	I *was numb because of my severe fear*
Heart racing, *palms sweaty*	282	(Zero translation)	215	(Zero translation)
I crawled along, engine idling, heart racing, *hands sweaty* on the wheel	438	قدت ببطء شديد وقلب تتسارع دقاته **ويدين تتعرقان** على المقود	337	I drove slowly, heart pounding, *hands sweating* on the wheel
Though I was trying hard, *my voice sounded wavery*	300	**بدا الارتجاف في صوتي** بالرغم من محاولتي اخفاء ذلك	229	*My voice sounded wavery* although I was trying hard
The second message was also for Kit As I listened, *the small hairs rose at the back of my neck*	276	كانت الرسالة الثانية الى كيت أيضا وبينما كنت استمع اليها ا **اقشعر شعر جسمي**	209	The second message was also for Kit As I listened, *my body s hairs quivered*
I nearly shit my shorts, because I knew the stuff was in the bedroom with me	418	**ارتعشت ركبتاي** لأنني عرفت أن البضاعة كانت في غرفة النوم معي	321	*My knees trembled*, because I knew the stuff was in the bedroom with me
What I saw made *my heart pick up a beat*	95	ما رأيته **جعل دقات قلبي تتسارع**	66	What I saw made my *heartbeat accelerate*
Heart racing, palms sweaty	282	(Zero translation)	215	(Zero translation)
Heart pounding, I raced to the complex and into the vestibule, taking the steps two at a time	359	**بقلب يخفق من شدة الهلع** أسرعت الخطى إلى المجمع	276	*Heart pounding from intense horror*, I quickened my pace to the complex
'Please no!' *My pulse beat at a ferocious pace*	375	كان **قلبي يخفق بسرعة جنونية**	287	*My heart was beating at a ferocious pace*
The floor was still, except for *my heart drumming against my ribs*	415	كان الطابق ساكنا إلا من **دقات قلبي التي كانت تقرع كالطبول داخل أضلعي**	319	The floor was still, except for *my heart drumming against my ribs*
My pulse louder in my ears than any competing noise	431	**صوت نبضي في أذني أعلى من أي ضجة منافسة**	332	*My pulse louder in my ears than any competing noise*

I crawled along, engine idling, *heart racing,*	438	قدت ببطء شديد **وقلب تتسارع دقاته**	337	I drove slowly, *heart pounding*
My stomach tightened	96	**انقبضت معدتي**	67	*My stomach tightened*
My stomach went tight with fear	430	**انقبضت معدتي من الخوف الذي تملكني**	331	*My stomach tightened from fear that possessed me*
Fear for Kit twisted in my gut like a physical pain	436	**اجتاحني خوفاً كبير على كيت**	336	I was *overwhelmed by great fear* for Kit
I remembered my conversation with Ryan's partner, Jean Bertrand, and the thought of Ryan brought the *usual stomach clutch* 'God , please let him be safe!'	448	تذكرت حينها محادثتي مع شريك رايان جين برتراند اثارت الفكرة **الانقباض المعتاد في معدتي** يا الله، أرجو أن يكون سالما	353	I remembered my conversation with Rayan's partner, Jean Bertland, and the thought brought *the usual stomach clutch* 'God , please let him be safe!'
Even the tea *couldn't warm my chill*	426	**شعرت ببرد** لم يستطع الشاي التخفيف منه	328	I *felt a chill* even tea could not mitigate it
Feeling a gun barrel against my temple, *I froze*	373	شعرت بمسدس يمس صدغي، **فتسمرت في مكاني**	286	Feeling a gun barrel against my temple, *I was pinned in my place*
I froze, watching and listening	415	**تجمدت** وانا اراقب واصغي	319	*I froze*, watching and listening
The crowd *froze* momentarily, then scatter	445	**تجمد** الحضور لدقيقة ثم تغرقوا	343	The crowd *froze* for a minute, then scatter
My mind screamed conflicting orders	372	**أما دماغي فبدأ بإطلاق أوامر متضاربة**	286	*My mind started to release conflicting orders*
Legs trembling, hands shaking uncontrollably *my mind numb*	381	جلست للحظة برجلين ترتجفان ويدين ترتعشان **وعقل مخدر**	292	Legs trembling, hands shaking uncontrollably *my mind numb*
My thoughts were chaos	381	كانت أفكاري **مشوشة**	292	My thoughts were *disruptive*
When I noticed the figure outside my door *an alarm went off in my head*	415	(Zero translation)	319	(Zero translation)
'What are you talking about?' *My mouth felt dry*	417	**احسست بجفاف في فمي**: عمّ تتحدثين؟	320	It's a cheap way to get rid of this trash 'What are you talking about? *I felt dryness in my mouth*
My mouth was so dry I could hardly speak	434	**جف حلقي** وبصعوبة تمكنت من الكلام	335	*My throat was dry*, and I could hardly speak

I tried to swallow, *but my mouth was a desert*	448	حاولت أن ابتلع ريقي، **لكن فمي كان جافاً كالصحراء**	344	I tried to swallow, *but my mouth was dry like a desert*
The same hair-trigger fear, the same *adrenaline rush*	248	خالجتني مشاعر الخوف عينها **وفورة الادرينالين** نفسها	186	I had the same feelings of fear and the same *adrenalin rush*
After thirty minutes a shovel chinked loudly in Claudel's pit. *My head flew up*	96	**اتجه الدم نحو قمة رأسي**	67	*Blood flew up towards the top of my head*
My heart felt dead in my chest	427	احسست أن **قلبي قد توقف عن الخفقان** داخل صدري	329	*My heart stopped beating in my chest*
Fear, anger, and guilt *churned in my head*	441	**تخبطت مشاعر الخوف** والغضب والذنب **في داخلي**	339	*Fear* anger and guilt feelings *flopped inside me*
I felt something inside me *curl into a cold, hard ball*	381	(Zero translation)	292	(Zero translation)
Wave of terror travelled up my spine	375	كنت أصارع من أجل الحفاظ على توازني حين وقع نظري على تانك، **فسرت في ظهري موجة من الرعب**	287	As I struggle for balance, my gaze fell on Tank, and *a wave of terror flowed up my back*
I followed his gaze, and *fear shot through me*	443	تبعت نظرته، **واخترق صدري الخوف**	341	I followed his gaze and *fear penetrated my chest*
I pushed the fear to a corner of my mind, knowing that it wouldn't stay there, and went to my room to change	361	**دفعت بمخاوفي إلى زاوية في عقلي** وأنا أعلم ألها لن تبقى هناك طويلا	277	*I pushed my fears to a corner of my mind* Knowing that it wouldn't stay long there
Rage and *fear rocketed my adrenaline*	372	تسبب **الخوف** والغضب **في إطلاق الأدرينالين في جسدي**	286	Rage and *fear caused adrenaline to be released in my body*
The same *hair-trigger fear*	248	**خالجتني مشاعر الخوف عينها**	186	*I had the same feelings of fear*
'NO!' I PROTESTED, *terror overcoming my resolve to stay cool*	372	لا! اعترضت ّ بشدة **وقد غلب الذعر على اعتزامي البقاء هادئة**	286	I strongly protested, *terror overcoming my resolve to stay calm*
I felt something cold in my chest	17	احسست **بشي بارد في صدري**	66	*I felt something cold in my chest*
I felt a constriction in my chest	359	**شعرت بضيق في صدري**	276	*I felt constriction in my chest*

I tried to swallow, *but my mouth was a desert*	448	حاولت أن ابتلع ريقي، **لكن فمي كان جافاً كالصحراء**	344	I tried to swallow, *but my mouth was dry like a desert*
The same hair-trigger fear, the same *adrenaline rush*	248	خالجتني مشاعر الخوف عينها **وفورة الادرينالين** نفسها	186	I had the same feelings of fear and the same *adrenalin rush*
After thirty minutes a shovel chinked loudly in Claudel's pit. *My head flew up*	96	**اتجه الدم نحو قمة رأسي**	67	*Blood flew up towards the top of my head*
My heart felt dead in my chest	427	احسست أن **قلبي قد توقف عن الخفقان** داخل صدري	329	*My heart stopped beating in my chest*
Fear, anger, and guilt *churned in my head*	441	**تخبطت مشاعر الخوف** والغضب والذنب **في داخلي**	339	*Fear* anger and guilt feelings *flopped inside me*
I felt something inside me *curl into a cold, hard ball*	381	(Zero translation)	292	(Zero translation)
Wave of terror travelled up my spine	375	كنت أصارع من أجل الحفاظ على توازني حين وقع نظري على تانك، **فسرت في ظهري موجة من الرعب**	287	As I struggle for balance, my gaze fell on Tank, and *a wave of terror flowed up my back*
I followed his gaze, and *fear shot through me*	443	تبعت نظرته، **واخترق صدري الخوف**	341	I followed his gaze and *fear penetrated my chest*
I pushed the fear to a corner of my mind, knowing that it wouldn't stay there, and went to my room to change	361	**دفعت بمخاوفي إلى زاوية في عقلي** وأنا أعلم ألها لن تبقى هناك طويلا	277	*I pushed my fears to a corner of my mind* Knowing that it wouldn't stay long there
Rage and *fear rocketed my adrenaline*	372	تسبب **الخوف** والغضب **في إطلاق الأدرينالين في جسدي**	286	Rage and *fear caused adrenaline to be released in my body*
The same *hair-trigger fear*	248	**خالجتني مشاعر الخوف عينها**	186	*I had the same feelings of fear*
'NO!' I PROTESTED, *terror overcoming my resolve to stay cool*	372	لا! اعترضت ّ بشدة **وقد غلب الذعر على اعتزامي البقاء هادئة**	286	I strongly protested, *terror overcoming my resolve to stay calm*
I felt something cold in my chest	17	احسست **بشي بارد في صدري**	66	*I felt something cold in my chest*
I felt a constriction in my chest	359	**شعرت بضيق في صدري**	276	*I felt constriction in my chest*