



UNIVERSITI PUTRA MALAYSIA

**A COGNITIVE SEMANTIC ANALYSIS OF ENGLISH AND ARABIC
VERBS OF VISUAL PERCEPTION 'SEE' AND 'RA'A' IN FICTION
WRITING**

ALDAWOODI RUAA TALAL JUMAAH

FBMK 2020 1



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By

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**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfilment of the Requirements for the Degree of Doctor of Philosophy**

November 2019

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment
of the requirement for the degree of Doctor of Philosophy

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November 2019

Chairman : Associate Professor Sabariah Md Rashid, PhD
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Sweetser (1990) claims that vision is the prime sense organ that motivates metaphors of intellect, such as ‘knowing’, ‘understanding’ and ‘thinking’. She also asserts that these metaphors are cross-cultural phenomena, possibly universal in human thoughts and speech. In the light of this claim, this study focuses on whether the metaphors of visual perception are really as universal as has been argued in the literature as research in non-Western languages has demonstrated that the metaphors are not universal. Thus, this study aims: 1) To unravel the conceptual metaphors underlying the linguistic expressions of the English and Arabic verbs of visual perception *see* and رأى (ra’a) in fiction writing, 2) To compare the conceptual metaphors underlying the linguistic expressions of the English and Arabic verbs of visual perception *see* and رأى in fiction writing, 3) To examine how human physiology motivates the conceptual metaphors underlying the English and Arabic verbs of visual perception *see* and رأى, and 4) To determine the role of culture in the motivation of conceptual metaphors underlying the English and Arabic verbs of visual perception *see* and رأى.

This study adopts a qualitative approach, and is situated within the field of cognitive semantics. Two comparable corpora of English and Arabic fiction writing between the period of 2010 and 2017 were compiled from different sources, with each of the corpora comprising two million words. Specifically, a sample consisting of 2,000 examples of the English verb of visual perception *see* and the Arabic verb رأى was randomly extracted from the corpus using the AntConc 3.5.0 and Ghawwas_V4.6 concordancers. The Metaphor Identification Procedures (MIP) were used to identify the metaphorical linguistic expressions in the corpus, and Lakoff and Johnson’s (2003), Sweetser’s (1990) and Ibarretxe-Antunano’s (2013a; 2013b) analytical frameworks were adopted for data analysis.

The data analysis revealed many similar conceptual metaphors in both English and Arabic. The findings also indicate that the similarity between the unravelled English and Arabic conceptual metaphors is not a mere coincidence or random, but these metaphors are motivated by biological as well as cultural factors. As for the motivation of the conceptual metaphors, the human physiology seems to govern the conceptualisation of the verbs of visual perception in both languages. Moreover, the motivation of the conceptual metaphors can be accounted for by cultural factors related to English and Arabic, namely, mythology, religion and philosophy. To conclude, the findings of this study support Sweetser's claim regarding the universality of conceptual metaphors related to the verbs of visual perception and the motivation of the metaphors by human physiology and culture.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

**ANALISIS SEMANTIK KOGNITIF KATA KERJA BAHASA
INGGERIS DAN ARAB BAGI PERSEPSI VISUAL ‘SEE’ DAN ‘RA’A’
DALAM PENULISAN FIKSYEN**

Oleh

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Sweetser (1990) mendakwa bahawa penglihatan merupakan organ deria primer yang memotivasi metafora keintelektualan, seperti ‘mengetahui’, ‘memahami’ dan ‘berfikir’. Beliau juga menegaskan bahawa metafora tersebut merupakan fenomena silang budaya, barangkali universal dalam pemikiran dan tuturan manusia. Merujuk kepada dakwaan ini, kajian memfokus kepada persoalan sama ada metafora persepsi visual sebenarnya adalah universal sebagaimana yang dipertikaikan dalam literatur kerana penyelidikan dalam bahasa bukan Barat menunjukkan bahawa metafora tersebut adalah tidak universal. Oleh sebab itu, kajian ini bertujuan: 1) Untuk merungkai metafora konseptual yang mendasari ekspresi linguistik kata kerja persepsi visual bahasa Inggeris dan Arab *see* dan رأى (ru’aa) dalam penulisan fiksiyen, 2) Untuk membandingkan metafora konseptual yang mendasari ekspresi linguistik kata kerja persepsi visual bahasa Inggeris dan Arab *see* dan رأى dalam penulisan fiksiyen, 3) Untuk memeriksa bagaimana fisiologi manusia memotivasikan metafora konseptual kata kerja persepsi visual bahasa Inggeris dan Arab *see* dan رأى, dan 4) Untuk menentukan peranan budaya dalam motivasi metafora konseptual yang mendasari kata kerja persepsi visual bahasa Inggeris dan Arab, *see* dan رأى.

Kajian ini menggunakan pendekatan kualitatif, dan terletak dalam ranah semantik kognitif. Dua korpora sebanding penulisan fiksiyen bahasa Inggeris dan Arab antara tempoh tahun 2010 dan 2017 telah didokumentasikan daripada sumber yang berbeza dimana setiap korpora terdiri daripada dua juta perkataan. Sampel kajian yang mengandungi 2,000 kata kerja persepsi visual bahasa Inggeris *see* dan kata kerja bahasa Arab رأى telah diekstrak secara rawak daripada korpus menggunakan konkordans AntConc 3.5.0 dan Ghawwas_V4.6. Selain itu, Prosedur Pengenalpastian Metafora (MIP) telah digunakan untuk mengenal pasti ekspresi linguistik secara

metaforikal dalam korpus. Kerangka analitikal Lakoff dan Johnson (2003), Sweetser (1990) dan Ibarretxe-Antunano (2013a; 2013b) telah diterima pakai bagi analisis data.

Analisis data memperlihatkan banyak metafora konseptual yang sama dalam bahasa Inggeris dan Arab. Dapatan kajian juga menunjukkan bahawa persamaan antara penggunaan metafora kata kerja bahasa Inggeris dan Arab bukan setakat kebetulan atau rawak, tetapi persamaan tersebut dimotivasikan oleh faktor biologikal selain faktor budaya. Untuk motivasi metafora konseptual, fisiologi tubuh berperanan menentukan konseptualisasi kata kerja persepsi visual bagi kedua-dua bahasa. Tambahan, motivasi metafora konseptual boleh dilandaskan pada faktor budaya khusus yang wujud dalam bahasa inggeris dan Arab seperti mitologi, agama dan filosofi. Sebagai kesimpulan, dapatan kajian ini menyokong dakwaan Sweetser tentang kesejagatan metafora konseptual kata kerja persepsi visual serta motivasi metafora tersebut oleh fisiologi manusia dan budaya.

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This thesis was submitted to the Senate of the Universiti Putra Malaysia and has been accepted as fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

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LIST OF ABBREVIATIONS

CMT	Conceptual Metaphor Theory
MIP	Metaphor Identification Procedure
Lit.	Literal meaning
Freq.	Frequency
%.	Percentage



SYMBOLS OF TRANSLITERATION SYSTEM

Key to symbols used in the transliteration system

(Adopted from Dewan Bahasa dan Pustaka (2008))

A. Consonants

Arabic Letters	Roman Letters	Arabic Letters	Roman Letters
ا	-	ط	t
ب	b	ظ	z
ت	t	ع	'
ث	th	غ	gh
ج	j	ف	f
ح	h	ق	q
خ	kh	ك	k
د	d	ل	l
ذ	dh	م	m
ر	r	ن	n
ز	z	و	w
ش	sh	ه	h
س	s	ء	'
ص	ṣ	ي	y
ض	ḍ	ة	ah*

*Transliterated as 'at' in the context of a combination of two words.

B. Vowels

Short		Long		Diphthongs	
ا	a	آ	ā	أَي	ay
ي	i	و	ū	أَوْ	aw
و	u	ي	ĩ		

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Verbs of perception, which have been defined in the literature as a class of verbs to “express verbal expressions related to no human sensory no cognition, sight (visual), smell (olfactory), hearing (auditory), touch (tactile) and taste (gustatory),” have received the attention of various scholars in the area of cognitive semantics (Al-Asmer, 2007, Ibarretxe-Antuñano, 2019, 2013a, 2013b). Semantically, these verbs have been classified under five different fields of perception, namely, vision, hearing, touch, taste and smell, and different verbs are linked to these perception fields, such as *see*, *hear*, *touch*, *taste* and *feel* in English and رأى (ra’a) ‘to see’, سمع (sami’a) ‘to hear’, لمس (lamasa) ‘to touch’, ذاق (dhāqa) ‘to taste’, and شعر (sha’ara) ‘to feel’ in Arabic.

Amongst these verbs of perception, verbs related to vision, which are referred to as verbs of visual perception in this study, have gained a particular interest of scholars in the field as they are connected to the primary sensory organ, vision that is used in gathering information about the external world (Lakoff & Johnson, 1999). For instance, according to Sweetser (1990), the information gathered by the sense of sight is considered more reliable and accurate compared to other senses, such as hearing, taste and smell. In this regard, some studies have shown that the primacy of vision over the other senses is attributed to human biological construction (Blendea, 2015; Paradis, 2015b; Spence, 2009).

Studies on verbs of visual perception have also focused on cross-linguistic studies on verbs of visual perception, such as English and Vietnamese (Oanch, 2016), English and Spanish (Littlemore, MacArthur, & Krennmayr, 2015) and English and Chinese (Li, 2013). Such studies have shown that the verbs of visual perception denote two general types of meaning: physical and non-physical (Ibarretxe-Antuñano, 2013a; Essa, 2010). While the first type of verbs manifests the meaning related to “a simple activity of perceiving an object by the eye” such as ‘I can see the moon’ and ‘رأى الهلال’ (lit. he saw the crescent), the second denotes the meaning of “a careful and detailed activity of perceiving an object by the eyes” (Fulk, 2018, p.147). As such, the second type is a case of metaphor, a phenomenon that has only, in recent times, been systematically investigated (Gunnarsdotir, 2013).

Similarly, the English and Arabic verbs of visual perception *see* and رأى also denote a variety of metaphorical meanings connected with knowledge and intellection, such as ‘I see your point’ and ‘أرى ماذا تعني’ (lit. I see what you mean) in which both verbs *see* and أرى (a’ra) (lit. I see) denote the meanings of knowing and understanding. In fact, verbs of visual perception, in particular, and the sense of vision, in general, have received special attention by cognitive linguistic such as Sweetser (1990) in which she postulated that the sense of vision motivates metaphors of higher intellection, such as

‘to know’ and ‘to understand’ and that these metaphors are universal in human thought and speech.

In a cultural sense, human beings of different cultures rely on particular senses more than on others. In the Western society, people depend primarily on the sense of sight (Winter, Perlmana, & Majid, 2018). “This supremacy of sight over the other senses is dated back to the Age of Enlightenment, when philosophers such as Locke and Descartes regarded sight as the sense of science” (Ibarretxe-Antuñano, 1999). Similarly, in the Middle East culture, the Islamic philosophers and scientists such as Averroes, Avicenna, and al-Razi remarked that the sense of sight has a special dignity as it is connected with knowledge about the surrounding world (Jabr, 1999).

In addition, there are various meanings and symbolisms linked to different sensory modalities of sight in different cultures. Whilst sight may be associated with reason or witchcraft in Austronesian society (Breton, 2017), it is connected with affection in Chinese (Li, 2013). Generally, these sensory associations constitute the sensory model used by a community. Members of the community make sense of their world by translating sensory perceptions and concepts into a certain worldview. Although some groups within the community may challenge this sensory model because they have different “sensory values, this model provides the foundation of a perceptual paradigm to be followed or resisted” (Breton, 2017).

In this light, verbs of perception, in general, and verbs of visual perception, in particular, display an intricate structure of metaphorical meanings that may be motivated by human bodily basis and some cultural values intrinsic in each society as will be discussed in section 1.3. With this in mind, the present study focuses on two verbs of visual perception, namely the English verb *see* and Arabic verb رأى (ra’a) and the conceptualisation and motivation (the factors that trigger the conceptual metaphors) of the metaphoric uses of these verbs in fiction writing.

1.2 The English and Arabic Verbs of Visual Perception *See* and رأى

Since the present study focuses on two verbs of visual perception in two different languages, the English verb *see* and Arabic verb رأى (ra’a), it is important to show that these verbs are semantically equivalent before embarking on the review of the related literature. Establishing a semantic equivalence between these two verbs is necessary as they constitute the basis of the comparative analysis between the English and Arabic languages in the present study.

In this respect, Kopytko (1990) states that the meanings of verbs of perception may be broken down into sense components (the minimal distinctive features of meanings) in order to illustrate the structure of a semantic field by means of certain types of opposition. Kopytko showed that the semantic field of verbs of perception can be investigated through a set of universal semantic features that characterises the human

sensory cognition. Hence, these semantic features can be used, for instance, to show fine-grained distinctions between verbs in different languages such as *see* and رأى.

A contrastive study by Jrew (2002), which identified the semantic equivalence between English and Arabic verbs of sensory cognition on the basis of their corresponding semantic fields, revealed that both رأى and أبصر (absara) and the English verb *see* are semantically equivalent. The criterion for identifying such lexical equivalence is related to the fact that these three verbs share almost identical semantic features, namely, [-SPECIFIC], [-MOMENTARY], [-NEGATIVE], [-INTENSIVE], [-FURTIVE] as displayed in the following table:

Table 1.1 : Semantic features of the verbs *see*, رأى and أبصر

Verb	[SPEC]	[ACT]	[VOL]	[MOM]	[NEG]	[INT]	[FURT]
see	-	- +	-	-	-	-	-
رأى	-	- +	- +	-	-	-	-
أبصر	-	+	-	-	-	-	-

SPEC = Specific, ACT =Active, VOL = Volitional, MOM =Momentary, NEG. =Negative, INT = intensive, FURT =furtive
(Adapted from Jrew, 2002)

Table 1.1 above shows that the verbs *see* and رأى appear to be equivalent in terms of their semantic features. Both of them are [-SPECIFIC] which means that they refer to the general perceptual ability in contrast to verbs such as *peek* or بصر (basasa) which refer to a specific act of visual perception. Also, both *see* and رأى are [-+ACTIVE] which means they can be stative and active verbs depending on the context of the sentence. However, the verb أبصر seems to be different in terms of the semantic feature [+ACTIVE]. It is different in that it denotes an active perception on the part of the perceiver. It means ‘to look at objects from far way and trying to recognise them clearly’ (Lexicon of the modern Arabic language, 2008). Accordingly, the verb أبصر ‘abasara’ is different from the verb رأى (ra’a) ‘to see’ in the sense that the verb أبصر ‘abasara’ indicates a strong sense of knowing and understanding. It is related to the meanings of contemplation and full awareness of something (Al-Asmer, 2007).

Furthermore, both the English *see* and the Arabic رأى are durative rather than momentary, which means that the act of perception lasts for an unspecified period of time; thus having the semantic feature [-MOMENTARY]. In contrast, certain verbs of perception such as *glance* or لمح (lamaha) denote a quick rather than sustained sensing activity. Additionally, the two verbs *see* and رأى are marked with the semantic feature [-NEGATIVE], that is, they indicate a positive attitude of the perceiver towards the object of perception. In contrast to verbs such as *gape* and بصر (basasa) which refer to a negative attitude of the perceiver towards the perceived object. The two verbs the English *see* and the Arabic رأى also share the semantic feature of [-INTENSIVE], which do not show an intensive act of perception as in the case of verbs such as *stare* or حنق (hadaqa) showing the intensity of perception. Finally, *see* and رأى are marked with the semantic feature of [-FURTIVE], which means that they do not show a secret

type of perception occurring without the knowledge of the object of perception in contrast to verbs such as *peek* or *أومض* (awmadha) (Jrew, 2002).

However, although *see* and *رأى* share a lot of semantic features, the Arabic verb *رأى* is different from the English verb *see* in terms of the semantic feature [VOLITIONAL], which means whether the act of perception is intentional or not on the part of perceiver. In the case of the English verb *see*, it always takes a negative value [-VOLITIONAL] in the semantic feature, that is, the act of seeing is unintentional on the part of the perceiver and it cannot occur in the imperative form which is manifested by the English verb *look* (Jrew, 2002). In contrast, the Arabic verb *رأى* takes a negative and positive value in the semantic feature [+VOLITIONAL], that is, the act of seeing can be both intentional and unintentional on the part of perceiver. Moreover, unlike the English verb *see*, the verb *رأى* can occur in the imperative form using *رَهِ* (lit. you look at) (Nasif et al., 2017).

The rationale for adopting the two semantically equivalent verbs *see* and *رأى* in the present study is because of their importance in the domain of cognitive semantics as they motivate various metaphorical meanings connected with knowing, understanding and thinking. In addition, the sense of visual perception is regarded as the prime sense organ that motivates metaphors of higher intellection as will be discussed in the next section.

1.3 Statement of the Problem

One of the major topics that has received the attention of many scholars in cognitive semantics is sense perception, which has been a focus not only in linguistics but also in other disciplines, such as psychology (Goldstein & Brockemole, 2016; Sekular & Blake, 2005;) and anthropology (Pink, 2015; Serres, 2016). In cognitive linguistics, sense perception and its conceptual structure have sparked interest because its conceptual domain is very productive, and it motivates various conceptual metaphors. In this respect, Ibarretxe-Antuñano (2013a, p.110) states that conceptual motivation is the outcome of “our physical, sensory-motor universal experiences shifted through the complex and socially acquired particular beliefs, knowledge and worldview(s) intrinsic to cultures.” Conceptual metaphor involves “mappings or correspondences holding between distinct conceptual domains” (Evans, 2019, p.136).

The relationship between perception and other conceptual domains such as cognition has been established first by Lakoff and Johnson (1980, p.50) who proposed a general metaphor ‘THINKING IS PERCEIVING’, but emphasised the significance of vision for cognition over other senses. Based on this conceptual metaphor, Sweetser (1990) further proposed the conceptual metaphor MIND-AS-BODY and posited that there is a systematic metaphorical connection “between the vocabulary of no physical no perception and the vocabulary of internal self and internal sensations.” Accordingly, she stressed that these correspondences are not random, but highly motivated associations between comparable areas of physical and internal sensation. In a further

examination of these metaphorical correspondences between the five physical senses and their abstract target domains, Sweetser (1990) found a whole systematic network of metaphorical connections between the physical domain of senses and other abstract domains of experience: vision> knowledge, hearing> head/obey, touch> feelings, taste> likes/dislikes, smell>dislikeable feelings.

Moreover, Sweetser (1990) argues that vision is the prime sense organ that motivates metaphors of higher intellect, such as “‘knowing’, ‘understanding’ and ‘thinking’”, whereas hearing verbs, such as *hear* or *listen*,” would not motivate these metaphors, because they are more associated with the particular communicative aspects of understanding, rather than with intellect. This claim is supported by many psychologists and psycholinguists such as Winter (2019) and Schwartz and Krantz (2017) who look at vision as an essential sense, which suggests a natural link between vision and thinking/knowledge.

Accordingly, the majority of Sweetser’s research relies on meaning change in reconstructed Indo-European languages, and her theory is derived from the fields of cognitive, historical and semantic linguistics. Sweetser further hypothesises that the metaphors of verbs of perception are cross-cultural, and universal in human thought and speech. In this regard, some cross-linguistic studies in Indo European languages seem to support Sweetser’s hypothesis regarding the systematic mappings between the physical domain of perception and the abstract domain of the mind and the universality of visual perception in motivating metaphors of the intellect. For example, in a study utilising a cognitive semantic analysis of English, Spanish and Basque verbs of perception taken from monolingual and bilingual dictionaries and two electronic corpora, Ibarretxe-Antuñano (1999) showed that the semantic field of verbs of perception is highly metaphorical and these metaphors are not specific to one language only, but are shared by the three languages used in the study.

Advancing Sweetser’s work, Ibarretxe-Antuñano (2013a, 2013b) proposed a model on the conceptual motivation of verbs of perception, which explains how the physiological properties of human body, i.e., embodiment and cultural constraints shape the conceptual metaphors of verbs of perception. This model of the physiological properties of verbs of perception explains the metaphoric mappings between the physical domain of perception and other abstract domains of experience. These metaphorical mappings, according to Ibarretxe-Antuñano, are established in the humans’ experience, i.e., in the way people interact, understand and use their perceptual capacities. For human beings, the senses are the means to gather information about the external world. Human beings are biologically restrained by the physiology of the senses whereby each sense possesses its own receptors (eyes, ears, skin, nose and mouth), a passageway to the brain, and stimuli (light, sound waves, mechanical disturbances, volatile substance and soluble substance) (Blendea, 2015; Ibarretxe-Antuñano, 2013a; Sekular & Blake, 2005).

Ibarretxe-Antuñano’s model (2013a; 2013b) also incorporates the concept of culture in order to investigate the controversial nature of the universality of the conceptual

metaphors of verbs of perception. She argues that the metaphor of verbs of perception is relative because cultures and sub-communities (sub-cultures) interface with people's conceptualisation of their world. In other words, each culture possesses certain idiosyncrasies that mediate between human senses and the surrounding world which is called the "culture sieve" (Ibarretxe-Antuñano, 2013b, p.324).

Additionally, the findings of Gunnarsdottir's comparative study (2013) of English and Icelandic metaphoric uses of verbs of perception, which relied on selected examples from dictionaries, revealed a clear association between the physical domain of perception and the abstract domains of the mind and internal sensations. Gunnarsdottir explained that since the two languages are closely related, the huge number of metaphorical correspondences signifies that the association is not whimsical, which thus provides support for Sweetser's theory of a systematic, semantic development within verbs of perception.

In the same vein, a study by Neagu (2013) which examined the polysemy of verbs of perception in English, French and Romanian in data extracted from dictionaries, showed that the verbs of perception in the three languages also seem to convey similar metaphorical meanings from different domains of experience, such as 'to understand' (*I see your point of view*), 'to obey' (*Listen to your father*), 'to affect emotionally' (*Patrick touched me very deeply*), 'to guess' (*Jill can smell trouble a mile off*), and 'to experience' (*He has tasted the sweetness of success*). Such a similarity in metaphorical meanings across different languages is also evident in a study by Ryliina (2013).

In a contrastive study of the syntactic and semantic features of the English verb *feel* and its Russian counterpart and depending on examples taken from dictionaries and thesaurus, Ryliina (2013) aimed to provide a contrastive semantic map of the verbs *feel* and *čuvstvovat'* and to investigate the similarities and differences between the two verbs. The findings of her study also revealed that the two verbs in both languages seem to denote sensory and cognitive meanings, albeit the sensory meanings being varied in Russian because *čuvstvovat'* signifies not only the perception by the sense of *touch*, but also the senses of *smell* and *taste*.

These reviewed studies on Western languages seem to provide a similar tendency in their findings, i.e. they are in support of Sweetser's (1990) hypothesis regarding the systematic mappings between the physical domain of perception and the abstract domain of the mind and the notion of universality of visual perception as the main sensory organ in motivating metaphors of knowledge and intellection. However, some studies on non-Western languages have shown otherwise. For instance, Evans and Wilkins (2000) tested Sweetser's hypothesis by carrying out a comprehensive cross-linguistic study of large data based on Australian dictionaries and thesaurus from a broad range of 60 Australian languages. The findings of their study indicate that visual perception is more linked to lust, desire, offence and supervision rather than to knowledge and intellection.

In this regard, Diaz-Vera (2015) assumes that if the conceptual metaphors of verbs of visual perception are a universal phenomenon, they should be found in non-Indo-European languages as well. Contrastive studies between English and Chinese by Zhao, Huang and Long, (2018) which explored the conceptual metaphors of verbs of perception in Mandarin Chinese, found many correspondences between Mandarin and English conceptual metaphors, such as KNOWING/ UNDERSTANDING IS SEEING and PAYING ATTENTION IS SEEING all being especially paramount in both languages. Zhao, Huang and Long, (2018), however, focused on the significance of distinct cultural background and explained how the Chinese society differs significantly from the Western societies. According to them, Chinese thoughts and expressions are shaped by certain concepts such as the *yin-yang* and the five different elements that are strongly built in the Far Eastern culture. Similar to the conclusions of Diaz-Vera (2015), Zhao, Huang and Long suggest that sociocultural features necessitate further inquiries within the study of metaphor in order to gain a deeper grasp of the phenomenon.

In the same vein, a systematic corpus-based comparative study between English and Chinese metaphors of visual perception was conducted by Li (2013). This study adopted the Vision Conceptual Metaphorical Mechanism (VCM), which is a newly-established theoretical framework mainly based on embodied philosophy and also related theories in cognitive linguistics. With 400 metaphorical expressions of visual perception selected randomly from the Sketch Engine Website as the data of the study, its findings show that while the Mandarin expressions of visual perception motivate metaphors related to the domains of cognition, affection and feelings, the English expressions of visual perception motivate only metaphors of cognition. The study concluded that English and Mandarin languages show universality and diversity in the conceptual metaphors of visual perception as both languages possess unique vision conceptual metaphors. Accordingly, English and Chinese may share the same conceptual metaphors but with different metaphorical manifestations” due to different cultural values and living conditions.

The link between visual perception and cognition also appears evident in two studies in Austro-Asiatic languages, Taiwanese Southern Min (Lien, 2015) and Vietnamese (Oanch, 2016). Although both studies provided a cognitive semantic account of verbs of visual perception, the studies lack any clear description of their methodology and data, which seemed to be extracted from dictionaries and thesaurus. The findings of this Austro-Asiatic cross-linguistic studies suggest that the metaphoric uses of verbs of visual perception in the two languages appear to be in line with Sweetser's hypothesis (1990) which states that there are systematic correspondences between verbs of visual perception and the meanings related to the mind and intellection.

With the tendency of the aforementioned studies on visual perception and cognition to rely on frozen unsystematic data, recent studies have taken a different methodological approach, i.e. using a corpus-based approach to investigate the use of English verbs of perception in naturally occurring data. For instance, De Grado (2016) conducted a syntactic-semantic study based on a corpus of 656 examples manually

extracted from the spoken and academic sections of the British National Corpus. However, the sample was considered small and unreliable to examine four verbs of perception (Deignan, 2017), and its method of manual extraction of citations might be subject to bias.

Thus far, although the literature has reported studies of verbs of perception within the Indo-European and Austro-Asiatic languages, Arabic verbs of perception have received the least attention. In Arabic, the issue whether vision plays a salient role in the conceptualisation of the intellect has been discussed by many Arab philosophers who argued that both sight and hearing are the most important senses in learning (Al-Asmer, 2007). According to Jabr (1999), Arab people have derived from the sense of sight many expressions signifying intellection and understanding. Moreover, the sense of sight and hearing are claimed to be partners in achieving full awareness of and attaining knowledge and are supposedly the true instrument of knowledge and reason (Al-Asmer, 2007).

In relation to this, some studies have dealt with the Arabic verbs of perception in the Holy Quran, such as those by Khalil (2002), Al-Asmer (2007), Mahmud and Abdullah (2010) and Siregar (2016) which focused on the syntactic and semantic aspects of these verbs and their various meanings in the Holy Quran. These studies have shown that there exist many extended meanings connected with the Arabic verbs of visual perception, such as 'to know', 'to recognise', 'to wait', 'to give time', 'to contemplate', 'to show mercy', 'to delay', 'to tell', 'to consult', 'to assume', 'to meet', 'to dream'. However, none of these studies have examined the Arabic verbs of perception from a cognitive-semantic perspective using naturally occurring data.

Other reported cross-linguistic studies in English and Arabic have tended to focus on examining conceptual metaphors related to emotions (Ahmad, 2016; Hamdi, 2015), time and food (Abu Libdeh, 2016; Al-Sadi, 2017), and colour terms (Ibrahim, 2017). Such studies have revealed some similarities and differences in the conceptual metaphors underlying conventional expressions across the two languages.

To date, the review of the literature shows that there are no comparative studies that have examined the conceptual metaphors related to the use of the English and Arabic verbs of visual perception. As discussed earlier, the reviewed studies on the verbs of visual perception seem to have a lack of systematic comprehensive research in English and Arabic that focused on Sweetser's hypothesis regarding the MIND-AS-BODY conceptual metaphor and the universality of visual perception in motivating metaphors of knowledge and thought. Additionally, the reviewed studies (Ibarretxe-Antuñano, 2013a; 2013b; Caballero & Ibarretxe-Antuñano, 2013) stress the need for systematic comprehensive studies that investigate the motivation of the conceptual metaphors underlying verbs of perception by human physiology and culture.

Bearing in mind the inadequacies of the aforementioned studies, such as basing their evidence on intuitively made-up examples by the researchers themselves and from

dictionaries, thus, the present cross-linguistic study fills in the gap in the literature by focusing on the conceptual metaphors underlying the English verb of visual perception *see* and Arabic verb *رأى* using authentic naturally occurring data produced by a variety of writers in fiction writing. The present study also offers a systematic cross-cultural study by comparing the metaphorical meanings manifested in the verbs of visual perception *see* in English and *رأى* in Arabic based on the cognitive semantic theory, specifically, the conceptual metaphor theory, their motivation and the role of culture in their motivation.

1.4 Objectives of the Study

The general objective of the present study is to investigate the English verb *see* and Arabic *رأى* from a cognitive semantic perspective. Within this general objective, are four specific objectives stated as follows:

- 1- To unravel the conceptual metaphors underlying the linguistic expressions of the English and Arabic verbs of visual perception *see* and *رأى* in fiction writing.
- 2- To compare the conceptual metaphors underlying the linguistic expressions of the English and Arabic verbs of visual perception *see* and *رأى* in fiction writing.
- 3- To examine how human physiology motivates the unravelled conceptual metaphors of the English and Arabic verbs of visual perception *see* and *رأى*.
- 4- To determine the role of culture in the motivation of the conceptual metaphors underlying the English and Arabic verbs of visual perception *see* and *رأى*.

1.5 Research Questions

Based on the above objectives, four research questions were formulated to guide the study:

- 1- What are the conceptual metaphors underlying the linguistic expressions of the English and Arabic verbs of visual perception *see* and *رأى* in fiction writing?
- 2- How different or similar are the conceptual metaphors underlying the linguistic expressions of the English and Arabic verbs of visual perception *see* and *رأى* in fiction writing?
- 3- How are the conceptual metaphors of the English and Arabic verbs of visual perception *see* and *رأى* motivated by human physiology?
- 4- What is the role of culture in the motivation of conceptual metaphors underlying the English and Arabic verbs of visual perception *see* and *رأى*?

1.6 Scope of the Study

The present study aims at investigating the conceptual metaphor of English and Arabic verbs of visual perception within the framework of the conceptual metaphor theory (henceforth CMT). The study adopts three models of analysis within cognitive semantics: Lakoff and Johnson (2003), Sweetser (1990) and Ibarretxe-Antuñano (2013a, 2013b). It also adopts the Metaphor Identification Procedure (MIP) by Pragglejaz group (2007) to identify the metaphoric uses of verbs of visual perception in the data, specifically, English verb of visual perception *see* and Arabic verb *رأى*.

The study focuses only on the cognitive semantic features of the verbs of visual perception, but not the syntactic and morphological features. It also analyses the metaphorical uses of the verbs, but does not focus on the polysemous uses of these verbs. The study adopts a qualitative approach to metaphor analysis and it utilises data which comprise comparable corpora of English and Arabic fiction writing compiled from different electronic sources. The corpora comprise approximately 2 million words, with each corpus comprising about 1 million words. Moreover, the present study deals only with fiction writing and its most common categories, such as mystery, science fiction, thriller and romance; it does not examine other written genre of language, such as news and academic. Fiction writing used in the study covers published and unpublished short stories and novels between the period of 2010 and 2017, but not novellas due to their unavailability online.

1.7 Significance of the Study

This study is valuable in several ways. Theoretically, the present study aims at providing a comprehensive cross-cultural account of the English and Arabic verbs of visual perception. It investigates the verbs of visual perception from a cognitive semantic perspective that focuses on the role of embodiment and culture in the motivation of conceptual metaphors of verbs of visual perception in English and Arabic. As mentioned earlier, the study aimed at filling the gap in the literature by addressing an issue of universality. Ibarretxe-Antuñano (2013a; 2019) argues that Sweetser's (1990) hypothesis of the conceptual metaphors of verbs of perception needs to be investigated in non-Indo-European languages in order to examine if the theory is applicable universally. Thus, the present study aims to seek evidence for this universality claim on Arabic by comparing two different unrelated languages which belong to different language families, English (Indo-European language) and Arabic (a semitic language).

Additionally, the study focuses on the English and Arabic verbs of visual perception based on a large amount of naturally occurring corpora, which provides the researcher with a more comprehensive data that may be useful in reaching more reliable results in relation to the conceptual metaphors underlying English and Arabic verbs *see* and *رأى*. To date, there is no available study with such a focus that has used comparable corpora of fiction as its data. Moreover, the comparable corpora of English and Arabic

fiction writing developed for the purpose of this study consist of two million words, which is large enough for use in future similar studies.

1.8 Theoretical Framework

The study adopts the framework of cognitive semantics, specifically, the CMT as the foundation for data analysis, which is a theory subsumed under cognitive linguistics (Lakoff & Johnson, 2003). The most basic definition of a conceptual metaphor can be stated as “understanding and experiencing one kind of thing in terms of another” (Lakoff & Johnson, 2003, p. 5). Specifically, conceptual metaphors involve mappings of certain elements from a source domain to a target domain: TARGET IS SOURCE. Usually, the source domain is more concrete, and metaphorical expressions are drawn from it in order to understand the target domain. In contrast, “the target domain is usually more abstract, and it is understood through the metaphor (Kövecses, 2015).

More generally, Semino and Demjén (2017, p. 5) describe conceptual domains as “rich mental representations: they are portions of our background knowledge that relate to particular experiences or phenomena, and may include elements such as travellers, relations between a traveller and their destination, and patterns of inference” (e.g., if someone reaches the end of a *cul-de-sac* they cannot continue to move ahead). Proponents of the CMT have stressed that metaphor is an important cognitive device of grasping and categorising the majority of abstract domains of the world. Supporters of Lakoff and Johnson’s theory argue against the traditional linguistic thinking of metaphor as basically a decorative and deviant use of everyday language (Alshunnag, 2016; Manasia, 2016a).

From a cognitive point of view, metaphor, is the traditional way of communication between people and their world because human thinking and actions are intrinsically organised by metaphoric terms. It is common in everyday life; it exists in thought and action and not just in language. Metaphor in cognitive linguistics is defined as a “mapping or correspondence between two conceptual domains, where properties from one domain, the source, are mapped onto another domain, the target. It is in this way that metaphors allow us to understand one domain of experience in terms of another” (Lakoff & Johnson, 1980, p. 135).

Kövecses (2015) maintains that the ability to establish a metaphoric link is attributed to a basic human cognitive ability, namely, imagination. Humans make sense of a less graspable experience on the basis of a more directly accessible experience. Lakoff and Johnson (1980) argue that humans map part of their bodily experience onto their cognitive experience of sickness as in *He came down with flu* or onto their experience of happiness and death as in *My spirit rose up*.

In essence, metaphor is a basic imaginative cognitive mechanism. It is the “means by which it is possible to ground our conceptual systems experientially and to reason in a constrained but creative fashion” (Johnson, 1992, p. 351). As Kövecses (2015, p.

12) puts it, this mechanism is a “complex mental mapping of our knowledge of one domain of experience (the source domain) to structure our knowledge of a different domain of experience (the target domain).” In brief, conceptual metaphor is perceived as an association between two conceptual domains by which the abstract is understood in terms of the familiar knowledge of the concrete and easy one (Alshunnag, 2016; Kövecses, 2015).

The conceptual metaphor theory has been used by Sweetser (1990) in order to examine the metaphorical and polysemic meanings of verbs of perception in Indo-European languages, from a diachronic and cognitive perspective. She argues that there are systematic metaphorical relations between verbs of perception and meanings associated with internal sensations. In fact, Sweetser takes up the interface between perception and other conceptual domains and expands it further into the so-called ‘MIND-AS-BODY’ metaphor (1990, p.28). She applied this metaphor to English verbs of perception and demonstrated that the relation between the body and the mind is not limited to just one sole metaphor such as UNDERSTANDING/KNOWING IS SEEING. In fact, there is an entire organised and consistent group of metaphoric mappings that utilises the body as the source domain and the mind as the target domain.

Another cognitive linguist, Ibarretxe-Antuñano (2013a, 2013b) proposed a model of the conceptual motivation of verbs of perception that explains how the metaphoric mappings happen between the physical domain of perception and other abstract domains of experience. Ibarretxe-Antuñano (2013a) argues that the conceptual metaphors underlying verbs of perception are motivated by two factors. The first factor is related to a set of prototypical properties that are based on the physiology and psychology of the senses. The second factor is linked to the role of culture that acts as an active mediating device that facilitates the way physical, sensorimotor and universal experiences traverse the social beliefs and thoughts underlying the communities (Ibarretxe-Antuñano, 2013b).

The three aforementioned theories (which will be discussed in detail in chapter two) are incorporated in this study because they closely relate to answering its questions. These are the CMT and MIND-AS-BODY theory (Lakoff & Johnson, 2003; Sweetser, 1990) for unraveling the conceptual metaphors underlying the English and Arabic verbs of visual perception *see* and *شَهِدَ*. The conceptual motivation of verbs of perception (Ibarretxe-Antuñano, 2013a, 2013b) was employed for examining how the physiological prototypical properties of the body (embodiment) motivate the conceptual metaphors underlying the English and Arabic verbs of visual perception *see* and *شَهِدَ* and to examine the role of culture in the motivation of these conceptual metaphors as Figure 1.1 illustrates.

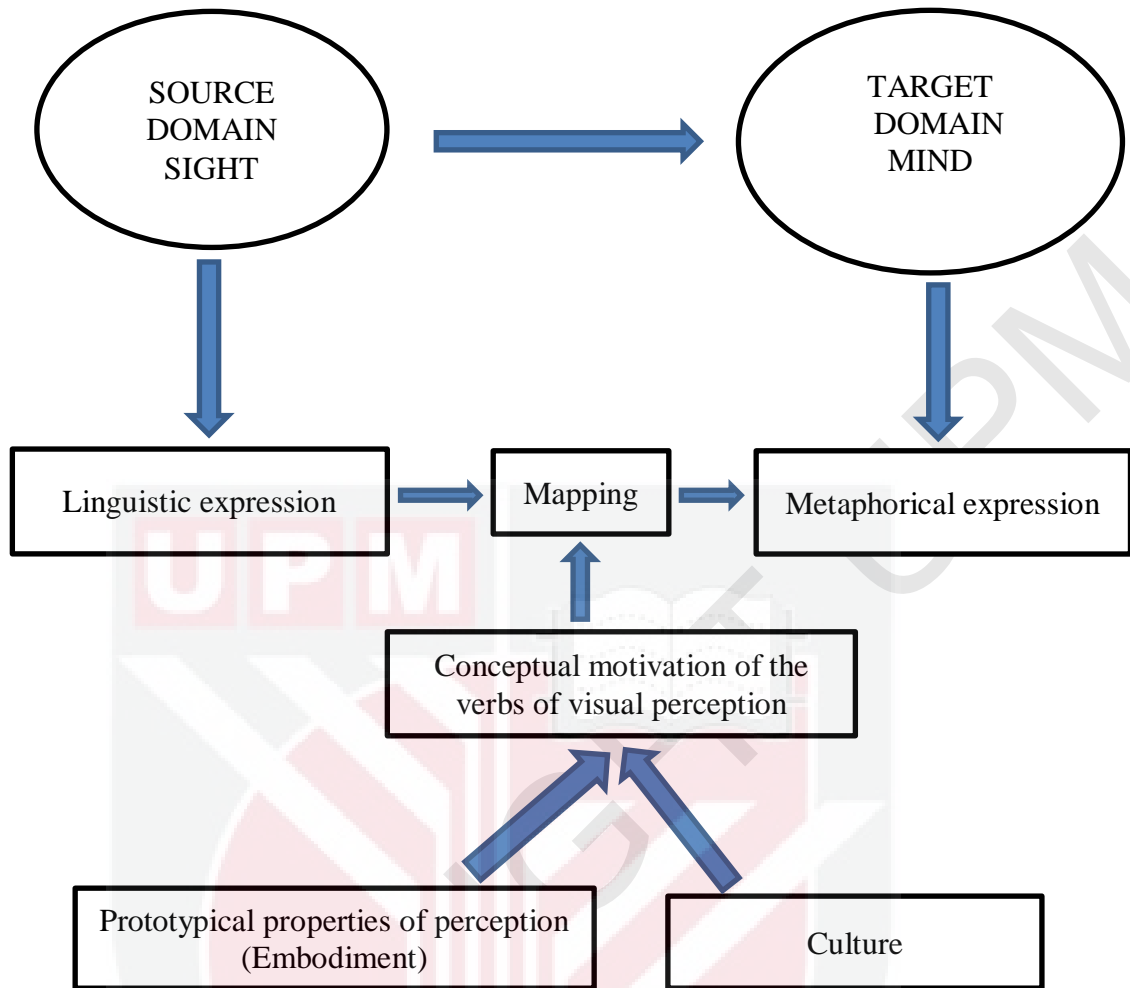


Figure 1.1 : Theoretical Framework

As figure 1.1 above shows, the mapping of the conceptual metaphors underlying the verbs of visual perception occurs between the physical source domain of sight and the abstract target domain of the mind. The figure also shows that there are two factors that may motivate the conceptual mapping, namely, the prototypical properties of perception and culture.

1.9 Definition of Key Terms

In this section, definitions of some technical terms used in this study are presented. The following few working definitions would familiarise the reader with their usage for construing the main theoretical issues dealt with in this study.

1. Verbs of visual perception: Verbs of visual perception refer to a class of verbs employed in English and Arabic to express the use of the sense of sight in the process of human sensory cognition (Al-Asmer, 2007; Winter, 2016).

2. Cognitive semantics: This area of semantics refers to an approach that studies the mind and its connections with humans' experience and culture. It considers language as a main instrument for decoding conceptual organisation of the mind (Valenzuela, 2017).
3. Culture: In this study, culture represents the common beliefs, thoughts, knowledge, and world view(s) that are specific to certain broad national, ethnic, or speech communities (Caballero & Ibarretxe-Antuñano, 2013).
4. Conceptual Metaphor Theory: This theory of metaphor was proposed by Lakoff and Johnson (1980). It postulates that metaphor is "basically a connection between conceptual domains, whereby ways of talking about one domain (the 'source domain') can be applied to another domain (the 'target domain') due to the 'correspondences' between the two", (Evans, 2019, p.35) such as the conceptual metaphor is LIFE IS A JOURNEY. Here, the 'journey' is the source domain and 'life' – what the metaphorical expression refers to – is the target domain.
5. Embodiment: This term refers to the concept that experience is embodied which means that people possess a species-specific conceptualisation of the world affected by their unique physical nature. In other words, humans' construal of reality is governed by the physiological nature of their bodies (Dingemanse et al. 2015).
6. Motivation: In the area of cognitive semantics, motivation means that "the relationship between A and B is motivated just in case there is an independently existing link, L, such that A-L-B 'fit together'. L makes sense of the relationship between A and B" (Lakoff 1987, p. 448).

1.10 Structure of the Thesis

This thesis is divided into five chapters. Following this introduction, the literature review chapter is further divided into two parts. The first part presents an overview of the English verbs of perception, major cognitive semantic theories of English verbs of perception, monolingual and cross-cultural studies of English verbs of perception. The second part of chapter two deals with the Arabic verbs of perception. It tackles the semantic features of these verbs and also covers recent monolingual and comparative studies on Arabic verbs of perception.

Chapter three discusses the methodology this thesis adopts to answer the research questions. It gives an account of the criteria adopted in compiling the comparable corpora of the study, characteristics of the comparable corpora, the data collection procedures and data analysis. The data analysis stage has been divided into four main subsections each addressing a research question by introducing the model adopted to carry out the data analysis process as deemed suitable to answer the question.

Chapter four presents the findings of the research. It has been divided into three main sections each addressing the findings of the analysis pertaining to a particular research question. Section one addresses the findings related to the conceptual metaphors underlying the English and Arabic verb of perception *see* and رأى as well as a presentation of the findings pertaining to the similarities and differences in the conceptual metaphor of the English and Arabic verb of perception *see* and رأى. Section two presents the analysis of how the prototypical properties motivate the conceptual metaphors underlying the verbs *see* and رأى. Finally, section three discusses the findings related to the role of culture in the motivation of the conceptual metaphors underlying the English and Arabic verbs *see* and رأى. Chapter five sums up the conclusions of the study by focusing on the major findings presented in relations to the research questions. The chapter also introduces the limitations of the study, its contributions to the field and recommendations for future directions.



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LIST OF PUBLICATION

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