The Motivations for the Semantic Change in the Category Green in Arabic: A Synchronic and Diachronic Corpus-Based Analysis

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Abstract

The present article analyses the semantic structure of the colour term أخضر (aḫḍar) (green) in Arabic to establish whether it has undergone a change in terms of meanings and prototypes and to identify the motivating factors for its semantic change. The current study compares and contrasts the polysemy of أخضر (aḫḍar) (green) in premodern texts and modern texts. To explore the meanings of the word أخضر (aḫḍar) (green) and to identify its most frequent collocates and thus most prototypical meanings, the study employs the *ArabiCorpus* (Arabic Corpus Search Tool). The data collected on the term are analysed in accordance with Rosch's [1] [2] prototype theory, and Lakoff and Johnson's [3] conceptual metonymy and conceptual metaphor. The results show that أخضر (aḫḍar) scores highly in its average occurrence in both premodern texts and modern texts and maintains its favourable meaning despite the variance in its prototypical meanings across the selected subcorpora. Its semantic expansion is motivated by conceptual metonymy, conceptual metaphor and loan translation respectively.

Keywords

Colour Terms, Conceptual Metaphor, Conceptual Metonymy, Conceptualization, Polysemy, Prototype, Semantic Change

1. Introduction

Colour stands for the psychological explanation of retinal and neuronal sensation of reflected light, comprising three attributes, namely hue (*i.e.*, sensation of wavelengths), brightness (*i.e.*, sensation of luminance) and saturation (*i.e.*, sensation of purity of a dominant wavelength) [4] [5] [6]. However, people concep-

tualize colours differently across cultures despite the existence of several notable affinities [7]. The lexical units that humans use to express colour concepts may also differ. People from different cultural contexts may have the same colour experiences, but they may vocalize these experiences differently [6].

The present paper analyses the polysemy of the Arabic colour term أَخْضَر (aḫḍar) (green), one of the basic colour terms [8]. In spite of the fact that languages may vary in the number of terms they use for colour concepts, there exists a universal list of eleven basic colour terms: *black*, *white*, *red*, *yellow*, *green*, *blue*, *brown*, *purple*, *pink*, *orange*, and *grey*. Languages range in the number of colour terms from two to eleven across languages [8]. For example, English consists of eleven colour terms. For another instance, Arabic, like English, comprises eleven colour terms [9]. Humans may see the same colour, but they may interpret it differently based on their bodily, social and cultural experiences. Colour categories spring from the world, human biology, a cognitive mechanism possessing some of the properties of fuzzy set theory, and a culture-specific selection of the basic colour categories [10].

Language is a communication system that mirrors human beings' understanding of the world around them [11]. Words are not containers of meaning, but rather they provide access to a cognitive network [12]. The senses that words have are not fixed or restricted, but they evoke a variety of cognitive domains based on context [13]. They are not discrete but fall into a continuum along which they overlap and share some common properties. The meanings that exhibit more common attributes are typical while those that show less common attributes are peripheral. Within this approach, a semantic change takes place when a peripheral sense becomes the core meaning of a lexical unit, or a typical meaning is excluded from the prototype structure of the word [14].

The literature on colour categorization and semantic extension of colour terms across cultures show that there are commonalities and variations in meanings of colour terms and in the ways individuals categorize colours across languages [15] [16] [17]. This diversity is mostly the usual outcome of semantic change. In general, language change is a result of intrinsic features of the human mind and social interaction [18]. Despite considerable literature on colour terms and polysemy across languages, research on the semantic change in colour terms across languages in general and in Arabic in particular is lacking.

The current study compares and contrasts the prototype structure of the word أَخْضَر(aḫḍar) (green) in premodern Arabic texts and modern Arabic texts. This is to determine whether the prototype structure of the lexical category under investigation went through a semantic change, and to find the motivations for the possible semantic change. This will, in turn, provide a greater insight into Arab users' conceptualization of green. The green colour was chosen for this study because it is one of the most symbolic colours in Arabic culture. It is more associated with positive connotations like nature, paradise and goodness [19].

Thus, the following research questions guide the present study:

1) Does the polysemy of the term أَخْضَر (aḫḍar) in premodern texts differ from its polysemy in modern texts?

2) What motivates the semantic extension of the term أَخْضَر (aḫḍar)?

2. Literature Review

As mentioned before, there is a considerable amount of literature on categorization, lexicalization and semantic expansion of colours across languages and cultures. This literature showed that colour terms, including *green*, compare and contrast across languages and cultures in terms of meaning and preference. As the focus of the current study is on the semantics of the green colour, only the findings related to the term *green* are discussed.

Soriano and Valenzuela [15] studied the connotative structures of *red*, *blue*, *green* and *yellow* in Spanish with regard to Osgood's semantic dimensions, namely Evaluation (good-bad), Activity (excited-relaxed) and Potency (strong-weak) to explore the reasons behind the association between colour terms and emotion words. They showed that *green* has positive evaluation and low activity despite its conventional association with envy by means of metonymy.

Allan [20], examining the orthophemistic, euphemistic and dysphemistic connotations of *black*, *white*, *grey*, *brown*, *yellow*, *red*, *green*, *blue* and a few miscellaneous colours in English, found out that *green* is associated with living vegetation and illness or jealousy. Ogarkova [21] investigated the conceptual metaphors of the concepts of jealousy and envy in Modern English. This study found that the term *green* is the third most frequent collocate of *envy* in the *Leipzig Corpus* and that the most significant metaphorical mapping is being envious is becoming green in complexion in the *BNC*. Because humans look pale or green when they are sick and green unripe fruits cause stomach ache, envy is understood by means of disease.

Another study by Xing [16] studied the meaning functions of *white*, *black*, *red*, *yellow*, *green*, *blue*, and *purple* in Chinese. It showed that the meanings of *green* in Chinese compare with their equivalents in English in terms of the meanings "natural" and "jealousy/adultery", but they contrast in terms of the meaning "coarse", which is only used in Chinese, and "inexperienced", which is only used in English.

A study by Al-Adaileh [22], which investigated the connotations of *black*, *white*, *yellow*, *red*, *green* and *blue* in Jordanian Arabic in terms of Allan and Burridge's (2006) X-phemisms, found that *green* has both euphemistic and dysphemistic connotations. For example, it euphemistically connotes "health", as in *green-toothed*, and dysphemistically connotes "immaturity and inexperience", as in *green-wood*.

Colour has also proved to be a very significant means of influencing the feelings and responses of customers. Colour choices across cultures appear to converge for certain products thanks to globalization. However, they may also vary due to cultural, religious and experiential dissimilarities [17]. In this study, for

example, which investigated colours in college students' selection of products in the USA, India, China and Turkey, green was found to be associated with nature and health in China, India and Turkey, and nature, Christmas and good luck in the USA.

The literature on colour terms discussed above shows the rich variety of colour meanings and choice across the world. As Grossman and Wisenblit [23] assert, the senses and preferences of colours are learned and may change over the years. Thus, it is pertinent to identify the changes and establish the factors that motivate them.

3. Methodology

The current paper aims to identify the semantic change that may have occurred in the prototype structure of the term أَخْضَر (aḫḍar). To this end, the study employs Rosch's [1] [2] prototype theory to explore the polysemy of the term under study. It also uses conceptual metonymy and conceptual metaphor [3] to establish the cognitive mechanisms that motivate change in meaning.

The data on the term أَخْضَر (aḫḍar) was compiled from the *ArabiCorpus* (Arabic Corpus Search Tool). The *ArabiCorpus* (173.600.000 words) comprises newspapers, pre-modern texts, modern literature and non-fiction. The current article utilizes three subcorpora: premodern, mainly the "Adab Literature" (2,073,071 words), the "Grammarians" (1,210,614 words) and the "Medieval Philosophy and Science" (1,576,860 words), modern texts, *i.e.*, literature (1,026,171 words) and nonfiction (27,945,460 words), and newspapers (135,360,804 words). These subcorpora were selected to explore the polysemy of the colour term أَخْضَر (aḫḍar) because they reflect the language used in different eras.

The corpus data analysis uses frequency and concordance to identify the most frequent collocates, meanings and examples of the term أَخْضَر (aḫḍar). This is to compare its prototype structure in premodern texts and modern texts. To collect all the data on the adjective أَخْضَر (aḫḍar) from the *ArabiCorpus*, all the different forms of the term were individually searched in the corpus. Adjectives in Arabic grammar inflect for grammatical gender, number, case and definiteness [24]. The adjective أخضر (aḫḍar) has different forms, *i.e.*, أخضر (aḫḍar) (masculine, singular), خضر (ḫuḍr) (masculine, plural), خضراء (ḫaḍrāʾ) (feminine, singular), خضراوات (ḫaḍrāwāt) and خضر (ḫuḍr) (feminine, plural). All these adjectives can be definite or indefinite based on whether the definite article ال (al) (the) is added to their beginning, as in أخضر (aḫḍar) and الأخضر (al-aḫḍar). It is worth noting that no examples of the adjectival form خضراوات were found in premodern texts or modern literature. Instead, many instances of the noun form خضراوات (ḫaḍrāwāt) (vegetables) were found.

4. Results

Before collecting data on the collocates and senses of أَخْضَر (aḫḍar), it was neces-

sary to examine its average occurrence across the selected subcorpora, as listed in Table 1.

Table 1 shows that the word أَخْضَر (aḫḍar) scores highly in its average occurrence in both premodern texts (0.65/ten thousand) and modern texts (0.67/ten thousand) and that its average occurrence is slightly higher in modern texts as portrayed in Figure 1. This suggests the constant usage of this colour term in Arabic texts.

As outlined in Table 2, the most frequent collocate of أخضر (aḫḍar) in premodern texts is طير (ṭayr) (birds), which refers to the birds that carry the souls of martyrs in paradise. The Prophet Muhammad (peace be upon him) said, "the souls, of the martyrs live in the bodies of green birds who have their nests in chandeliers hung from the throne of the Almighty. They eat the fruits of Paradise from wherever they like and then nestle in these chandeliers" [25]. Thus, *green* in this sense is associated with paradise, being a quality of these birds. This mental connection with paradise and religion also applies to the third top collocate روضة (rawḍa) (garden) in several of the concordance lines where *green* co-occurs with روضة (rawḍa). It is worthy of note that روضة (rawḍa) is an analogy for paradise. The second top collocate *the trees* indicates the metonymic extension of *green* as the green part of the tree stands for the whole tree. The
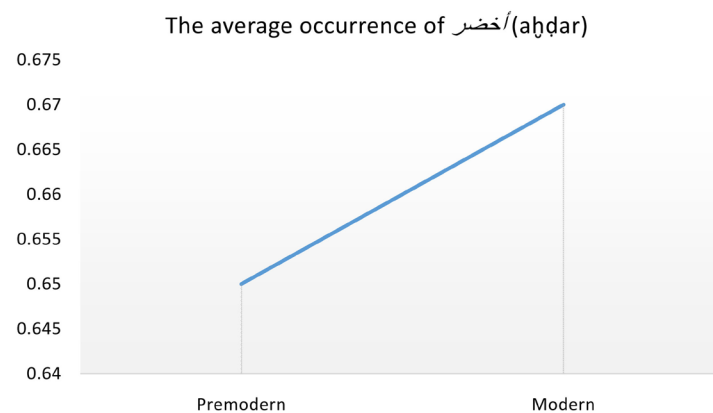

Figure 1. The average occurrence of أَخضر (aḫḍar) in premodern and modern subcorpora.

Table 1. The frequency of أَخْضَر (aḫḍar) in the selected subcorpora.

	Subcorpus	Number of occurrences	Total number of occurrences	The average number per ten thousand words
Premodern	Adab Literature	148	315	0.65/ten thousand
	Grammarians	89		
	Medieval Philosophy and Science	78		
Modern	Modern literature	129	11,065	0.67/ten thousand
	Nonfiction	339		
	Newspapers	10,597		

Table 2. Collocate frequency of أخضر (aḫḍar) in premodern texts.

Collocate	Collocate frequency
طيور (ṭoyūr)/طير (ṭayr) (birds)	10
الأشجار/ الشجر (aš-šajar/al-ašjār) (the trees)	7
روضة (rawḍa) (garden)	7
الأرض (al-arḍ)/الغبراء (al-ġabrāʾ) (the earth)	6
الجلدة (al-jilda) (the skin)	5
الليل (al-layl) (the night)	5
البقل (al-baql) (the herbs)	4
الورق (al-waraq) (the leaves)	4
يابس (yābis) (dry)	4
أسود (aswad) (black)	4

fifth and sixth most frequent collocates of أخضر (aḫḍar) are associated with the black colour, as in peoples' dark skin and the colour of the night. Arabs sometimes used *green* to refer to the black colour of the skin [26] [27] and to describe the blackness of the night [27]. Generally, there used to be an overlap between *green* and *black* in old Arabs' categorization of these colours. For instance, Arabs described the rural areas in Iraq, when Muslims conquered it, as black because of the dark green colour of its fields and trees [26]. The overlap between *green* and *black* is further supported by the tenth most frequent collocate أسود (aswad) (black). In the context of the concordance lines, the ninth most common collocate of أخضر (aḫḍar), *i.e.*, يابس (yābis) (dry), refers to the variation in herbs: fresh or dry, as in رازيانج (rāziyānaj) (fennel). The meaning of the term *green*, that is, "the colour of the living plants" in this context is metonymically extended to "green herbs", which are freshly cut and ready for use.

In modern literature, as shown in **Table 3**, the most frequent collocate of أخْضَر (aḫḍar) is *earth*, which metonymically extends "green plants" to "being covered with plants or vegetation". This meaning is supported by many following collocates: الحشيش (al-ḥašīš) (grass) and البصل (al-baṣal) (onions), parts of green plants, واحة (wāḥa) (oasis), حقول (ḥuqūl) (fields) and تونس (tūns) (Tunisia), which are metonymic extensions from "green plants" to "being covered with grass or vegetation". The second most frequent collocate زربية (zarbiyya) (carpet) highlights the meaning of *green* as a visual attribute, being a quality of the carpet. The sixth most frequent collocate اليابس (al-yābis) (the dry), in contrast to its use in premodern texts, marks the creation of the idiomatic expression, preceded by أتى على (atā ʿalā) (finish or destroy) and conjoined with اليابس (al-yābis) (the dry), meaning "to destroy completely/everything". The most concrete meaning of الاخضر و اليابس (aḫḍar wa l-yābis) in this context would be in a scenario where fire eats everything from green living plants to dead plants. The semantic projection is then metonymic as *green* and *dry* stand for all the living plants and dead plants affected by fire respectively. However, this meaning is metaphorically generalized to everything, including humans and buildings, as in the case of war.

Table 3. Collocate frequency of أَخْضَر (aḫḍar) in modern literature.

Collocate	Collocate frequency
الأرض (al-arḍ) (the earth)	4
زربية (zarbiyya) (carpet)	3
الطائر (aṭ-ṭāir) (bird)	2
البصل (al-baṣal) (onions)	2
الحشيش (al-ḥašīš) (grass)	2
اليابس (al-yābis) (the dry)	2
واحة (wāḥa) (oasis)	2
حقول (ḥuqūl) (fields)	2
تونس (Tunisia)	2
الأشجار (al-ašjār) (the trees)	2

As seen in Table 4, the sixth most frequent collocate اليابس (al-yābis) in modern literature is the most frequent collocate in nonfiction texts. The second most frequent collocate الدنيا (ad-dunyā) (the world) is generally used with reference to the Prophet's hadith, "the world is sweet and green (alluring) and verily Allah is going to install you as vicegerent in it in order to see how you act. So avoid the allurement of women: verily, the first trial for the people of Isri'll was caused by women" [25]. The semantic extension in this context is metaphorical as the world, compared with fruit, is fresh, sweet and attractive. The third most frequent collocate (ال)ضوء (aḍ-ḍaw') (the light), forming an idiomatic expression, is extended to the meaning of "permission to start or proceed with something". Thus, the green light, the traffic light that signals permission to go, is metaphorically extended to authorization for doing something. The fourth, sixth, seventh, eighth and ninth most frequent collocates: (ين) الميل / (ين) العلم (al-'alamayn)/(al-maylayn), the marker (s) between which running is designated in performing as-saʿy during the ritual pilgrimages of Hajj and Umrah, (ال)جنة (al-janna) (heaven), طير (ṭayr) (birds) (in paradise), سندس (sundus) (fine silk) (worn in paradise), and as-saʿy are associated with positive religious concepts. The tenth most frequent collocate الخط (al-ḫaṭ) (the line) is an element of the compound noun *the Green Line*, referring to the boundary between pre-1967 Israel and the Occupied Palestinian Territories. This border marks the land that Israel captured in 1948 [28]. The border was named after the green ink used to draw the line on the map demarcating the 1949 Armistice Agreements [29].

Table 5 indicates that the third most frequent collocate of أخضر (aḫḍar) in nonfiction texts, *i.e.*, (ال)ضوء (aḍ-ḍaw'), is the most frequent collocate in newspapers. The second most frequent collocate is *spaces*, meaning "land covered with plants which are undeveloped". This sense is a metonymic projection from green plants. Conceptual metonymy also motivated the extension of أخضر (aḫḍar) in the contexts where it frequently co-occurs with *area (s)*, *mountain*[1]

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[1]The Green Mountain refers to the name given to mountainous plateaus in different places, especially in Oman and Libya.

Table 4. Collocate frequency of أَخْضَر (aḫḍar) in nonfiction.

Collocate	Collocate frequency
اليابس (al-yābis) (dry)	95
الدنيا (ad-dunyā) (the world)	42
(ال)ضوء (aḍ-ḍawʾ) (the light)	41
العلم (ين)/(al-ʿalamayn)/(الميل (ين) (al-maylayn) (the marker (s))	41
الأرض (al-arḍ)/ الغبراء (al-ġabrāʾ) (the earth)	41
(ال)جنة (al-janna) (heaven)	35
طير (ṭayr) (birds)	28
المسعى (as-saʿy)/(al-masʿā)/ يسعى (ال)سعي (yasʿā)	21
سندس (sundus) (fine silk)	16
الخط (al-ḫaṭ) (the line)	15

Table 5. Collocate frequency of أَخْضَر (aḫḍar) in newspapers.

Collocate	Collocate frequency
(ال)ضوء (aḍ-ḍaw') (the light)	1344
المسطحات (al-misāḥāt) (ال)مساحات (al-musaṭṭaḥāt) (spaces)	517
الخط (al-ḫaṭ) (the line)	506
(ال)يابس (al-yābis) ((the) dry)	325
المنطقة (al-minṭaqa) (the zone)	292
(ال)مستطيل (al-mustaṭīl) ((the) rectangle)	253
الجبل (al-jabal) (the mountain)	251
منطقة (minṭaqa)/ (ال)مناطق (al-manāṭeq) ((the) area (s))	202
الحزام (al-ḥizām) (the belt)	107
ثورة (ṯawra) (revolution)	72

and *belt*, to "being covered with vegetation". The compound *green belt* denotes "a land around a city in which building is not allowed", and so it is associated with conservation. The tenth most frequent collocate further supports this association as *the green revolution* conveys the change in agriculture to increase food production. The fifth most frequent collocate المنطقة (al-minṭaqa) (the zone) projected the meaning to "the International Zone of Baghdad", cordoned off for protecting it from attacks during the war. Thus, *green* is metaphorically extended to "secure". The sixth collocate (ال)مستطيل (al-mustaṭīl) ((the) rectangle) shows another metonymic extension of *green* as (ال)مستطيل الاخضر (al-mustaṭīl l-aḫḍar) (the green rectangle) means "the football pitch"[2]. Thus, green, the first element of the compound, stands for the turf that covers the field, and *rectangle*, the second element of the compound stands for the marked-out field.

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[2]Despite its popular use in sports, there is no reference of this compound in Arabic dictionaries possibly because it is a very new neologism.

5. Discussion

Based on the corpus data, the term أَخْضَر (aḫḍar) showed its constant frequency over time as both premodern and modern subcorpora score highly in their average occurrence for أَخْضَر (aḫḍar). The collocates of أَخْضَر (aḫḍar), in contrast, vary in frequency over time. The collocate الأرض (al-arḍ) maintains its frequency rank in modern nonfiction and is the most frequent collocate in modern literature. The sixth and seventh highest collocates of أخضر (aḫḍar) in premodern texts, that is, الجِلدة (al-jilda) (the skin) and الليل (al-layl) (the night) are not available anymore in modern texts. This suggests that this meaning has vanished. The association of أخضر (aḫḍar) with nature has an equivalent high frequency in both premodern and modern texts. New frequent collocates that are connected with religion appear in modern nonfiction: العلم (ين) (al-ʿalamayn)/ الميل (ين) (al-maylayn) (the marker (s)), (ال)جنة (al-janna) (heaven) and سندس (sundus) (fine silk). The third most frequent collocate (ال)ضوء (aḍ-ḍawʾ) (the light) in modern nonfiction scores the highest frequency in newspapers. This subcorpora also marks a change in prototypical meanings as it introduces new frequent collocates, e.g., ثورة (ṯawra) (revolution) (in agriculture), الخط (al-ḫaṭ) (the line) and المنطقة (al-minṭaqa) (the zone) (in politics), and المستطيل (al-mustaṭīl) (the rectangle) (in sports). Etymologically, the term أخضر (aḫḍar) refers to "fresh living plants", which means that the term is historically associated with grass. This agrees with Wierzbicka's [7] postulate that the closest rendering of the English term *green* in numerous languages of the world is "either morphologically or etymologically related to words for grass, herbs, or Vegetation in general" [7]. Thus, it is suggested that vegetation is the prototype of *green*, from which most of the other senses developed. Most of the semantic extensions of أخضر (aḫḍar) were motivated by conceptual metonymy, and some meaning extensions were motivated by conceptual metaphor. However, some of these extensions may be the equivalents of words or phrases from other languages, especially English. For example, the compound الخط الاخضر (al-ḫaṭ l-aḫḍar) (the Green Line) was named by the Israelis [29]. For another example, the compound المنطقة الخضراء (al-minṭaqa l-ḫaḍrāʾ) (The Green Zone) was created by some US security personnel [30]. These compounds are deemed to be translated into Arabic. In addition, with the awareness of environmental issues worldwide, the formation of numerous meanings and words is the result of loan translation and thus language contact; some instances are *the green revolution* and *the green belt*.

6. Conclusion

The results show that there is a slight increase in the frequency of occurrence of أخضر (aḫḍar) in both premodern texts and modern texts, indicating the constant usage of the term in Arabic over time. They also indicate that the most common prototypical meanings of أخضر (aḫḍar) vary from premodern texts to modern texts. However, the term أخضر (aḫḍar) in general maintains its positive conno-

tation and favourable status. This can be attributed to the fact that خضر (aḫḍar) is conventionally associated with religious and cultural concepts like paradise, peace and oasis. In addition, most of the new common meanings that the term concerned developed through loan translation from other languages as an outcome of language contact, affected by globalization, global issues, and so on, are positive. The results also indicate that conceptual metonymy and metaphor are highly active in the semantic expansion of أَخْضَر (aḫḍar) and that metonymy is even a more active semantic projection of أَخْضَر (aḫḍar). The findings of the current study are believed to have critical implications for translation and education. The study also contributes to the field of cognitive linguistics with new knowledge on the universal and culture-specific use of conceptual metaphor and metonymy in the polysemy of Arabic colour terms.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

[1] Rosch, E. (1973) Natural Categories. *Cognitive Psychology*, **4**, 328-350. https://doi.org/10.1016/0010-0285(73)90017-0

[2] Rosch, E. (1975) Cognitive Representations of Semantic Categories. *Journal of Experimental Psychology: General*, **104**, 192. https://doi.org/10.1037/0096-3445.104.3.192

[3] Lakoff, G. and Johnson, M. (2003) Metaphors We Live By. The University of Chicago Press, Chicago. (Original Work Published 1980) https://doi.org/10.7208/chicago/9780226470993.001.0001

[4] Lenneberg, E.H. and Roberts, J.M. (1955) The Language of Experience: A Study in Methodology. Massachusetts Institute of Technology, Centre for International Studies, Cambridge.

[5] Hardin, C.L. (1988) Colour for Philosophers: Unweaving the Rainbow. Hackett, Indianapolis.

[6] Payne, D.L. (2006) Colour Terms. In: Brown, K., Ed., *Encyclopedia of Language and Linguistics*, Vol. 1, 2nd Edition, Elsevier, Oxford, 605-610. https://doi.org/10.1016/B0-08-044854-2/01026-9

[7] Wierzbicka, A. (1990) The Meaning of Colour Terms: Semantics, Culture, and Cognition. *Cognitive Linguistics*, **1**, 99-150. https://doi.org/10.1515/cogl.1990.1.1.99

[8] Berlin, B. and Kay, P. (1969) Basic Color Terms: Their Universality and Evolution. University of California Press, Berkeley.

[9] Al-Rasheed, A., Al-Mohimeed, N. and Davies, I. (2013) Berlin and Kay's Theory of Color Universals and Linguistic Relativity: The Case of Arabic. *Journal of Modern Education Review*, **2**, 45-62.

[10] Lakoff, G. (1987) Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. The University of Chicago Press, Chicago. https://doi.org/10.7208/chicago/9780226471013.001.0001

[11] Cienki, A. (2007) Frames, Idealized Cognitive Models, and Domains. In: Geeraerts, D. and Cuyckens, H., Eds., *The Oxford Handbook of Cognitive Linguistics*, Oxford

University Press, New York, 27-47.

[12] Langacker, R.W. (1987) Foundations of Cognitive Grammar: Theoretical Prerequisites. Vol. 1, Stanford University Press, Stanford.

[13] Langacker, R.W. (1999) Grammar and Conceptualization. Vol. 14, Walter de Gruyter, Berlin. https://doi.org/10.1515/9783110800524

[14] Carpenter, M.J. (2013) Semantic Change and Cognition: How the Present Illuminates the Past and the Future. *Selected Proceedings of the* 15*th Hispanic Linguistics Symposium*, Vol. 2871, 1-16. http://www.lingref.com/cpp/hls/15/index.html

[15] Soriano, C. and Valenzuela, J. (2009) Emotion and Colour across Languages: Implicit Associations in Spanish Colour Terms. *Social Science Information*, **48**, 421-445. https://doi.org/10.1177/0539018409106199

[16] Xing, J.Z. (2009) Semantics and Pragmatics of Colour Terms in Chinese. In: *Studies of Chinese Linguistics: Functional Approaches*, Hong Kong University Press, Hong Kong, 87-102.

[17] Ackay, O., Dalgin M.H. and Bhatnagar, S. (2011) Perception of Color in Product Choice among College Students: A Cross-National Analysis of USA, India, China and Turkey. *International Journal of Business and Social Science*, **2**, 42-48.

[18] Blank, A. and Koch, P. (1999) Historical Semantics and Cognition. Vol. 13, Walter de Gruyter, Berlin. https://doi.org/10.1515/9783110804195

[19] Hasan, A.A., Al-Sammerai, N.S.M. and Kadir, F.A.B.A. (2011) How Colours Are Semantically Construed in the Arabic and English Culture: A Comparative Study. *English Language Teaching*, **4**, 206-213. https://doi.org/10.5539/elt.v4n3p206

[20] Allan, K. (2009) The Connotations of English Colour Terms: Colour-Based X-Phemisms. *Journal of Pragmatics*, **41**, 626-637. https://doi.org/10.1016/j.pragma.2008.06.004

[21] Ogarkova, A. (2007) Green-Eyed Monsters: A Corpus-Based Study of the Concepts of ENVY and JEALOUSY in Modern English. *Metaphorik. de*, **13**, 87-147.

[22] Al-Adaileh, B.A. (2012) The Connotations of Arabic Colour Terms. Linguistica online, 13.

[23] Priluck, G.R. and Wisenblit, J.Z. (1999) What We Know about Consumers' Colour Choices. *Journal of Marketing Practice*, **5**, 78-88. https://doi.org/10.1108/EUM0000000004565

[24] Ryding, K.C. (2005) A Reference Grammar of Modern Standard Arabic. Cambridge University Press, Cambridge. https://doi.org/10.1017/CBO9780511486975

[25] Muslim, I. (2000) Sahih Muslim (Abdul Hamid Siddiqi, Trans.). Kitab Bhavan, Delhi.

[26] Al-Mawardi, A.H. (1996) The Ordinances of Government: Al-Ahkām as-Sultāniyyah w'al-Wilāyāt al-Dīniyya (Wafaa H. Wahba, Trans.). Garnet Publishing, Reading.

[27] Al-Halabī, A.T.A.W. (1996) The Book of Opposites in the Arabic Language. Dār l-Kutub l-ālamiyya, Beirut.

[28] WordNet (2010) From Princeton University "About WordNet". http://wordnet.princeton.edu

[29] Shehadeh, R. (2015) Language of War, Language of Peace: Palestine, Israel and the Search for Justice. Profile Books, London.

[30] "The Green Zone": The Secrets behind Choosing the Area and the Reason for Naming It (2013, March 22), Al-Arabiya. https://www.alarabiya.net