A Cognitive Semantic Account of the Preposition "bra" in Modern Standard Arabic with Reference to the English "Through"

Salha Alqarni¹

Correspondence: Salha Alqarni, English Language Department, Faculty of Languages and Translation, University of Jeddah, Jeddah, Saudi Arabia, Tel: 000966-503-67-2325. E-mail: smal-qarni@uj.edu.sa

Received: May 16, 2024 Accepted: July 24, 2024 Online Published: September 2, 2024

Abstract

Prepositions are crucial grammatical devices for indicating location, movement, time, and other meanings. A case in point is the Arabic preposition "'abra," which expresses different spatial, temporal, and abstract meanings. Adopting a cognitive semantic perspective, this study investigates 'abra, its diverse spatial meanings, and metaphorical extensions. It also uses cognitive constructs such as image schemas, prototypes, and conceptual metaphor to demonstrate how various senses of 'abra can be described based on perceptual properties and cognitive characteristics. In addition, this study compares the meanings of 'abra with those of its English equivalent (through). This research uses authentic examples from Modern Standard Arabic available through the Sketch Engine website and illustrations created by the researcher. The analytical description involves the basic schema, the prototypical meaning, and the metaphorical extensions. The findings reveal that 'abra and "through" share a basic image schema and prototypical sense with slight differences resulting from varying conceptualizations. The metaphorical extensions are also similar. The distinctions between the two mostly pertain to the semantic scope in addition to the fact that 'abra also covers the meaning of the preposition "across." Generally, this analysis asserts that prepositional meanings are best described using a cognitive semantic framework. The results may be useful in the fields of lexicon, second learning and teaching, as well as translation.

Keywords: preposition, 'abra, through, image schema, conceptual metaphor, cognitive analysis

1. Introduction

1.1 Problem Statement

The Arabic preposition "'abra" presents an interesting case study of a preposition with multiple meanings: some are spatial, some temporal, and others abstract. Modern Standard Arabic (MSA) uses 'abra to convey the meaning of path in a motion event. This sense had been restricted to verbs in the past.

Alqarni (2023) established that 'abra is equivalent to the English preposition "through." At other times, it is found to mean "across." It has also been found to convey the meanings of "around" and "via." Since Alqarni's study was the only one that focused on this preposition and because it followed a usage-based approach to identifying 'abra's senses, the connection between these senses was outside its scope. Moreover, it was impossible to completely characterize the semantic equivalence between 'abra and "through" in English. Therefore, further research into the basic semantic structure of 'abra is required to investigate how its various senses are linked and to examine the degree of equivalence between 'abra and "through." This can only be possible through a cognitive semantic account of 'abra that considers the conceptual elements that inform its meaning and use.

Cognitive semantics is an effective approach for describing the meanings of prepositions as it links meaning representation in language to other cognitive abilities and human perceptual experiences. Cognitive linguistics research has long focused on the linguistic representation of spatial concepts to emphasize the connection between language, cognition, and perception (Jackendoff, 1985; Langacker, 1987, 1991; Johnson, 1987; Taylor, 1988; Talmy, 1978–2000). The fundamental principle of cognitive semantics is that language and cognition interact at different levels and in various ways. Languages vary in how they linguistically map spatial concepts (Coventry & Garrod, 2004). Talmy (2000) highlighted that prepositions are a crucial component of a language's grammatical system, responsible for structuring spatial concepts. However, prepositional meanings are schematic, abstract, and difficult to describe (Langacker, 2008); therefore, research into the meaning of prepositions will strengthen one's understanding of cross-linguistic variation, language universals, and the role of conceptual structure in determining spatial meanings. Thus, a cognitive semantic analysis of prepositional meanings can deepen our understanding of spatial language and facilitate the investigation of the relation among the senses of a preposition.

This study aims to examine the senses of the Arabic preposition 'abra and demonstrate the connections among these meanings. In addition, this study aims to compare and contrast 'abra with "through," which is the closest preposition to it in terms of meaning. This study adopts a cognitive semantic framework to explain 'abra's meanings using image schemas, which are universal conceptual elements. The cognitive linguistic approach suggests that semantic structure is embodied, that is, derived from sensory and spatial experiences

¹ English Language Departtment, Faculty of Languages and Translation, University of Jeddah, Jeddah, Saudi Arabia

(Langacker, 1987; Talmy, 2000; Lakoff, 1987). The meanings of prepositions are cognitively structured configurations of sensory spatial orientations derived from image schemas, which are "schematized patterns of activity abstracted from everyday bodily experience, especially pertaining to vision, space, motion, and force" (Langacker, 2008, p. 32). Image schemas determine a preposition's basic sense and the semantic network of senses connected to it (Lee, 2001). Sensory experiences provide the foundation for image-schematic meaning, which can reach a level of abstraction that adds to the structuring of further concepts (Gibbs, 2005).

1.2 Literature Review

Prepositions are fundamental grammatical devices for conveying relational concepts in the spatial and temporal domains; as such, they inherently hold multiple meanings in different contexts. This has prompted attempts from linguists to characterize these senses and discover their links using different frameworks. Accounts of Arabic prepositions were mostly part of reference grammar books within the formal structural linguistics framework. For instance, while Hasan (1996) explained the meaning and usage of Arabic prepositions and their different senses, Wright (2011) illustrated the finer details with the addition of informative nuances of meaning conveyed by various prepositions. However, recent studies such as Ryding (2005) and Husni and Zaher (2020) have focused on learners of Arabic. Therefore, their accounts are learner-directed and brief but remain within formal classifications. They explained the uses and functions of Arabic prepositions in MSA, providing real-world examples from Arab media. These accounts were limited to the traditional view of Arabic prepositions as grammatical particles with arbitrary meanings in different contexts, leaving their different but related meanings unexplained and unjustified.

In Arabic, as in all other languages, prepositions hold different meanings. Arabic prepositions are described as having abstract and figurative senses (Ryding, 2005) or as being polysemous (Nasser, 2013). Yet only a few systematic studies have investigated the relation between the spatial and temporal senses of MSA prepositions as well as the importance of perception in understanding their polysemy. Such scarcity of studies on the topic, according to Peate (2012), can be attributed to the circularity and limitations of the methods for investigating Arabic prepositions. Therefore, he attempted to analyze MSA spatial prepositions using a construction grammar approach to reveal their structured and schematic nature. His study highlighted the systematic way of conveying abstract concepts through spatial concepts and how constructions function as a determining factor in the meaning of Arabic prepositions, especially verb + preposition combinations. His findings confirmed that prepositional meanings are language-specific, and that meaning extension is driven by metaphors based on spatial language. This is consistent with cognitive semanticists' theory that the polysemous nature of prepositions arises from the metaphorical extensions of their spatial senses (Boers & Demecheleer, 1998). However, the study was limited to a subset of prepositions and left out newer additions such as the preposition 'abra.

Many other studies investigated the meanings of spatial prepositions in different contexts within the cognitive semantics framework. Some focused on one preposition, while others selected a limited set (Ech-Charfi, 2008; Mohammed et al., 2012; Nasser, 2013; Hammadi, 2016; Saeed, 2018; Khan et al., 2019). These studies sought to offer a cognitive explanation for the polysemy of Arabic spatial prepositions with varying specificity and agreed that a preposition's primary direct sense is inherently spatial, and that the other extended senses derived from it constitute most of its uses. However, to the best of my knowledge, no studies have attempted to explain the senses of 'abra except Alqarni (2023), which aimed to explain the formal and functional motivations behind the grammaticalization of 'abra in MSA, by examining its usage patterns. The study used a corpus-based approach and collocational analysis to identify 'abra's semantic senses and showed that frequency can influence the formal and semantic development of words, leading to instances of category shift due to the grammaticalization process. It also demonstrated that the use of 'abra gradually shifted toward abstract senses. The study provided formal evidence that justified the categorization of 'abra as a preposition in MSA and identified its associated senses based on the corpus. Nevertheless, much remains to be learned about this preposition, including its core spatial schema, its spatial configurations, and the relations between its various spatial and temporal senses.

Considering that "through" is the closest equivalent of 'abra, this study aims to address the aforementioned issues and explain their equivalence. The following overviews the most important studies on "through."

The preposition "through" has been extensively examined within the cognitive tradition. Using concepts from cognitive linguistics such as image schema, prototype, and radial network, Martins (2000) investigated the meanings of "through" within Langacker's (1987) space grammar framework. The study analyzed such meanings based on cognitive properties such as trajector (TR) and landmark (LM) and concluded that abstract extensions are due to perceptual similarity. It found that the meanings of "through" followed a consistent radial network structure involving a basic schema, a prototypical schema, and other less typical schemas explained through conceptual metaphor. In a similar study, Yue, Cao, and Huang (2022) explored the meanings of "through" in relation to prototype theory and conceptual metaphor theory. The study focused on establishing the prototypical sense and the stative and dynamic senses of "through" and the role of metaphor in extending its meaning. The researchers concluded that knowledge of the prototypical sense is the determinant in interpreting the meaning of English prepositions.

Following the assumptions of distributed semantics propagated by Sinha and Kuteva (1995), Evans (2003) presented a different view of the senses of "through" in that the meanings of prepositions in general and "through" in particular are derived not only from the preposition itself being a polysemous word but also from the sentential context in which it is used. Simply put, concepts such as the TR, LM, and path contribute to a preposition's overall meaning. The exact meaning of a preposition is "constrained and delimited by the sentential context, including the TR.NP, LM.NP, and verb which occur in the utterance" (Evans, 2003, p. 2). Accordingly, Evans used the

principled polysemy model (Tyler & Evans, 2003) to study the prepositions "to" and "through" and argued that this model provides a better way to determine the distinct senses of a preposition. The study concluded that "through" conveys a path consisting of consecutive points from one side of a confined LM to the other and further emphasized that in this preposition, the sense of motion is influenced by its interaction with sentential elements such as motion verbs.

Therefore, prepositional meanings can be analyzed and understood by using cognitive constructs such as conceptual metaphor, image schema, and prototype. Furthermore, the sentential context in which a preposition such as "through" is used—which includes the verb, the LM, and the TR—determines its meaning. Hence, this study utilizes a theoretical framework that includes image schema, prototype, and conceptual metaphor to achieve its objectives.

1.3 Analytical Framework

The following is an overview of the cognitive constructs employed in the analysis.

1.3.1 Image Schemas

Image schemas are schematic representations of physical experiences that map spatial constructs into mental constructs (Oakley, 2010; Johnson, 1987), which shape our thinking and influence our linguistic expression. Image schemas are patterns that arise from repeated bodily experience and form the foundation for more complex lexical concepts (Evans, 2007). Cognitive linguists believe that image schemas underlie different aspects of language and thought and allow human beings to make sense of their experiences of the world (Lakoff, 1987). Basic image schemata, including spatial orientation relations such as top-bottom, front-back, and part-whole, are responsible for structuring the representation of space in language (Lakoff, 1990). Spatial schemata are represented by open-class (nouns, adjectives, verbs) and closed-class forms (prepositions and adverbs), with prepositions typically conveying spatial schemas associated with paths or sites (Talmy, 2005, 2000). Schemas such as PATH and DESTINATION/GOAL are linked to our understanding and expression of spatial, temporal, and aspectual relations (Lakoff, 1987). For instance, GOAL is generally used to conceptualize ENDS/PURPOSES. Hence, purposes are conceptually thought of as locations.and achieving a purpose is like following a road that leads to that location. The SOURCE-PATH-GOAL schema is a cognitive and psychological theory suggesting that motion follows a path with a beginning and an end in space and time (Talmy, 2000). Prepositions express different spatial schemata, and the same preposition occasionally communicates different meanings associated with various image schemas. Image schemas provide a psychologically real foundation for language description.

The conceptualization and linguistic construal of spatial scenes is largely controlled by the system of attention that affects a language's grammatical system (Langacker, 1987; Talmy, 2000). This system involves perspective, which refers to the relative importance placed on different participants in a scene. The terms TR and LM refer to the most important participants in a scene, and attention to them controls and directs the linguistic representations of physical and abstract experiences (Langacker, 1987; Evans, 2007). Talmy (2000) called these participants figure and ground. TR is the most significant participant whereas LM stands for the secondary (grounded) participant (Evans, 2007). The TR/LM arrangement allows language users to emphasize some elements of the observed scene while ignoring or backgrounding others (Langacker 1987; Talmy, 2000). TR/LM structuring is essential for description as it underlies all linguistic expressions of space.

1.3.2 Prototypes

Research on prototype effects on linguistic categories (Lakoff, 1990; Evans, 2007; Taylor, 2019) highlighted the link between conceptual and linguistic categories. Taylor (2019) observed that the prototype of a word is the central sense, to which all other senses are linked in a radial structure. The senses of a preposition are related and radially structured around this prototypical sense, which is usually the most pervasive and easily activated sense (Langacker, 2008) and enjoys the highest level of cognitive prominence (Martin, 2000). Langacker (2008) argued that grammatical units can be cognitively examined using a schema and prototype framework. The prototype is applicable to central senses, and a schema underlies all senses.

1.3.3 Conceptual Metaphor

Conceptual metaphor is an inherent cognitive mechanism that Lakoff (2006) defined as "cross-domain mapping" (p. 186). Conceptual metaphor theory, developed by Lakoff and Johnson in the 1980s, is based on recognizing these cross-domain correspondences and establishing a larger pattern that can be generalized across various expressions. This theory states that conceptual metaphor pertains to the connection between language, cognition, and embodied experience. Generally, conceptual structure is organized around correspondence between different conceptual domains. For example, the conceptual domain of quantity is understood in terms of the vertical elevation domain (Evans, 2007). Kovecses (2010) asserted that conceptual metaphor can be a long-term historical–cultural process in which a word's meaning evolves from a source to a target domain. For example, the meanings of "before" and "after" were extended by metaphor from the spatial to the temporal domain. Metaphors allow speakers to understand one domain by drawing on the structure of another. Understanding takes place because of mental concordances between two domains, such as time, whose passage is conceptualized as the movement along locations in space. As a result, future times are in front of the perceiver whereas past ones are behind them (Kovecses, 2010, p. 37). Lakoff and Johnson (2003) argued that the cognitive system is metaphorical, and that spatial metaphor is part of this system. Space is a physical domain that serves as a basis for understanding abstract nonspatial domains. Boroditsky (2000) explained that space and time share a conceptual structure, allowing for a description of abstract concepts such as time, state, and amount using spatial

concepts. Spatial prepositions typically indicate location, source, goal, or path of motion. Spatial metaphor is used to project these meanings metaphorically onto temporal and other abstract domains, extending such meanings.

The abovementioned three cognitive mechanisms are essential when describing the semantics of prepositions. Prototypes constitute the basic senses of words whereas image schemas serve as the basis for space representation. Conceptual metaphors facilitate the understanding of abstract concepts through connections between various domains.

2. Method

Algarni (2023) already established the general guidelines for identifying the senses of 'abra. This study is an analytical effort that uses an image-schematic account to reveal the underlying mechanisms of these senses and identify the most pertinent semantic factors that are relevant to elucidating these meanings using a qualitative approach. The corpus used in this research is representative of MSA, containing data from various genres across the Arab world including media, fiction, academic, law, discussions, and blogs accessed through the Sketch Engine website.

This study's analysis of 'abra (through) follows the cognitive grammar framework (Langacker, 1987, 2008) and uses cognitive constructs such as image schema, TR, and LM in addition to conceptual metaphor to characterize its meanings. The analysis starts with an exploration of the spatial meanings of 'abra and then its nonspatial senses created by conceptual metaphor. The first step here is to determine the cognitive characteristics of each meaning, requiring examples from the corpus that illustrate the properties of each category in relation to medium, destination, passage, and others. Another step involves examining differences within the same category because of the attributes of the LM, especially dimensionality. These senses are then compared to the ones conveyed by "through" to establish divergence or convergence points between the two prepositions. Diagrams illustrate the effect of spatial configuration on the various senses of 'abra and the nominal expression after the preposition on its semantic specifications. The second step involves tracking how the basic image-schematic characterization of each sense extends to abstract domains. The last step involves deducing the basic image schema of 'abra, its prototypical sense, and its similarities and differences with "through."

3. Cognitive Analysis and Discussion

This analysis of 'abra begins with its spatial meaning, exploring its basic image schema as manifested in its usages. Alqarni (2023) revealed that its spatial sense is the original sense from which other senses have developed. Consequently, this sense is the most salient as it is perceptually grounded in physical experience.

The central image schema of 'abra involves a TR traversing a bounded LM with entrance and exit points (Algarni 2023), the resulting path being its basic sense. Hence, the image schema of 'abra (through) can be described in terms of a TR, an LM, and a path, which is comparable to that of the English preposition "through," in which "path" is the main functional component (cf. Martin, 2000; Tyler & Evans, 2004). The TR is the entity being described in terms of its spatial movement and direction, while the LM is the reference point for the TR's movement; the course of this movement is the path.

The following image-schematic explanation of 'abra's senses may include variations associated with the LM's dimensionality and the TR's position. Five broad meanings are provided for this preposition.

3.1 The Trajector Expresses a Passage (into the Landmark and Out of It)

This sense represents the basic schema of 'abra (through). The TR's dimensions, shape, and size are insignificant to the meaning whereas the LM's dimensionality is substantially important to the conceptualization of the spatial meaning. The LM's dimensions create different spatial configurations resulting in some modifications to the path element encoded by the preposition as follows.

- 3.1.1 The LM Is Conceptualized as a Zero-dimensional Dot
- 1. ghādara ?ila tūnis 'abra al-hudūd al-barriyya left (he) for Tunisia through the border the-land He left for Tunisia through the borders.
- 2. khirrīijūn marrū min ?amām-ih 'abra al-bawāba al-khaḍrā? graduates passed from front of him through the-gate the-green Graduates passed in front of him through the green gate.
- 3. tamma muṣādarat al-?asliḥah allati tamurru 'abra niqāṭ al-murāqaba complete confiscation the-weapons that pass through points-of the-control Weapons passing through control points were confiscated.
- 4. tanţaliq qiţārātu-ha min maḥattat alriyad wa tamurr 'abra 'iddat mudun depart trains-its from station-of Riyadh and pass through several cities Its trains depart from Riyadh Station and pass through several cities

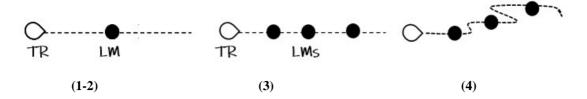


Figure 1. Path Shapes with Zero-dimensional LMs

The preceding sentences correspond to an LM conceptualized as a zero-dimensional dot. The passage or path itself may take any shape. The schematic configurations in Figure 1 represent sentences (1) and (2), where one LM is seen. The path expressed in (3) contains several LMs. The passage may also be traced by a zigzag line as in sentence (4), where multiple LMs are scattered randomly in the spatial scene.

3.1.2 The LM Is Conceptualized as a One-dimensional Line

Sentences (5) and (6) have a distinct LM configuration in that the LM represents a one-dimensional line. Figure 2 illustrates this spatial arrangement.

- 5. tamurr al-sufun <u>'abra al-khatt al-milāhi</u> min janūb sharq ?āsiya ?ilā ?urubbā pass the-ships through the-line the shipping from southeast-of Asia to Europe The ships pass through the shipping line from Southeast Asia to Europe.
- 6. sa-yatimu naql al-jarrārāt <u>*abra khatt sikkat hadīd aliskandariva alqāhira</u> will be transport the tractors through line-of railway-of Alexandria Cairo The tractors will be transported <u>through the Alexandria-Cairo railway line</u>.



Figure 2. Path Shapes with One-dimensional LMs

The LM is conceived as an extended line, and the two sentences differ in that (5) specifies a destination or goal of motion while (6) does not.

3.1.3 The LM Is Conceptualized as a Two-dimensional Plane

Examples (7) and (8) show that the moving entities travel through a two-dimensional plane. The TR is conceived as an entity moving through this plane from one side to the other and beyond. A sense of crossing a boundary is observed, illustrated in Figure 3.

- 7. al-ghalibiya al-uzmā min hā?ulā? dakhalat <u>'abra al-?arāḍi al-turkiya</u> the-majority the-vast of these entered through the-territories the-Turkish
- The vast majority of these entered through Turkish territory.

 al-?ālāf yahrubūn <u>'abra al-baḥr al-mutawassit</u> 'ala qawārib the-thousands fleeing across the Mediterranean on boats

Thousands are fleeing on boats across the Mediterranean.

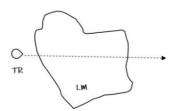


Figure 3. Two-dimensional Plane LMs

An alternative form of the LM, also conceptualized as a two-dimensional plane, has a rectangular shape. Examples (9)–(11) contain different LMs in relation to size, but the common feature of these LMs is that they all have the same shape, illustrated in Figure 4.

9. farra al-bāqūn 'abra nahr al-furāt

fled the-rest through river-of the Euphrates

The rest fled across the Euphrates.

10. bada?at (al-sayārah) bi-liqtiraab 'abra al-shāri' bitarawwi

began (the car) to-approach through the street slowly

It (the car) began to slowly approach through the street.

11. tamuru al-nāqilāt al-muḥammala bi-naft al-sharq al-awasat 'abra qanāt al-suways

pass the-tankers the-loaded with-oil the-east the-middle through canal-of the Suez

Tankers carrying Middle Eastern oil pass through the Suez Canal.



Figure 4. Rectangular-shaped LMs

3.1.4 The LM Is Conceptualized as a Three-dimensional Enclosure

Sentences (12) and (13) are instances of 'abra used with three-dimensional LMs that indicate an extended area with a volume. The TR moves from one side to the other inside this three-dimensional enclosure.

12.?akhadhat tarkuḍ maʻa-hu **ʻabra al-mamarr al-ṭawīl**

started-she running with him along the-corridor the long

She started running with him down the long corridor.

13. sir-tu 'abra al-ghābati thāt al-?shjār al-hā?isha

walked-I through the-forest with the-trees the-fragile

I walked through the brushwood forest.



Figure 5. Three-dimensional LMs

When the LM takes a three-dimensional volume, the conceptualization of this spatial scene moves from the second-person to the first-person perspective, suggesting that the conceptualizer is looking directly at the three-dimensional passage as shown in Figure 5.

The above discussion revealed that 'abra is used to express a passage through an LM that can be a zero-dimensional dot, a one-dimensional line, a two-dimensional plane, or a three-dimensional volume. So far, 'abra's basic image schema seems unaffected by LM's shape or dimension. The significance of classifying the LM's shape in connection to 'abra (through) facilitates our understanding of this spatial preposition and the spatial configuration it is used with, which can serve as a basis for cross-linguistic evaluations as well as comparisons involving 'abra and other Arabic prepositions.

The same basic image schema conveyed by 'abra has also been reported for "through" (Martin, 2000), indicating that both share a basic image schema.

3.2 The Trajector Expresses a Passage (within the Landmark)

The examples thus far illustrate LM configurations in which the TR moves up to and beyond their boundaries with or without expressing the end point. Simply put, the LM serves as the reference point for the TR's movement, but it is not the goal of movement or its destination. Conversely, in some cases, the LM serves as the goal of motion. The movement is understood to occur within the LM's boundaries, stopping at the final boundary. Sentences (14) and (15) and Figure 6 clarify this point.

14. yastaţī' tiflu-ak al-mashii <u>'abra al-ghurfah</u> bidūn al-suqūtt

can child-your the-walking across the room without the-falling

Your child can walk across the room without falling over.

15. al-nasīj al-'aṣabi yursil ?isharāt kahrabā?iyya <u>'abra al-jism</u>

the-tissue the-nervous send signals electrical through the-body

The nervous tissue sends electrical signals through the body.

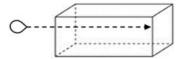


Figure 6. Path within the LM

Notably, 'abra only expresses movement within LMs conceptualized as three-dimensional entities. When the LM is a point or a two-dimensional entity, 'abra is not used to convey movement inside it. However, this is a common usage of "through" in English, which can be used with two-dimensional LMs as in example (16).

- 16. A. Mold can actually eat through the wood.
- B. I hammered the nail through the board.



Figure 7 demonstrates that "through" is used to indicate movement within two-dimensional landmarks such as walls and boards.

Figure 7. Movement into the LM

Description: From "A cognitive approach to the polysemy of "Through" by A. M. Martin, (2000), Estudios ingleses de la Universidad Complutense, 8, (11-38), p. 22

(https://dialnet.unirioja.es/servlet/articulo?codigo=174467). CC BY-NC.

3.3 The Trajector Expresses an Orbital Passage (around Multiple Landmarks)

One popular usage of 'abra is to describe a round path; in this sense, it is comparable to the English preposition "around," which refers to both half- and full-circle paths as demonstrated by the image schemas in Figure 8 below adopted from Lindstromberg (2010).

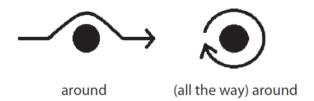


Figure 8. An Image-schematic Characterization of "Around"

Description: From "English prepositions explained." (p. 134) by S Lindstromberg, (2010),

John Benjamins B.V. (https://benjamins.com/catalog/z.157). Copyright 2010 by John Benjamins B.V.

Example (17) illustrates some of the main senses expressed by "around" (see Dewell [2007] for more details).

- 17. A. He asked me to meet him around the corner at Victoria Market.
 - B. It is almost no effort for me to row around the lake.
 - C. I envy the people who travel around Europe.

These sentences represent three different schemas for "around." Sentence 17A shows a larger path with a general direction, and "around" denotes only part of that path representing a semicircular detour (Dewell, 2007). The LM is seen as an obstacle in the general directed motion between the source and goal. In sentence 17B, the TR follows a curved path, maintaining a relatively fixed distance from a central single LM. In sentence 17C, the round passage serves as a line that connects a set of locations forming a large LM. This last schema was described by Schulze (1993) as a single LM linked to a multiplex of internal locations where the TR moves from one location to the next in a sequence inside the LM's internal organization. The third meaning is illustrated in Figure 9. These three schemas are the basic ones for "around" in English.



Figure 9. LM with Multiplex Locations

Sentences (18)–(20) show that when 'abra is used to mean "around," its sense matches that of the third schema in Figure 9 and not the other two senses.

18. ya?xkhudhu-na al-kitāb fi riḤlah 'abra ?arjā? al-'ālam

(it)-takes-us the book in a journey around parts-of the-world

The book takes us on a journey around the world

19. tatasi' dā?irat al-iḥtijājāt 'abra al-'awāşim al-'ālamiya

expanding circle of the-protests around the-capitals the-international

The circle of protests is expanding across global capitals.

20. yusāfirūn 'abra al-qārrāt bi-?adnā wasā?il al-safar

travel-they across the-continents with minimal means of the-travel

They travel across continents with minimal means of travel.

These examples illustrate that 'abra's meaning corresponds to the schema where a single LM is considered a multiplex of internal locations, and the TR sequentially travels between them inside the larger LM. The other two schemas are expressed in Arabic using the locational prepositions 9inda or Hawla as demonstrated by the translations in example (21).

21. A. He asked me to meet him around the corner at Victoria Market.

ṭalaba min-ni ?an ?u-qābila-hu 'inda al-zāwiya fi sūq fiktūrya

asked(he) from-me to I-meet-him at the corner in market of Victoria

B. It is almost no effort for me to row around the lake.

tagrīban lā juhd (?abdhulu-hu) li-l-tajdīf hawla al-buhayrah

almost no effort (I-exert) to-rowing around the lake

The English preposition "through" does not convey this sense in similar contexts, which constitutes another point of divergence between it and 'abra. However, the similarity between 'abra and ḥawla in this case must be further explored to determine their interchangeability. This inquiry is outside the purview of this study.

3.4 The Trajector Expresses an Abstract Passage (within the Landmark)

This section features sentences that express nonphysical movement and attribute a sense of movement to a stationary object. Although the spatial scene is motionless, the conceptualizer interprets it as indicating motion, frequently referred to as fictive (Talmy, 2000) or subjective motion (Langacker, 1987, 2008). The strong directionality implied by the verb and 'abra (through) produces a sense of mobility (Langacker, 1987; Matsumoto, 1996; Alqarni, 2023), resulting in an abstract motion sentence as seen in examples (22)–(24).

22. huwa wādi yamtaddu 'abra al-hudūd bayn alyaman wa sa'ūdiya

It a valley extend across the borders between Yemen and Saudi

It is a valley that extends **across the-border** between Yemen and Saudi Arabia.

23. tshad balad shāsi' al-misāḥa, yamtaddu 'abra al-saḥrā? al-kubrā

Chad country vast the-area extending across the-desert the-biggest

Chad is a vast country, extending across the-Sahara Desert.

24. al-janāḥ al-thāni 'abra mamar dā?iryy

the- suite the second across corridor circular

The second suite is across a circular corridor.

These sentences depict a spatial scene where one object is within or spans another object from side to side. Sentences (22) and (23) show

that the valley or the country (TR), respectively, are stationary objects but specify their location in relation to the borders or the Sahara Desert (LM), respectively. In sentence (24), the hotel suite's location is described with respect to a circular hallway. These are instances of abstract motion within the LM where 'abra describes an abstract path to the location specified. A similar case can be observed in English where "across" is occasionally used to describe the path of motion in an abstract motion construction, demonstrated in sentences (25) and (26).

- 25. Notice the bright band that stretches across the sky.
- 26. There was a sudden bright explosion and a corkscrew trail across the sky.

These examples show that the stars (TR) and the explosion's trail (LM) are located on the sky's surface, forming an imaginary belt or strip from one end to the other. The continuity of the explosion's lights or stars creates a sense of motion. Using "across" produces an imagined path inside the LM along which the TR moves. However, "across" in this case expresses location or extent rather than traversal (Huang, 2022); therefore, 'abra is equivalent to "across" when used to express an abstract path within the LM. Moreover, 'abra is similar to "across" in that the LM is always conceptualized as a two-dimensional surface. In this case, the spatial image schema employed is that of a two-dimensional surface where the TR and LM interact in different ways (Figure 10).

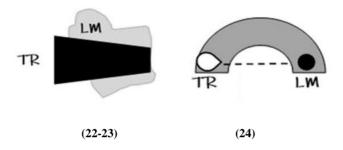


Figure 10. 'abra with the Meaning of "Across"

These examples show that 'abra differs from "through" because its use with the sense of "across" is not documented for "through." However, "through" is used to express the abstract motion of a TR or its location within an LM that is either physical or abstract. In both sentences, the TR's motion is abstract.

- 27. This trail cut off through the woods.
- 28. Every entrepreneur goes through hardships.

In sentence (27), the trail (TR) continues for some time and then stops inside the wood's boundaries. Therefore, "through" describes an abstract path in the woods (LM) toward the location where the trail stops. Simply put, "through" conveys what Martin (2000) calls the end point of the TR. Sentence (28) conceptualizes hardships as LMs that the entrepreneur (TR) traverses along an abstract path amid a challenging condition.

Therefore, 'abra is confirmed as a preposition that conveys a complex spatial relation between a TR and an LM where the TR changes its location through time. These consecutive location changes form a path in the conceptualizer's mind whether the motion is physical or abstract and regardless of the LM's shape. The path expressed by 'abra is sometimes equivalent to the one described by "across" and at other times is closer to the one conveyed by "through" regardless of the type of motion involved. This means that 'abra's semantic scope intersects with both spatial senses. Nevertheless, its most widely used sense is that of "through." The key distinction between the meanings of "across" and "through" is dimensionality; while the latter can be used with one-dimensional, two-dimensional, and three-dimensional LMs, the former is only used with two-dimensional LMs. Stromberg (2010) stated that the meaning of "across" describes a long, straight path on a flat surface, and its LM must be an "elongated cross-wise form" between two entities (p. 99). Examples (29) and (30) demonstrate this difference.

- 29. She sailed across the ocean.
- 30. Sharks need to move through the oceans.

In English, "across" is used when the movement takes place in a two-dimensional surface with the path typically stretching from one side to the other (Huang, 2022; Lindstromberg, 2010). Meanwhile, "through" is used when the movement occurs in a three-dimensional volume, i.e., when the reference point is a bounded LM that has an interior structure with entry and exit points (Tyler & Evans, 2004). Stromberg (2010) illustrates the difference between the two prepositions in Figure 11.

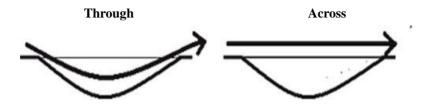


Figure 11. An Image-schematic Characterization of "Through" vs. "Across"

Description: From "English prepositions explained." (p. 127) by S Lindstromberg, (2010),

John Benjamins B.V. (https://benjamins.com/catalog/z.157). Copyright 2010 by John Benjamins B.V.

The difference between 'abra's two spatial senses is also based on dimensionality. Consequently, 'abra conveys the meaning of "through" when motion takes place in a three-dimensional volume but expresses the meaning of "across" when motion occurs on a two-dimensional surface or when it has a locative meaning. Figure 12 visualizes thhis difference.

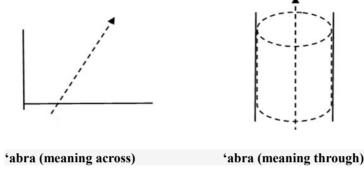


Figure 12. 'abra's Senses (Through vs. Across)

Figure 12 suggests that 'abra expresses the meanings of "through" when used with three-dimensional entities or two-dimensional entities conceptualized as bounded enclosures and "across" when used with two-dimensional entities forming an unbounded extent.

3.5 The Trajector Expresses a Medium (Intermediate Landmark to the Goal)

Examples (31) and (32) contain LMs conceptualized as zero-dimensional. The LM is a medium through which the TR moves but does not mark the end of the TR's movement. The movement is construed as contact between the TR and the LM.

- 31. wāṣala sayra-huma ?ilā aljazā?ir 'abra alqāhira continued (they) journey-their to Algeria via Cairo
 - They continued their journey to Algeria via Cairo
- 32. 39 milyoon musāfir yatim naqlu-hum 'abra al-maṭār sanawyyan
 - 39 million passenger complete transporting-them through the airport annually
 - 39 million passengers are transported $\underline{\text{through the airport}}$ annually.

The next set of examples demonstrates a variant of the previous schema where the LM is either a two-dimensional medium as in sentences (33) and (34) or a three-dimensional medium as in sentence (35). The movement is construed as intersecting with the LM. Figure 13 schematizes the meanings of 'abra.

- 33. kan al-mu'allim yutillu 'alay-him <u>'abra al-nāfidha</u> was the teacher looking at them through the window
 - The teacher was looking at them through the window.
- 34. yumkinu-na al-ru?yatu <u>'abra al-zujāj</u> can-we the-seeing through the glass

We can see through the glass.

35. sawfa tuwazza' manshūrāt <u>'abra al-jaw</u> will be-distributed leaflets via the air Leaflets will be distributed **through the air**.

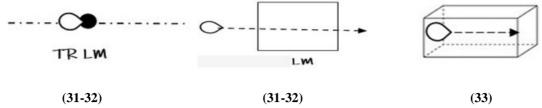


Figure 13. Passage Through an LM (Conceived as a Medium)

In English, "through" along with its object noun conveys the meaning of a medium. That is, the TR travels to a further goal of motion "via" the LM (Martin, 2000). The sentences in example (36) are analogous to the Arabic ones above and prove that with regard to this sense, 'abra and "through" are identical.

- 36. A. He was driving from the Mojave Desert through California to Washington.
 - B. Sunlight was coming through the window.
 - C. He sent the bottle through the air to Rodgers.

The previous analysis confirms that 'abra takes a basic image schema of path—goal, representing the path element; therefore, it is considered a preposition of path. The path can take any shape but is most often straight. The LM is a dot or a bounded two- or three-dimensional enclosure. An entrance point, and in most cases, an exit point as well, can be seen for this path. This applies to both objective and subjective motion. In all these cases, 'abra conveys the meaning of "through." Moreover, the meaning of 'abra is found to overlap with that of "around," in which case the path is orbital. Such cases are limited in the data and may express an idiomatic use. Most importantly, the meaning of 'abra is found to overlap with that of "across," which means that 'abra encompasses both senses. The characteristic difference between the two senses is the LM's dimensionality. For two-dimensional unbounded spatial configurations, 'abra conveys the meaning of "across." For other bounded spatial configurations of any dimension, it expresses the sense of "through." In addition, 'abra is found to communicate the sense of a medium or a conduit to a goal or destination.

The discussion also reveals that 'abra and 'through' are generally equivalent in meaning despite the latter having a wider range of senses that are not part of this discussion as they are not found to be articulated by 'abra. Generally, both prepositions share an image-schematic structure, indicating that they convey similar spatial concepts.

3.6 Metaphorical Extensions of 'abra

Humans perceive their physical surroundings through their senses. Their ability to comprehend spatial surroundings and the relations between them allows them to reflect on nonphysical or nonimmediate elements. They also extend such physical experience to other domains to interpret many abstract concepts and phenomena (Lakoff & Johnson, 1980). The relation between physical and abstract domains is established through metaphor, which functions as a structuring mechanism where an abstract domain is understood by comparison to a concrete one (Boroditsky, 2000).

The basic spatial meaning of 'abra has many metaphorical extensions covering a range of semantic domains that will be analyzed in this section.

3.6.1 From the Domain of Space to the Domain of Time

Space and time are different domains in human experience but are conceptualized the same way. Space is part of human bodily and perceptual experiences, while time is an abstract domain. The transfer of image schemas from physical to abstract domains is a construal operation (Talmy, 1988; Langacker, 2008) or a conceptualization process (Lakoff, 1987) through which we can interpret the world around us. Langacker (2008) asserted that metaphorical projections involve the mapping of the core structural elements (i.e., image schemas) of one domain onto another. Time is often conceptualized in terms of locations and entities. Time is also perceived as moving, and specific periods are conceptualized as bounded areas (Lakoff, 1980, 1993). Accordingly, time periods are interpreted as zero-dimensional, two-dimensional, or three-dimensional LMs. Examples (37)–(39) illustrate these types, respectively.

37. mashrūʻ al-qānūn yamurru <u>'abra marāḥil kathīra</u>

project-of the-law passes through stages many

The bill goes **through many stages**.

38. al-mushkilāt almuzmina tarākamat dākhil al-mujtama' al-yamani 'abra al-sinīn

the-problems the-chronic accumulated inside the-society the Yemeni through the years

Chronic problems have accumulated within the Yemeni society over the years.

39. al-mar?atu al-'arabiya marat 'abra al-tarīkh bi-zurūf qāsiya

the-woman the Arab went through the-history by-conditions harsh

The Arab woman has gone through harsh conditions throughout history.

These examples use 9abra to convey metaphorical motion through time, which is based on the same image schemas in the spatial domain. This means that the path's spatial physical schema is extended to the domain of time, where time is conceptualized as an LM. In sentences (37) and (38), the LM is metaphorically conceived as a region with multiple zero-point entities, and the metaphorical motion takes place from one LM to the next in a sequence. Sentence (39) conceptualizes the LM as a line along which the movement proceeds continuously with no intervals or stops. Time is seen as a river moving in one direction from the beginning to the present moment. The preposition 'abra (through) expresses the path of a hypothetical movement of time from a starting point to an end point, which is the moment of speaking. Thus, the same illustrations in Figures 2 and 4 apply to the conceptualization of time in the above sentences. These illustrations are repeated in Figure 14 for convenience.

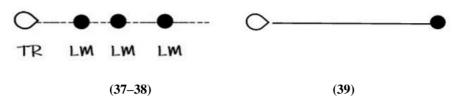


Figure 14. Metaphorical Conceptualizations of Movement of Time

Examples (37)–(39) indicate movement through time. When 'abra conveys a metaphorical path, it does not indicate duration. Meanwhile, "through" signifies duration through a time period as illustrated in example (40) (Yue et al., 2022), which expresses temporal continuity from the start to the end of the night or month. It can be substituted with "during" and convey the same meaning. The idea of the temporal continuity of a state along a time period was mapped from the spatial sense of traversal from one side to the other. Hence, it possesses the same spatial meaning of "through your vein" (Hue, 2022).

- 40. A. My son started sleeping through the night.
 - B. The World Cup will continue through July.



Figure 15. Duration through Time

Figure 15 illustrates the metaphorical sense of "through" with time expression in English. Meanwhile, 'abra, when used with time expressions, does not express a continuation of state like "through" or even a correspondence of two events like "during." Rather, it denotes a path in a multiplex LM containing many interrelated LMs conceptualized as dots or along a line with no specific intervals or LMs on it. Therefore, 'abra's image-schematic base that is projected to time traverses multiple points along an extended line. The difference lies in the LM configuration as revealed by a comparison of illustrations between Figures 14 and 15. To convey a continuity of state, the preposition Tawaala (throughout) is used to express a sense of prolongation. The sentences in example (41) confirm this point.

41. A. istamarra al-qaşf tawāla al-layl

continued the bombardment throughout the night

The bombardment continued throughout the night.

B. tadaffaqa al-jarḥā ?ilā al-mustashfā khilāla al-layl

streamed the wounded to the hospital throughout the night

The wounded streamed into the hospital throughout the night.

Example (41) shows that the prepositions Tṛawāla (throughout) and KHilāl (during) are the most effective ways to communicate temporal continuity. The former refers to the maintenance of a temporal state, making it identical to the temporal meaning of "through," while the latter pertains to a perpetuation with internal pauses and can be used with temporal and nontemporal nouns. 'abra can be used with extended time expressions such as al-tarīKH (history) or al-zaman (time) as they refer to prolonged periods consisting of separate intervals conceptualized as LMs or dots on a timeline. Meanwhile, time expressions such as shahr (month) or laylah (night) are usually short and as such are not considered to be prolonged periods.

Another point of divergence between 'abra and "through" is the latter's denotation of a time range between separate days or even numbers with the meaning of "until and including" as confirmed by Yue et al. (2022). Examples (42) and (43) illustrate this point.

- 42. A. Eggs hatch during late May through July.
 - B. Just follow steps 1 through 10 and you're done.
- 43. A. yufqis al-bayd khilāla ?awākhir māyu hattā yūlyu

hatch the-eggs during late May until July

B. mā 'alay-ka siwā ittibā' al-khatawāt min 1?ila 10.

Not on-you but following the-steps from 1 to 10

A comparison between the sentences in example (42) and their Arabic equivalents in example (43) reveals that time range is not among the senses expressed by 'abra. Instead, another set of prepositions, mainly the pair min/?ila (from/to) and Ḥatta (until), are used to convey this meaning.

In this case, the divergence between 'abra and "through" may be attributed to the difference in their conceptualizations. According to Langacker (2008), a key component of conceptualization is perspective or the "vantage point," which refers to the language user's location (p. 73). In example (42), the vantage point is the same distance between source and goal, while in sentence (43) and indeed in all other realizations of 'abra, the vantage point is closer to the goal and TR and away from the source. This is illustrated in Figure 16, where the perspective has no bearing on how the LM is interpreted; it may or may not be the goal. Although the vantage point is not always linguistically realized, it affects grammatical and semantic structure in various ways (see Tamy [2000, volume I] and Langacker [2008] for a comprehensive discussion of perspective). However, when "through" is used in this sense, the source is part of the perspective, making it appropriate and grammatically correct to mention the starting point. Meanwhile, in Arabic, 'abra is not used in similar constructions as perspective does not consider the source. Therefore, mentioning the source along with 'abra would be ungrammatical.

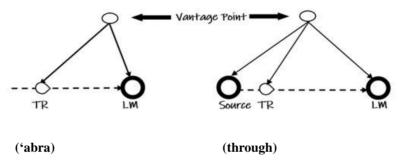


Figure 16. Difference in Conceptualization Between 'abra and "Through"

The previous discussion confirms that 'abra mainly indicates the transversal of a time period and not duration through time or the start of a period as the preposition "through" in English does (Yue et al., 2022). Hence, 'abra and "through" are not identical when used with time expressions.

3.6.2 From the Domain of Space to the Domain of Manner

Spatial paths usually lead to possible ends or goals. When we intend to achieve a goal or engage in an activity, we always have a process that must be followed, whether physical or abstract. Thus, a spatial path is metaphorically extended to be the means through which a goal is accomplished, or an activity is performed. Based on this metaphor, the preposition has acquired the meaning of "by means of," demonstrated in examples (44)–(46).

44. da'a ?ilā ?ījād taṭbīq 'abra al-?ajhiza al-dhakkyyia

called-he for finding an application via the-devices the-smart

He called for creating an application via smart devices.

45. yatadamman al-multaqā wirash tanmiyat al-maharāt 'abra al-fann

include the- forum workshops-of developing the- skills through the-art

The forum includes workshops for developing skills through art.

46. satabuthu al-jam'iyah taqrīra-hab 'abra al-şuḥuf al-maḥalliya

will broadcast the association report-its through the-newspapers the-local

The association will broadcast its report through local newspapers.

In sentence (44), the application is the TR, and the smartphones that allow users to download and run applications are the LM. No applications would exist without smartphones. Sentence (45) states that art (LM) serves as a means to develop one's skills (TR). Sentence (46) indicates that newspapers (LM) will help with the broadcast of TR. The LM serves as the means through which the action of the sentence is achieved. In this context, 'abra (through) denotes the means, and the LM is the instrument that allows for the action of the verb. Figure 17 repeats the spatial image schema in Figure 13 demostrating how paths are used as physical means to arrive at specific locations. This meaning is metaphorically transferred to the abstract means through which an activity is performed.



Figure 17. The Physical Concept of Medium

Therefore, 'abra has two metaphorical extensions in the time and manner domains, differentiating it from "through," which has been metaphorically extended to completion, termination, cause, and many other domains (see Martin [2000], Evans [2007], and Yue et al. [2022] for a full discussion). In the domain of time, 'abra conveys the path of a metaphorical motion through time, conceptualizing time as a line with several distinct but related LMs along this line. In the domain of manners, 'abra indicates the means or method through which an action or activity is achieved. These meanings of 'abra presented so far can be summarized in the form of cognitive elements as follows.

- 48. A. TR (passage in and out of the LM)
 - B. TR (passage inside the LM)
 - C. TR (passage of a circular movement around multiple smaller LMs)
 - D. TR (passage of an abstract movement inside the LM)
 - E. TR (spatial medium)
 - F. TR (metaphorical passage of time)
 - G. TR (metaphorical medium)

The fundamental image schema of 'abra is a physical path followed by a physical medium. Both senses are extended metaphorically, and these extensions include the time and manner domains. Based on the abovementioned parameters of prototype theory, one can conclude that the prototypical meaning of 'abra is a passage from one side to the other, which is its most prominent and immediately activated meaning. The other senses are directly related to it or derived from it.

A comparison of the meanings of 'abra and "through" clearly shows that both convey the same basic image schema of source—path—goal. The prototypical meaning of 'abra is similar to that of "through," which is a passage from one end to the other. Both convey a passage through an LM that can be a dot or a two- or three-dimensional entity. The path can express an exit out of the LM or can occur within the LM, can be orbital around multiple LMs connected to a larger LM, and can convey a medium. Both prepositions have metaphorical extensions to the domain of time and manner. Meanwhile, there are some differences between 'abra and "through." First, "through" conveys spatial and metaphorical meanings that 'abra does not cover. Second, 'abra includes some meanings of "across," which are conveyed by "through." Moreover, the metaphorical senses of 'abra are different from those of "through" in some respects, such as the expressions of time duration and of the starting point of a time period.

4. Conclusion

This study investigated the senses of 'abra by adopting a cognitive semantic perspective. It found that the cognitive elements of TR and LM were relevant to the analysis of 'abra's spatial meanings. The analysis showed that 'abra's basic image schema is mainly path. Consequently, 'abra is considered a preposition of movement. The dimensions of the LM determine how the path element is shaped. The source is not realized as a component of the schema, and while the goal frequently aligns with the LM, sometimes it does not. The image-schematic analysis of this preposition verified that 'abra occasionally has a static reading in extremely few instances. The analysis of 'abra's metaphorical extensions revealed that its basic image schema is extended to the time and manner domains.

'abra's senses were also compared and contrasted with those of "through" in English, revealing that they share the basic image schema of source—path—goal although the source is not always realized linguistically. The semantic meanings of 'abra coincide with those of "through" despite the latter's broader range of meanings that are not expressed by the former. Additionally, the analysis proved that 'abra overlaps with two other English prepositions—"across" and "around"—in some of their senses. The meaning of "across" conveyed by 'abra is not among those of "through," while that of "around" was found to be among those of "through." Although "through" expresses more metaphorical senses than 'abra, the meanings they share are the most prominent ones. Semantic elements that play a role in shaping the senses of 'abra include dimensionality and perspective.

The results of this study have serious implications for the description of prepositional meanings. The findings confirmed that a cognitive semantic framework is more suitable for analyzing the meanings of prepositions as it establishes a connection between perception, language, and cognition. Through image-schematic analysis, this study described the meanings of 'abra in precise terms away from unrealistic definitions and traditional grammatical classifications. It also clarified the similarities and differences between 'abra and "through" in English as well as allowed for a differentiation between the meanings of "across" and "through" conveyed by 'abra. This study further proved that 'abra is a preposition and not a noun as it is still considered because the major semantic element in its meaning is path. Indeed, this research found that 'abra's semantic characteristics were similar in all its senses whether literal or metaphorical.

Moreover, the results may prove useful for experts in lexicon, translation, and second-language instruction. Prepositions are crucial function words that convey spatial, temporal, and metaphorical meanings. By understanding how different languages interpret space and

time and their metaphorical extensions, students can improve their communication skills and develop an appreciation for linguistic diversity. Because prepositional meanings can be difficult to translate, particularly between different languages, contrastive analysis can facilitate translators' proficiency in translating prepositions.

'abra's syntactic behavior must be thoroughly examined to understand how it is used to convey the semantic elements of path, source, and goal. Thus, future research may engage in a structural investigation of the syntactic organization of prepositional phrases with 'abra and their constructional relations to particular verbs or nouns in main and subordinate clauses.

Acknowledgments

The researcher would like to thank the Deanship of Research and Innovation at the University of Jeddah for the financial support grant No. (UJ-23-SHR-36).

Authors' contributions

This paper was solely written by the author.

Funding

This work was funded by the University of Jeddah, Jeddah, Saudi Arabia, under grant No. (UJ-23-SHR-36). Therefore, the author thanks the University of Jeddah for its technical and financial support.

Competing interests

The author declares that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Not applicable.

Ethics approval

The Publication Ethics Committee of the Sciedu Press.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

Alqarni, S. M. (2023). Grammaticalization in MSA: The case of 9abra as a preposition. *The Journal of Arts, Literature, Humanities and Social Sciences*, 89, 101-125. https://doi.org/10.33193/JALHSS.89.2023.803

Boers, F., & Demecheleer, M. (1998). A cognitive semantic approach to teaching prepositions. *ELT Journal*, 52(3), 197-204. https://doi.org/10.1093/elt/52.3.197

Boroditsky, L. (2000). Metaphoric structuring: Understanding time through spatial metaphors. *Cognition*, 75(1), 1-28. https://doi.org/10.1016/s0010-0277(99)00073-6.

Coventry, K. R., & Garrod, S. C. (2004). Saying, seeing and acting: The psychological semantics of spatial prepositions. London: Psychology Press. https://doi.org/10.4324/9780203641521

Ech-Charfi, A. (2008). Spatial and temporal uses of Moroccan Arabic prepositions. BASSAMAT, 3, 111-111.

Evans, V. (2003). The semantics of English prepositions: Spatial scenes, embodied meaning, and cognition. Cambridge: Cambridge University Press.

Evans, V. (2007). Glossary of cognitive linguistics. Edinburgh: Edinburgh University Press. https://doi.org/10.1515/9780748629862

- Evans, V., & Tyler, A. (2004). Rethinking English 'prepositions of movement': The case of to and through. *Belgian Journal of Linguistics*, 18(1), 247-270. https://doi.org/10.1075/bjl.18.13eva
- Gibbs, R. W. (2005). The psychological status of image schemas. From Perception to Meaning: Image Schemas in Cognitive Linguistics, 29, 113-136. https://doi.org/10.1515/9783110197532.2.113
- Huang, C. The spatial cognitive meaning of across. English Language and Literature Studies, 11(4). https://doi.org/10.5539/ells.v11n4p1
- Jackendoff, R. S. (1985). Semantics and cognition (Vol. 8). Massachusitts: MIT press.
- Khan, S., Badshah, S. N., & Khan, I. U. (2019). Cognitive semantic study of the preposition 'Min'in the Quran. *Journal of Islamic and Religious Studies*, 4(2).
- Knowles, M., & Moon, R. (2004). Introducing metaphor. London: Routledge.
- Kovecses, Z. (2010). Metaphor: A practical introduction. Oxford: Oxford University Press.
- Lakoff, G. (1987). Position paper on metaphor. In *Theoretical Issues in Natural Language Processing* 3. Berkele University of California. https://doi.org/10.3115/980304.980348
- Lakoff, G., & Johnson, M. (2003). Metaphors we live by. Chicago: University of Chicago Press.
- Langacker, R. W. (1987). Foundations of cognitive grammar (vol 2). Stanford, CA: Stanford University Press.
- Langacker, R. (2008). Cognitive grammar: A basic introduction. Oxford: Oxford University Press.
- Lentzner, K. R. (1977). Semantic and syntactic aspects of Arabic prepositions. Washington DC: Georgetown University.
- Lindstromberg, S. (2010). English prepositions explained. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Mart ń, M. A. (2000). A cognitive approach to the polysemy of "Through". Estudios ingleses de la Universidad Complutense, 8, 11-38.
- Mohammed, T. M. Q., Ho-Abdullah, I., & Hua, T. K. (2012). The preposition (fii) in the horizontal and vertical axes as used in the Taizzi dialect: A cognitive approach. *Asian Social Science*, 8(4), 99. https://doi.org/10.5539/ass.v8n4p99
- Nasser, M. M. A. (2013). The polysemous nature of some Arabic prepositions. *International Journal of Linguistics*, 5(2), 66. https://doi.org/10.5296/ijl.v5i2.3102
- Oakley, T. (2010). Image schemas. In *Handbook of cognitive linguistics*, Dirk Geeraerts & Hubert Cuyckens (eds.): Oxford: Oxford University Press.
- Peate, J. (2012). A Construction Grammar Approach to Spatial Prepositions in Modern Standard Arabic. PhD thesis. Salford: University of Salford.
- Saeed, S. (2018). The polysemy of Khilāl: A cognitive approach. International Journal of English Linguistics, 8(3).
- Salman Hummadi, A. (2016). The cognitive semantics of prepositions in the Holy Qur'an and their implicatures. *Anbar University Journal of Languages & Literature*, 8(1), 362-408.
- Sardaraz, K., Ab Rashid, R., & Nusrat, A. (2022). The semantics of the preposition "alā" in the Quran: A conceptual metaphor perspective. *Frontiers in Psychology*, 13, 788582.
- Sinha, C., & Kuteva, T. (1995). Distributed Spatial Semantics. *Nordic journal of linguistics*, *18*(2), 167-199. https://doi:10.1017/S0332586500000159
- Talmy, L. (2000). Toward a cognitive semantics: Concept structuring systems (Vol. 1). Massachusitts: MIT press.
- Talmy, L. (2005). The fundamental system of spatial schemas in language. From Perception to Meaning: Image Schemas in Cognitive Linguistics, 29, 199-234.
- Taylor, J. R. (2019). Prototype effects in grammar. Cognitive Linguistics-Key Topics, 127-147.
- Tyler, A., & Evans, V. (2003). Reconsidering prepositional polysemy networks: The case of over. *Trends in Linguistics Studies and Monographs*, 142, 95-160.
- Wright, W., & Caspari, C. P. (2011). A grammar of the Arabic language. New York: Cosimo, Inc.
- Yue, F., Cao, S., & Huang, J. (2022). The semantic analysis of the preposition "through" from the perspective of cognitive linguistics. *Theory and Practice in Language Studies*, 12(2), 400-406. https://doi.org/10.17507/tpls.1202.25