

The Role of Conceptual Blending Theory in Understanding and Solving Arabic Riddles

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Abstract

Conceptual blending is universal in the sense that it can be found in a variety of contexts, including ordinary life, literature, art, and scientific creation. The purpose of this study is to demonstrate how this theory helps to reveal or identify the subtle elements of Arabic riddles. The study proved the assumption that conceptual blending is a fruitful method to analyze and understand the construction of Arabic riddles.

Keywords: Conceptual Blending, mental spaces, input spaces, generic space, riddles.

Received: 07/01/2024

Accepted: 13/05/2024

دور نظرية المزج الفكري في فهم وحل الألغاز العربية

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المستخلص

تهدف هذه الدراسة الى التحقق من مدى استخدام نظرية المزج التصوري للعالم الفرنسي جيل فوكوني والأمريكي مارك تورنر في فهم وحل الألغاز العربية. وهذا منبثق من امكانية وجود عملية المزج التصوري او الذهني في العديد من السياقات العلمية والأدبية اضافة الى وجودها في الحياة اليومية. وقد اعتمدت الدراسة على طرح عدد من الألغاز العربية ومن ثم تحليلها لغويا باستخدام مبادئ نظرية المزج التصوري. وقد أثبتت الدراسة فعالية النظرية في فهم مكونات الألغاز العربية اضافة الى دور النظرية في التوصل الى الحلول لتلك الألغاز عن طريق دمج العناصر المتشابهة او المختلفة من عدة فضاءات في سبيل التوصل الى الحل الأنسب.

كلمات مفتاحية: المزج التصوري، الفضاءات الذهنية، فضاءات المدخلات، الفضاءات المشتركة، الألغاز.

تاريخ القبول: ٢٠٢٤/٠٥/١٣

تاريخ الاستلام: ٢٠٢٤/٠١/٠٧

Introduction

Conceptual blending, a cognitive process, operates apparently in the background, often escaping conscious awareness. As individuals engage in speech or thought, they remain unaware to the intricate workings of their minds. Thus, on the surface, the process seems straightforward, lacking the complexity evident in its outcomes. These cognitive products, however, hold significant implications, providing individuals with the capability to decode complex ideas and grasp the essence of literary and scientific concepts. Despite its seemingly inherent simplicity, conceptual blending remains a fundamental mental operation, serving as a substance for understanding the multi-layered nature of the human cognitive process.

1.1. Objectives

The current research investigates the application of conceptual blending as a cognitive process for comprehending and decoding Arabic riddles. The aim is to substantiate the existence of conceptual blending and to enhance our comprehension of its role in unraveling the intricacies of Arabic riddles. This research endeavors to furnish empirical evidence supporting the presence of conceptual blending, shedding light on its integral involvement in the cognitive processes employed for understanding and solving Arabic riddles.

1.2. Research Questions

1. How does conceptual blending operate in the cognitive processes involved in understanding and solving Arabic riddles?
 1. What specific cognitive mechanisms are employed during the conceptual blending process when individuals engage with Arabic riddles?
 2. To what extent does conceptual blending contribute to the creative and problem solving aspects of interpreting Arabic riddles, and how does this affect the overall comprehension of these riddles?

2. Literature Review

2.1. Understanding Conceptual Blending

Conceptual blending is a cognitive process that involves combining different mental spaces or concepts to create new ideas or meanings. It is a higher cognitive operation that involves the selective integration of conceptual elements from two distinct mental spaces, resulting in the

formation of a novel meaning that emerges dynamically in a given context (Coulson & Oakley, 2001). This process gives rise to the creation of a conceptual blend, which does not erase the original inputs but rather provides an integrated scenario serving as a conceptual anchor for the conceptual integration network. It also enables individuals to make sense of new information and generate creative ideas that may not have been possible through traditional cognitive processes (Chapman & Clark, 2019), (Turner et al., 2019).

The application of conceptual blending extends beyond creative activities and can be observed in various fields such as literature, art, science, and technology. For instance, in literature, authors often blend different plotlines or characters to create unique and compelling narratives. Similarly, in the field of technology, engineers may employ conceptual blending to integrate diverse technologies and ideas to develop innovative products and solutions (Turner, 2020). Understanding the particulars of conceptual blending offers valuable insights into human cognition and creative thinking processes. As researchers continue to delve into this phenomenon, the potential for attaching the power of conceptual blending to drive innovation and problem solving becomes increasingly evident (Coulson & Oakley, 2001).

The mental space idea put forward by Fauconnier gives rise to the blending theory (1994). The speaker's meaning is viewed by mental space theory as a "mental representation" that also includes the linguistic structures, following cognitive semantics. Speakers can put up elements in referential structure because of this (Oakley and Coulson, 2000). According to Evans, the advantage of a mental space "...serves to recruit temporary structure from the immediate discourse environment as well as recruiting structure from long-term memory" (Evans, 2007).

Little conceptual packages known as mental spaces are created as people think and converse in order to attain local comprehension and action (Fauconnier and Turner, 2002). This covert, subversive cognition is what makes up our social and mental lives (Fauconnier, 1997). Each of these mental spaces comprises entities and relations related to a given scenario as perceived by the speaker, serving as temporary storage for particular information in a particular domain (Coulson, 2001).

The use of mental spaces, as proposed by Fauconnier and Turner (2008), allows individuals to form localized understanding and take appropriate action in their daily lives. Conceptual blending, or integration, explains how mental spaces "blend" to create a third space that is more

than a composition of the two. In all cases of conceptual blending, mapping is partial, not all elements are projected from the input spaces, and the new representation has its own emergent structure shaped by elaboration and pattern selection (Coulson, 2001).

For example, Howell (2010) uses conceptual blending to analyse instances of critical humour in responses to the fall of the Berlin Wall and the reunification of Germany that followed 1998 (Coulson & Oakley, 2001). A recent advancement in cognitive semantics is called "conceptual integration" or "blended spaces," which is a generalization of analogy and metaphors and accounts for meaning construction in a broad range of discourse contexts such as counterfactuals, jokes, or visual cartoons Turner; Coulson & Oakley; Rohrer, 2004.

In conceptual blending theory, the source target domain can serve on equal footing both contribute items relationships to a mental work space of meaning comprehension They are partial assemblies structures by frames And cognitive models" (Grady et al., 1999). The central insight of conceptual blending theory is that two or more mental spaces can be linked via mappings to yield novel inferences. In other words, mental spaces are based on more general and stable knowledge structures associated with a particular domain; they are temporary spaces used in the construction of meaning (Coulson & Oakley, 2005).

The emergence of a new representation through conceptual blending demonstrates the dynamic nature of cognitive integration, where partial assemblies of elements, structures by frames, and cognitive models lead to the formation of blended mental spaces (Oakley, 1998). By highlighting the emergent structure shaped by elaboration and pattern selection, this theory provides a comprehensive framework for understanding the construction of meaning in various discourse contexts, including counterfactuals, jokes, and visual cartoons (Hutchins, 2005). The pervasive nature of conceptual blending in human thought underscores its significance in enabling individuals to form localized understanding and take appropriate action in their daily lives. This cognitive process fundamentally relies on the capacity to manipulate webs of mappings between mental spaces (Oakley & Pascual, 2017).

2.2. The Role of Conceptual Blending in Cognitive Processes

The role of conceptual blending in cognitive processes is crucial. It allows individuals to integrate seamlessly multiple perspectives and concepts, facilitating the formation of new ideas

and novel solutions. Furthermore, conceptual blending plays a key role in the dynamic nature of human thought and language, allowing for the creation of rich and nuanced understandings. Conceptual blending is not only a routine cognitive process, but it also yields products that become deeply entrenched in our conceptual structure and grammar (Turner et al., 2019).

In essence, conceptual blending serves as a cognitive tool that allows us to make sense of our experiences, communicate effectively, and generate innovative ideas. Moreover, the cross-space mapping of counterparts and integration of events in blending enable us to bridge different domains of cognition and action (Hart, 2010). The theory of conceptual blending offers valuable insights into the cognitive processes involved in constructing meaning and navigating complex conceptual frameworks. The research on conceptual blending highlights its importance as a fundamental cognitive operation that is comparable in significance to other cognitive processes such as analogy, recursion, and mental modeling (Turner & Fauconnier, 1995).

In summary, conceptual blending is a dynamic and versatile cognitive operation that allows individuals to integrate multiple perspectives and concepts, resulting in the creation of novel insights and solutions (Fauconnier & Turner, 2008).

2.3. The Importance of Conceptual Blending in Various Discipline

The importance of conceptual blending extends across various disciplines, including psychology, linguistics, anthropology, and philosophy. It provides a framework for understanding how meaning is constructed and communicated in language, which is essential for linguistic analysis and language processing research (Hart, 2010). Additionally, conceptual blending is valuable in psychology as it sheds light on how our cognitive processes contribute to the formation of mental representations and problem-solving abilities (Fauconnier & Turner, 1996).

Many authors contribute to this approach, including Nili Mandelblit, who highlights the significance of blending in grammar and morphology. Eve Sweetser examines the function of blending and metaphor in social rituals and the construction of noncompositional meaning, while Seana Coulson (Coulson & Oakley, 2003), (Kristiansen, 2006) studies multiple blends at work in metaphor and counterfactuals and develops experimental techniques to corroborate the psychological reality of the theoretical constructs (Grady et al., 1999). Edwin Hutchins, who offers a theory of material anchoring, demonstrates the importance of blending in material

culture. Bob Williams and Esther Pascual (Fauconnier and Lakoff, 2010) further solidifies the practical implications of blending theory, providing evidence of its relevance in real-world scenarios. By bridging the gap between theoretical frameworks and empirical studies, their research contributes to the widespread impact of conceptual blending in diverse domains, from cognitive science to applied linguistics (Turner, 2020).

Additionally, Eve Sweetser's exploration of blending and metaphor in social rituals provides insight into the construction of noncompositional meaning in cultural contexts, highlighting the relevance of conceptual blending in anthropology and sociology (Coulson & Oakley, 2005). Furthermore, Edwin Hutchins' theory of material anchoring demonstrates the application of blending theory in material culture, offering a framework for understanding how conceptual mappings influence the material world (Jamrozik et al., 2016). This interdisciplinary approach not only enriches our understanding of cognitive processes but also extends to fields such as anthropology, archaeology, and design (Landau et al., 2010).

To summarize, the wide range of conceptual blending theory is evident in its interdisciplinary applications, spanning disciplines such as linguistics, psychology, anthropology, and material culture (Oakley & Pascual, 2017). The diverse perspectives and empirical support emphasize the pervasive influence of conceptual blending in shaping our understanding of cognition, language, and cultural practices (Grady, Oakley, and Coulson: *Blending and Metaphor*, 1996).

2.4. Riddles

Riddles have long been a popular form of entertainment and intellectual challenge. They often require creative thinking and the ability to make connections between seemingly unrelated ideas (Ngonyani, 2013). Riddles can be found in many different cultures and have been used as a way to pass the time, entertain, and educate. They play a significant role in the development of cognitive skills and problem-solving abilities, especially in children (Fissler et al., 2017). The power of riddles lies in their ability to prompt individuals to think outside the box and consider alternative interpretations and perspectives. By grappling with the complexities of a riddle, individuals exercise their mental agility and expand their capacity for abstract thinking (Houd\00e9, 2022).

Additionally, riddles often contain layers of meaning and wordplay, requiring the solver to unravel them through careful analysis and lateral thinking. This encourages individuals to delve deeply into the nuances of language and symbolism, fostering greater linguistic dexterity and critical thinking skills (Malik & Marwaha, 2022). The appeal of riddles also extends to their role in social interaction. They provide a platform for communal engagement, as individuals come together to share and solve these enigmatic puzzles. This communal aspect not only fosters a sense of camaraderie but also offers a space for the exchange of diverse perspectives and interpretations (control, 2020).

2.4.1. The Role of Riddles in Conceptual Blending

Riddles are interesting texts from the prospect of comprehension and cognitive processing. They are appropriate examples for conceptual blending, and this is exactly why Fauconnier and Turner (Fauconnier & Turner, 1996) select a riddle, the "Buddhist monk riddle", as one of the prime examples of the conceptual blending analysis. The theory improves its efficacy in interpreting linguistic utterances, and other interesting phenomena like riddles, which can be solved by strategically and deliberately blending different event scenarios and assessing their possible outcomes.

Therefore, it can be chosen as a 'problem-solving strategy' (Ungerer and Schmid, 2006). Furthermore, the study of riddles provides valuable insights into the cognitive processing of ambiguous or non-literal language, offering a rich ground for exploring the intricate workings of conceptual blending. By strategically blending diverse conceptual inputs to arrive at a coherent interpretation (Fauconnier & Turner, 1998).

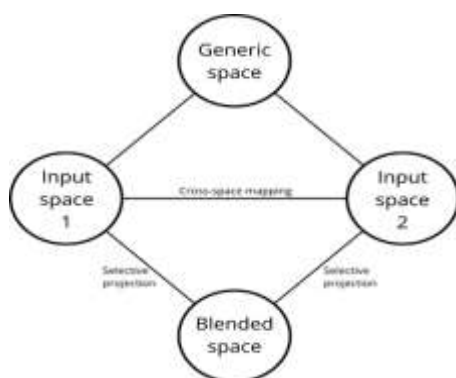
2.4.2. Arabic Riddles

Arabic riddles have been a source of fascination and intrigue for centuries, challenging the minds of individuals across cultures and languages. However, recent researches have shown that Arabic riddles offer more than just entertainment value; they can also provide valuable insights into the cognitive processes involved in problem solving and the creation of mental spaces (Putra & Zikwan, 2019).

One study conducted by researchers at the University of Haifa found that solving Arabic riddles requires the ability to generate and manipulate mental spaces, or internal representations of information that are used to solve problems (Kandel et al., 2004). These mental spaces are

created through language and visual imagery, allowing individuals to mentally simulate potential solutions and make connections between seemingly disparate pieces of information. Arabic riddles also require significant use of language skills such as metaphorical semantic, morphological and syntactic knowledge which are essential to successfully solve them (Muhamad et al., 2014).

In addition to enhancing cognitive ability, Arabic riddles also play an important role in preserving cultural heritage and promoting intercultural understanding. Furthermore, Arabic riddles are not limited to their entertainment value; they can also serve as a means of transmitting knowledge, societal norms and values (Ben-Zur & Zeidner, 2012). In order to solve riddles, conceptual mixing may be intentionally used. The procedure demonstrates how far-off places converge to get the desired outcome. The following figure illustrates how the spaces are mixed together to result in the new space which represents the riddle's solution. Figure from <https://academic-accelerator.com/encyclopedia/conceptual-blending>



In the realm of riddles, the generic space serves as the platform for the integration of linguistic, logical, and creative elements (Houd\u00e9, 2022). It allows individuals to merge their understanding of language, symbolism, and lateral thinking to unlock the hidden meanings within the riddle (Dai et al., 2019).

3. Methodology Overview for Analyzing Arabic Riddles

In this research, the aim is to analyze Arabic riddles using conceptual blending theory. The methodology for this analysis will involve the following steps:

1. Data Collection: A corpus of Arabic riddles, twelve riddles, from different online platforms.
2. Data Analysis: The data will be analyzed using the conceptual blending theory.

3. Conceptual Blending Theory Application: The principles of conceptual blending theory will be applied to identify the underlying conceptual domains and mappings in the Arabic riddles.
4. Identify Blending Networks: Identify the blending networks within each riddle, which involve the integration of different concepts from different domains.

3.1. Application of Conceptual Blending Theory on Arabic Riddles

2.1. ما هي التي ترى كل شيء وليس لها عيون؟ (المرآة)

In this riddle, a dual set of input spaces unfolds a cognitive interplay. The initial realm encapsulates a typical human trait, namely sight, whereas the subsequent space introduces an entity empty of visual organs. The resulting generic space merges the concept of sight with the absence of eyes. Within the blended space, the emergent outcome transcends mere vision, leaning towards a reflective attribute. The culmination of this cognitive fusion unveils the answer: A mirror. Examining this riddle through the conceptual blending theory, we can see the interplay of different cognitive areas and how blending plays a powerful role in both linguistic and cognitive understanding.

2.2. ما هي الجامعة التي ليس فيها طلاب؟ (جامعة الدول العربية)

Within this riddle, a single input space is dedicated to the concept of a university, yet it clearly omits a fundamental element—students. To unravel the mystery, a blending occurs with another space possessing the criterion of gathering but devoid of students. The resulting generic space encompasses the gathering criteria coupled with the absence of students. The conclusion of this blending demonstrates as the solution: the League of Arab States. This intricately woven cognitive process, guided by conceptual blending theory, proves the artistry of linguistic and cognitive problem-solving within the realm of riddles.

2.3. ما هو الشيء الذي يطير بلا جناح؟ (الدخان)

Within the limits of this riddle, dual spaces unfold their distinct criteria. The first space introduces a creature that takes to the skies, adhering to the conventional notion associated with birds. Simultaneously, the second space introduces an entity also engaged in flight, yet confronting the expected norm by lacking wings. The resulting generic space becomes a confluence, harmonizing the concept of flight from the first input space and the wingless flight

from the second. From this blending emerges the solution: 'smoke,' soaring through the air without wings. This riddle offers a cognitive journey towards a surprising resolution.

2.4. تدورولا تتعب .. وتأكل ولا تشرب.. فما هي؟ (الطاحونة)

The blending here results from blending the contrasts rather than the similarities between the two input spaces. Input one presents the activity of turning around 'for humans', but without feeling dizzy. Input space two presents another activity 'for humans' that is eating, but without drinking. The generic space takes the contrasted elements from the input spaces, and the blended space presents the solution, which is a thing that operates in the same manner of turning around, and eating; yet it is not a living thing it is a 'windmill'.

2.5. ما اسم الشجرة التي لا ظل لها ولا ثمار؟ (شجرة العائلة)

This riddle has two input spaces as well, but the first one is the riddle itself and the other is the solution. Blending the elements that both spaces do not have in common solves the riddle. The first input space is about a tree space, and it has elements like fruits and having a shadow among other elements, which this space lacks. Blending the missing elements of a tree in the generic space with a tree itself solves the riddle that is a 'family tree'.

2.6. رجلاه على الأرض ورأسه فوق النجوم.... فما هو؟ (الضابط)

In this riddle, there are two spaces, input space one, which deals with a human being and this, is derived from the characteristic of standing on legs. While input space two suggests a non-human space because a human head cannot be over the stars. The generic space will contain the human aspect and the non-human aspect from the input spaces. The blended space solves the riddle when it succeeds in matching the two aspects to a human being an 'officer'.

2.7. ما هو الذي يمشي ويقف وليس له أرجل؟ (الساعة)

Within the framework of this riddle, the first input space introduces characteristics typically associated with living entities—specifically, the acts of walking and stopping. Simultaneously, the second input space suggests an object engaged in the same actions, although lacking of legs. The ensuing generic space becomes a connection, synthesizing the traits of walking and stopping from the first input space, coupled with the legless quality from the second. From this harmonious blending, emerges the solution: 'the clock,' embodying the characteristics of both input spaces in a creative convergence of attributes.

2.8. تضرب بلا سبب وتطير بلا جناح وتسبب الفرح والغضب...فما هي؟ (كرة القدم)

In the intricate layers of this riddle, three distinct input spaces unfold. The first space delves into the concept of hitting, a typically reasoned action, yet the rationale is obviously absent. Simultaneously, the second space introduces an entity engaging in flight although without wings. The third input space introduces a contrast in emotions, where something typically associated with joy induces an unexpected sense of anger. The consequent generic space becomes a bond, capturing the contrasts from all three input spaces. This dynamic blending process ultimately unravels the solution: 'football,' a clever convergence of hitting without apparent cause, wingless flight, and the unexpected emotional contrast within the realm of sports.

2.9. يجري ولكنه لا يستطيع المشي؟ (الماء)

Conceptual blending theory serves as a valuable tool for dividing the details of this particular riddle, wherein we explore the contrasting characteristics of something capable of "running" but incapable of "walking." The solution, in this instance, is revealed "water." Applying blending theory involves a thorough mapping of the attributes associated with "running" onto the concept of "water," which exhibits the capacity to flow or move swiftly in a specific direction. However, water lacks the anatomical components of legs or feet required for traditional "walking." This clever riddle prompts us to reassess our cognitive frameworks by seamlessly blending seemingly incongruent concepts, ultimately leading to the ingenious resolution embodied by water.

2.10. شيء صاف كالماء ومولود في النار إذا مات استقر على الأرض؟ (الزجاج)

Within the restrictions of this riddle, conceptual blending theory proves instrumental in unraveling its enigmatic layers. The task involves harmonizing the concepts of something "pure like water," "born in fire," and "when it dies, it settles on the ground." Through the lens of blending theory, we can seamlessly merge these disparate attributes in a mental space, ultimately arriving at the cohesive answer: "glass".

The amalgamation of ideas becomes apparent as we recognize that glass is birthed from intense heat, symbolizing the element of fire. Its inherent transparency draws parallels to the purity associated with water. Moreover, the riddle's allusion to the aftermath of breaking aligns with the way shattered glass settles on the ground in fragments.

2.11. ما هو الشيء الذي ترميه كلما احتجت اليه؟ (شبكة الصيد)

To analyze the riddle using conceptual blending theory, we can start by identifying the two input spaces. One input space involves the action of throwing something, which can be linked to the concept of discarding or getting rid of an object. The other input space involves the need or desire for something, which can be connected to the concept of seeking or searching for an object.

The blend of these two input spaces leads to the emergence of the riddle's solution: a fishing net. In this blend, the action of throwing (as a way of discarding or getting rid of something) is combined with the need or desire for something, resulting in the concept of using a fishing net to catch fish. This conceptual blending reveals the creative and imaginative way in which the riddle's answer is constructed.

2.12. ما هو الشيء الذي يكون أخضر في الأرض، وأسود في السوق، وأحمر في البيت؟ (الشاي)

The blending process of different elements in this riddle uncover its underlying meaning. The green color in the earth could represent nature and growth, the black color in the market may symbolize commerce and trade, and the red color in the house might stand for warmth and domestic life. When we blend these concepts together, we find that the answer to the riddle, "tea," fits perfectly. Tea starts as green leaves on the plant, it is processed and traded in the market, and it is often enjoyed in the warmth of a home. Therefore, the riddle is a clever play on the different aspects of tea and how it manifests in various stages of its existence.

4. Discussion of Results

The analysis of the presented riddles through the lens of conceptual blending theory offers valuable insights into the cognitive processes involved in deciphering linguistic puzzles. Conceptual blending theory, developed by Fauconnier and Turner, posits that cognitive abilities allow individuals to blend various mental spaces, combining elements from different domains to create novel and meaningful connections.

4.1. Mirror Riddle:

- Blending of Sight and Reflection: The blending theory here demonstrates how the cognitive process merges the human characteristic of sight with the absence of eyes, leading to the emergent attribute of reflection associated with a mirror.

- Cognitive Interplay: The riddle exemplifies the unconscious cognitive interplay between different mental spaces, displaying the depth of conceptual blending in linguistic understanding.

4.2. League of Arab States Riddle:

- Absence of Students in a University: The riddle imaginatively blends the concept of a university, a typical gathering place for students, with the absence of students, resulting in the unexpected solution of the League of Arab States.
- Details of Cognitive Fusion: The cognitive fusion involved in this riddle highlights the intricate process of blending criteria from different spaces to arrive at a coherent answer.

4.3. Smoke Riddle:

- Blending Flight and Wingless Flight: The riddle displays the blending of conventional flight criteria with the absence of wings, leading to the unexpected yet fitting solution of 'smoke'.
- Cognitive Process: The riddle leads to a cognitive challenge, stimulating preconceived notions and encouraging the exploration of unconventional connections between concepts.

4.4. Windmill Riddle:

- Blending Contrasting Elements: Unlike similarities, this riddle blends contrasts, combining the activities of turning around and eating without drinking, resulting in the unexpected solution of a 'windmill'.
- Problem Solving Strategy: The riddle not only represents unconscious cognitive processes but also serves as a deliberate problem solving strategy, emphasizing the versatility of conceptual blending.

4.5. Family Tree Riddle:

- Blending Missing Elements: This riddle blends the missing elements of a tree, such as fruits and shadows, from one input space with a tree itself, leading to the solution of a 'family tree'.
- Blurring Riddle and Solution Spaces: The deliberate blending of the riddle space with the solution space blurs the lines between the two, highlighting the flexibility of conceptual blending.

4.6. Officer Riddle:

- Blending Human and Non-Human Aspects: The riddle blends the concept of a human being with a non-human aspect, leading to the solution of an 'officer'.
- Representation of Cognitive Mapping: It highlights the cognitive mapping of characteristics from different spaces to form a cohesive understanding, a key feature of conceptual blending.

4.7. Clock Riddle:

- Synthesis of Walking and Stopping: The riddle seamlessly blends the characteristics of walking and stopping with the absence of legs, resulting in the solution of 'the clock'.
- Creative Convergence: The creative convergence of these attributes displays the versatility of conceptual blending in linguistic problem solving.

4.8. Football Riddle:

- Cognitive manipulation of Contrasts: This riddle involves the cognitive dance of contrasts, blending hitting without cause, wingless flight, and emotional contrasts to arrive at the unexpected solution of 'football'.
- Sporting Example of Conceptual Blending: It serves as a sporting example of how conceptual blending operates in diverse cognitive domains.

4.9. Water Riddle:

- Blending Running and Legless Movement: The riddle determines the blending of the concept of running with the legless movement, leading to the solution of 'water'.
- Navigating Cognitive Frameworks: It prompts the solver to navigate cognitive frameworks, displaying how conceptual blending challenges and reshapes established thought processes.

4.10. Glass Riddle:

- Harmonizing Fire, Water, and Breaking: Conceptual blending harmonizes the attributes of fire, transparency similar to water, and the aftermath of breaking, resulting in the cohesive solution of 'glass'.
- Richness in Blending: The riddle emphasizes the richness and depth conceptual blending brings to the interpretation of linguistic and cognitive challenges.

4.11. Fishing Net Riddle:

- Blending Action of Throwing and Need: The riddle involves blending the action of throwing with the concept of need, leading to the solution of a 'fishing net'.
- Cognitive Mapping for Solution: It demonstrates the cognitive mapping of actions and needs to arrive at a creative and imaginative solution.

4.12. Tea Riddle:

- Blending Colors and Stages of Existence: The riddle blends the colors associated with different stages of tea's existence, offering a creative play on its manifestations.
- Cohesive Answer through Blending: It exemplifies how conceptual blending unites disparate elements to form a cohesive answer, emphasizing the versatility of this cognitive process.

The discussion of these riddles within the framework of conceptual blending theory highlights the cognitive richness, versatility, and creativity involved in linguistic problem solving. The interplay between different cognitive domains, the deliberate use of contrasts, and the blending of seemingly unrelated elements contribute to the intricate and fascinating world of conceptual blending in the understanding of riddles.

5. Conclusions

There are several disciplines where conceptual blending is a useful theory. It is also a method used, consciously or unconsciously, to understand the complexities in modern life. This has been demonstrated by using this idea in a variety of contexts, including commercials, jokes, and riddles. In this study, it was proved that conceptual blending offers a powerful framework for analyzing and understanding Arabic riddles. The outcomes demonstrate two things. First, this theory is actually used to answering these riddles by blending, or mixing, distant regions to arrive at the blended space, which holds the answer. Second, the generic space might include contrasts in addition to only the similarities across the input areas.

In addition, the theory's terms, that is the components of the network, are established. These components are the input spaces, generic space, and blended space. It is clear that the application of conceptual blending has provided valuable insights into the process of solving Arabic riddles. By recognizing the role of conceptual blending in this context, it becomes evident that it is not only a theoretical framework but also a practical tool for problem solving. This study has shown how the blending of distant regions can lead to the creation of a new space,

which holds the answer to the riddle. Additionally, the consideration of contrasts in the generic space expands the understanding of the complexity and versatility of this theory.

Furthermore, the identification of the components of the network, including the input spaces, generic space, and blended space, offers a structured approach to understanding the process of conceptual blending in the context of solving Arabic riddles. These findings contribute to the broader significance of conceptual blending in diverse areas of inquiry, emphasizing its potential for enriching our understanding of human cognition and cultural phenomena.

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