The Constructional Analysis of Emanation Fictive Motion in Arabic: A Cognitive Semantic-Syntactic Study

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Abstract

The study explores the cognitivenetwork and semantics of the Arabic fictive motion constructions of emanation paths within Talmy's framework. One of the claims in cognitive linguistics is that motion event can be used to describe an inherently static scene without any movement in reality, but linguistically, that scene is conceptualized as dynamic movement. Thus, fictive motion (hereafter FM), as a cognitively universal phenomenon, expresses a static physical entity by using dynamic linguistic structure. Emanation is one of the different types of FM which has been investigated by Talmy (1996, 2000). The central aim of this study is to investigate emanation FMin Arabic and to find whether ituses the same constructions that are used in Talmy's model. The study also aims to find if there are other categories that can be used in Arabic and absent in his categorization and vice versa. More precisely, the study looks for an answer to how abstract ideas are acquired and structured in Arabic. The results revealed that more concrete verbs are used in Arabic to describe FM. It also uses categories that are not classified within Talmy's framework.

Keywords: cognitive linguistics, fictive motion, factive motion, emanation, path.

التحليل التركيبي للحركة التخيلية الأنبثاقية باللغة العربية؛ دراسة دلالية معرفية

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المستخلص

تدور الورقة البحثية الحالية في فلك علم اللغة المعرفي حيث تدرس الشبكات المعرفية والدلالية لتراكيب الحركة التخيلية لاتبثاق المسارات في اللغة الععربية ضمن الاطار النظري لعالم اللغة المعرفي تالمي. يتبنى علماء اللغة المعرفيون فرضية امكانية استعمال الافعال الحركية لوصف المشاهد على انها متحركة وليست الافعال الحركية لوصف المشاهد على انها متحركة وليست جامدة. لذلك تعبر الحركة التخيلية كظاهرة معرفية عالمية عن الكيانات الجامدة باستعمال تراكيب لغوية حركية. يعتبر الانبثاق احد الانواع المختلفة للحركة التخيلية الذي قام بتصنيفه ودراسته عالم اللغة المعرفي تالمي (1996، 2000). تهدف هذه الورقة البحثية

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لدراسة الانبثاق كحركة تخيلية في اللغة العربية ومعرفة فيما اذا كانت اللغة العربية تحتوي على ذات التراكيب التي صنفها تالمي. كذلك تهدف الدراسة لإمكانية ايجاد اصناف جديدة غير مذكورة في تصنيفات تالمي. وعلى وجه الدقة تبحث الدراسة الحالية عن اجابات لكيفية اكتساب وتمثيل او تركيب المفاهيم المجردة في اللغة العربية. اشارت نتائج البحث الى استعمال افعال ملموسة لتمثيل او وصف الحركة التخيلية في اللغة العربية. كما اشارت الى ان اللغة العربية تحتوي على اصناف غير موجودة ضمن نظرية تالمي.

الكلمات الدالة: علم اللغة المعرفي، الحركة التخيلية، الحركة الحقيقة، الانبثاق، المسار.

1. Introduction

This study is an attempt to exploreFMconstructions in Arabic from a cognitive linguistic point of view, which considers language as both a mirror of the human mind and an instrument for construing and conveying information. Cognitive linguistics is aradical school to study language, basedon human experience of the world and the way we perceive and conceptualize it[1]. It assumes that the relationship between language and reality is mediated by human cognition. It studies how linguistics phenomena, like metaphor, metonymy, motion, etc., are cognitively conceptualized. The term FMhas been utilized by cognitive linguists to refer to the dynamic descriptions of static scenes.

Motion is one of the most basic experiences in our daily life and also in our communicative needs. It refers to everyday experience in locomotion, event perception, and action. It is thebasic category in the physics of the real world as well as in the cognitive processes of perception, control, memory, and in human linguistic conceptualization [2]. The concept *motion* is the fundamental mechanism in cognitive linguistics. The study of motion has attracted a great deal of attention in recent times because its study has revealed some noticeable differences which transcended many languages[3]. Different cognitive linguists have suggested various models for representing and understanding the semantics of motion such as [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14], [15].

Traditionally, motion is characterized as a Source-Path-Goal configuration, that is, the direction in which we move from the starting to the ending points. However, Talmy rejects this idea, replacing it with his notion of Figure-Move-Path-Ground formula[16].He believes that the two concepts of Figure and Ground are more comprehensive than those suggested by Fillmore[4]: *Source*, *Goal*, *Location* and *Path*. Talmy[15] states that "The basic Motion event consists of one object (the Figure) moving or located with respect to another object (the reference object or Ground)". The spatial relation between them is called *Path*, and it may be enlarged and specified by what is called *Co-Events*.

It is important to differentiate between two types of motion: actual (or factive) motion and FM. Zlatev [17] argues that there are two ways of representing the concept *motion* as a cognitive process: one that limits the process as an actual perceived motion, and the other extends motion to be more 'imaginary' or abstract scenarios. In other words, actual motion verbs such as 'go' and 'run' express situations in which an animate agent physically moves from one location to another. However, FM verbs express

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situations with no observable physical motion. Rojo and Valenzuela [3] exemplified this distinction:

- ❖ Frodo climbed to the top of the hill
- ❖ The path climbed to the top of the hill

In the first sentence, *Frodo* physically moves, changing his location from the bottom to the top of the hill. However, in the second sentence, the path does not move in any physical (or metaphysical) way. This study concerns with this second type of motion. The goal of this paper is to investigate the universality of FM and whether it is applicable to other languages, like Arabic, or not. The study begins by defining the cognitive phenomenon of FM (Section 2). Then it discusses the Talmy's model of emanation(Section 3). After that, it turns to analyze the representation of emanation of FM in Arabic (Section 4). Last, the paper contains someconcluded points by briefly outlining the main findings and points taken place throughout the study (Section 5).

2. Fictive Motion as a Cognitive Phenomenon

The notion of FMgoes back to the earliest days of Cognitive Linguistics. It has been utilized by different cognitive linguists under a range of various labels. It was first studied systematically with the name *fictive motion* in Talmy [14],[15]. It is further called as *virtual motion*[18], [12]; *subjective motion*[19], [20]; *simulated motion*[21]; directional extent sentences [22]; *pseudo-motional locatives*[23]; *meander verbs*[24]; and *abstract motion*[19],[25].

FM is a fundamental property of the human mind, and therefore, it is considered to be a universal phenomenon. However, Talmy [26] claims that not all languages represent FM in the same way, but every language has specific forms of fictivity. For example, as a FM, English can say *The sun shone intothe cave*, while Spanish cannot be able to say that. They can factively useanother way *The sun illuminated the cave*, or *illuminated the interior of the cave*, a non-fictive representation.

FM is a linguistic phenomenon used to describe a static physical scene as an implicit mental simulated motion. Talmy is among the first researchers who have vastly discussed FM. He describes the term fictive as "the imaginal capacity of cognition, not to suggest (as perhaps the word fictitious would) that a representation is somehow objectively unreal"[14]. Talmy [15]adds that this notion is described as non-veridical forms of motion, that is, examples of movement without any real physical occurrence. In harmony with Talmy, Evans [27] defines FMas "the ascription of motion to an entity that cannot undergo veridical motion". Núñez and Marghetis [28] also refer to this phenomenon as "a cognitive mechanism through which we unconsciously (and effortlessly) conceptualize static entities in dynamic terms. {...} Motion, in these cases, is fictive, imaginary, not real in any literal sense". As exemplified in Talmy [15]:

* This fence goes from the plateau to the valley

In the sentence above, the doer of the verb go(i.e., this fence) does not actually move anywhere. The relation between the fence, the plateau and the valley is simply static, and there is no movement of the fence in reality. But linguistically, we may conceive and conceptualize it as a dynamic movement (moving from the plateau to the

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valley) which is represented by the motion verb 'go' and directional prepositions 'from...to...'.

Langacker, on the other hand, approaches the subjective motion from the perspective of cognitive grammar. For Langacker, the construction of meaning is a process of conceptualization. According to him, FMand actual motionis described as the conceptual moving thatinvolvethe same mental scanning subjectively or abstractly along a path. This means that motion can be perfective or fictive. This classification of motion can be shown in his distinction between two modes of cognitive processing for the structuring of complex scenes: *sequential scanning* and *summary scanning*. The former occurs when the movement traverses physically. The latter involves the same mental operations in which an object is fictively construed as the same entity[29]. That is, the summary scanning takes place when all aspects of a scene are simultaneously made as active and available. Therefore, FM is seen as imagined and its cognition is grounded in experience.

Lakoff's contribution to the FMis primarily based on conceptual metaphor. According to Lakoff, FMrealizes mapping across domain, namely the representation of the metaphor 'form is motion', which has two domains: source andtarget domains. The former includes motion and the latter is shape and form. Therefore, FMis essentially a conceptual mapping to understand shape and shape with motion. Sometimes, the metaphor is so conventional that ithas engraved in human concepts to be clearly observed[30].

Fauconnier, one of the most prominent cognitive linguists, describes FMdepending on the conceptual blending theory. This theory is "a dynamic process that occurs at the moment of perception to create new meanings from existing ways of thinking"[31]. It consists of four mental spaces: generic space, two input spaces and mapping these spaces forms blendedspace, which forms a conceptual network [32]. To understand metaphors, these mental spaces are linked by the process of 'mapping' to derive an integrated conceptualization.

For Jackendoff[9], FMverbs are static and temporal, in contrast to actual motion verbs, which are dynamic and temporal. That is, the conceptualization of FM is related to static representations of *Paths*, which determine directions, shapes, orientations, etc. He claims that paths have a cognitive role independent of the motion of objects they cross. Finally, Matlock [21] claims that FMis actually the mental simulation of the motion in human mind. Matlock's experimental work shows that "subjects dealing with sentences with fictive motionwill use more time than those who do not, which can indirectly illustrate his point that people are simulate the motion in their brain and the simulation takes time"[30].

3. Talmy's Emanation of Fictive Motion

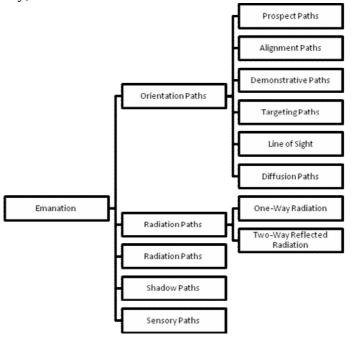
Talmy [15] classifiesFMinto six categories. They are *emanation*, *pattern paths*, *frame-relative motion*, *advent paths*, *access paths*, and *coextension paths*. Emanation is one of the main types of FM, which has been investigated by Talmy [14],[15],[26]. Itis fundamental because "this category appears previously to have been largely

unrecognized". As such, this study will only concentrate on emanation FMand its representation in Arabic.

According to Talmy [26], emanation is the FMof intangible entity moving fictively from a source, which continues along its emanation path and terminates by hitting a distal object. That is, the motion of emanation paths does not include the factive (actual) movement of an entity. The movement is fictive and it does not involve any physical form, and therefore, what is conceived as fictively moving is an object rather than the observation of that object. Thus, the emanation of FMis characterized as [-animate], [-movable] and [+emissive]/[+perceptible]. The feature values of emanation path expressions are summarized as follows.

- a. Factive motion of some elements need not be present for the fictive effect.
- b. The fictively moving entity is itself fictive.
- c. The fictive effect is observer-neutral.
- d. What is conceived as fictively moving is an entity [15].

Talmy divides emanation into four subcategories: *Orientation Paths, Radiation Paths, Shadow Paths* and *Sensory Paths*. The Orientation Paths is, in turn, classified into five brands: *Prospect Paths, Alignment Paths, Demonstrative Paths, Targeting Paths,* and *Line of Sight*. The present study suggests another type of Orientation Paths, calling it as *Diffusion Paths*. It also differentiates between two kinds of Radiation Paths: *One-Way Radiation* and *Two-Way Reflected Radiation*. The linguistic categories of emanation FM, developed in this study, are schematized as follows:



The model of Emanation

3.1. Orientation Paths

Orientation paths are linguistically conceptualized and perceivedasa continuous linear intangible matter that emergesaway from the front of some object. This object can be conceived as either an intangible line in motion or an intangible abstraction that moves along an intangible line. Orientation Paths are further subdivided into five subcategories, depending on whether the front of entity is a face type or a point type, or whether the FMof the intangible line is axial or lateral[15].

3.1.1. Prospect path:

The source object has a planar or face-type front; and this object has a particularrelative to some other objects in the surroundings. Thus, the emanation is perpendicular to the plane in which a Figure moves toward a Ground[26]. This can be represented in the following example:

***** *The cliff wall faces toward the valley.*

3.1.2. Alignment path

The source object has a stationary straight linear with a point-type front. It is linguistically conceptualized "in terms of something intangible moving along the axis of the object, emerging from its front end, and continuing straight along a prepositionally determined path relative to some distal object" [15].

***** *The snake is lying toward the light.*

3.1.3. Demonstrative path

The source object is linear with a point-type front from which an intangible line emerges. The fictive moving line functions to guide somebody's attention along its path. The emanation is coaxial with the linear object[15].

***** *The arrow on the signpost pointed toward the town.*

3.1.4. Targeting path

In a targeting path, source is a front-bearing object whose orientation is set by an agent so that the fictive line conceptualized or perceived as emerging from the front follows a desired path relative to the object's surroundings[15].

❖ I pointed my gun into the living room.

3.1.5.Line of sight

Source is a visual apparatus located on the front of an animate or mechanical entity. It deals only with the lateral line of sight motion, i.e., its shifts of orientation [15].

❖ *I slowly turned my camera toward the door.*

3.1.6. Diffusion Paths

It occurs when the source object fictively transfers from an area of high concentration to an area of low concentration. In the other way, the emanation diffuses or spreads out from a particular source target object.

* The news spread everywhere

3.2. Radiation paths

Radiation emanates continuously from an energy source and moves steadily away from it, impinging on a distal object. Radiation paths differ from orientation paths. Radiation paths are often possible to detect the presence of the radiation, whereas

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orientation paths consist of the motion of a wholly imperceptible line. This type of emanation has only one conceptual or perceptual form viable for the sun (or fire/flashlight etc.) from the sun to an object [26]. Such motions are generally perceived to be static, but linguistically they are conceptualized as dynamic processes in which the light moves from one place to another.

***** The sun is shining into the cave

The current study suggests a distinction between two types of radiation path: one-way radiation path and two-way mirrored radiation path. The former, proposed by Talmy, occurs when the source of energy releases radiation toward the target object. The two-way mirrored (or reflected) radiation happens when the light does not directly release from the energy source, but it is reflected from another source. This second kind of radiation path can be characterized by entities that have flat surface and being able to reflect images of a scene, such as mirror or water, as in:

* The water reflects the color of sky

3.3. Shadow paths

Shadow path is a linguistic conceptualization (and perhaps also a perception) in which the shadow of an object, visible on some surface, fictively moves from that object to that surface. Thus, the shadow can be linguistically conceptualized as the Figure (the moving entity) and the object that carries the shadow as the Source. The surface on which the shadow is located is described as Goal[15]. Moreover, the predicate of shadow expressions can only be a motion verb (like *throw, cast, project,* or *fall*), and a path preposition (such as *into, onto,across* or *against*).

* The tree threw its shadow down across the valley.

The active verb *threw* is used, here, to refer to static shadow of the tree, as if it moved from the shadow-bearer (the tree) to the valley.

3.4. Sensory Paths

The last type of emanation paths is the sensory path, which includes the conceptualization of two entities: the Experiencer and the Experienced, along with something intangible moving in a straight path between the two, in one direction or in another. Experiencer "emits a Probe that moves from the Experiencer to the Experienced and detects it upon encounter with it", whereas the Experienced "emits a Stimulus that moves from the Experienced to the Experiencer and sensorily stimulates that entity on encountering it" [15]. Thus, the direction can either go from the Experienced (we) to the Experiencer (the enemy). According to Talmy [26], Experiencer can be:

A. Non-agentive -- permits both fictive directions

- i. The verb is lexicalized to take the Experiencer as subject:
- ❖ I can hear him all the way from where I'm standing.
- ii. The verb is lexicalized to take the Experienced as subject:
- **The old wallpaper shows through the paint even to a casual passer-by.**
- B. Agentive -- only permits Experiencer as Source
- ❖ I looked toward the valley.
- C. Lateral motion of the sensory emanation from an agentive Experiencer
- ❖ *I slowly looked toward the door.*

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4. ArabicEmanation of Fictive Motion

The representation of FMis not limited to English. Butit is a cognitive universal mechanism in which many languages, including Arabic, use the same type of extension. For example, the road slopes down the valley, is expressed in Arabic as ينحدر الطريق أسفل. Such motion verbs (like ينحدر الطريق السفل). Such motion verbs (like ينحدر الطريق) descend) are frequently and systematically used by speakers to express stationary spatial scenes that include path-like configurations (as in path). The aim of this study is to understand the nature of FMexpressions in Arabic. It attempts to describe this phenomenon applying Talmy's four types of emanation to see if Arabic uses the same constructions that are used in Talmy's model, or there are other categories that can be used in Arabic and absent in his categorization and vice versa.

4.1. Orientation Paths

4.1.1.Prospect Path

It refers to the source object that has a face-type front. Such object has geographically a specific relative to other objects in the surroundings. That is, the two objects are conceptualized as looking at each other. In Arabic, such constructions generally use verbs like يتقابل (hug), يتقابل (embrace), يتقابل (face). Concerning the following examples:

1. يطل العراق على الخليج العربي من خلال محافظة البصرة

Iraq overlooks the Arab Gulf through the province of Basra⁽¹⁾.

Namib Desert is the only place in the world where the sea **meets** the desert

The fall zone arises when a solid rocky area faces a soft rocky area

Horaman is a city that embraces the mountains of Kurdistan

In the sentences above, the source object, like *Arab Gulf* or *sea*, is conceptualized as facing the Goal object, like *Iraq* or *desert*. The objects are construed linguistically as such that they are looking towards each other, i.e., each of them is located at one side. One side acts as the source location and the other as the goal location.

In Arabic, the distinction between the Source location and the Goal location is sometimes not obvious. In this case, the two objects are linguistically conceptualized as both the source location and the goal location at the same time. As representing in the following examples:

The mountains embracethe only route leading to northern Iraq

The rivers **meet** in the city of Qurna in Iraq

The cane trees face on the banks of the river

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⁽¹⁾It should be noted that the translation of the data is made by the researchersthemselves since there is no available translation of it.

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On the both sides of the narrow road leading to Arc of Victory, the trees hug

The objects, *mountains*, *revers* and *trees*, are conceptualized as locating at one side, although they face each other. This is becausethe two objects are conflated into one noun phrase. Therefore, both objects act as the source location and the goal location simultaneously.

4.1.2. Alignment Path

This second type of orientation path occurs when the source object is conceptualized as a stationary straight linear with a point-type front, as illustrated in the following sentences:

The tattoo runs along the spine

The Kirkuk-Baniyas pipeline **extends** from the Kirkuk oil field in Iraq to the Syrian port of Baniyas.

Al-Aimmah Bridge (the Bridge of the Imams) passes over the Tigris River in Baghdad

In these sentences, the expressions *the tattoo, the pipeline, the Bridge*are conceptualized linguistically as having an axis that extends from start point and moving towards the last point respectively. The object *the tattoo*, for instance, is thought to be moved from the beginning to the end of *the spine*.

4.1.3. Demonstrative Path

This third type of orientation path happens when the source object is linear with a point-type front from which an intangible line emerges. The verb "يشير" (point) is only used in Arabic, as in:

There is a plate on the highway, the red arrow**points** toward Baghdad

In the previous sentence, the arrow on the signpost is a linear object with a point-type front, from which an intangible line emerges. The arrow draws people's attention to where the arrow is pointing.

4.1.4. Targeting Path

The fourth type takes place when the intention of the agent is involved. The source object with a front is oriented by the agent intentionally towards a direction. This kind occurs in Arabic by using the verbs رحم (direct to). دهر (destroy), as follow:

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Iraqi artillery targets three terrorist dens

The artillery destroyed terrorist places

Artillery fire **directs** towards the enemy

In the examples above, the source object (the artillery) is set by the unmentioned agent to orient towards a specific goal. Fictive line is linguistically conceptualized as emerging from the artillery towards the enemy. However, Talmy [15] states that "the camera

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provides an instance of fictive motion following the fictive path, with a so-conceived photographic 'probe' emerging from the camera's front". The same thing in Arabic, verbs like التقط (taking a picture) can be used to refer to that, as in the following example:

The camera took beautiful and professional photos

Here, the FMis conceptualized as extending from the camera lens towards the scene and then taking the scene back into the camera.

4.1.5. Line of Sight

The last type of orientation path involves a visual apparatus located on the front of an animate or mechanical entity from which a fictive line emerges. Below is an example of illustrating line of sight:

17. **نظرت** نحو السفينة

I looked towards the ship

18. وجهت الكامير انحو البحر

I directed the camera towards the sea

19. أدار (التفت) رأسه عندما سمع صوت أمه.

He **turned** his face (head) when he heard his mother's voice.

The source object is conceived as moving causing the lateral motion of the line of sight that emerges from the front. Here, the preposition (stowards, in 14) specifies the particular path which the line of sight follows. The only object that has actual move is the camera or agent's turning head, yet that object stays in the same location relative to the sea, not moving closer to it. The preposition (stowards) normally refers to a Figure object (I)'s executing a path in the direction of the Reference Object (ship or the sea), where the distance between the two objects progressively decreases.

4.1.6. Diffusion Paths

It takes place when the source object is conceived as diffusing in space. It can be realized in Arabic through the verbs تقشى (diffuse), توزع (distribute), تسلل (creeps) or تقشى (spread), as shown in the following sentences:

20. انتشر الخبر بين الناس

The news **spread** among the people

21. تسلل الضوء للغرفة

Light creeps into the room

4.2. Radiation paths

Radiation path happens when radiation emanates continuously and steadily from an energy source and hitting a distal object. In this case, the radiating event can be characterized as involving three entities: the radiator, the radiation itself, and the irradiated object. This radiating event then includes three processes: the emanation of radiation from the radiator, the motion of the radiation along a path, and the impingement of the radiation on the irradiated object [15]. Like English, it is very common in Arabic as in English and itself (enter), as in:

22. تسطع الشمس على التلال

The sun is **shining** on the hills

23 عند الساعة السابعة صباحا، تدخل الشمس الدافئة إلى الغرفة

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At 7 am, the warm sun enters the room

Here, the source object is the sun because it is the generator of light. Radiation emanates from the sun and moves steadily through a straight path and finally the light is impinged on the hill. Such motions are generally perceived to be static, but linguistically they are conceptualized as dynamic processes in which the light moves from one place to another. What is mentioned above is suggested by Talmy. However, we can realize another kind that cannot be found in Talmy's model, whichwe called **mirrored (reflected) radiation path**. It takes place when the light does not directly emanate from the energy source; instead, the light is reflected from generic source, which is usually the sun. Reflected radiation path is characterized by entities that have flat surface and being able to reflect images of a scene, such as mirror or water, as in the following examples:

24. تعكس البحيرة زرقة السماء الصافية

The lake reflects the clear blue of the sky

25 يعكس القمر ضوء الشمس

The moon **reflects** sunlight

26. في حجرتي المظلمة، تعكس المرأة الضوء الخافت

In my dark room, the mirror reflects the dim light

Here, the verb بعكس (reflect) is common in this type of FM in Arabic. In the first example, the water reflects the blue scene of sky. In the second example, the moon reflects sunlight. Thus, the sky, sunlight and light are the source of energy; and they are reflected on the water, moon and mirror.

4.3. Shadow paths

The shadow of source object emanates towards a surface of that object. In shadow path, there is no direct radiation from the source of energy to the goal location as in radiation path, "there is no theory of particle physics that posits the existence of ``shadowons" that move from an object to the silhouette of its shadow"[15]. The verbs will be and the common in Arabic, as follow:

27 ألقت الشجرة بظلها أسفل الوادي

The tree **threw** its shadow down the valley

28 سقط ظل العمود على الحائط

The shadow of the pillar **fell on** the wall

In the previous sentences, the shadow-bearing objects (like الشجرة pillar) are described as the agents that carry the shadows and called Figure. These objects are regarded as the Source of shadow. On the other hand, the surface on which the shadow is located (like الحائط valley and الوادي wall) is settled as the Ground object, here functioning as Goal.

4.4. Sensory Paths

Sensory path is described as moving from the 'Experiencer' to the 'Experienced' object. This kind of FM can be visual, auditory, olfactory, or even tactile and gustatory. Sensory path can be illustrated in Arabic as follow:

29. **يمتد** بصرنا نحو الوادي

Our gaze extends toward the valley

30. خرج الصوت من التلفاز

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The sound **sneaked** out TV

31. دخلت اخرجت رائحة كريهة في امن فمها

Bad smell exits/enters from/in her nose

32. غطت رائحة الكبريت المكان

The smell of sulfur covered the place

33. هبت ريح باردة في وجهها

A cold wind **blew** in her face

Participants of visual paths generally involve the Figure, the Ground, and the Agent. The first sentence refers to the visual path. It is conceptualized as extending towards the perceived entities, which is the Experienced. In this sentence, the Experiencer serves as the Figure (that is as Source), the Goal location is associated with the Experienced, and the Ground is the space between the agent's eye and the valley. The second sentence regards as auditory path in which the sound is expressed by the motion verb خرج (exit). Here, the auditory perception includes FM between the person who experiences the hearing and the sound heard. The Experiencer (التلفاز) TV), in the described sentence, is encoded as the Goal location, and the Experienced (الصوت) sound) is expressed as Source location.

The third sentence is classified as olfactory path in which the dynamic linguistic representations of smell are perceived indirectly. In Arabic, the verbs (exit) and خز (enter) can be used to refer to olfactory path. What is conceived, here, is that the Experienced entity is conceptualized as the Figure, i.e., as the Source location, whereas the Experiencer serves as the Goal, and the space between them is Ground. The last sentence, on the other hand, indicates tactile path. The agent who is represented as Experienced entity, feels cold in which the wind touch the agent's face.

5. Conclusion

Arabic goes with the languages that support the assumption in which the construction of FM is cognitively universal phenomenon, that is embodied in the human mind. Thus, it is not limited to grammatical constraints of specific language, but many languages, including Arabic, use such type of extension. The current study has arrived at conclusion that Talmy's model is suitable to study this linguistic phenomenon crosslinguistically. It can be used to describe Arabic fictive motion. However, Arabic contains motion verbs that have more concreteness to refer to abstract scenes. For instance, the motion verbs that have more concreteness to refer to abstract scenes. For instance, the motion verbs (exit), (exit)

CONFLICT OF INTERESTS

There are no conflicts of interest

Reference

- [1] F. Ungererand H. Schmid, *An Introduction to Cognitive Linguistics*. London: Longman, 1996.
- [2] W. Wildgen, "Time, Motion, Force and the Semantics of Natural languages". *University of Bremen*. Antwerp Papers in Linguistics, 2004.[Online]. Available: www.fb10.uni-bremen.de/homepapes/wildgen/pdf/ antwerpen-time
- [3] A. Rojoand J. Valenzuela, "Fictive Motion in English and Spanish:, *IJES*, vol. 3 (2), 125-151, 2003.
- [4] C. Fillmore, "The case for case", in *Universals in linguistic theory*, E. Bachand T. Harms, Eds. London: Holt, Rinehart and Winston, 1968, pp. 1-88.
- [5] G. Lakoff, Women, Fire, and Dangerous Things. Chicago: University of Chicago Press, 1987.
- [6] M. Johnso, The Body in the Mind. The Bodily Basis of Meaning, Reason and Imagination. Chicago: Chicago University Press, 1987.
- [7] R. Jackendoff Semantics and Cognition. Cambridge, Mass: MIT Press, 1983.
- [8] R. JackendoffSemantic Structures. Cambridge: MIT Press, 1990.
- [9] R.Jackendoff Foundations of Language: Brain, Meaning, Grammar, Evolution. Oxford: Oxford University Press, 2002.
- [10] G. Radden, "The concept of motion", in *Understanding the Lexicon: Meaning, Senses and World Knowledge in Lexical Semantics*, W. Hüllen and R. Schulze, Eds. Tübingen: Max Niemeyer Verlag, 1988, pp. 380-94.
- [11] A. Wierzbicka Semantics: Primes and Universals. Oxford: Oxford University Press, 1996
- [12] L. Talmy, "Semantics and syntax of motion", In *Syntax and Semantics*, J. Kimball, Ed. New York: Academic Press, 1975, pp.181-238.
- [13] L. Talmy, "Lexicalization Patterns: Semantic Structure in Lexical Form", In Language Typology and Syntactic Description: Grammatical Categories and the Lexicon vol.I, T.Shopen, Ed.Cambridge:Cambridge University Press, 1985, pp.36-149.
- [14] L.Talmy, "Fictive motion in language and 'ception'", In *Language and space*, P. Bloom, M. Peterson, L. Nadeland M. Garrett, Eds. Cambridge: Cambridge University Press, 1996, pp.211-276.
- [15] L. Talmy, Toward a Cognitive Semantics, vol. I: concept-structuring systems. Massachusetts: MIT Press, 2000.
- [16] C. Chu, "Five Formulations of the Conceptual Structure of Motion and Their Cross-Linguistic Applicability: With Special Reference to Chinese", *Studies in Linguistics* 34.1, 1-26, 2008.
- [17] J. Zlatev, "Spatial Semantics", In *The Oxford handbook of cognitive linguistics*, D. Geeraerts and H. Cuyckens, Ed. Oxford: Oxford University Press, 2007, 318-350.
- [18] W. Langacker, "Virtual reality", Studies in the Linguistic Sciences, 29(2), 77-103, 1999.

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Vol. 29/ No. 6/ 2021

- [19] W. Langacker, "Abstract Motion", Proceedings of the Twelfth Annual Meeting of the Berkeley Linguistics Society. Berkeley Linguistics Society, 12, pp. 455-471, 1986.
- [20] O. Matsumoto, "Subjective Motion and English and Japanese Verbs", *Cognitive Linguistics*, 7(2), 183-226, 1996.
- [21] T. Matlock, "Fictive motion as cognitive simulation", *Memory and Cognition*, 32(8), 1389-1400, 2004.
- [22] C. Bennett, Spatial and temporal uses of English prepositions: An essay in stratificational semantics. London: Longman, 1975.
- [23] R. Dowty, Word meaning and Montague grammar. Boston: D. Reidel Pub. Co, 1979.
- [24] B. Levin, English Verb Classes and Alternations: A Preliminary Investigation. Chicago: University of Chicago Press, 1993.
- [25] W. Langacker, Foundations of cognitive grammar (Vol. 1). Stanford: Stanford University Press, 1987.
- [26] L. Talmy, Ten Lectures on Cognitive Semantics. Boston: Brill, 2018.
- [27] V. Evans, *A Glossary of Cognitive Linguistics*. Edinburgh: Edinburgh University Press Ltd, 2007.
- [28] R., Núñez and T. Marghetis, "Cognitive Linguistics and the Concept(s) of Number", in *Oxford Handbook of Numerical Cognition* R. Cohen-Kadosh and K. Dowker, Eds. Oxford: Oxford University Press, 2015, pp. 377-401.
- [29] W. Langacker, *Cognitive Grammar A Basic Introduction*. Oxford University Press: Oxford, 2008.
- [30] L. Shi, "Introducing Phenomenology into Fictive Motion", *Advances in Social Science, Education and Humanities Research*, vol. 205, 426-429, 2018.
- [31] A. Joy, J. Sherry and J. Deschenes, "Conceptual blending in advertising", *Journal of business research*, 62, 39-49, 2009.
- [32] V. Evans, K. Bergen, and J. Zinken, ED., *The Cognitive Linguistics Reader.* London: Equinox Publishing Ltd, 2007.