



Mental Space and Metaphor

By: Samara M. Ahmed

المجاز الفكري والاستعارة

المستخلص

وتركز هذه الدراسة على المجال الفكري والذي هو نظرية عملية ومجازية والتي هي أداة لغوية وتستخدم في التجارب كل يوم. يساهم المجال الفكري والمجازي لحل العديد من المشاكل التي تعتبر مرجعية والتي تركت دون حل من قبل رؤى محدودة للطرق اللغوية التقليدية. يستخدم المجاز الفكري لفهم الرموز الذهنية ولتفسير أي غموض لأي موقف من خلال تمثيل المفاهيم الفكرية المجردة في مصطلح أكثر واقعية ووضوحاً.

Abstract

The role of metaphor and mental space. This study deals with metaphor as a cognitive phenomenon which is the main part of our mental system. Metaphor is used to understand and experience the abstract and complex concepts in terms of more and concrete ones. Metaphor is a process of conceptual mapping create cognitive correspondences between two conceptual domains and map them from the source to the target domain. Metaphor is a cognitive process because in metaphorical understanding the mind does not depend on the words we hear or read but on cognitive features and image schemas. Contexts also play an important role in interpreting and understanding the exact



meaning behind metaphors used in these contexts. So, this study is a cognitive linguistic one that is used in everyday life which governs our conceptual system.

1.1 Introduction

Mental space is a cognitive model which involves two basic elements that of mental space and connectors across spaces. These are simple cognitive structures, together with few general principles; solve key issues concerning reference in linguistics and philosophy of language (Negrea, 2006:1).

According to Lackoff (1987:281) mental space is a medium for conceptualization and thought. Thus, any fixed or ongoing state of affairs as anyone conceptualize it in represented by a mental space.

Fauconnier (1997:37) believes that mental spaces are not isolated from each other or work independently from each other, but are interconnected, and can be modified as thought and discourse starts or activates. As discourse establishes new spaces, elements, within them and connections between them are established. So that, mental spaces may be embodied inside spaces that are established previously.

Fauconnier and Turner (2002:102) stress that mental spaces are internally organized by knowledge structure in long-term memory such as frames and schemas. In this sense, mental spaces operate in one – line or working



memory, but are built up partly by activating structures available from long-term memory. They also mention that mental spaces are the basic elements of a cognitive process which is known "meaning construction" that involves two processes: the building of mental spaces and the establishment of mapping between them. These processes can be illustrated in the following figure (ibid).

Input 1

Input 2



Figure (1) Mapping of Elements Across Inputs

So, in Fauconnier's and Turner view (2002:40) mental spaces as

"Conceptual packets constructed our thinking and talking, for the purpose of local understanding and action."

There are many sources for mental spaces. Geeraerts and Cuyckens (2007:352) think that spaces are built for many sources, one of them is the set of conceptual domains that everyone already knows, e.g., eating and drinking buying and selling, social conversations in different places, etc. Knowledge from many domains can be the source to build up a single mental space. It can be build up from additional frames aside from processes such as going to the



market, taking a break from work, etc. Moreover, immediate experience represents an important source for mental spaces. So that, everyone can understand that mental spaces are not linguistic structures, but mental construct that emerge or set up in any discourse by linguistic expressions. Mental spaces are not defined in relation to the mind, but to the discourse in which they appear in (Ibid:353). On the other hands, Tabakowsk and Choinski (2010:5) argue that through the work of Fauconnier and Sweetser (1996) and Fauconnier (1997), mental space theory became an encompassing cognitive theory of discourse and discourse management. According to this cognitive theory, different linguistic and non-linguistic knowledge systems are involved. These systems are referred to as 'mental spaces'.

1.2 The Mapping of Mental Space

Fauconnier and Turner (2002:40) explain spaces in terms of "mental spaces small conceptual packets" connected to long-term schematic knowledge called frames as well as to long-term specific knowledge. This explanation shows four mental spaces:



Two input spaces, a generic space that contains what the two inputs have in common, and blended space may also contain additional elements (emergent structure) which can include new elements retrieved from long-term memory or resulting from comparison of elements drawn from the separate inputs, or from elaboration on the elements in the blended

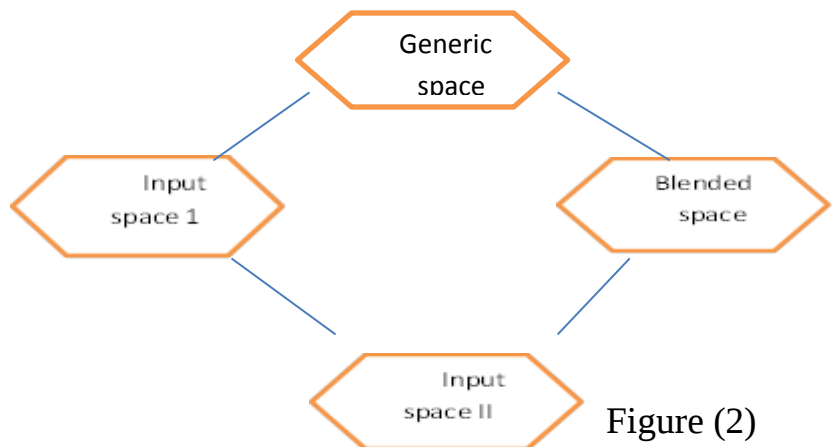


Figure (2)

This figure illustrated the mental spaces by circles, with relevant contents which either displayed iconically or listed in abbreviated form (Ibid:42).

1.3 Mental Space and Conceptual Blending Theory

Conceptual blending is a basic mental operations that creates networks of connections between mental spaces.



Conceptual blending depends on the knowledge everyone has in long-term memory that he/she can use it to interpret his/her perceptions which is organized into patterns. These organizational conceptual structures which are called 'mental spaces' represent the main elements in the cognitive process of blending (Antunano,2004:10). Conceptual blending theory is a cognitive knowledge and it is a basic mental operation that works over mental spaces. Evans and Green (2006:400) stress that conceptual blending is derived from two main theories within cognitive semantics; conceptual metaphor theory and mental space theory, to it is closely related and even viewed as an extension to it. The reason is that it is concerned with dynamic aspects of meaning construction and its dependence upon mental spaces as parts of its architecture. Bing and Redish (2006:1) said that conceptual blending explain the way in which the mind combines two mental spaces to make sense of linguistic input in new emergent way. Blending occurs usually at the subconscious level, it nonlinear and nondeterministic. The precise way a person blends to input mental spaces together depends strongly on both the linguistic input and on the physical mental context (Ibid:1).

Evans and Green (2006:403) concluded that conceptual blending draws up mental space because an integration network consists of inputs in which elements in each input are linked by mappings. Heerdence (2008:33-34) stresses that mental spaces are the fundamental concepts of



blending network. These mental spaces are incomplete and are characteristically informed by frames.

1.4 Metaphor and Mental Space

In traditional view, metaphor is a conscious and deliberate use of words that requires a special talent to do it. Lackoff and Johnson (1980:3) say that many abstract and complex concepts like love, state, changes, war, etc. are mentally represented, understood and constituted by metaphor, for example:

- Ideas are food.
- Time is space.
- Love is madness.

These expressions are used by people in everyday language as part of the way in which they perceive, understand and act it in their life by using their mental domain.

Lackoff and Turner (1989:227) state that "far from being merely a matter of words, metaphor is a matter of thought- all kinds of thought".

While Lackoff (1993:203) points out that the locus of metaphor is not our language, but in the way one can conceptualize one mental domain in term of another.

Lackoff and Johnson (1993:206) state that metaphor is mental since it involves understanding and perceiving one domain of experience by experiencing each expression in



terms of mental Scenario in which a gents, roles, entities, activities, and inferences which are transferred from one domain to another.

According to these views, metaphors are parts of our mental system that one cannot think without them, because they are metaphors that everyone live by.

Lackoff and Johnson (2003:257) emphasize that "You don't have choice to whether to think metaphorically. Because metaphorical spaces are part of our mental, we will think and speak metaphorically wherever we want or not".

Metaphor in relation to mental space cannot be used in communication only, but also in understanding by making one of the cognitive operations that shape the final product of one thought that is involved in metaphor which relates to the speaker's packaging of information which is called "mental spaces" (Radden and Driven,2007:1).

Likewise, metaphor is far from being a poetic or rhetoric device, it constructs both human categorization of experience and the course of mental processing. Nowadays, metaphor becomes the central aspects of human communication.

Taking metaphor as a mental process which is not only found in language, but in all aspects of everyday life.

So, Cienki and Muller (2008:5) put it in this form:

".... If metaphor has its basis across-domain mapping in mental system, then words should



offer just one form in which they may appear. One should be able to find metaphoric expression in various forms of human behaviour, and not exclusively in language."

So that, metaphor in its relation to mental space is not a linguistic phenomenon which is restricted to literary works, but it is a mental and conceptual phenomenon which is used in everyday life by everyone.

1.5 The Importance of Metaphor in Mental Space

The importance of metaphor as a mental process is seen in considering it as a tool to conceptualize one mental domain in terms of another (Lackoff and Johnson,1980:3).

Liebert (1997:15) assures that metaphor is a central cognitive process which helps everyone to think and talk about abstract phenomenon which is found in mental domain through mapping the structure of concrete source domains into abstract domain of experience.

Lackoff and Johnson (1999:3) state that "the mind is inherently embodied. Though is mostly unconscious. Abstract concepts (mental) are largely metaphorical. Metaphor is the main mechanism through which we compared abstract concepts and perform abstract reasoning".



Conversational mental image refers to the nature of metaphor and also it maps one conversational mental image into another.

- I'm feeling low.
- I'm out of money. (Geeraerts,2006:215).

Koveses (2010:ix) concludes that metaphor is the central device of creative literary imagination and it becomes the ultimate cognitive device of thinking and understanding without it neither poet nor ordinary people could live by.

1.6 The Role of Mental Space and Metaphor in Understanding Sentences

In understanding sentences

As the researcher has mentioned earlier in the previous section that the notion of blending space has been developed by Fauconnier and Turner (1994, 1995, 1996, 1999) on the basis of the concepts of 'mental spaces', i.e. a relatively small conceptual structure built up for purposes of local understanding and reason. For this reason the researcher will take Fauconnier and Turner (1995) as a model to illustrate three sentences.

According to Fauconnier and Turner (1995:184) a mental space generally rely retrieves data from more than one conceptual domain so that it creates its own structure, always smaller than that of the input domains. On the basis of this view, metaphor is the result of a blending process whose – a source and a target- and two middle spaces-a



generic space and a blended space. The structure from at least two input spaces is projected into the blend (which integrates part of the structure from the input spaces into more complex events to become dynamic), while the generic space (which contains the basis structure of the input spaces) in turn licenses the projection. (see figure (3))

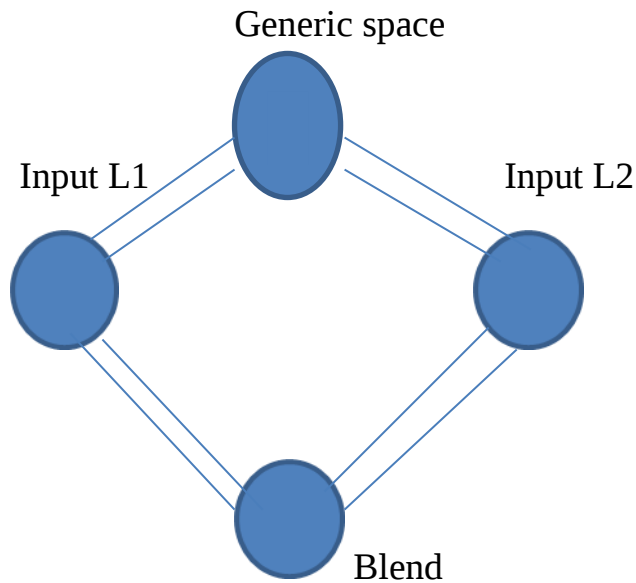


Figure (3)

The process is illustrated by the analysis of the following sentences:-

1. His plan backfired on him.

Source	Generic	Target
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(Input space 1)	Space	(Input space 2)
A hunt intends to kill an animal.	Someone has a clear intention	Someone intends to do something
The hunter has everything prepared: rifle, lens, etc.	All is prepared and planned in advance.	He carefully plans what to do.
The hunter makes out an animal in the distance and locates it with the rifle, being just about to kill it.	The plan is to be carried out.	He conscientiously prepares everything to carry out the plan, being just about to perform it.
The hunter shoots.	The action is performed.	He carried out the plan.
The rifle back fires: the shot goes out from the butt of the rifle towards the hunter.	The action fails and has the opposite effect.	The plan fails and has the reverse effect that was expected.

Blending Space

Someone, intending to do something, thoroughly plans and prepares what steps to take but just when he is about to do it the plan fails having the reverse



effect that was expected.

2. With drugs you are digging your own grave solidly.

Source (Input space 1)	Generic Space	Target (Input space 2)
Someone digs a grave.	Someone does a specific action.	Someone is doing harm himself.
A shovel is used as the digging instrument.	There is an instrument used.	Drugs are taken.
The grave is going to be for a dead person in a near future.	The action is related to death.	By means of doing continuos harm to oneself, one may die.
The dead person is the digger himself.	The doer of the action dies.	The one who was harm to himself dies.
The digger has the possibility to stop digging with the shovel so that he doesn't die.	The doer may prevent death by stopping the action.	The drug consumer may stop taking drugs in order to avoid death.

Blending Space

Someone repeatedly takes drugs and



that is killing him. The drug consumer is still in time to avoid death by leaving drugs.

3. He buried himself in alcohol.

Source (Input space 1)	Generic Space	Target (Input space 2)
Someone buries a dead person in a tomb.	Someone does a specific action	Someone devotes so much time of this life to drink alcohol that he does not seem to be alive.
Sand covers the tomb and surrounds the dead person completely.	Covering and surrounding element.	Alcohol is surrounding the whole life of that person, as if he was encapsulated it by.
In order to come back to life the dead person should leave the tomb and the surrounding sand.	Someone leaves a close place.	In order not to devote so much time to drink, he should give up alcohol.



This sentence means that a person devotes so much of his life immersed in a certain task that he seems to be dead.

Blending Space

Someone devotes so much time of his life to drink alcohol that he seems to be dead in tomb surrounding by alcohol.

Examples of Metaphorical Mental Spaces

1- Eating Is Destroying.

Obviously, the image of the worm climbing into the nostrils and eating the brain leads to the metaphor "Eating is Destroying" which stems from the bodily experience based on eating, that is, destroyed the food by putting it in mouth and breaking it down into smaller fragments which, upon reaching the stomach, will be easily decomposed by its acids.

2- The brain is a sponge.

In this example the brain is a sponge, and information (in the form of images, words, ideas, etc.) is liquid that can be absorbed by the brain. It may be also related to the idea that the brain is a container, whose entrance and exit are the ears.

3- Drug sweep.

The mapping of this message means that the cleaning of drugs with a broom onto the arrest of drug dealers and



people taking drugs in such a way that society becomes cleaner.

2. Conclusion

Metaphor is a cognitive process and its main function is understanding and experiencing one concept in terms of another. Metaphor is a kind of mapping from which patterns of metaphorical language arise and this metaphorical and conceptual mapping depend on perceived resemblance and correlations in experience influences about how people think, reason and imagine in everyday life.

Metaphor is not a part of our language, but it is the main part of our mental system, which is used an understanding tool the more abstract and complex concepts which represents the target domains in terms of more clear and delineated concepts which is the source domains of conceptual metaphor. So, metaphor is used by all people of all ages and educational backgrounds and not restricted to certain people as a decorating tool.

Mental space and metaphor is a cognitive process not a linguistic one, since it does not depend on the words only, but it depends in the work of conceptual mapping on perceived and cognitive correlations or correspondences



between the source and the target domain. Also, words do not tell us in which part the concepts resembles each other, but through conceptual mapping by which the mind will select the required features or knowledge structure from the source and map them to the target domain.

Mental metaphor is a systematic process. This systematically is reflected in metaphorical mapping which is a set of systematic correspondences between the source and the target domain, also, this systematically is clear since metaphorical mapping in one direction only, i.e. it takes place from the source to the target domain and not the opposite. Also, mental metaphor is a systematic process, since it does not occur in isolated or randomly. Each mental metaphor is part of a more general mental metaphor which are all formed by everyday experiences.

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