Reasons behind Using Metaphor: A Cognitive Perspective on Metaphoric Language

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ABSTRACT
Looking at metaphoric language from a cognitive perspective, this article offers several reasons behind the prevalence of metaphors in human language. Firstly, metaphoric language is cognitively economic. When we use metaphors, a salient and conventionally-recognized feature of the base is attributed to the target. This projection is accompanied by the automatic inhibition of metaphorically-irrelevant meaning aspects, which reduces the burden on the cognitive system of language user. Secondly, in many cases of metaphors, an event or idea is described by the mediation of images. This image schematization is a tool by which the processes of understanding and interpretation are facilitated. Thirdly, metaphors appear in the language in a coherent manner, making the processes of expression and understanding systemic and frame-based. Fourthly, employing the most typical words in the base position of metaphors lubricates the process of comprehension, because they are at the peak of metaphor-based categories. Therefore, they are readily accessible to the comprehender. However, in addition to these cognitive factors, some other external factors such as social and contextual ones might have contributed to the prevalence of metaphors in our language.

Key Words: metaphoric language, base, target, inhibition

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Introduction
Throughout the history, the language used by human beings has undergone dramatic and massive changes. Such changes or evolutions have originated from or encouraged by internal and external factors (Lyons, 1981). Internal factors are within-language forces that cause some changes in the language. External factors are extra-linguistic forces that are imposed by the conditions of social context. Languages of the world have changed in many areas, including sound change, grammar change, vocabulary change, etc. In this article, we focus on one particular aspect of language change or language evolution. Metaphor is an ever-present feature of daily language use. It is very difficult, or perhaps impossible, to communicate effectively without using metaphors. They are so pervasive that it is very rare to find a metaphor-free communicative event. The growing trend of metaphor use has been reported in many studies. Honeck (1997) has noted that metaphoric language is a highly-used strategy among advertisers. Graesser, Mio and Millis (1989) found that speakers use a unique metaphor in every 25 words in television news programs. Cacciari and Glucksberg (1994) say that metaphors are no longer an ornament added to language to make it more beautiful; rather, they are powerful tools to achieve communicative objectives and to make language more efficient.

In their extensive discussions, Lakoff and Johnson (2003) present a large number of cases in which metaphors are manifested in our language. In other

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words, all these verbal metaphors are based on a single conceptual metaphor and are understood by the activation of the conceptual metaphor in the mind of comprehenders. According to Ruiz de Mendoza Ibáñez (2014), the notion of “conceptual mapping”, posed in conceptual metaphor theory, has traditionally been used to describe basic cognitive processes underlying metaphor and metonymy. He adds that the same notion can also account for the processes involved in understanding other figures of speech such as hyperbole, irony, and paradox.

This article intends to discuss those possible factors which might have been behind the process of language metaphorization. The aim is to enumerate and explore those factors which have pushed us toward a metaphor-oriented, or even a metaphor-based, language. The main focus will be on cognitive factors in metaphor creation and metaphor comprehension. These factors will be elaborated on one-by-one in order to find how they might play a role in the process of language metaphorization and how they have made us more inclined to employ metaphors in our language. There is no doubt that some social factors have also been involved in this growing trend. However, these factors will not be the subject of discussions in this article.

**Economic Aspect of Metaphoric Language**

When speakers use metaphoric language, they describe one thing or one domain (target or topic) in terms of another thing or another domain (base or vehicle). For example, when it is said that A lawyer is a lighthouse, the lawyer is described by the lighthouse. In other words, a certain characteristic of base (in this case lighthouse) is attributed to the target (lawyer). According to salience imbalance model (Ortony, 1979), understanding a metaphoric statement involves the attribution of a salient feature of base to the target. It means that when we are faced with the metaphor X is a Y, an outstanding feature of Y (base) is attributed to target (X). Glucksberg, Newsome, and Goldvarg (2001) argue that throughout the process of metaphor comprehension, metaphor-irrelevant features of the base are filtered out; that is, those semantic aspects of the base which are metaphorically irrelevant are inhibited and are not taken into account. For example, in understanding the metaphor My lawyer is a shark, features such as living at the sea, being able to swim, and breathing under the water are metaphorically irrelevant; therefore, they are inhibited throughout the process of metaphor comprehension (p. 282). According to Gernsbacher, Rachel, and Robertson (1999), interpreting this metaphor would result in enhancement of metaphor-relevant attributes of shark (such as tenacity, ferocity, and aggressiveness), while non-appropriate or metaphorically-irrelevant attributes of shark are attenuated or suppressed. This was discussed through evidences from neuro-psychological studies by Banaruee, Khoshima, Khatin-Zadeh and Askari (2017) where they affirmed that a broad metaphorical class is produced by a suppression- or inhibition-based mechanism through which the majority of semantic aspects are completely filtered out.

After this brief review, we are now in the position to answer this question that how metaphoric language can be economic. As was mentioned above, through using metaphors, the speaker attributes a salient or a conventionally-recognized feature of the base to the target. This projection of a specific aspect of meaning is accompanied by the inhibition or suppression of other aspects of meaning which are not concordant with that particular context. We, as human beings, tend to use the least amount of energy and resources to achieve the highest amount of intended objectives. Although we might not be aware of this strategy, it is a widely-used tool. It is a very common strategy that is particularly used in our cognitive operations such as those employed in our daily language use. Through using metaphors, we automatically push out a large number of meaning aspects that are not intended in that particular context. Such filtering process is not cognitively demanding, because the intended aspect of meaning is very salient and conventionally-recognized for all speakers of the language. Therefore, the activation of that aspect of meaning and its projection from base unto target domain is cognitively undemanding. We, perhaps unconsciously, have been using metaphoric language in order to communicate with the least amount of cognitive demand and in the most efficient way. When the word jail is used metaphorically, the first thing that immediately comes into mind is confinement and restriction. Therefore, metaphoric sentences such as My job is a jail, My house is a jail, My country is a huge jail are readily understood. The term jail has a lot of aspects of meaning. For example, we can refer to a jail as a building. However, confinement and restriction are the most known and most conventional aspects of meaning of this term. In this way, the intended meaning is expressed in
an effective manner by using one word (*jail*) in a metaphorical sense, making it unnecessary to use several words in a literal sense to express the same intention.

It must be noted that the above explanation cannot justify the existence of complex literary metaphors (for example, those used in poetry) whose understanding involves going along way and sometimes intellectual deductions. Literary metaphors are mostly used for aesthetic purposes. The authors use this type of metaphor to adorn their language and make it more beautiful. It is a tool to encourage the reader to think profoundly. When a literary text is colored by these metaphors, the reader, consciously or unconsciously, is encouraged to read with a higher degree of attention. Literary metaphors are mostly imaginative and artistic. The reader has to submerge himself/herself in the text in order to decode the message of the writer. In this way, a better and a stronger connection is created between the reader and the text. Therefore, the prevalence of metaphors in the literature can be explained by aesthetic and psychological factors rather than cognitive factors.

**Image Schematization**

One of the ways in which we can communicate more efficiently through language is image schematization. Image schematization means a pictorial or a geometric description of an event or idea. There is a limitless number of world’s events and ideas whose understanding is significantly facilitated through image schematization. Describing events or ideas in terms of images makes the nature of relationship among their components clearer. When the comprehender reconstructs the image in her/his mind, s/he can obtain a better understanding of the overall relationship existing among components and, consequently, the whole of that phenomenon. According to Peña Cervel (2004), image schemas are shared by people and cultures all over the world; therefore, any conceptual system based on them must be endowed with some kind of universal character.

Johnston (1987 p. 126) provided a list of image schemas through which many events are understood metaphorically. This list includes image schemas such as confinement, source-path-goal, blockage, etc. Orientation metaphor is a special type of metaphor in which one concept is not structured in terms of another concept but a system of concepts is organized with respect to another concept (Lakoff 2003, p.15). These metaphors are mainly based on spatial orientations such as up-down, in-out, etc. Lakoff (p. 17) cites the conceptual metaphor *High status is up*, which is the source of many verbal metaphors such as the following metaphors:

- He has a *lofty* position.
- She will *rise* to the *top*.
- He is at the *peak* of his career.
- He is *climbing* the ladder.

In these metaphors, an image-based domain (base domain) is mapped unto the target domain. Because of the nature of base domain, the process of understanding is facilitated for the comprehender. There are many scientific subjects whose understanding is made much easier when they are discussed through images, diagrams, geometrical shapes, etc. To give an example from Physics, consider an object that moves on a straight line with a changing speed. The speed of this object changes from moment to moment. The movement of this object can be described by the function *x=F (t)*. In this function, *x* is the place of moving object and *t* is the time. Describing the movement of this object by an algebraic function is very useful in solving many problems. However, when the movement is shown on a Cartesian diagram (time on horizontal axis and place on vertical axis), the nature of relationship between time and place as well as the changes of momentary speed is made much clearer. For example, a quick look at the diagram can tell us when the speed has been increasing and when it has been decreasing. Also, the diagram offers us a clear understanding of momentary speed at each moment. The diagram helps us to see a number of aspects that cannot be easily understood by other means such as the function *x=F (t)*. In this example, the movement of an object is described in two modes. However, description by diagram can improve our understanding of the same movement. A single phenomenon can be described in a number of ways. Each way is one representation of the same event or idea. Each representation looks at the same event or idea from its specific perspective.

Our ordinary experiences tell us that when an event, concept, or idea is described by the mediation of images, diagrams, or geometric shapes, its understanding is facilitated. Several reasons might be suggested for this improvement in our understanding. A pictorial representation of an event


or idea allows us to look at it as a whole. In other words, we see all the components and the manner of their relationships to each other at the same time. The visualization of a phenomenon can facilitate its accessibility and speed up its activation during language comprehension. Therefore, expressing and understanding an event or idea is made easier for speaker and comprehender when the processes of expression and comprehension are visually-based. Orientation of various elements and the position of each element relative to other elements can be one of the reasons facilitating the comprehension of visually-based mode of expression. Considering these points, we would not be surprised to see the wide extent of metaphoric language and its prevalence in every aspect of communication. It has been a natural tendency of humans to find ways for more effective communication. Using image-based metaphors and image schemas has definitely been an effective tool to improve the quality of communication among people.

**Systematicity and Coherency of Metaphoric Language**

Metaphors are used in a systemic and coherent manner in the language. In their book *Metaphors we live by*, Lakoff and Johnson present a number of conceptual metaphors which are the source of a larger number of verbal metaphors in English. These examples clearly show the systematic way in which a great number of verbal metaphors originate from a single conceptual metaphor. Every conceptual metaphor can be considered as a wide and general frame based on which many verbal metaphors are created and used in the process of communication. In other words, the creation of conceptual metaphors in the languages of the world can be viewed as a kind of frame-formation or even rule-formation. Under each frame or each rule, a large number of ideas can be expressed. The creation of general frames or rules in the language might have been one of the strategies developed by humans to enhance the efficiency of their communication. Had the humans decided to express a large set of ideas in an unsystematic or patchy way, the quality of communication among them would have been lowered. The systematic manner in which conceptual metaphors and their corresponding verbal metaphors are used in the language reduces the burden on our cognitive system, because a large number of ideas and utterances can be expressed and understood by the activation of a small set of conceptual metaphors. In other words, the systematic and frame-based employment of conceptual or universal metaphors (if we consider a conceptual metaphor as a general frame) might have been a quality-enhancing strategy for humans to express their thoughts and to understand the points made by their interlocutors. Throughout the development of our language, some possible deficiencies within the language might have contributed to the emergence of new verbal metaphors, which can be considered as a normal reaction from language users.

An important question that might be raised is that how conceptual metaphors have been born and how they have developed into their current status. To answer this question, it can be suggested that the current conceptual metaphors have not been inherently conceptual metaphors from the beginning of their birth; rather, they have evolved into conceptual metaphors throughout a number of developmental stages. Such a development might have been facilitated by an early stage of conventionalization. In other words, when a metaphor establishes itself within a language and becomes conventionalized, a small set of other metaphors are derived from it. The establishment and conventionalization of this small set of derived metaphors paves the way for the birth of other related metaphors within the same set and under the same original metaphor. This process is exponential; that is, the generation of new verbal metaphors sets the ground for the birth of other new verbal metaphors. This exponential process continues until it reaches a state in which the original metaphor is considered as a conceptual metaphor. However, it must be noted that other factors might also be involved in the creation of conceptual metaphors. Kövecses (2013) suggests that correlation-based metaphors emerge from mental representation through a metonymic stage.

As conceptual metaphors are strongly established and highly conventional within the language, they have been an accessible and a rich source for the generation of new verbal metaphors. Conceptual metaphors and verbal metaphors produced by them lubricate our communication, although in the majority of cases we are not aware that we are using them to produce sentences and to understand statements of other people. Identifying all influencing factors and how they interact with each other and also how they interact with contextual and social factors can be a very complex job. In recent decades, the rapid advance of technology, as
an external factor, has contributed to the invention of new metaphors. The changes of language are influenced and dictated by many factors. Within fifty years, there will be many new metaphors incomprehensible for people living in these days.

**Metaphor-Based Categorization**

The creation of large categories and referring to them by a single word is a very common strategy in language use. For example, the word *horse* is used for a large group of animals which share certain features. This word is not used to refer to a specific animal. Similarly, the word *plant* is used to refer to a large group of living creatures, which themselves are divided into a number of smaller subcategories. For example, there are a lot of types of flowers. Creating large taxonomies and including a great number of objects in them on the basis of certain features is a common strategy, although we might not be aware of such categories. Similar to this type of taxonomies, special types of semantic categories are used in the language that are based on metaphoric concepts. The word *link*, *bridge*, *channel*, *road*, etc are used to refer to a tool by which two entities are connected to each other. Literally, these words have different meanings; metaphorically, all these words can be used in certain contexts to refer to a connection between two entities. However, compared to other words, the word *link* is more typical. This word can be used to refer to a person mediating between two other persons; it can be used to refer to an office mediating between a large company and a number of its branches; even it can be used to refer to an electronic chip that connects two points in an electronic device. The word *bridge* can also be used in many contexts. We talk about a *bridge* between generations of people, a bridge between two hostile countries (creating peace and understanding between two enemies), and a bridge between ourselves and success (this bridge can be a college degree). The words *road* and *channel* can also be used to express the same meaning. However, these latter words are less typical. All these words, with different degrees of typicality, share a certain metaphorical meaning. Among these metaphor-based categories of words, those words which have the highest degree of typicality are mostly used as the base of metaphoric statements.

Considering the above-mentioned points, one might say that the most typical words, which stand at the peak of each group, have been employed by language users as a strategic tool. Because of their high degree of typicality, these words are easily accessible to the speaker and listener. Therefore, using these words as a tool to express metaphorical meanings is facilitating for both language producer and language comprehender. The intended meaning can be expressed by literal words or less-typical terms in metaphor-based category. However, the best way to express that meaning is to encode it in the most-typical term of metaphor-based category.

**Summary**

Taking a cognitive perspective on metaphors, this article presented several reasons that have contributed to the prevalence of metaphors in our language. Firstly, in terms of cognitive resources needed to process language, metaphorical language is economic. Through using metaphors, a salient and easily-accessible feature of base is attributed to the target. This projection is simultaneous with the automatic suppression of metaphorically-irrelevant features of base domain. The mechanism of suppressing irrelevant features of base domain is not cognitively demanding, because the intended and relevant feature of the base is very salient and, consequently, it is readily accessible. Secondly, a large number of metaphors are based on image schemas. Describing an event, concept, or idea by the mediation of images is one of the best strategies that help us to obtain a clearer understanding of them. Therefore, image-based metaphors can be effective tools to improve our understanding of our world. Thirdly, the systematic way in which metaphors employed in the language enhances the quality of communication among language users. A large number of verbal metaphors are understood by the activation of a single conceptual metaphor. In other words, a great number of verbal metaphors are systemically derived from the original conceptual metaphor. Such systematicity might have been an encouraging factor for language users to employ metaphors in their communications. Fourthly, putting the most representative word of a metaphor-based category in the base position of a metaphor can be a strategic tool for language users. These highly-typical terms are easily processed by comprehenders. Therefore, the interpretation of statement is facilitated. It must be added that the role of social and contextual factors is undeniable. The main question is that how these factors interact with each other.
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