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## Conceptual Metaphors of Coldness in English and Arabic

A B S T R A C T

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This study deals with Conceptual Metaphor as a cognitive phenomenon which is the main part of our conceptual system. Metaphor is used to express and realize the abstract and complex concepts in terms of concrete ones. Conceptual Metaphor depends on the systematic mappings between the two domains .The current study presents a contrastive analysis of conceptual metaphors of temperature related expressions particularly (Coldness)in English and Arabic languages. Its main purpose is to seek the similarities and differences in the two languages. This study examines the shared and cultural-specific conceptual metaphors , and the extent to which the difference in conceptual metaphors can be related to cultural and physiological factors .The study hypothesizes the following for the aims to be achieved: (1) human tend to represent emotions by utilizing source domains that are grounded in their experience .(2) English and Arabic have similarities and differences in highlighting and utilizing temperature concepts to understand abstract domains.The main conclusions in this study are:(1) English and Arabic have similarities in conceptual metaphors .The reason behind these similarities is because they are embodied and grounded in human's experience .(2) There are certain differences in both languages in conceptualizing certain target domains due to cultural differences.

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### دراسة مفهومية للبرودة في اللغة الانكليزية والعربية

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### الخلاصة:

تتناول هذه الدراسة الاستعارة المفهومية حال كونها ظاهرة معرفية، لكونها تمثل جزءاً رئيسياً من نظامنا المفاهيمي، إذ يتم استعمال الاستعارة للتعبير عن المفاهيم المجردة والمعقدة للتعبير عن المفاهيم المجردة والمعقدة وإدراكها من خلال الأشياء. فالاستعارة المفهومية تعتمد على التشابه بين المجالين

الملحوس والمحسوس. الاستعارة المفهومية وتعتمد على التشابه بين المجالين .  
تقدم هذه الدراسة تحليلاً مقارناً للاستعارات المفهومية للتعبير المتعلقة بدرجات الحرارة باللغتين الإنجليزية والعربية وتحديد البرودة، والغرض الرئيسي هو البحث عن أوجه التشابه والاختلاف في اللغتين. المفهومية وترتبط بها . تبحث هذه الدراسة عن الاستعارات المفهومية التي تشترك بها اللغتين، وعن الاستعارات المفاهيمية التي تختص بها كلتا الثقافتين ومدى ارتباط الاختلاف في الاستعارات المفاهيمية بالعوامل الثقافية والفسولوجية.

تفترض الدراسة لتحقيق أهدافها ما يأتي: (١) يميل البشر إلى التعبير عن مشاعرهم عن طريق الاستعانة بأشياء محسوسة متجسدة بتجاربهم . (٣) توجد أوجه تشابه واختلاف بين اللغتين الإنجليزية والعربية في إبراز درجات الحرارة واستخداماتها لفهم المجالات المتعددة.

أما الاستنتاجات الرئيسية في هذه الدراسة فتتلخص بما يأتي: (١) توجد أوجه تشابه بين اللغتين الإنجليزية والعربية في الاستعارات المفاهيمية ، ولعل السبب وراء هذه التشابهات هو أنها مجسدة ومتشابهة ، و متصلة في تجربة الإنسان. (٢) هناك اختلافات معينة في كلتا اللغتين في تصور بعض المجالات المستهدفة بسبب الاختلافات الثقافية

## Cognitive Linguistics

Cognition is related to “all aspects of conscious and unconscious mental function. In particular , cognition constitutes the mental events (mechanisms and processes) and knowledge involved in a whole host of tasks” (Evans,2007:17) . The approach used to analyze natural language is known as Cognitive Linguistics. It is originated in the late 1970s and early 1980s in the work of George Lakoff, Ron Langacker, and Len Talmy. Consistent with this approach, language is a mean used for organizing, processing, and conveying information. Accordingly, analyzing linguistic categories conceptually and experientially has a great importance in the field of cognitive linguistics. Hence, the formal structures of language are examined in relation to each other. These structures are considered to be reflections of: general conceptual organization; categorization principles; processing mechanisms; as well as experiential and environmental influences (Geeraerts and Cuyckens, 2010: 1).

cognitive linguistics has three fundamental characteristics:

- 1) The primacy of semantics in linguistic analysis; it follows in a direct way from the cognitive perspective. In other words, when categorization represents the primary function of language, then meaning should be the primary linguistic phenomenon.
- 2) The encyclopedic nature of linguistic meaning: it follows from the categorical function of language. This means that when language is considered a system for categorizing the world, there is no need to assume a systemic or structural level of linguistic meaning which differs from the level where there is a relationship between world knowledge and linguistic forms.
- 3) The perspectival nature of linguistic meaning: this denotes the subjective reflection of world in the language. The function of language categorization imposes a structure on the world rather than just reflecting objective reality. Indeed, language represents a method for organizing knowledge that reflects individuals' needs, interests and experiences; as well as those of cultures (Geeraerts and Cuyckens, 2010: 3).

### **Conceptual Metaphor Theory**

CMT started with the book of George Lakoff and Mark Johnson, “**Metaphors We Live By**” (1980). Metaphor is defined by Lakoff and Johnson (1980: 5) as “understanding and experiencing one kind of thing in terms of another”. For example:

#### **ARGUMENT IS WAR**

In this example, the language used to express some features of argument (‘*win* or *lose*’ an argument, ‘*attack*’ an opposing argument) reflects the metaphorical structure of the underlying concept. Consequently, our actual experience of argument is structured in terms of war. In this concern, war-like terms (such as attack, defend, defeat, etc.) are used to express arguments whereby a sense of personal threat is experienced. Sometimes, metaphors are mixed. Thus, one aspect of our experience is drawn from one metaphor to be emphasized and expressed; whereas the second metaphor is used to emphasize and express another aspect. However, this mixing is only used when the entailments are consistent, or at least complementary, and not contradictory (Ritchie, 2006: 32). Metaphor has a crucial part to be played in language creativity and knowledge representation in

specialized domains. It represents an important cognitive phenomenon for the conceptualization of realities. Also, it is used to make ambiguous concepts more accessible and understandable (Sánchez et al., 2012: 187).

CM is one of the most important topics in cognitive linguistics. It is studied from various perspectives including philosophical, cross-linguistic, grammatical, corpus, cognitive, and psycholinguistic approaches. The existing studies on cognitive linguistics have focused on methods whereby knowledge is reflected by CMs; as well as revealing a vision of the world as designed by a specific culture. Culture can be understood through analyzing CMs, which are considered as structures of knowledge that are integral to a culture. Hence, metaphors are defined within a discourse suppose a reconstruction of conventional knowledge characteristic of specific community. Practically, this in turn provides a vision into the metaphorical structures of the culture context (Raffaelli and Katunar, 2016: 127).

The metaphorical construction of a certain situation includes two parts. The first part is formed by a relatively fixed set of metaphors determining individuals' view of this situation. Concerning the second part, it refers to the individuals' skill to employ these metaphors when communicating about that situation. Moreover, these metaphors can be linguistically formed by the speaker using different ways. Thus, there is a need to reveal and examine different expressions that function in a discourse as different aspects of the same CM. Indeed, discourse reflects the way whereby a specific situation is viewed by individuals. On the contrary, the discourse is built and shaped by the principles of the metaphorical understanding of a situation (ibid: 127-128).

### **Conceptual vs. Linguistic Metaphors**

In CMT, metaphor is based on the following principles (Lakoff, 2006 cited in Negro, 2019: 49):

- Metaphor is primarily a cognitive mechanism.
- Metaphor involves understanding a domain of experience (TD) in terms of a more concrete domain (SD).

- A metaphor is to be regarded as a mapping (e.g., a fixed set of conceptual correspondences) between a SD and a TD, where one or more features of the source are projected upon the target. A metaphor is “an ontological mapping across conceptual domains,” so “the essence of meaning is understanding and experiencing one kind of thing in terms of another” (Lakoff and Johnson, 1980: 5).
- Any LM, or metaphoric expression, is a reproduction of CM.

In this concern, CM should be distinguished from LM. CMs are primary cross-domain mappings that influence individuals' thinking. On the other hand, LMs represent the linguistic realizations of those CMs. So, the CM ‘ARGUMENT IS WAR/BATTLE’ may indicate such LMs as: one cannot defend his/her claims or they shot down the argument (Adams, 2017: 6) as clarified in figure (1) below:

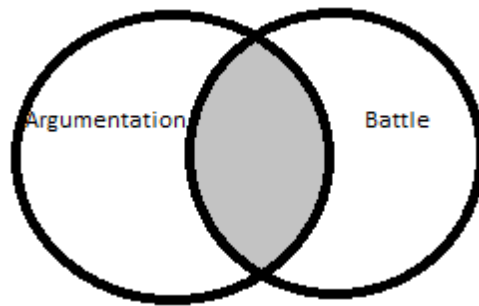


Figure 1: “Metaphor Invites us to see Similarities but Ignore the Differences”  
(adopted from Morgan, 1998: 5).

#### 2.4. Metaphor as Mapping between the Source and Target Domains

Metaphor involves understanding one domain of experience in terms of a very different domain of experience. Theoretically, a metaphor can be understood as mapping between SD and TD. This mapping is tightly organized. For example, in the ‘LOVE IS A JOURNEY’ metaphor, ‘JOURNEY’ is the source domain and ‘LOVE’ is the target domain. There are ontological correspondences, according to which entities in the domain of love (e.g., the lovers, their common goals, their difficulties, the love relationship, etc.) correspond systematically to entities in the domain of a journey (the travelers, the vehicle, destinations, etc.). It is a common

mistake to confuse the name of ‘mapping’ for the mapping itself, which represents a set of correspondences (Lakoff, 1992: 5-6).

In cognitive linguistics, domains and several other technical terms have the same nature of knowledge structure, which is: “words do not exist alone; they come as surface manifestations of interconnected knowledge of words, context, and inferences”. A domain is a background knowledge structure which consists of related words, concepts and inferences. The SD is a concrete domain; while the TD is an abstract domain (Nabeshima, 2017: 123-124).

The selection of particular SD to go with particular TD has an experiential basis. In other word, the SD can apply to several TDs. The TDs give rise to metaphorical linguistic expressions (kovecses,3003:312). In CM ‘THEORIES ARE BUILDINGS’ here ‘THEORIES’ is conceptualized in term of ‘BUILDINGS’ due to a set of correspondences between them (McGlone,2007:113).

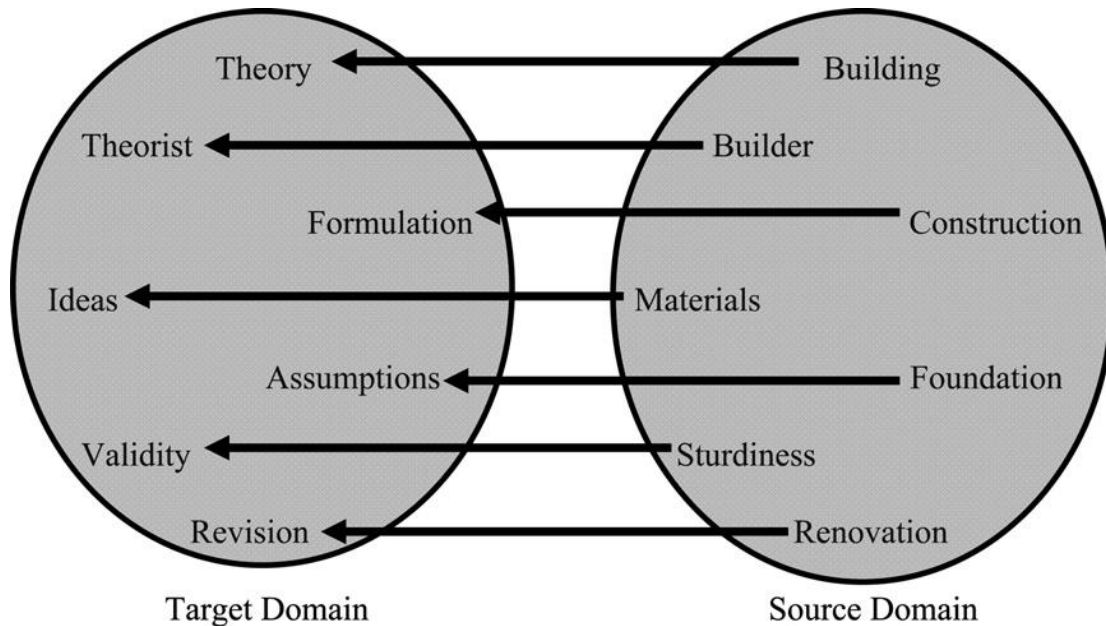


Figure 2: Hypothesized Correspondences between Attributes of the Concepts ‘THEORY’ and ‘BUILDINGS’(adopted from McGlone,2007:113).

### Highlighting and Hiding



The systematic way that allows comprehending an aspect of a certain concept in terms of another (e.g., an aspect of arguing is comprehended in terms of battle) will inevitably hide other aspects of that concept. The reality-shaping power of metaphor lies in the fact that "the internally coherent network of entailments that comprise CM highlights certain features of TD but hides others". This means that when giving immediate cognitive access to a systematic understanding of a particular domain, a

metaphor systematically distracts us from its aspects inconsistent with the metaphor's SD" (Lakoff and Johnson, 1980: 157-158).

### Metaphor Utilization

Metaphorical utilization is applied to SD. Kovecese (2010:93) mentions that in the CM 'ARGUMENT IS A BUILDING' there are some LMs for this CM .

-We have got the *framework* for a *solid* argument.

-If you do not *support* your argument with *solid* facts ,the whole thing will *collapse*.

-You should try to *buttress* your argument with more facts.

-With the *groundwork* you gave got, you can *build a strong* argument.

These LMs represent the CM 'ARGUMENT IS A BUILDING'.It seems that some parts of the concept 'BUILDING' are used in the metaphorical comprehension of the concept 'ARGUMENT' as *construct, build ,buttress ,solid ,strong* .On the other hand ,some aspects of building are not used .Buildings in general have rooms ,doors ,they can be found on roads ,there are people living or working in them and so on .All these information are not utilized in 'ARGUMENT IS BUILDING'.

### The Adopted Model

In this study , Lakoff and Johnson’s “**Metaphor We Live by**” in its two editions (1980) and (2003) is adopted as a model of analysis. This study investigates metaphor in the light of CMT. This model states that metaphor is pervasive in everyday life. CM is composed of two domains :a SD which is concrete and TD which is abstract or concrete. Our ability to understand abstract thoughts depends on our ability to project information from concrete domains from which we have a grounded experiences (sensorimotor information ) onto TD. Such abstract domain can be understood more easily.

For instance, in the metaphoric proverb ‘*No smoke without fire*’. The SDs are ‘SMOKE’ and ‘FIRE’ and the TDs are ‘TRUTH and RUMOUR’. It is the people experience which leads them to select the source and the target domains .Then LMs result from the relation being made between the two domains. This relation is made through the mappings between the two domains. In the metaphoric proverb the mappings as follow :

SMOKE –RUMOUR

FIRE-TRUTH (Belkhir,2014:10).

### **The Conceptual Metaphors of Coldness**

Cold is a relative term that describes a lack of heat or heat energy (<https://expanduseramics.com/qa/.html> ). Cold is applied to embodied phenomena seen or felt as follows:

- a) Water frozen and not flowing.
- b) In the winter, all things withered.
- c) Raining and snowing.
- d) The branches become dry and easily broken.
- e) Frozen ground.
- f) People shivering, crouching and stamping.



Thus, it is clear that ‘cold’ has the properties of stagnation, inhibition, weaken, and sedimentation (Yang and Jia ,2016: 3).

## FEAR IS COLD

Fear is an emotional reaction which human beings experience during hazard situation to defend the self at any stage of development (Lewis , Haviland and Barrett,2008:377)

1. He *froze* with fear.

Froze is the past tense of the verb ‘freeze’ .The literal meaning of this verb is to become hard as a result of extreme cold (OALD,2010) .This verb is used to express fear .It is the humans’ natural reaction to become motionless through sudden exposure to a situation of fear.

2 . Lowe makes my blood *run cold*.

The verb ‘run’ means to flow (OALD,2010). This expression is used to refer to a situation when a person is seized by a sudden feeling of worriedness and fear. This is based on the fact that blood is a hot element in the body and during horror and fear, it becomes cold and unable to fulfill its function of supplying the body with vital heat and energy.

3. I heard *a blood curdling* scream .

The verb ‘curdle’ means to turn from liquid to solid (OALD,2010). The adjective ‘blood curdling’ is used to refer to the sense of extreme horror. The human brain processes the unusual voices .Scream is a unique signal that is not used by regular speech . Fear can be triggered by the sound of scream .When something makes the blood curdle, it means making you very frightened.

4.*Cold shiver* runs down my spine when I saw a poisonous spider on the wall .

The noun ‘shiver’ means to shake slightly because of coldness (OALD,2010). When exposed to a fearful situation , the human body reacts in a similar way to how it does during cold weather . That is to say, a fearful person shivers in a manner similar to his shivering in cold weather .

5.The movie was a real *chiller*.

The noun ‘chiller’ means the feeling of coldness (OALD,2010) . In this expression , it refers to uncomfortable sense of unpleasant feeling especially of fear that accompanied with trembling. The human body trembles as a reaction to sudden coldness and sudden fear .

There is a series of mappings that characterizes this CM.

THE SOURCE		THE TARGET
The cause of cold	⇒	the cause of fear
The cold thing	⇒	the afraid person
The cold	⇒	the fear
The effect of cold	⇒	the effect of fear

Table (1) The Highlighting and Utilization in ‘FEAR IS COLD’

No.	Linguistic Metaphor	Highlighting	Utilization
1	Froze	Very scared	To make something frozen
2	Run cold	To make someone scared	Having low temperature
3	Blood curdling	Causing horror	To clot or to cause congeal
4	Cold shiver	Making someone frighten	Very cold
5	Chiller	Causing mild fear	Having low temperature

### INDIFFERENCE IS COLD

The state of the lack of interest, concern, motivation to accomplish anything in life is called indifference (<https://en.wikipedia.org/wiki/Psychology>). The lack of

affection and emotion is understood in terms of coldness and the indifferent individual is seen as cold.

1. She gave me *a cold welcome* .

The adjective ‘cold’ is used metaphorically to refer to a situation when a person reacts to the presence of other persons in a way that is without emotion and even in a rude way. The lack of interest or lack of emotion gives an idea of stillness. This notion is driven by the fact that cold slows down our movement.

2.The government appears to give a *cold shoulder* to the complaints.

The noun phrase ‘cold shoulder’ means to behave in an unfriendly way (OALD,2010). This phrase is used to express the act of disregarding someone. The origin of this idiomatic expression returns back to medieval times. In that time, when people have a feast, the welcomed visitor gets a big hot meal. However, the unwelcomed visitor gets a meal of night before namely cold shoulder of mutton (Dictionary of Idioms and Their Origin ,1992 ). So, cold here is understood as indifference utilized from real coldness which denotes being not interested in somebody .

3. He never helps the others , he is a *cold fish* .

The noun ‘cold fish ‘ means unfriendly (OALD,2010) .It is used to refer to aloof person who is without emotion, a person who has no feelings in situations where we expect him to show a lot of emotion, It is just like the cold fish which is nothing but a dead fish ,a fish with no feeling.

4. It was *cold comfort* to him to know that it was an accident .

The noun ‘cold comfort’ refers to a situation when one gives a limited consolation and much less sympathy than one needs that makes a difficult situation bitter but not better (<https://dictionary.cambridge.org/>) .The word cold is used in a sense of unemotional or without feeling .

Based on the analysis above ,the mappings from COLD onto FEAR can be concluded as follows :

THE SOURCE:COLD

THE TARGET:INDIFFERENCE

The cause of cold	⇒	the cause of indifference
The thing that is cold	⇒	the lonely, neglected person
The cold	⇒	the indifference
The effect of cold	⇒	the effect of indifference

Table (2) The Highlighting and Utilization in 'INDIFFERENCE IS COLD'.

No.	Linguistic Metaphor	Highlighting	Utilization
1	Cold welcome	indifference	Having low temperature
2	Cold shoulder	Indifference	Having low temperature
3	Cold fish	Unfeeling	chill
4	Cold comfort	Inadequate consolation	Very cold

## FEAR IS COLD

جمد في مكانه. 1.

Lit : He *froze* in his place.

Int : he was *very scared* that he cannot move .

The verb 'جمد' means to freeze (<https://www.almaany.com/>) . In this expression 'جمد' refers to a state when the person becomes motionless because of fear

جمد الدم في عروقه ٢

Lit : The *blood froze* in his veins.

Int : He was *very afraid*.

The verb 'جمد' in this expression refers to a state of fear when the body of the afraid person becomes cold and the blood stop pumping in his body .

This CM is based on the mappings between the SD 'COLD' and the TD 'FEAR':

THE SOURCE:COLD

THE TARGET:FEAR

The cause of cold	⇒	the cause of fear
The cold thing	⇒	the scared person
The cold	⇒	the fear
The effect of cold	⇒	the effect of fear

Table (3) The Highlighting and Utilization in 'FEAR IS COLD'

No.	Linguistic Metaphor	Highlighting	Utilization
1	جمد (freeze)	Very scared	To make something frozen
2	جمد (freeze)	To make someone scared	Having low temperature

## HAPPINESS IS COLD

1. هو قرة عين امه .

Lit :He is his mother *cold tears* .

Int: He is the source of his *mother's happiness* .

The noun (قرة) means coldness (<https://www.almaany.com/>). This word is used metaphorically to refer to happiness . The phrase 'قرة عين' refers to the cold tears in states of joy or happiness, unlike the hot tears of sadness .In this expression the son is the source of the mothers' happiness and the cause of the cold tears of happiness .

This CM is based on the correspondences between COLD and HAPPINESS.

THE SOURCE:COLD

THE TARGET:HAPPINESS

The cause of cold	⇒	the cause of happiness
The cold thing	⇒	the happy person
The coldness	⇒	the happiness
The effect of coldness	⇒	the effect of happiness

Table (4) The Highlighting and Utilization in 'HAPPINESS IS COLD'

No	Linguistic Metaphor	Highlighting	Utilization
1	قرة عين (Cold tears)	Extreme happiness	Low temperature

**INACTION IS COLD .**

اراد اتمام الامر ثم بردت همته.1

Lit : He wants to do it but he *becomes cold*.

Int :He wants to do it but he *becomes lazy* .

The verb (بردت) refers to a situation when someone wants to do or has an intention to do something but his mettle gets weaken or he/she gets lazy. During

cold weather, human activity weakens and this is due to the fact that coldness impairs our movement.

The mapping process of the structural metaphor INACTION IS COLD can be concluded as follows :

THE SOURCE :COLD		THE TARGET :INACTION
The cause of cold	⇒	the cause of inaction
The cold	⇒	the inaction
The effect of cold	⇒	the effect of inaction

Table (5) The Highlighting and Utilization in ‘INACTION IS COLD’

No	Linguistic Metaphor	Highlighting	Utilization
1	بردت همته (Becomes cold)	Inaction	Having low temperature

## 1 Conclusions

The study arrives at the following conclusions:

1. Because of the fact that we are very frequently experience an increase and decrease of the temperature of our bodies or the air ,the concept of temperature is one of the closest concept to us .
2. English and Arabic languages share many CMs of temperature .This similarity prove that metaphors are not arbitrary but embodied or motivated by physiological reality. Some of the CMs of temperature related expressions in English and Arabic, especially those of emotions, might be universal. The reason behind this universality is because they are embodied. They have a basis in human’s bodily experience.



3. In Arabic language there is the CM ‘HAPPINESS IS COLD ‘ in which happiness is depicted as cold .This CM is not found in English language where happiness is portrayed by warmth ‘HAPPINESS IS WARMTH’. This opposition in the CM of happiness is related to the climate features of both cultures. The climate in the Arab World in general is characterized by high temperature and dryness. So high temperature of weather is considered as source of annoyance and dissatisfaction. Coldness is considered as a source of satisfaction and pleasure. In western world the situation is different .Coldness is considered very common . ‘HAPPINESS IS WARMTH’ is used in English , in which warm and feeling warm is evaluated as a positive experience.

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