CONCEPTUALIZATIONS AND SCHEMATIZATIONS OF HEAD METAPHORS: A CONCEPTUAL METAPHOR THEORY

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ABSTRACT

Human’s head takes the most important part in human’s part of body which leads to the frequent use of head in language uses. This study therefore aims to investigate how head is conceptualized through the use of metaphor in Corpus of Contemporary American English (COCA) and how the conceptual metaphors are projected through image schemas. The data were obtained from Corpus of Contemporary American English (COCA) as a rich data sources relevant to the study. This study applied qualitative descriptive study through the framework of the Conceptual Metaphor Theory (CMT) proposed by Lakoff and Johnson (2008). Sentences which contain head metaphors were selected, analyzed, and categorized to relevant conceptual metaphors through the bridge of mappings to characterize the relationship between two concepts (source and target domains) in the metaphorical process and image schemas. The findings of the study showed that head is mostly metaphorically used as a container which is conceptualized as a head is a container. The most image schemas used are containment schemas which show in-out, full-empty, and surface schemas. The image-schemas have indeed been shown to likely become the basis of numerous metaphorical constructions and have been helpful to understand how people cognize their world.

Keywords: Conceptual metaphors, head, image schemas, COCA, cognitive semantics

A. INTRODUCTION

‘My head is spinning’, ‘My head seems to explode’. These two expressions are often heard in everyday languages. But, is that lexically true that one’s head is spinning or exploding? Of course not. The first expression means that someone feels dizzy (about something) and the latter means that someone is forced to think of something beyond his/her ability. These two expressions belong to metaphor which is used to expressed something in different way. A metaphor is one of interesting topics to study for its large use in languages from daily to academic language. Lakoff and Johnson (2008) stated that metaphor is pervasive in every day life, not just in language but in thought and action. This shows that metaphor is not only used in some imaginative stories, poems and other literature works. Metaphor is also used in our daily life. Metaphor is a figurative language which is used to concretize an abstract
thing in order that the abstract concept is more understandable and realistic. When somebody said, “My head is spinning.”, it doesn’t mean that his head is really spinning like how it is imagined to be done by machine. However, it is metaphorically conveyed to realize or to concretize the abstraction someone’s dizziness which happens in one’s head to what is done by a machine or wheel which is more concrete and easy to understand.

There are two things to see in the statement of ‘My head is spinning’. One is the the use of metaphor of head and the second is the use of metaphorical concept. The metaphor of head use is how the head is metaphorically applied to express a feeling which is a dizziness. The second part is the concept of head metaphor. Conceptual metaphor according to Kövecses (2010) is a concept consisting two conceptual domains, in which one domain is understood in term of another. In this case, the feeling of head’s moving is conceptualized to something more abstract which can move or spin to make the feeling more comprehensive. Then, its conceptual metaphor is Head is a moving object. Metaphor is again largely used in many forms of situation, objects and fields. Therefore, the writers would like to investigate the types of head metaphors, its conceptual metaphors, and the image schemas in COCA. Owing to metaphor pervasive applications, the writers would only focus on the use of head metaphor but in large contexts through COCA data supplier.

1. Cognitive Semantics
What comes to mind when talking about cognitive linguistics is ‘mind and meaning’. Evans and Green (2018) stated that cognitive linguistics is a modern school of linguistic thought that originally emerged in the early 1970s out of dissatisfaction with formal approach to language. Research about language from cognitive perspective is to study patterns of conceptualization of an abstract concept to more concrete one. Lakoff and Johnson (2008) supported that the human cognitive system is an abstract concept which is systematically structured in terms of conceptual domains deriving from our experience of the behaviour of physical objects, involving properties like motion, vertical elevation and physical proximity. Johnson (1992) stated that cognitive semantics helps to provide human deep insight of how our mind works and build the understanding of our experience and environment. So, what is the correlation of cognitive semantic to cognitive semantics? Cognitive semantics is a movement or approach of cognitive linguistics describing how people conceive their world. Evans and Green (2018) stated that cognitive semantics is an embodiment of conceptual structure. Then scope of cognitive semantics would focus on the how people get the meaning of a concept based on what they have experience which is depicted through language.

2. Metaphors and Conceptual Metaphor Theory
Metaphors are expressions which are used by people to figuratively convey their intention in different words. In Merriam Webster online dictionary, a metaphor is defined as a figure of speech in which a word or phrase literally denoting one kind of object or idea is used in place of another to suggest a likeness or analogy between them. Lakoff and Johnson (2008) stated, “Metaphor is pervasive in everyday life, not just in language but in thought and action.”. This statement means that the use of metaphors is common in daily life not only in literature or narrative story. Conceptual metaphors are the concept used to comprehend the abstract concept by mapping it onto more concrete domain. Kövecses (2010) stated that a conceptual metaphor consists of two conceptual domains, in which one domain is understood in term of another.
Conceptual Metaphorical Theory (CMT) aims at settling crucial cognitive problems. In this theory, it is discussed about how people understand abstract domains is mapped onto concrete domain which makes the abstract concept more understandable. The concepts are known as source domain (concrete domain) and target domain (abstract domain). The source domain is applied to understand the abstract concept in the target domain. The relationship between the objects create an understanding of the meaning of a particular object through the understanding of the meaning of the other objects is organized by metaphor (Lakoff and Johnson, 2008).

3. Mappings
Cognitive linguistics concerns on using one domain to understand another domain. This works by mapping one abstract domain to more concrete domain. So, mapping is a way of how to understand source domain and to depict the element in the target domain. Besides metaphor, metonymy also used mapping to understand two domains, the vehicle and the target domain (Kovecses and Radden, 1998). Evans and Green (2018) stated that one of prominent themes in cognitive semantics is the idea of conceptual mappings. Furthermore, Kovecses (2010) to comprehend the relationship between two concepts (source $\rightarrow$ A and target B) in metaphorical expression, mapping is the way. Sirait, Lingga, Seva, (2020) gave one example of how mapping is working in metaphorical expression in the tabulation of corona virus is an enemy.

| Source: Enemy               | Mapping | Target: Corona virus                  |
|-----------------------------|---------|---------------------------------------|
| Invisible enemy             | $\rightarrow$ | Corona virus                           |
| Work against/protect against| $\rightarrow$ | The process of defeating corona        |
| Hand sanitizer/vitamin D    | $\rightarrow$ | Tools to defeat the enemy              |

This mapping shows that to understand corona virus as the target domain, we use enemy as someone or something to defeat or something/someone that might harm. So, corona virus is conceptualized as an enemy to show the threat it gives to human being.

4. Image Schemas
Image schema emerges from human’s bodily reaction based on human physical experiences and cultural background. Lakoff and Johnson (2008) in Evans and Green (2018) stated that image schemas could function as source domains for metaphorical mapping. (Subiyanto, 2015) showed that image schemas are useful in building and discovering the meaning of metaphorical expressions. Dodge and Lakoff (2005) conveyed that image schema can be depicted through preposition, postpositions, verbs, cases, body-part metaphors, or morphemes. In the following table, several image schemas are provided which is taken from Evans and Green (2018).
Table 2. Image Schemas

| Space               | Up-down, front-back, left-right, near-far, centre-periphery, contact, straight, verticality |
|---------------------|------------------------------------------------------------------------------------------------|
| containment         | Container, in-out, surface, full-empty, content                                               |
| Locomotion          | Momentum, source-path-goal                                                                   |
| Balance             | Axis balance, twin-pan balance, point balance, equilibrium                                    |
| Force               | Compulsion, blockage, counterforce, diversion, removal of restraint, enablement, attraction, resistance |
| Unity/multiplicity  | Merging, collection, splitting, iteration, part-whole, count-mass, link (age)                 |
| Identity            | Matching, superimposition                                                                     |
| Existence           | Removal, bounded space, cycle, object, process                                               |

B. METHOD
A qualitative descriptive methodology is applied to this study. The data about metaphorical expressions of head were taken from Corpus of Contemporary American English (COCA) by selecting, downloading and then categorizing the data based on the conceptual metaphor theory (CMT). The data can be downloaded from https://www.english-corpora.org/coca/. Corpus linguistics becomes the data consideration due to its abundance data and convenience searching that assisted to obtain the data effectively and efficiently. Campoy, M. C., et al. (2010:3) stated that corpus linguistics has enabled the expansion of better-quality learner’s input and manage to provide researchers with a wider, finer perspective into language in use. The procedures of gaining and analyzing the data were started by selected several representative data with the keyword ‘head’. The frequency occurrence of ‘head’ and its variations is 348,664 in which ‘head’ (305,041), ‘heads’ (43,616), ‘heading’ (7). In advance to the selection, the data were then analyzed and categorized them in accordance with their conceptual metaphors. In addition, the concepts, image schemas are shown using using Lakoff and Johnson theory, supported by Saeed (2003), who divided schemas into three, containment schemas, path schemas, and force schemas.

C. FINDINGS AND DISCUSSION
The frequency occurrence of ‘head’ and its variations is 348,664 in which ‘head’ (305,041), ‘heads’ (43,616), ‘heading’ (7). The whole frequency does not all belong to metaphorical expressions. Head is also used lexically and medically. From the occurrence, the writers selected 22 representative data comprised metaphorical expressions of head. Those metaphorical expressions are then classified according to three kinds of conceptual metaphors: structural, orientational, and ontological metaphors.

1. Classification of Conceptual Metaphors of Head
As the most important part of human body, head is often used in many ways to describe and analogize something. The head contains brain as the center of movement and head indicates the life of beings. It is not surprising then that there will be found many different uses of our head in language, including figurative languages like metaphor, referring to its size, shape, function, position, and significance for human. This shows that one of interesting reasons to
examine the use of word head metaphorically to find out how people conceptualize this part of human body.

**a. Structural Metaphors of Head**

In the parts of human body, our structural knowledge about human body is mapped onto another concept which is called structural metaphors. Structural metaphors have more structural or functional correspondences between the source domain and the target domain. In other words, people can understand the target and domain through the rich structural mappings from the source domain. **Structural metaphors** can be an analogy or comparison one entity to the other thing which resembles to the functions or shapes. A head could be then mapped onto another thing where the target domains can be part of plant, organization, institution, mountain or earth.

a.1 The company’s leader is the head

1. Mosteller said. Mark Bell, head of the New Order Human Rights Organization, also came to the family's aid … (NEWS: Atlanta Journal Constitution)

The head here is used as a source domain to understand the organizational structure in one company. The position of a company’s leader is described by the position of head on the top of human’s part of body. The part ‘head of the New Order Human Rights Organization’ is an abstract thing understood to be similar with the role and the position of the head in the human body. ‘Head’ in the common word functions to govern all human body activities by the brain inside it and the position is on the top part of human body and ‘head’ in the organizational structure is responsible to govern all the members inside the organization and he takes the top position of the company. The structural correspondence between a head and company’s leader can be seen in the following.

| Source: Head           | Mapping | Target: An organization |
|------------------------|---------|-------------------------|
| The role of head       |         | The role of the company’s leader |
| The position of head   |         | The position of the company’s leader |

a.2 The top part of a plant is the head

In this datum, a top part of a plant is mapped onto the image of head in its shape.

2. The Communists! " WHACK! She splits a fresh head of cabbage in half, revealing the intricate folds inside. (FIC: New Moon)

The source domain is the head of human being which is used to understand the shape and the position of part of plant in ‘the head of cabbage’. The structural correspondence between a plant and a human body is shown in the following mapping.

| Source: Head           | Mapping | Target: Plant            |
|------------------------|---------|--------------------------|
| The top position of the body |         | The top position in the plant |
| The shape of the head    |         | The shape of the plant    |
b. Ontological Metaphors of Head

Ontological metaphor takes the source domain of an object as a container or a substance. The container image schema including the word in and out is commonly closely related to the ontological where the target is understood as a container (Johnson 1987:32).

b.1 The head is a container

Head expressions are frequently used "to refer to the head's presumed content, that is the brain, the mind, human ratio, intelligence" (Niemeier 2008: 358). The head can be said to be conceptualized as a container which can be filled with certain containment.

3. I was memorizing long verses, learning to write in my head without using pen and paper. To this day I write music in my head, then transcribe it after its completion. (ACAD: Poetry)

The head is here is regarded as a container. The head is metaphorically comprehended as ‘a three-dimensional entity which can hold things inside’. The phrase ‘learning to write in my head’ is not a literal meaning because it is impossible to write something inside one’s head. So, this is called metaphorical expression. Then by using prepositional phrase ‘in my head’, it is understandable that ‘head’ is conceptualized to a container which may be filled with certain content. Therefore, the concept ‘the head as a container’ is acceptable to this example. Other concepts that use ‘the head is container’ can be seen in the following.

4. But I think that someone put into his head that this was a way to go to paradise (ACAD: MiddleEastQ)

Another way to clearly understand that the head is referred to a containment is the use of the preposition as the element of image schema. The preposition ‘into’ shows we store something in the head. In the above datum, the head is referred to a container because the head can be understood to be a place to pour something to someone’s head.

5. I think it has gone through my head quite a few times. (ACAD: Studies in the Education of Adults)

From the clause ‘it has gone through my head quite a few times’, preposition ‘through’ shows that something has previously been stored in the head and then forced to be emptied by something else. This is in line with what Niemer (2008:358) stated that in fact, the head is conceptualized as a container which, similar to any other container, may be filled with certain content, which focuses either on its fullness vs. emptiness or on the dynamic process of filling or emptying it.”

B.2 the head is a container of emotions

In this concept, the head is regarded as a container for emotion where human’s head is mapped onto more specific to be a place for feeling.

6. … flavor that will make any Asian food lover's head explode with joy. (NEWS: Atlanta Journal Constitution)

Different from previous example, in this datum, the head is referred to a container of emotion where head contains an emotion which can be seen in the statement ‘that will make any Asian food lover's head explode with joy’. As it has been stated that a head as a container can be
filled or emptied. In this case, ‘the head’ as a container is emptied because of explosion which is understood to have been filled by emotion before.

B.4 the head is a container of ideas or thoughts
The other use of head as a container can be seen in the use of head as a container of ideas or thought. See the following datum.

7. … who, even unintentionally, might have put the idea in his head, … (NEWS: Washington Post)

It is known that a container is utilized to keep or store things. Similarly, the head is perceived as a container to ‘store’ ideas or thoughts. The expression ‘might have put the idea in his head’ shows an image of a head containing ideas. Thus, in this example, head is used to understand as a container to store ideas.

b. 5 The head is an object
In ontological metaphor, we can see an abstraction, such as an activity, emotion, or idea, is represented as something concrete, such as an object, substance, container, or person. In the previous data, it has been discussed how the head is conceptualized as a container of an entity or something. In this part, the head is regarded as an entity or object. An entity metaphor is an ontological metaphor in which an abstraction is represented as a concrete physical object. In this analysis, the metaphoric conceptualizations, the head is an object, is proven to be a rich source of metaphorical expressions in both languages. They can be grouped into several sub-metaphors.

b.6 The head is a solid object
To see how human’s head is conceptually used as a solid object, consider the following example.

8. " Boy's got a hard head, just like his old man did. (FIC: Birthright)

In this example, the head is conceptualized as a solid object which is construed out of certain hard materials so that the content which is supposed to reside on someone’s head cannot enter the container that the content supposed to remain outside.

b.7 The head is a moving object
In this concept, our head is metaphorically regarded as an object which can move. Take a look at the following example.

9. Bobo's head has been spinning since arriving in Fort Collins for his introductory news conference Dec. 23. (NEWS: Denver Post)

In this example, a head is referred to an object which can move from one point to another point. This can be drawn from the image schema of ‘up-down schema’ which represent spatial orientations or relations. The word ‘spinning’ shows that the head is conceptualized to something that can rotate and move. The expression ‘Bobo's head has been spinning’ means causes someone to feel dizzy. Therefore, to put a more concrete meaning, the head is used to give clearer image. Therefore, head is a moving object is a suitable concept to this expression. There are still several examples showing that a head can be conceptualized to something moving.
10. It was hard for me when I took my children... even with my head swimming in this data. (NEWS: Denver Post)

11. Holmes was sent to the hospital to get a CAT scan after he ran his head into the jail wall, King said. (NEWS: Denver Post)

In normal sense, head is impossible to swim as seen in data ‘even with head swimming’ or in data ‘after he ran hi head in to the jail wall’. The examples given are used to show the conceptual metaphor of the head is a moving object.

c. Orientational Metaphors of Head

An orientational metaphor is a metaphor in which concepts are spatially related to each other that involves spatial relationships (such as up-down, in-out, on-off, and front-back). Here are some examples to show how the head is used in the orientational metaphors.

c1. Happy is up, sad is down

Our feeling can be conceptualized to metaphorical expression in spatial relationship of up and down where ‘up’ refers to happiness and ‘down’ shows sadness. Consider the following data.

12. What she had to be was someone who put her head down and looked at the nuts and bolts of Emily's List. (NEWS: New York Times)

Through physical basis, we can understand that dropping posture typically goes along with sadness and depression, erect posture with a positive emotional state. (George and Lakoff, 2008:12)

13. And I hope that you will put your head together ... (SPOK: CNN_Chung)

When we ‘put head together’, it means that we are trying to discuss something head-to-head to find the right solution. This metaphorical expression ‘put your head together’ means that the more people discuss, the better the solution will be got. Then conceptual metaphor of ‘the more options is the betterer’ can be drawn from this sentence or something ‘better’ is understood by putting ‘more’ head.

c4 Proud is up; disappointed is down

Almost similar to the previous data (data 22 and 23), our feeling of pride can be understood through orientational movement, positive is up and negative is down.

14. and wear it proudly with my head held high (NEWS: Austin American Statesman)

In this expression, orientational metaphor is used by showing the up and down orientation. We know that when we are proud, our physical movement tends to show something up or high or when we are disappointed our posture will be down. Having analyzed the data, the writer summarizes all the standpoints of the conceptual metaphors of head as follows.
2. Image Schemas used in the Conceptual Metaphor of Head

One of image schemas used in conceptualizing head metaphors is the containment schema. In the container schema, the head is metaphorically comprehended as "a three-dimensional entity that can hold things inside (Velasco, 2001) meaning that the head is conceptualized as a bounded space with its inside and outside, where a content is stored."

(1) I write music in my head, then transcribe it after its completion. (ACAD: Poetry)

The image schema applied to this metaphorical expression is containment schema which can be seen in the following figure:

Figure 1. Containment Schemas

"English in is made up of a container schema (a bound region in space), a profile that highlights the interior as the landmark (LM) and the object overlapping with the interior as a trajectory (TR)" (Lakoff & Johnson 1993:31). In this example, the head is the landmark (LM) for ‘the written music’ as the trajectory (TR) which is located in the head. This metaphor is derived from the concept of ‘The Head is a Container’ where we human can store something in or get out something from the container.

(2) I think it has gone through my head quite a few times. (ACAD: Studies in the Education of Adults)

In this data, an image schema of container still works where it can be said to be Full-Empty. ‘It has gone through my head’ is understood that something that has been stored in the head becomes empty of something else.

(3) The blue strands arising out of her head show neural pathways.

Figure 2. Containment Schemas

The image schema here is different from the previous image scheme in figure 1 in which figure 2 involves motion and containment. The LM is ‘the head’ while TR is ‘the blue strands’ which belongs to the entity that undergoes motion or move from a position inside the LM to occupy a location outside the LM.
Path Schemas are also used in conceptualizing head metaphors as can be seen below.

(4)… that teachings need to travel from head to heart, (ACAD: Journal of Ecumenical Studies)

In data 4, the head is metaphorically regarded as the source of the teachings which need to travel from the source to the target. This is conceptualized as a journey PATH from the source ‘head’ to the target ‘heart’. In other word, the concept of image schema is depicted as a starting point, the ‘head’ doing a movement from one place to another place or to the end point, the ‘heart’.

(5)… a new support surface contact by actively moving their head toward their midline. (ACAD: Clinical Rehabilitation)

This image schema is derived from the head is a moving object where the head is conceptualized as an object which is moved from a place to another place. The image schema here we perceive that the head is moving from one starting point to the end point by showing a STRAIGHT PATH.

(6) Fadia shakes her head. (NEWS: New York Times)

The image schema of head here is LEFT-RIGHT where head is imagined to be moved from the left to the right to show disagreement. This is derived from the orientational metaphor of DISAGREEMENT IS SHAKING ONE’S HEAD.

(7) What she had to be was someone who put her head down and looked at the nuts and bolts of Emily's List. (NEWS: New York Times)

The expression of ‘what she had to be was someone who put her head down’ is derived from the conceptual metaphor of ‘happy is up and sad is down’ in which through physical basis, we can understand that dropping posture typically goes along with sadness and depression, erect posture with a positive emotional state. Thus, the image schema is up-down schema where head is depicted to be up in the state of happiness and to be down in the state of sadness.

The other schema is force schema. In the following datum, it can be seen the force schemas which is understood through the use of head.

(8) I think has gone through my head quite a few times. (NEWS: Atlanta Journal Constitution)
The image schema applied to the above metaphorical expression is compulsion schema which emerges from the experience of being moved by external force like can be seen in the above figure. The entity or something in one’s head moves along a trajectory because of an external force; and the dashed line represents the fact that the force may be blocked or may continue to another trajectory.

D. CONCLUSION

Having analyzed several data, the study can be concluded that mapping is beneficial to understand the abstract domain by depicting it to more concrete object like seen in the mapping of a head is an object. From the study, it is chosen 22 representative data to show how head is conceptualized. The three kinds of metaphors (structural, ontological, and orientational) are described through the representative data. Structural metaphors of head can be seen in the company’s leader is the head, the top part of a plant is the head. The ontological metaphors can be seen in the concept of the head is a container (for dreams, ideas, and emotions). Head is also conceptualized as an object (the head is a solid object and moving objects). Orientational metaphors can be seen in the concept of happy is up, sad is down, the more option is the betterer, and proud is up; disappointed is down. Schematizations of head are shown in the image schemas of containment schemas, path schemas, and force schemas. The concepts and the image schemas are helpful in building and comprehending the abstract concepts that metaphorical expressions bring.

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REFERENCES

Campoy, M.C., Cubillo, M.C.C., Belles-Fortuno, B., Gea-Valor, M.L. (Eds.). (2010). Corpus-based approaches to English language teaching. New York: Bloomsbury.
Dodge, E. & Lakoff, G. (2005). From Perception to Meaning Image Schemas in Cognitive Linguistics. Mouton de Gruyter Berlin. New York
Evans, V., & Green, M. (2018). Cognitive linguistics an introduction: An introduction.
Lakoff, G., & Johnson, M. (2008). Metaphors we live by. University of Chicago press.
Lakoff, G. (1993) The Contemporary Theory of Metaphor. In: A. Ortony (ed.) Metaphor and Thought. Cambridge: Cambridge University Press.
Johnson, M. (1987) The Body in the Mind. The Bodily Basis of Meaning, Reason and Imagination. Chicago: Chicago University Press.
Johnson, M. (1992) Philosophical Implications of Cognitive Semantics. Cognitive Linguistics
Kovecses, Zoltan. (2010). Metaphor: A practical introduction. New York: Oxford University Press.
Kovecses, Z. and Radden, G. (1998) Metonymy, Developing a cognitive linguistic approach. Cognitive Linguistics
Saeed, I. John. (2003). Semantics. 2th Edition. Blackwell Publishing. Australia
Sirait, Asnita, Seva, K., & Lingga, T. R. (2020). Conceptualizing Corona Virus Metaphor in Media Headlines: A Cognitive Semantic Approach. English Journal Literacy Utama, 5(1), 278–286. https://doi.org/10.33197/ejlutama.vol5.iss1.2020.477
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Subiyanto, P., et.al. (2015). Image Schema Analysis on Psalm 23: A Study of Metaphor Based on Cognitive Theory. E-journal of Linguistics, Vol 13. No. 1(86-92). https://ojs.unud.ac.id/index.php/eol/

Velasco, O. I. (2001). Metaphor, Metonymy, and Image Schema: An analysis of conceptual interaction patterns. *Journal of English Studies*. Vol 3,47-63