

ISSN(print): 2788-9106
ISSN(Online): 2788-9092

**INTERNATIONAL
JOURNAL OF SOCIAL SCIENCE
AND HUMANITIES RESEARCH-
MIYR**

Volume 3. Issue 1. 2023.03

**PETROLEUM METAPHORS IN ENGLISH AND
MONGOLIAN**

Badamdorj Enkhzul · Choijin Zolzaya

English Department, School of Foreign Languages,
Mongolian University of Science and Technology



PETROLEUM METAPHORS IN ENGLISH AND MONGOLIAN

Badamdorj Enkhzul¹, Choijin Zolzaya^{2*}

¹ *English Department, School of Foreign Languages, Mongolian University of Science and Technology*

² *English Department, School of Foreign Languages, Mongolian University of Science and Technology*

benkhzul596@gmail.com, zolzaya124@gmail.com

Abstract-In this research paper, we will examine how the metaphor of the oil industry is uniquely manifested in English and Mongolian, based on language examples, and use the Metaphor Identification Method (MIP Steen 1999) to consider the unique metaphors that reflect the characteristics of English and Mongolian culture. studied to show how they are different and similar. As for the theoretical model of the research work (CMT), the study was conducted within the framework of the conceptual metaphor model. As a result of the research work, we emphasize the universality of metaphors and the fact that they express the characteristics of culture and thinking, and we believe that in the future when translating technical and technological terms, metaphors can be replaced by metaphors that express the national characteristics of the language being translated and reflect the unique characteristics of thinking

Keywords- Metaphor, Culture, Petroleum, Language, Terminology

Received: 2023.03.05

Reviewed: 2023.03.10

Accepted: 2023.03.28

* Corresponding Author: Choijin Zolzaya

1. INTRODUCTION

Today, the demand for oil and petroleum in the world and our country is growing, especially in recent years, the issue of building an oil refinery factory in Mongolia has become an important need. Some real work is being done in this section. In recent years, investment in the geological and petroleum industries by major foreign countries such as the United Kingdom, the United States, and Canada has expanded, and there has been a real need to use the terms petroleum and oil in English and Mongolian.

Therefore, studying how English terminology is used in Mongolia and translated into Mongolian is important. In addition, there is a legitimate need to use English books, magazines, information, and websites on oil and petroleum and their refining. Therefore, this study will greatly contribute to young researchers who specialize in translation, work in international projects and programs, companies with foreign investment, and conduct research. In recent years, oil specialists have been trained in Mongolia, and new advanced techniques and technologies from many countries have been introduced in this field. In addition, foreign and domestic oil companies have begun drilling and mining operations, and our drilling workers have traveled abroad to identify, refine, and refine drilling terms.

This study aims to compare the oil and petroleum-related metaphors in English and Mongolian, identify similarities and differences between metaphors in the two languages, and give some fundamental explanations for metaphorical expressions as a result of the study.

2. THEORETICAL BACKGROUND

The word "metaphor" is derived from the Greek word "metaphor". Before the development of cognitive linguistics, metaphor was considered only a literary form. Metaphors have become an important research topic for researchers because they reflect the specifics of philosophy, history, culture, and national thinking.

The classical theory of conceptual metaphors was first proposed by J. Lakoff and M. Johnson [1]. The concept of the metaphor model can be found in American scholars J. Lakoff, M. Johnson [1], Reddy [2], and *The Conduit Metaphor* as well as *Metaphors we live by*. Metaphor systems play a huge role in vocabulary, semantics, and grammar. Metaphors are often translated from the original to the realm. Conceptual metaphors are not perceived as metaphors because they have become "an integral part of the cultural

paradigm of the speakers" (J. Lakoff 1993: 210). Also, according to Lakoff and Johnson (1993: 203), a cognitive metaphor is a point between the main spheres in a conceptual system. In linguistics, a conceptual metaphor is written in capital letters to express the concept of the language. Kovessess Z., [3] states that "metaphor is a multifaceted phenomenon that exists not only in any language, but also in the conceptual system and the socio-cultural structure, thinking, and actions of people." On the other hand, the concept is a term used to describe the structure of information that reflects our consciousness, mental and mental resource units, and human knowledge and experience. When naming an object, a complex concept is formed by emphasizing one of the attributes that are necessary before the conquest, rather than all the attributes named by it. It depends on the specifics of the nation's thinking and expression and is related to the stable naming pattern of each phenomenon. (O. Shinebayar, B. Zoljargal 2020: 41 [4]). The concept of a concept is a complex whole, and everything contains many features of a phenomenon in a complex way.

Within the cognitive theory framework, our knowledge of the world's phenomena exists within a certain range. Human thought, language, culture, history, and the environment are inextricably linked, and reality is expressed in language in the world of abstract thinking. In addition to the rapid development of the technological age, corpus linguistics has been developing rapidly since the 1980s and has been instrumental in the study of metaphors. Degnan [5] was a major step for researchers in developing a methodological approach to the use of corpus in the study of metaphors.

In recent years, Mongolian scholars have been studying conceptual metaphors and contributing to the development of cognitive linguistics. But we need to do a lot of world-renowned cognitive linguistics research. Terminology scholars have conducted extensive research on a wide range of topics. D.Tuul [6] points out that in 1925, a terminology commission was established at the Institute of Scripture, and the work of defining scientific and technical terms reached a new stage. The monograph titled "Issues on Linguistics Terminology Development" explores ways to create technical terminology based on the power engineering sectors. This has complied with the requirements and created new terms. Scholar B. Sodnom [7] emphasizes that the norms and structure of the Mongolian language should be taken into account when defining modern Mongolian terms and a translator shouldn't be only focused on the translation forms. D. Bayarmaa [8], in her monograph "Structure and Semantic Research of Calqued Terms" (2014), analyzed the translated terms in the information and communication sector at the word

formation and meaning level and developed a linguistic basis and methodology for improving and translation. H. Munkhtsetseg's Terminology Translation Studies [9] includes a translation of social, humanitarian, natural, and technical terms and a history of translating Mongolian terms. Scientists O. Shinebayar and B. Zoljargal [4] have created a new work called Mongolian Terminology based on the Method of Analogy. This work is an important innovation in the study of terminology. In the course of the research, few works have translated oil terms from English into Mongolian.

A concept is a set of concepts that summarize what you have learned in a specific word. (O. Shinebayar, B. Zoljargal [4]). However, there is still no common understanding of the term concept, which is a topic of many studies in modern linguistics. In this regard, B. Researchers Chuluundorj, M. Bazarragchaa, J. Bayansan, and D. Tserenpil have studied many aspects. A. Oberpolzerova [10] has conducted ethnographic research, researched the Mongolian language, culture, and communication, and described the culture of the Mongolian people and the features of the people's language in great detail in her work. Researcher B. Tumorhuyag [11] explored conceptual metaphors in political discourse from a cognitive linguistic perspective, making it accessible to researchers in the field. From the point of view of cognitive linguistics, the researcher.

Ch. Zolzaya [12] conducted a unique study on the mentality of nomadic and sedentary peoples. In addition to word formation, suffixes, word abbreviations, word combinations, foreign-language copying, and other word-formation techniques. It is emphasized that metaphors are inextricably linked to the human mind. Metaphors were considered a literary tool, but today they are widely used in all fields of science. This study emphasizes that the work on standardization and development of scientific and technical terms has been expanded to include the development of glossaries for each sector, which has been initiated by industry professionals. arises from such requirements.

3. METHODS

This research has conducted a contrastive analysis of the oil and petroleum metaphor in English, and Mongolian. The data relating to the study were selected from different sources including dictionaries, different online sources, and previous studies. Several proposals have been made to systematize the method for identifying metaphorically used words in discourse in recent years. Pragglejaz group [13]; Crisp et al., 2007; Steen 1999) The Metaphor Identification Procedure (Steen 1999) is a practical, and systematic method

for identifying metaphorically used words in discourse. This five-step procedure of MIP incorporates both linguistic and conceptual metaphor identification in the following ways: (1) identifying metaphorical focus (2) identifying metaphorical idea (3) identifying metaphorical comparison (4) identifying metaphorical analogy (5) identifying metaphorical mapping.

The following steps were taken in identifying linguistic metaphors from the Mongolian data. First, after attentive reading of the entire text from different sources, a general understanding of the meaning was established. Second, the lexical units in the text needed to be checked to ascertain whether any of the words in the discussion had been used metaphorically. Third, the basis for each lexical unit was determined. The next step was to decide whether the word's basic meaning was sufficiently distinct from the contextual meaning. Then I analyzed whether the contextual meaning of the word was related to its basic meaning by some form of similarity. The final step was to mark the lexical unit as metaphorical. In addition, the Romanization System is used to transcribe the Mongolian examples. In this study.

4. RESULTS AND DISCUSSION

This study has found that the terminology of the oil and petroleum industry is rich with metaphors for a uniquely interesting national mentality created by analogy. J. Lakoff, M. Johnson [1] argued that conceptual metaphor theory is a metaphorical phenomenon that moves from reality to abstraction and from cognition to action, rather than from decorating language. The study shows that English and Mongolian-speaking people have different national characteristics in terms of cognition, culture, and environment due to their cognitive and cultural characteristics.

Douglas Butler [14] identified four main roles used in technical metaphors. Technical metaphors include 1) naming parts and parts and spaces; 2) highlighting actions and times; 3) expressing properties rather than time and space, and 4) modeling both emphases on time and space. Christina Schafer [15] suggests that there are several translation methods related to metaphorical translation. She considered translating (translating one metaphor into another), interpreting a metaphor in another word, or not even translating it. The results of the study show that for these categories, most metaphors are metaphorical expressions of parts and components and the nature of the object.

This study has found that there have been some culture-specific metaphorical expressions of the petroleum field in the two languages. English is rich with metaphorical expressions in the oil field. Consider the examples cited from the English Mongolian Petroleum Dictionary: 2012 as follows: The expression (1) “*a prairie dog*” is understood in terms of “*a small-scale refinery used to supply diesel and gasoline to a drilling rig built in a remote area without desert dog infrastructure*”. In English, the word (2) “*fish*” is understood in terms of “*the equipment left in the pit*”, (3) “*dog shift*” refers to “*the night shift*”, and (4) “*casting dog*” refers to “*the equipment used to hold a thing fallen in the open pit*”. Examples (1-4) show that in a sedentary culture, “*dogs, fish*”, domains are used to express the meaning of the oil industry equipment and device in English. This analogy is based on the similarity between the operation of a *dog digging* and the *operation of a tool*. However, in the above example, the word “*dog*” has been translated into Mongolian as “*mögjee*” and “*meeghuur*”. The data show that the metaphor is based on the similarity of what is within the source. Depending on the specifics of the nation's conceptualization, analogy creates many terms in a standard way. Some terms expressed in animals such as “*dog, monkey, mouse, fish, and rabbit*” express *petroleum field equipment and device* in English. Moreover, it is interesting fact that “*a doghouse*” refers to “*a place where workers change clothes at the bottom of a drilling rig.*” In this example, “*a doghouse*” is understood in terms of the “*place where the workers change their working clothes.*” Also, the expression “*monkey board*” refers to “*the flat part that sticks out to the side of the rig's derrick (or mast) close to the top.*” in oil in English. There are some expressions “*mouse hole, rat hole*” that is used to express “*a shallow borehole under the rig floor, lined with the pipe*” in English. These expressions show that the animal domain is more elaborated in English with expressions cited here. In this example, (5) “*donkey pump*” refers to the “*boiler feed water pump*” and (7) “*whirling rabbit, rotating rabbit, rabbit*” is understood in terms of the *pipe, chimney, and cleaning spatula* in English. In addition, the expression (8) “*pigpen pig fence*” refers to the “*search on the top of the drilling tower.*” (English Mongolian Petroleum Dictionary: 2012). Another interesting term is (9) “*donkey*” an English term commonly used in the oil industry. It is translated into Mongolian as a “*tuslakh mechanism-a secondary mechanism*). The *loaded donkey* and the *oil rig* were named because of their similar shapes. In Mongolian, people in the industry call it “*Morin Tolgoi as a horse's head*”. (English Mongolian Petroleum Dictionary: 2012). In English, the basic meaning of the word (10) “*cat*” is a small domesticated carnivorous mammal with soft fur, a short snout,

and retractable claws. It is widely kept as a pet or for catching mice, and many breeds have been developed". In the oil industry, the word means "tractor". In this case, the metaphor represents the transfer of meaning from a living thing to a non-living thing. A very common metaphor in the English oil industry is "cat." Because the cat's footsteps are similar to the movement of this device, it can be considered a metaphor based on these similarities. Another examples metaphors are related to the animal, (12) "Pig iron" /Cast-iron colored metal, metal cast in a trough-like mold without a lid./ (Gan-Ochir, Z. "Encyclopedia of Engineering Technology 1991 UB). "Pig" has changed from its original meaning of "a farm animal kept for its meat" to a metaphorical role, and it has the meaning of casting /Cambridge dictionary.com/. According to research, this metaphor (pig iron) came from the fact that the English-speaking people with a sedentary lifestyle were engaged in non-pastoral farming. Also, the characteristics of the cognitive thinking of the settled people can be clearly observed in this example. (12) "Worm gear" is used to express in the technical context "A worm gear is a gear consisting of with a spiral thread" it means as a technical tool /target domain/ Zunduisuren, Ch (1991) "Encyclopedia of Engineering Technology". Source domain of the "worm" is a small animal with a long, narrow, soft body without arms, legs, or bones. /Cambridge dictionary.com/ The study shows that there are unique metaphorical expressions related to the human body in English. All of these indicate that English has the central metaphor "BODY PART IS A MACHINE PART". This metaphor is more elaborated in English. (English Mongolian Petroleum Dictionary: 2012). Consider the examples cited below:

In this example, (11) "free head" is understood in the terms of "push, bodying". The expression "ear" refers to the "hole, loop" in oil in English. The metaphorical expressions such as "pipe elbow, elbow bend, elbow" refers to the "joint, crooked connection" in English.

dead-eye, orifice, mouth, throat, tooth box, face, cover, groove, hard alloy finish, face line of teeth machined flat, the surface of the weld, the face of the wellbore, face shield, face, phase difference, facing-coating, cover, etc.

The peculiarity of the metaphor of the technical field is due to the similarity of the functions performed by the technical parts of the machine and the functions of the human organs. In the example above, the term "elbow" is used to refer to the *human body as a mechanism gasket*. There are also unique metaphors associated with human clothing, such as the English "suspension shoe" and the "sleeve of a jack". These findings suggest that

metaphors are common to all languages, but each language is enriched with different words and cultures, depending on the specific cultural differences in the nation's mindset. Research shows that the English language has a very unique metaphor associated with petroleum. For example, *"It's a hard act to follow. As an energy and chemical source, petroleum is like fine brandy aged to perfection over 100's million years. Biomass fuels are just day-old moonshine."* Paul Grigson [16]: 2013 This example shows that oil is a perfect brand. Petroleum is also a metaphor for the importance of pure soup with lots of good ingredients and the glare of sunlight in a bottle. For example, *Petroleum is like an organic soup with many ingredients, including sulfur-containing compounds. What: "In a land of harsh extremes - long, dark winters and brief, brilliant summers - petroleum is like sunshine in a bottle, the great energy equalizer in a nation of uneven strengths. But at what price?"* Dwayne Wilkin: 2013 [17].

Some of the terms in the English language are metaphorical or figurative in Mongolian and are created by metaphors based on traditional life and nomadic culture. For example, *rack-hedreg araa, camshaft- nudargan gol, articulate drilling-nidergen urumdlug*, (English Mongolian Petroleum Dictionary: 2012) Looking at the examples, in Mongolian "niderge" share the following meanings: 1. Kneading and kneading tools for skinning: wooden shovels (kneading tools made of wood for skinning); 2. *Nidruul*: washing with nitreg(washing with nitrous), 2. *khedreg*-a weapon used for tanning sheepskin, 3. fist-knotted hands, meaning. (Mongolian Advanced Explanatory Online Dictionary) Traditional expressions related to Mongolian customs, culture, environment, and religion are evolving into terminology.

The study shows that petroleum-related term was translated from English into Mongolian to reflect the traditional culture and nomadic lifestyle. For example: *working barrel valve seat- emeel (saddle), valve cone-havhlagiin emeel (valve saddle), swivel bail- eemeg (rings), thief zone- hulgaich bus (thief zone,thief sand zone), finger basket-spider*, (English Mongolian Petroleum Dictionary: 2012).

This study considered a cognitive map between the source and the target area of how the metaphor of the oil industry is expressed in English and Mongolian. Metaphors are based on a comparative comparison between the source and the target area and the similarity of the objects. Cognitive linguistics is a science that is inextricably linked to logical and linguistic semantics and thinking. Language is a tool for creating and interpreting reality. Concepts are the main basis for creating a picture of reality. This suggests that the terminology of the field of technology is inextricably linked to the

worldview of language and culture. The use of language shows that these two cultures have conceptual metaphors with different traditional expressions and imagery.

Similarities: The fact that metaphors have been translated into metaphors in both languages also shows the common nature of metaphors. Douglas Butler [14] identified metaphors in the technical field for four main roles. 1) Petroleum industry metaphors in English and Mongolian a) naming specific parts and components and their functions; b) the representation of the nature of things is the same. For example, the term "*transfer arm*" is translated into Mongolian as "*auto arm*". The human hand is so named because it has the same function as the "*arm*". The "working barrel valve seat" is also translated into Mongolian as a metaphor for the "*saddle of a submersible pump*". It is based on the similarity of the two species. "*Saddle*" means a device consisting of fleece, such as a flea or a fleece, which is used for loading and unloading horses; The meaning of the word is explained as a variety of shapes. 2) Moreover, there have been some metaphors for body parts in two languages. For example, *nail head-hadaasni Tolgoi*, *tooth box-shudet araa*, *face side-nuuren tal*, *finger-huruu* (*finger, a fixture to secure the upper end of the arrow during the lifting and lowering operation of the drill*), *Webber teeth-irmegtei shud*, English-Russian-Mongolian Dictionary of Petroleum Industry 2012) 3) In both languages, there are examples in English and Mongolian that compare the actions of technical parts to animals within the general frame, but the language in which the language is used is different.

Differences: In English, there are metaphors expressed in *dog*, *monkey*, *mouse*, *fish*, and *rabbit*. For example, English: *Donkey pump and whirling rabbit*, etc. In a sedentary culture, terms such as dogs, pigs, mice, fish, rabbits, and monkeys are more common. The term has been replaced in the Mongolian language by metaphors related to traditional nomadic culture and animal husbandry. Example: *rack-hedreg araa*, *camshaft- nudargan gol*, *articulate drilling-nidergen urumdlug*, *spray guard-eejin hormogch* [18] English-Russian-Mongolian Dictionary of Petroleum Industry 2012).

The English metaphor was also translated into Mongolian as a metaphor. For example, *thief zone- hulgach bus* etc. From the above example, it is important not to copy the metaphor, but to use it as a term in the mind of a Mongolian who reflects the national style. From this, it can be seen that translating terms into metaphors is a very effective way to enrich one's vocabulary with traditional words and to enrich one's language that reflects the specifics of national conceptualization.

5. CONCLUSION

The fact that the Mongolian language is created and translated by analogy is a reflection of cultural features. Metaphors in this field of petroleum are very common in English. In addition, a sample study of how metaphors in this field are translated into Mongolian shows that metaphors are translated and replaced by other metaphors. Researchers have also compared metaphors across many disciplines, but there is currently no comparative study of metaphors in the field of science and technology, especially English metaphors.

As a result of the research work, by studying the technical and technological examples of English and Mongolian languages, studying the similarities and differences between the two languages in the semantic framework of cognitive linguistics, and comparing the characteristics of the language and culture and historical thinking of the nomadic people with the language and culture of the settled people, in the development of the linguistics of identity.


I hope it will be a definite contribution. Although there are similar universal metaphors for both languages, there are also very specific metaphorical phrases and concepts that are specific to each language and culture. Mongolian people's thinking is not only different from British and American people who have a settled culture, but for Mongolians, there are many factors such as worldview, nomadic life, closeness to the natural world, etc.

REFERENCES


- [1] Lakoff, G. and M. Johnson. 1980. *Metaphors We Live By*, Chicago: Chicago University Press.
- [2] Reddy, M. 1993(1979). The Conduit metaphor: A case of frame conflict in our language about language. In Andrew Ortony (ed.), *Metaphor and Thought*, 2nd ed. Cambridge: Cambridge University Press.
- [3] Kövecses, Z. 2005. *Metaphor in Culture*, Cambridge: Cambridge University Press.
- [4] Shinebayar O. and B. Zoljargal (2020) Mongolian term created by analogy. UB, Mongolia:
- [5] Deignan, A. 2005. *Metaphor and Corpus Linguistics*. Amsterdam: John Benjamin Publishing.
- [6] Tuul D. (2004). On the development of terminology from a linguistic point of view.
- [7] Sodnom B. (2008). The purpose of defining Mongolian terminology. Collection. III,
- [8] Bayarmaa D. (2004). Structure and semantic research of translated terms. Doctoral
- [9] Munkhtsetseg N. Terminology translation studies. (2020) Ulaanbaatar, Mongolia: Soyombo printing press.
- [10] Oberfalzerova, A. 2006. *Metaphors and Nomads*. Ph.D. dissertation, Charles University Press.
- [11]Tumurkhuyag, T. (2011) A study of metaphors in political discourse from a cognitive linguistic perspective” (on the examples of Mongolian, Russian and English). UB
- [12] Zolzaya Ch., (2015). “Emotion Metaphors in English and Mongolian: With Special Reference to Anger, Love, Happiness, and Sadness”. Doctoral dissertation in Linguistics, Gyeongsang National University, Korea
- [13] Pragglejaz group 2007; Crisp et al., 2007; Steen 1999 The Metaphor Identification Procedure
- [14] Douglas Butler. 1986. The function of Metaphor in Technical Discourse, research article
- [15] Christina Schäffner, (2003). Metaphor and translation, Some Implications of a Cognitive Approach, *Journal of Pragmatics*, Volume 36, Issue 7, July 2004, Pages 1253-1269
- [16] Paul, G. 2013. Analogy as a Teaching Tool. Metamio.com
- [17] Dwayne, W. 2013. Analogy as a Teaching tool. Metamio.com
- [18] Sanj R, Undraa D, English -Mongolian Petroleum Technology Dictionary, UB. 2012 Ulaanbaatar, Mongolia: Admon Publishing House.

AUTHOR'S INTRODUCTION

1. First Author

	Badamdorj Enkhzul	benkhzul596@gmail.com
	Magister and Lecturer of the Mongolian University of Science and Technology Work field: School of Foreign Languages, MUST	

2. Corresponding Author

	Chojjin Zolzayta	zolzaya124@gmail.com
	PhD, Assoc professor of the English Department, School of Foreign Languages, MUST Work field: School of Foreign Languages, MUST	