

# A Cognitive Study of Conceptual Metaphors in Disney Animated Films — A Case Study on *Zootopia*

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## **Abstract:**

Based on the theory of conceptual metaphor, this paper studies the deep meaning of *Zootopia*, and analyzes the metaphorical cognition in its lines, compositions and even plots. In terms of research methods, valuable lines and plots are extracted as data for analysis based on the author's understanding of the film. Through the study of conceptual metaphor, it is found that *Zootopia* can be analyzed from three perspectives: structural metaphor, orientation metaphor and ontological metaphor. Ontological metaphor can be divided into entity and substance metaphor and container metaphor.

**Keywords:** Metaphor, Conceptual metaphor, *Zootopia*

## **1. Introduction**

Metaphor has been studied for a long time at home and abroad and its theories have been applied in various fields, especially in the field of cognitive study. Lakoff & Johnson (1980) state that metaphorical expressions in our language are systematically related to metaphorical concepts, so people can use metaphorical expressions to study the nature of metaphorical concepts and understand the metaphorical nature of our activities.

Disney animated films are loved by children all over the world. Its metaphorical characters, composition, narration and lines are the reasons for its success. As the 55th animated film produced by Disney, *Zootopia* has attracted not only children's attentions, but also the adults' attentions since its release. The film has grossed more than \$1 billion worldwide and won two best animated feature awards, the Oscar and the Golden Globe Awards. The movie depicts a metropolis full of metaphors. This paper attempts to analyze it from the perspective of metaphor cognition.

Based on the theory of conceptual metaphor, this paper studies the deep meaning of *Zootopia*, and analyzes the metaphorical cognition in its lines, compositions and even plots. In terms of research methods, valuable lines and plots are extracted as data for analysis based on the author's understanding of the film. Through the study of conceptual metaphor, it is found that *Zootopia* can be analyzed from three perspectives: structural metaphor, orientation metaphor and ontological metaphor. Ontological metaphor can be divided into entity and substance metaphor and container metaphor.

The study of the conceptual metaphors on *Zootopia* has the following practical significance: first of all, the results of this study can provide some reference for the cognitive study of metaphor in cartoons. Through the analysis of conceptual metaphor of the film, it can help audience to understand the cultural symbols of *Zootopia* from the perspective of metaphor. At the same time, through the analysis of internal and external cognitive perspectives, it provides a new idea for future researchers, that is, metaphor is a linguistic phenomenon, and language is only the surface of metaphor. Metaphor contains rich cultural connotations, values and artistic concepts, which are worth further exploration and research. Finally, this study is helpful to improve people's language skills in actual communication, help English learners take English culture as a starting point, understand the internal structure of language, and achieve communication goals more effectively.

## 2. Literature Review

### 2.1 Metaphor and conceptual metaphor

The term "metaphor" is derived from the the Greek word "metaphor", which refers to "transfer" or "carry across". The earliest research on metaphor can be traced back to Aristotle since 2000 years ago. He states that metaphor is a rhetorical device using one word to replace another one. The comparison theory inspired by Aristotle takes metaphor as implicit comparison between a metaphorical expression and a literal paraphrase based on analogy or similarity. The substitution theory raised by the Roman rhetorician Quintillion treats metaphor as a rhetoric device using some equivalent literal words or expressions to replace another one. These two classical theories focus on the semantic level and consider metaphor as a pure rhetorical device. The interaction theory proposed by Richards in 1936 changes the direction of metaphor research from the rhetoric perspective to the cognitive perspective. Ricoeur (1978) puts forward to two new concepts ( "vehicle" and "tenor") and points out that the meaning of the metaphor derives from the interaction between "vehicle" (the actual metaphorical expressions) and "tenor" (the main idea that the metaphor aims to convey).

The term "conceptual metaphor" can be found in a book named *Metaphors We Live by*. Because of the lack of systematicness in the interaction theory, Richards fails to reveal the cognitive nature of

metaphor. The traditional views on metaphor researches had occupied a dominant position until *Metaphors We Live by* written by Lakoff and Johnson was published. *Metaphors We Live by* is a profound book because it sets a milestone in the history of the metaphor research and marks the real shift from metaphor research from rhetorical perspective from cognitive perspective. Lakoff & Johnson (1980) state that “Metaphor is pervasive in everyday life, not just in language, but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature”. Thus it can be seen that metaphor is ubiquitous in people’s languages, thoughts and actions, not just as a figure of speech in people’s daily life.

## 2.2 The classification of conceptual metaphor

Lakoff & Johnson (1980) point out that the conceptual metaphors could be divided into three types in accordance with the cognitive functions performed in different contexts: structural metaphors, orientational metaphors and ontological metaphors.

Structural metaphor means that “one concept is metaphorically structured in terms of another” (Lakoff & Johnson, 1980). According to Lan (2005), structural metaphor allows people to go beyond orientation and referring, making it possible for them to metaphorically structure an abstract, diffuse and poorly described concept based on another structured and concrete concept. Take “TIME IS MONEY” as an example. It is well-known that time is value commodity and it is a limited resource that people use to achieve their goals or realize their dreams. Due to the development of the concept of work in today’s life, employees’ salary is usually related to the time they spend in work, which means that the time is accurately quantified. So it has become a habit to pay people by hour, week or year.

Oriental metaphor means that “the one that does not structure one concept in terms of another but instead organizes a whole system of concepts with respect to one another” (Lakoff & Johnson, 1980). Oriental metaphor is a cognitive process in which the spatial concept is used to map other cognitive domains or target domains to obtain extended and abstract meanings, such as emotion (happy is up and sad is down), body (health is up and illness is down), and morality(virtue is up and depravity is down).

Ontological metaphor means that “a figure that provides ways of viewing event, activities, emotions, ideas, etc., as entities and substances” (Lakoff & Johnson, 1980). Ontological metaphor contains two parts: container metaphors, entity and substance metaphors. A container metaphor is an ontological metaphor in which some concepts are represented as having an inside and outside and capable of holding something, such as “The ship is coming into view”. A entity and substance metaphor means that human experiences with physical objects provide the basis for ways of viewing events, activities, emotions, ideas, etc., as entities and substances, such as “We need to combat inflation”.

## 3. Results & Discussion

In this paper, the author analyzes the characteristics and applications of conceptual metaphors in the film *Zootopia*. Conceptual metaphors can be divided into three types in the film *Zootopia*:

structural metaphors, orientational metaphors and ontological metaphors. The author will analyze each type of metaphor in details.

### 3.1 Structural metaphor

Structural metaphor refers to the construction of one concept by the structure of another concept, which means that the structural metaphor constructs one abstract or vague concept through a concept with clear structures. In other words, the cognitive function of the structural metaphor is to enable the speakers to understand target A by means of the structure of source B (Kovecses, 2002: 33) . In the film *Zootopia*, there are numerous structural metaphors in lines. Here are two typical examples.

#### a. Time is money

In the lines of the film, *Zootopia*, it is easy for viewers to find that money terms are applied to time contexts. The creator compares time to money, which embodies the value of time and implies that time in this film is urgent and can not be wasted. Obviously, time is an abstract concept and it does not have any sentimental color. Money is a visible, touchable object that can be consumed, wasted, and used to purchase commodities. When the creator regards money as a metaphor of time, time is given the concrete meaning, which means that the meaning of time is associated with money and time can also be spent, wasted and used in exchange for something of value. Thus it can be seen that time becomes a precious and limited resource because of the metaphor. Take the below dialogue as an example.

*Judy: I think your \$10 worth of popsicles can wait.*

*Nick: I make 200 bucks a day, Fluff! 365 days a year, since I was 12. And **time is money**. Hop along.*

This conversation took place when Judy asked Nick some clues about a lost otter. Nick thought it was a small thing that the otter lost and didn't want to help. Judy retorted that Nick could wait to make money but the otter can not wait to be rescued. Nick said, "I make 200 bucks a day, Fluff! 365 days a year, since I was 12. And time is money. Hop along." This dialogue shows that Nick thought that time is money and every minute he could use it to make money, not to find a lost otter. Thus it can be seen that this conceptual metaphor appears to express Nick's impatience in *Zootopia*. The metaphor "time is money" is presented directly in the line of this movie, which not only reflects the importance of time, but also helps the creator to shape the characters. Nick tells Judy that time is money directly and refuses her request without mercy, which is very consistent with the fox's cunning character. From my point of view, the use of this metaphor not only embodies the value of time, but also helps to shape the characteristics of Nick. In the later part of the story, though Nick thinks that time is money, he still spends a lot of time with Judy to investigate the cause of otter's loss, which shows that Nick is cunning but kind in nature.

### b. Time is war

In the film *Zootopia*, the producer applies war terms to non-war contexts to express the urgency of specific things vividly. According to the direct experience or indirect reference of war, people leave the impression of “violence, cruelty and severity” in the image schema of war. The concept domain of war includes the concepts of "attacking the enemy" and "overthrowing". These familiar and concrete conceptual elements are mapped to the corresponding elements in the field of non-war concepts. Take the below dialogue as an example.

*Nick: ..... If you need something done, he's on it.*

*Judy: I hope so. We are really **fighting the clock** and every minute counts.*

This conversation happened when Judy was investigating license plates. She met a group of sloths working in the Transportation Bureau. As everyone knows, sloth is a slow-moving animal, which means that Judy had to endure sloth's low productivity even if she was in a hurry. This conceptual metaphor appeared to express Judy's impatience in *Zootopia*. “We are really fighting against the clock, every minute counts," she said. The object part of the sentence refers to the time concept of "clock", while the predicate part uses the verb, “fight”. That is to say, the time here is regarded as the object that can be attacked. Spending time is like fighting a war in the film because Judy makes a promise that if she can not find the otter within 48 hours, she will get sacked. Therefore, in order to show the urgency of time, the film takes advantage of the war terms to depict a non-war term, “time”. Thus it can be seen that conceptual metaphor in *Zootopia* has the function of presenting tension and helping viewers understand the plot.

## 3.2 Orientational metaphor

Orientational metaphor is a kind of image schema metaphor. It projects the spatial structure of the source domain onto the target domain of the non-spatial concept, which makes the concept have a sense of spatial direction. For example, “up-down”, “on-off”, “front-back”, “deep-shallow” and so on can be seen easily in English. Among all the orientational metaphors, the vertical space metaphor is the most closely related to people. The concept of “up-down” is the most basic one and its root lies in the gravity of the earth. Therefore, the most direct understanding of human experiences is the concept of vertical space.

### a. Happy is up, sad is down

Lakoff & Johnson (1980) believes that sadness and depression are usually accompanied by drooping postures, while positive emotions are upright. In the film of *Zootopia*, the conceptual metaphor of "happiness is up, sadness is down" is fully used. Take the below dialogue as an example.

*Judy's father: Hey, there, Jude. Jude the dude. Remember that one? How we going?*

*Judy: I'm fine.*

*Judy's mother: Your are not fine. Your ears are **droopy**.*

This conversation happened when Judy gave up her dream to go home, she began to sell carrots as scheduled. She was depressed, her parents cared about her, and she pretended to be good. Judy's mother said: “you are not good, your ears are droopy”. Obviously, happiness is an abstract concept,

which needs to be concrete and visualized. According to the experience of real life, when people are sad and depressed, their heads are often drooping. On the contrary, people tend to look up when they are in a good mood. Therefore, the creator uses the orientational metaphor to help viewers comprehend the concept of happiness and sadness. This dialogue uses the metaphor of orientation, and at the same time, it matches with the animal image to express Judy's hidden bad mood in an emotional way.

#### **b. Control is up, out of control is down**

Lakoff & Johnson (1980) states that “control is up and out of control is down”. In the film of *Zootopia*, many of language expressions in the lines have been well interpreted. Take the below dialogue as an example.

*Judy: Just have a quick question. Are your customers aware they're getting snot and mucus with their cookies and cream?*

*Elephant: What are you talking about?*

*Judy: I don't want cause you any trouble, but I believe scooping ice cream with an ungloved trunk in a Class 3 health code violation. Of course, I could let you off with a warning if you were to glove those trunks.....*

The conversation took place when Judy argued with a manager of the ice cream store. In the movie, the store manager refused to sell ice cream to Nick in an ice cream shop for elephants. Judy grabbed the handle and threatened the manager to help the little fox achieve his birthday wish. She found that the clerk didn't wear a mask to make ice cream, which directly violated the regulation, a Class 3 health code. She said, “Of course I could let you off with a warning if you were to glove those trunks”. As a law enforcement officer, Judy has absolute control over the scene, so in terms of language expression, she uses "off" to express the threat to the manager. Similar expressions include, “You are under arrest... Find him. Shut him down.”, and also “You need something done, he's on it”. In these expressions, “under”, “down” and “on” mean that everything is in control.

### **3.3 Ontological metaphor**

Ontological metaphor uses physical objects or people to explain abstract concepts. By using ontological metaphor, people can use specific and familiar objects to understand abstract things, and introduce unfamiliar and unexplained things into a cognitive model. When people understand abstract things, they tend to turn intangible things into perceptible things. This transformation from abstract to concrete is the transformation of ontological metaphor, which can be divided into entity and substance metaphor and container metaphor. These two metaphors are embodied in animals.

#### **a. Fear is an entity**

In the film *Zootopia*, the producer regards “fear” as an entity and vividly describes this entity to help audience understand the concept of fear. Take the below lines as an example.

*Voice-over: Fear. Treachery. Bloodlust. Thousands of years ago, these were the forces that ruled our world. A world where prey were scared of predators. And predators had an uncontrolled, biological urge to maim, and maul.....*

The voice-over appeared at the beginning of the film. Judy and her friends recreate the past in a drama performance, which presents that the world thousand of years ago was divided in two: vicious predator and meek prey. But as animals evolved, nowadays, all animals move beyond their primitive, savage ways and predator and prey live in harmony. From the analysis of this voice-over, it can be seen that “fear” is metaphorically “predators”. “Fear” is endowed with life and is an entity capable of controlling the world. Children are the main viewers of animated films. It is difficult for children to understand “fear”. The producer turns “fear” into an entity, that is, a predator or carnivore. This can not only help children understand the concept of “fear” better, but also pave the way for the later story.

#### **b. DNA is a container**

In the lines of *Zootopia*, the producer regards “DNA” as a container. DNA, deoxyribonucleic acid, the chemical in the cells of animals and plants that carries genetic information and is a type of nucleic acid. Obviously, DNA is a biological concept that children can not understand easily. So, the creator compares DNA to a container and help the viewers to comprehend the film. Take the below dialogue as an example.

**Reporter:** *Why is this happening?*

**Judy:** *We still don't know. But, it may have something to do with biology.*

**Reporter:** *What do you mean by that?*

**Judy:** *A biological component. You know, something in their DNA.*

**Reporter:** *In their DNA? Can you elaborate on that, please?*

**Judy:** *Yes, what I mean is, thousands of years ago, predators survived through their aggressive hunting instincts. For whatever reason, they seem to be reverting back to their primitive, savage ways.*

The conversation took place at a press conference. Judy and Nick have just uncovered a case of the barbarization of carnivores. Reporters asked Judy why the carnivores became savage. Judy said that it may have something to do with biology, which means that the genes of carnivores determine that predators are able to prey on meek animals. DNA is the main component of the chromosome and is also the main genetic material. In the dialogue of this film, DNA is seen as a container. Containers, as volumetric entities, can be used to store things. The contents of the container can also be taken out or dumped out. Similarly, the bestiality trapped in a container in a movie which can be stored, and can all run out of DNA catalyzed by external factors.

#### **4. Conclusion**

This paper collects metaphor samples from *Zootopia* and analyzes them in details within the framework of conceptual metaphor. It is found that metaphor in animated films is not only reflected in lines, but also in the plots. There are three types of conceptual metaphor in movie lines: structural metaphor, orientational metaphor and ontological metaphor. Ontological metaphor includes entity and substances metaphor and container metaphor.

This study has the following implications: first, it helps to improve people's metaphorical awareness. Conceptual metaphors are often used in daily life, but they are hard to find, let alone understanding their working mechanism or internal structure. Therefore, this study will help people

better understand metaphor from a cognitive perspective. Secondly, this study can help students make better use of cultural background knowledge and improve their language skills in communication. The use of idioms with conceptual metaphors in communication or speech can help English learners achieve better communication.

Despite the implications of the above discussion, there are still some inevitable limitations in this paper: on the one hand, this paper does not analyze the pictures of the animated film. In fact, the characteristics of conceptual metaphor can be seen from many aspects of animation, such as the construction of character identity, visual effect, composition and so on. On the other hand, this paper only focuses on *Zootopia* and does not involve other Disney films. Therefore, a more systematic metaphorical discourse analysis of Disney films should be made. What's more, research tools should be used to conduct a scientific multi-modal metaphor study of Disney animated films.

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