The Relationship between Cognitive Reference Point and Target Body: An Analysis of News Cartoons

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Abstract—Previous studies have proved great explanatory power of the principle of Cognitive Reference Point (CRP) in the analysis of discourses. Less attention is focused on the principle itself. This study explores the relationship between the cognitive reference point and the target body by analyzing a few news cartoons. Findings show that the mapping process of reference point and target body is achieved either in the same field, in the same domain or in different dominions.

Keywords—cognitive reference point; target body; explanation of relationship

1. INTRODUCTION

The cognitive reference point model is an idealized cognitive mechanism in the process of understanding and experiencing the world. People have different perspectives on things, forming different ways of highlighting things. Langacker believes that the principle of reference points is a basic cognitive ability of humans and it is ubiquitous in every moment of our life experiences. The model is shown in figure 1:

![Diagram of Cognitive Reference Point Model](image)

Figure 1: The cognitive reference point (R) and cognitive target (T) in the figure are in a basic position within certain cognitive domain.

Langacker believes that these two can be seen as a cognitive system. In order to form an understanding of the target body, it is necessary to establish mental contact. As the choice of reference points is subjective and empirical, the choice and establishment of reference points are dynamic, mostly unconscious or involuntary. The understanding of the target body depends on the cognitive reference point and is the ultimate purpose of human cognitive activities.

There were a lot of studies about the cognitive reference point. They focused on more linguistic phenomena from the view of the reference point principle and less the principle itself. This paper focuses on the relationship between cognitive reference points and target bodies. Through the analysis of different news cartoons, we explain several relationships between cognitive reference points and target bodies and how they achieve the coherence of the multi-modal discourses.

2. RESEARCH AND APPLICATIONS OF COGNITIVE REFERENCE POINT MODEL

Langacker believes that cognitive reference point is a basic human cognitive ability which is commonly found in every moment of our life experiences. He explains the CRP theory as Night-time Sky: The night sky is full of stars. How to find the one that we want? Observer (i.e., conceptualizers) is often firstly locating a bright star (reference point) which is easy to find. And then treat it as a starting point. Find the star (target) we want by the scope (dominion) of the starting point. This phenomenon is also applying to humans’ other experiences, such as to find a place on the map. People often firstly identify a large, well-known location as a reference point. Then it is much easier to determine the target place with the help of reference point. For example, if we want to find the key “A”, we must first have a keyboard. If we want to find a certain paragraph, we firstly need to find the page with this paragraph. This cognitive ability has become people's common sense.

In his book Foundations of Cognitive Grammar Vol.II: Descriptive Application, Langacker puts forward cognitive reference point and cognitive reference point model and applied them into the explanation of nominal structure, possessive structure, metonymy mechanism, topic structure. Take possessive structure as an example, he proposes that possessive structures are susceptible to schematic characterization intermediate in abstractness between such notions as ownership and part/whole relations on the one hand, and mere association on the other. Possessive constructions evoke an idealized cognitive model which is abstract and immanent. It is
fundamental to how people conceptualize the world and adapt to people’s everyday experience. Let’s see some examples of “possessor” and “possessed” relationships:

(Part-whole relationship): your hand, my eye
(Individual-collective relationship): her group, their team
(Relatives appellation relationship): your friends, his cousin

(Something owned relationship): his laptop
(Unowned possession relationship): the baby’s cradle
(Something manipulated relationship): my car
(Something at one’s disposal relationship): Sally’s office
(Something hosted relationship): the dog’s fleas
(Mental or physical quality relationship): her health
(Situational relationship): his quandary, my predicament
(Local relationship): their spot, my home
(An action carried out relationship): his departure
(An action undergone relationship): Lincoln’s assassination

From the above, three prototypes of possessive relationship can be summarized: ownership relationship, kinship relationship and part-whole relationship.

Wang Yin’s researches and applications of cognitive reference point is an improvement from lexical level to discourse level of cognitive linguistics and he gets great achievement in discourse coherence through cognitive analyses. Wang Yin believes that this model can explain discourse coherence. On discourse level, the information sender sets a speech range (D in Figure 2) and a starting point (R in Figure 2) based on a viewing angle (C in Figure 2). We can conduct a series of expositions around the starting point, i.e. we have a lot of cognitive target (see TI, T2, T3 in Figure 2). At the same time, this discourse is coherent (Wang Yin, 2005b). This can be used to explain coherence function of topic overarching from a cognitive perspective. After that, Wang Yin goes further to expand on repaired cognitive reference point, and puts forward seven discourse construction mechanisms which adapt to the diversity of articles’ form, as well as enhance the explanatory power of cognitive reference point principle (Wang Yin, 2011a).

![Figure 2 Cognitive reference point model of topic overarching (Wang Yin, 2011a).](image)

After Langacker’s advocating of cognitive reference point principle and Wang Yin’s application and improvements, more and more authors begin to try to interpret various language phenomena with the help of cognitive reference point principle and got achievements in different linguistics branches. Wang Haiyuan (2006) uses cognitive reference point principle to explain indirect speech act, pragmatics errors, pragmatics negotiations and catch the conclusion that these different communicative phenomena are the result of the communicative subjects’ different cognitive reference points. Wang Zhengyuan (2006) analyzes the relationship between cognitive reference point and discourse view point in literature. Wei Zaijiang (2008) analyzes the relationship between cognitive reference point and Pragmatic Presupposition. Wang Yekun (2009) makes research on the tense choice of time deixis in a cognitive reference point perspective. Van Hoek (1997:142-173) and Li Conghe (2009) analyzes backwards anaphora constructions in a cognitive reference point mechanism. Li Conghe comes out that the anaphoric pronoun, usually a possessor, is contained in a proposed modifier and the antecedent nominal functions as the subject of the main clause. Both English and Chinese backwards anaphora approximately follow the same cognitive principle, namely, the existence of a prominence asymmetry between the antecedent and the pronoun. The antecedent is the most prominent nominal being construed as the cognitive reference point with the co-referential pronoun falling into its dominion. Wen Xiu (2010) conduct a research on the influence of different cognitive reference point choice on space deixis. With the direction of Langacker’s reference-point construction theory, he analyzes the cognitive process of space deixis reference from several different aspects like the selection of directional reference points, the selection of positional reference points and the choice of space deixis. He draws a conclusion that in the cognitive process, different reference points and observation points will lead to human’s different cognitive interpretations and space fuzziness. Zhao Yong & Shi Yingfeng (2011) use cognitive reference point principle to explain entailment and semantic presupposition. They classify entailments and presupposition in strong entailment and weak entailment, absolute presupposition and relative presupposition. Their research reveals that weak entailment and relative presupposition are coincided. Relative presupposition and entailment which can both be true but cannot both be false within the sentence. These are in fact the result of cognitive reference point’s shift. Cognitive reference point principle provides a new perspective for the study of relationship between entailment and semantic presupposition. Xiong Rongnin (2011) analyzes the different focalizations-zero focalization, internal focalization, external focalization, multiple focalizations of narrative theories in a cognitive reference point perspective. These researches have further expanded the explanatory power of cognitive reference point principle. However, the
relationship between cognitive reference points and target bodies remain unclear and need further discussion.

3. THE RELATIONSHIP BETWEEN COGNITIVE REFERENCE POINT AND TARGET EVENT

3.1 In-field mapping relationships

Langacker mentioned the definition of field when studying allegations and meanings. From a psychological point of view, the field is conceptualized in understanding whatever is needed for the target. In other words, the conceptual meaning of the mind can be metaphorically referred to as a “concept”.

The conceptualizer uses himself/herself as a cognitive reference point to activate the register, after forming a certain context, maps the target object in a metaphorical manner, thus completing the understanding of the target body. As is shown in Figure 3: The conceptualizer recognizes a certain mental path formed on the basis of the knowledge reference point and the target body, thus a complete mapping process is achieved. In order to achieve an understanding between the two domains, the mapping process needs to be placed in a larger field.

![Figure 3 In-field mapping relationship](image)

Example one: As a special way of delivering information in everyday life, news cartoons play a vital important role in the process of influencing the public by means of multimodal discourses. Then coherence of the multimodal discourses is worth being paid more attention to since it determines whether our readers can receive the entire true meaning of the multimodal discourses. Figure 4 is a typical news cartoon. We can see there is only an image of the Earth and a person in the news cartoon, and no other descriptions or words appear in the news cartoon except for the caption “the Heavy Burden of the Youth”, which is a generalization. What the producer eager to express has to be seen from the visual image, which serves as the reference point of this multimodal discourse. We look at the visual image with the question in our mind, is the earth a heavy burden? If not, what is the heavy burden? What causes the heavy burden? What is the consequence of the heavy burden? and what is the consequence of the heavy burden, through which a larger field is activated. From the picture, we know that the heavy burden refers to the Earth. The color, as a visual mode, gives us the reference point metaphorically referring to the concept of “pollution”, the reason why the Earth becomes a heavy burden. The Earth, as we all know, is usually painted blue, but some parts of the Earth here are depicted black to form a contrast with other parts, which means the environmental pollution. Due to the environmental pollution, the Earth is not healthy anymore and destruction can be seen everywhere, so it becomes a heavy burden of the youth. Then we can continue to see what the consequence is that the heavy burden brings about to the youth. The young man carries the earth on the back with an extremely bended waist and emaciated body, sweat pouring off his head, which seems heartrending and painful. In reality, it is nonsense to carry the earth on one’s back, while this text uses such a vivid image to reflect and stress the terrible effect of the polluted Earth, it produces grave consequences and the young generation has to bear and endure the heavy burden left behind by the last generation. The mapping process of the reference point (the image in this cartoon) and the target body (the terrible effect of the polluted Earth) is happened metaphorically between two domains. Therefore, the relationship between the reference point and the target body is between two domains in a field.

![Figure 4 the Heavy Burden of the Youth](image)

3.2 The generic relationship in the same domain

Langacker believes that construal is the different cognition and understanding of the same semantic content. Mental entities and concepts are a series of perceptions. The prominence of reference points is the basis for understanding. When Weizaijiang quoted Wang Yin's point of view, the more prominent entities are more likely to be regarded as reference points. Using this prominent entity as a reference point to confirm that other entities are the core content of the cognitive reference point, and the confirmed target body and reference point are subordinate relations. As shown in Figure 5, when the cognitive reference point R is determined, the target T and the reference point confirmed by mental contact activate a domain. This confirmed target body is one of the cognitive domains under the reference point concept.
3.3 The mapping relationship in different dominions

People use the various sensory organs of the body to perceive the world and judge the world, creating a cognitive world or mind through the experience of perception. The perception of the entity and scene of the real world usually serve as the reference point, activating the abstraction of the mental world. In the mapping process, people’s "knowledge" of the world is the basis of "coherence". Coherence does not come from the coherent relationship itself, but from the knowledge of the world. From the perspective of cognitive psychology, the process of perceptual experience triggers the imagination and the abstraction of the mental world, though reasoning, discourse can establish a unified cognitive model in readers’ mind, and the modal meanings are coherent, so that people can understand a text. As is shown in Figure 7, although the two domains are separated and not within the same field either, mapping between the reference point and the target body can still be achieved by analogical or inferential cognitive mechanisms.
mapping relation of the different domains, directly and infectiously.

Figure 8 Water and energy

4. DISCUSSION AND CONCLUSION

Cognitive linguistics holds that coherence exists in human cognition. It is the reader/listener's job to establish coherence by using their linguistic knowledge to connect the world of discourse with the people, objects, events and situations outside the discourse. That is to say, the construction of discourse coherence is a cognitive process, and the information provided by a discourse can form a unified cognitive world in our minds, which can be regarded as coherence by communicators (Wang Yin, 2005). This view is the basic theoretical basis for analyzing textual coherence from the perspective of dynamic discourse. In the process of cognitive coherence, people's "knowledge" of the world is the basis of "coherence". Coherence does not come from the coherent relationship itself, but from the knowledge of the world. Thadard (2000) believed that the proposition of cognitive coherence is to solve the relationship between thinking and action. In his book “Coherence in Thought and Action”, he proposed five ways to realize cognitive coherence: explanatory, analogical, inferential, perceptual and conceptual, which basically reflect people's approaches eventually unified into cognitive coherence. Although Thadard puts forward five ways of coherence from the psychological and philosophical perspectives, it has a strong explanatory power to help people understand or recognize the coherence of a text.

In this paper, we discuss the relationship of the reference point and target body from the same field, the same domain and different dominions. The relationship between the object and the body demonstrates that people use different views on different things. Through an analysis of news cartoon, we find that different perspectives lead to differences in narrative methods and the selection of reference points, different relationship between the reference point and target body as well. Therefore, the influence on people's perception of things in the objective world and the mental world is different. The present analysis not only provides a further understanding and application of the principle of reference point, but also provides effective method to multimodal discourse analysis. Based on the five ways of realizing coherence in people's cognition of the world proposed by Thadard, future studies can further elaborate the mental paths in Cognitive Reference Point Model. What’s more, the mental path is an important feature of the bridging operation, which involves repetition and circulation. Thus, a dynamic coherence view is also necessary.

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