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A Cognitive Linguistic Study on the Polysemous Chinese Word

"头"

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Abstract

The prototype category serves as the foundation for polysemy which is extended via metonymy and metaphor. As cognitive linguistics advances, it has become apparent that metaphor and metonymy are not merely poetic embellishments for language. Rather, they constitute a mode of thought and a form of cognition, by which we gain comprehension of new concepts. Due to the fact that the head is the most significant portion of the human body, it is frequently used in linguistic expressions. This study adopts qualitative descriptive study through the framework of prototype theory, metaphor, metonymy, and iconicity to make an analysis of the polysemous Chinese character "\(\pm\)" (head), which contributes to our understanding of the intricate interplay between language, cognition, and cultural associations.

Keywords

Head, Polysemy, Metaphor, Metonymy

1. Introduction

Polysemy pertains to the pervasive phenomenon of words possessing two or more meanings. When a term is coined, it initially possesses a single definition that represents a specific concept or occurrence. As society and culture evolve, human comprehension of the external world deepens, making communication between individuals more challenging and intricate. In the case of "头" which means "head", its polysemous nature stems from the various conceptualizations associated with the head. Different aspects of the head, such as physical features, cognitive functions, and metaphorical extensions, contribute to the diverse senses attributed to "头". Lakoff and Johnson (1980) consider both conceptual metaphor and conceptual metonymy as cognitive mechanisms that are widespread in human language and aid individuals in understanding the world. "Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature." (Lakoff & Johnson, 1980, p. 4). A more profound comprehension of the multifaceted nature of language that governs comprehension

and communication can be attained through an exploration of the cognitive processes involved in the interpretation of the polysemous word "失".

This study aims to make an analysis of the polysemous Chinese character "失" from a cognitive perspective. It attempts to explain how polysemous words are formed and how the periphery meanings are extended from the basic meaning by adopting the framework of prototype theory, metaphor, metonymy, and iconicity.

2. Theoretical Framework and Literature Review

2.1 Prototype Theory

The framework of prototype theory, which is also referred to as prototype semantics, investigates the manner in which the human mind organizes categories and concepts (Geeraerts, 2009). It implies that categories are not delineated by a rigid collection of designating characteristics, but rather by a single and prototypical member that serves as a representative of the category.

The inception of prototype theory can be historically attributed to the 1970s research conducted by Eleanor Rosch and her associates. Their research focused on object categorization and discovered that individuals tended to create groups based on typical examples, rather than a specific collection of sufficient features. The development of the prototype theory suggests that categories are structured around a central prototype that represents the key characteristics of the category. This prototype is regarded as the most typical or representative member of the category. Other members of the category are evaluated according to their resemblance to the prototype. As an illustration, the prototype for the category "fruit" could be an apple, given its widespread usage and symbolic status as a fruit. Conversely, fruits such as oranges and bananas are regarded as more or less typical due to their similarity to the prototype.

Prototypes are developed through our experiences with different instances of a particular category. They are impacted by variables like frequency, salience, and cultural norms. The prototype represents the shared characteristics of category members, whereas atypical cases may vary in some aspects. For instance, a robin can be considered a quintessential bird due to its possession of conventional avian characteristics including feathers, a beak, and the capability of flight. Nevertheless, a penguin is atypical since it lacks the ability to fly and possesses distinct physical traits.

Prototype theory elucidates that categorization is a gradient phenomenon rather than a binary one. It enables flexibility and diversity in our interpretation and classification of objects, concepts, and language expressions. It also considers that certain category members may be viewed as more central or representative of the category than others.

2.2 Conceptual Metaphor

Conceptual metaphor theory is a crucial method for studying polysemy and serves as a cognitive tool to aid human perception of the external world. It typically encompasses two domains: the target domain and the source domain. The source domain is used to define concrete, familiar, and known items, and

the target domain refers to unfamiliar and abstract concepts. The extended meanings are developed through the metaphorical mapping from concrete domains to abstract domains. The polysemous words are extended through metaphor based on the relation of similarity between the literal meaning and figurative meanings.

Lakoff and Johnson (1980) further divided conceptual metaphor into three types: structural metaphor, orientational metaphor, and ontological metaphor. Structural metaphor refers to the cases where one concept (the target concept) is metaphorically structured in terms of the other (the source concept). Although the two concepts pertain to distinct cognitive domains, their constituents exhibit a consistent correspondence. For example, "time is money" establishes a coherent relationship between the concepts of "money" and "time" from two distinct cognitive domains. Both "time" and "money" are valuable, available for use or occupation, and can be either saved or squandered. Through the conceptual domain of "money", which is material and tangible, individuals are able to comprehend the invisible and abstract domain of "time".

Orientational metaphor involves interpreting abstract ideas, such as emotions and feelings, by using spatial orientation terms (e.g., up and down, inside and outside, front and back, center and edge) which are rooted in human spatial awareness. The expressions "I'm in high spirits" and "I'm feeling down" use orientational metaphors to convey the abstract emotional concepts of "happiness" and "sadness" by associating them with the locative words "high" and "down", which creates the conceptual metaphors "happy is up" and "sad is down".

Ontological metaphor demonstrates that individuals recognize and articulate intangible notions, emotions, and psychological states by drawing upon their personal experiences with tangible objects, particularly their own bodies. The human language frequently employs ontological metaphors. For example, in the expression "His fear of insects is driving him insane", the abstract notion of "fear" is personified as a tangible and physical entity capable of inducing insanity in the speaker.

2.3 Metonymy

Lakoff and Johnson (1980, p. 39) were the first to describe metonymy in cognitive terms as a process "allows us to conceptualize one thing by means of its relation to something else". Nevertheless, this definition falls short of elucidating the essence of this phenomenon and its connection to metaphor. Lakoff and Turner (1989) provide a more nuanced definition of metonymy as a conceptual mapping that occurs within a single domain and is characterized by a "stand-for" relationship. Its primary function is referential. As an illustration, the term "crown" may denote either a monarch or a regal authority. "Hollywood" is a possible designation for the American film industry. These examples demonstrate how metonymy can encapsulate complex ideas or institutions in a succinct and evocative manner.

Metonymy is a figure of speech that is widely used in language and literature to create vivid imagery, convey complex ideas, and add depth and nuance to communication. It involves the substitution of a word or phrase with another word or phrase that is closely associated with it, often based on a

relationship of contiguity, proximity, or common association. This rhetorical device allows speakers and writers to evoke specific meanings, emotions, or concepts by using a related term that is part of the same semantic field.

One of the key features of metonymy is its ability to emphasize a particular characteristic, or aspect of the original word, rather than directly naming it. By choosing a related term that is interconnected in meaning, metonymy can enhance the expressive power of language and create layers of meaning that resonate with the audience. This indirect approach to conveying ideas can stimulate the imagination, evoke sensory experiences, and engage the reader in a more dynamic and thought-provoking way.

Metonymy fulfills various functions in language and communication. It enhances comprehension by using closely associated terms to refer to larger concepts, creates rhetorical effects by evoking specific qualities or characteristics, facilitates efficient communication by allowing for brevity and economy of expression, and represents abstract concepts in a concrete and tangible way. Metonymy adds depth, nuance, and efficiency to our expressions, enabling us to communicate effectively and convey complex ideas in a concise and impactful manner.

2.4 Iconicity

Iconicity is a relationship of resemblance or similarity between the two aspects of a sign: its form and its meaning (Mannheim, 1999). An iconic sign is one whose form resembles its meaning in some way. The opposite of iconicity is arbitrariness. In an arbitrary sign, the association between form and meaning is based solely on convention. For instance, the Hindu-Arabic numerals 1, 2, 3 are arbitrary, because their current form does not correlate to any aspect of their meaning. In contrast, the Roman numerals I, II, III are iconic, because the number of occurrences of the sign I correlates with the quantity that the numeral represent.

There are several types of iconicity, as the form of a sign may resemble aspects of its meaning in several ways. It may create a mental image of the concept (imagic iconicity), or its structure and the arrangement of its elements may resemble the structural relationship between components of the concept represented (diagrammatic iconicity).

Iconicity plays a significant role in various aspects of language, including the formation of words, the structure of sentences, and the creation of meaning. However, not all languages or linguistic expressions exhibit high levels of iconicity, and their importance can vary across different linguistic systems and cultures.

Some spoken words are iconic, exhibiting a resemblance between form and meaning. For instance, the word boom bears resemblance to the loud, explosive sound to which it refers, and the word teeny conveys a sense of smallness through the high-front vowel /i/ (e.g., Ohala, 1994). Experimental studies show that people can take advantage of iconicity to improvise novel, meaningful vocalizations (Fay et al., 2013; Perlman et al., 2015), and this process can play an important role in the formation of new words (Dingemanse, 2014). Thus, iconicity has been argued to have special significance in the origins of languages, serving to bootstrap the formation of spoken symbols (Imai & Kita, 2014).

2.5 Previous Studies on Body Parts from a Cognitive Perspective

Considerable research has been devoted to both monolingual and cross-lingual investigations of human body part terminology. The conceptual process of body-part terms has been explored by several scholars, including Lakoff (1993) and Kovecses et al. (2003). According to Lakoff (1993), the most fundamental metaphors are rooted in the physical experience of humans. Therefore, conceptual metaphors can exist across languages. In their investigation of the semantics of emotion language, Kovecses et al. (2003) proposed that emotions are mainly perceived metaphorically. Monolingual studies on specific body part terms were carried out to provide evidence for particular cognitive linguistic hypotheses. For instance, Niemeier (2000) used "heart" as a representation of emotions to support the idea that many metaphors were based on metonymy. Several researchers have conducted comparative studies on body-part terms in different languages. Deignan (2004), for example, conducted cross-linguistic research on several body component terms to suggest that the majority of central metaphors stemmed from universal bodily experiences and were therefore common across other languages. Additionally, he found that a multitude of expressions were formed through a blend of metaphor and metonymy. Oi and Oin (2004) investigated English and Chinese "heart" expressions and proposed a cognitive model of "heart" expressions comprising two metaphoric models and six metonymic models. Cai and Cao (2013) conducted research comparing the Chinese and English metaphorical usage of viscera lexes, with a particular focus on the influence of cultural distinctions. Furthermore, Zhao (2010) presented a comprehensive investigation into the meaning transference of body-part terms (e.g., hand, head, eyes, and stomach) between English and Chinese. Wang (2002) focused on some frequently-used body parts to analyze the thinking mechanism of metaphor in Chinese and English. The author worked out some similarities between the two languages from the aspect of psychology and semantics. In addition, the author reached a conclusion that body metaphor was not only a cognitive tool to conceptualize and understand the world, but was also the basis of words' creative ability.

3. Prototypical Analysis of "头"

3.1 Overview of Meanings of "Head"

In Chinese dictionaries, "头" (Tou) is an important word with multiple meanings. As Xinhua Chinese Dictionary shows, "头" has the following meanings:

- 1. 人身上最上部和动物最前部,长着口、鼻、眼睛等器官的部分 (the part of your body above your neck which includes mouth, nose, eyes, and so on)
- 2. 指头发或留头发的样式 (refers to hair or hairstyle)
- 3. 物体的顶端或末梢 (the top or end of an object)
- 4. 事情的起点或终点 (the beginning or the end of something)
- 5. 物品的残余部分 (residual parts of something)
- 6. 头领,为首的人 (a chief or leader)

- 7. 方面 (aspect)
- 8. 第一 (the first)
- 9. 领头的,次序居先的 (prior in order)
- 10. 方言,用在"年"或"天"前面,表示时间在先的 (beforehand)
- 11. 临,接近 (close to)
- 12. 量词,多用于动物(多指家畜) (quantifier, mainly used for domesticating animals)
- 13. 礼仪和惩罚 (etiquette and punishment)

3.2 Meaning Network of "头"

members with an unequal status within the same semantic category. In accordance with personal experience, prototypical items are the most common, representative, and easily understood, whereas marginal items are the meanings that individuals extrapolate via metonymy and metaphor. The more abstract the marginal items, the further they are from the prototypical items. However, no matter how its meaning changes and how abstract it is, it is always related to the prototype in one way or another. Meaning (1) is the most easily understood and representative and belongs to the prototypical meaning of the polysemous word "头". However, meanings (2)-(13) are the meanings that people fully utilize their cognitive ability to recognize, which are the extension of the prototypical meaning (1). For example, meaning (6) is a chief, leader. Without careful study, people may think that there is no relationship between meaning (6) and its prototype meaning (1). However, from a cognitive linguistic point of view, the emergence of meaning (6) is a metaphorical mechanism by which people recognize the meaning based on their own experience and cognitive ability. As we all know, the head is an indispensable and important part of the human body, integrating the five senses and thinking. Similarly, the leader is also an indispensable and important part of the whole team, without whom the team or organization has no core. Therefore, when people get to know such new things, they search for the existing concepts in their minds and find that the core person of a team is as important to the team as the head is to the body. Mapping the schematic structure of the origin domain (head to body) to the target domain (core person to team), the word "头" is given another meaning: leader.

The polysemous word "头" comprises distinct items, each of which has prototypical and marginal

In terms of physical characteristics, "头" is a round body organ containing hair, brain, and so on. Hair is one part of the head, so the head can be used to refer to hair or hairstyle in Chinese. "头" can also be used as a classifier. For example, "一头蒜", which means "a bulb of garlic". Because garlic is the same as a head which is like a round shape, thus garlic can be counted as "一头蒜". There are also some other similar expressions, such as "葱头" which means "onion"; "芋头" which means "taro"; "拳头" which means "fist".

Looking from different angles, the head can present different directions. On the side of the horizontal direction, the head is located in front of the body, so we have the words such as "前头" and "后头". "头" can also be used as an adjective to describe the rank or sequence of something being prior. For example, "头奖", which means "the first prize"; "头等舱", which means "the first-class cabins". On

the side of the vertical direction, the head is on top of the body, so we have "山头", "枝头", and "墙头".

In terms of the meaning (13), Kowtow is one such etiquette to show respect and politeness. Kowtow is an action with a head touching the land, which is a unique rule in China.

4. The Metaphoric Usage of "头"

4.1 Orientational Metaphor

The head is located in the uppermost part of the body in the vertical plane and is the first organ that can be perceived visually, so it can form an imagery schema of "up and down" in the space where a person is located, and it can represent the highest place of an object. Here are some examples.

(1) "夜已经有些深了,月亮挂在枝头,将半夜苍穹照的亮亮堂堂的。"

Translation: It is late at night. The moon hung over the top of the branches, shining brightly in the middle of the night.

(2) "清晨的阳光照在成山头,雾气缭绕,仿佛仙境一般。"

Translation: In the early morning, sunlight shines at the top of the hill, and the foggy atmosphere makes the hill like a fairyland.

The above terms "山头" and "枝头" both derive their meanings from the fact that the position of the head is at the uppermost part of the body, and "头" means being at the top of a vertical plane object.

(3) "我们要以**百尺竿头更进一步**的精神,不断追求卓越,才能在竞争中取得更大的优势。" Translation: We have to keep pursuing supreme with the spirit of "Bai chi gan tou geng jin yi bu" in order to gain a greater advantage in the competition.



Figure 1. Figures of "山头", "枝头", and "百尺竿头"

"Bai chi gan tou geng jin yi bu" is a Chinese idiom. "Bai chi gan tou" means "the top of a long pole". Although "头 is already at the top, it can still break through this height to achieve higher achievements. This idiom is an expression of one's expectation that the other person can make further efforts to surpass himself.

If placed horizontally, "头" can indicate the foremost part of an object, such as "船头" (the head of a train) and "源头" (the beginning of a river). Additionally, the phrase "左头" means "to the left" and "右头" means "to the right". These expressions utilize the head's role in perceiving and navigating the

physical environment to convey metaphorical notions of lateral directionality.



Figure 2. Figures of "船头", "源头", "左头", and "右头"

Apart from the one-dimensional space that is oriented vertically or horizontally, it can also be placed in a three-dimensional space. "头" can be combined with directional words such as east, south, west, and north to form new concepts, such as "里头" (inside), "外头" (outside), "东头" (eastern), and "西头" (western). In fact, in these words, the meaning of "头" is weakened and it only serves as a suffix for the other words.



Figure 3. Figure of "里头", "外头", "东头", and "西头"

4.2 Time Metaphor

The time metaphoric usage of "头" stems from the physical position of the head, which is located at the beginning of the body. This orientation allows "头" to metaphorically represent the beginning point of temporal entities or sequences. For instance, the phrase "年头" translates to "the beginning of the year" in English. The phrase "头一天" signifies "the first day" or "the beginning day". The metaphorical usage of "头" in "头一年" reflects the cognitive process of mapping physical experiences onto abstract temporal concepts. The phrase "头一年" can be used in various contexts to signify different meanings. It can refer to the first year of a person's life, the first year of a project or endeavor, or the beginning year of a historical period. In each case, the metaphorical usage of "头" highlights the significance of the initial phase or starting point of a particular temporal entity. The phrase "头一年" also carries connotations of freshness, novelty, and potential, where possibilities and opportunities abound. Moreover, the time metaphoric usage of "头" extends beyond the phrase "头一年" to other temporal expressions. For example, "头几天" refers to the first few days, "头半年" denotes the first half-year,

and "头一秒" represents the first second. These phrases all utilize the metaphorical connection between the physical head and the concept of the initial or starting point in time to convey specific temporal relationships and durations. Additionally, it can also extend to expressing the concept of priority or precedence in time. The term "头等大事" translates to "the most important thing" or "the top priority" and is used to designate something of the highest significance or urgency.

4.3 Ontological Metaphor

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 closely related to the ontological where the target is understood as a container (Johnson, 1987).

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

(1) "我**头脑**中总是有些愚蠢的想法"。

Translation: My head is always filled with silly thoughts.

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. In this example, it treats the head as a container that can hold things by using it in conjunction with the phrase "filled with". In English, there are also similar expressions, for instance, "have rocks in one's head", which regards the head as a container as well.

The head is the uppermost part of the human body and is visually the first part that catches attention. Compared to the torso, the head is relatively smaller. Based on our experience with this body part, we can observe that "关" is metaphorically extended in expressions to represent a part or end of an object, thus conveying the image schema of "a part of a whole". It is generally used to indicate a small portion within a larger entity.

(2) "她细心地挑选出合适的**针线头**,开始缝补那件旧衣服。"

Translation: She carefully picked out the right **head of needle and thread** and began to mend the old dress. "针头线脑" refers to small objects used in needlework. "头" metaphorically represents the small and fragmented part relative to the whole entity. This is based on the fact that the head is relatively small in size compared to the torso, in which case it can be used to describe tiny things. In addition, there are many other concepts that are derived from the experience of "头" as a part of the whole, such as "袖头" (cuff of a sleeve) and "烟头" (cigarette butt).



Figure 4. Figures of "针线头", "袖头", and "烟头"

4.4 Structural Metaphor

Structural metaphor refers to using the structure of one concept to construct another concept. It is a way of using concrete concepts to understand abstract concepts, projecting familiar meanings onto unfamiliar words in order to understand new things. "头" is an organ of the human body, and as with any organ, it can cause different sensations. For example, "头疼" (headache), "头晕" (dizziness), "头脑发热" (brain fever). These physical sensations of the head itself can cause discomfort, so we can use these words that describe physiological phenomena to express psychological states.

(1) "这个问题太棘手了,弄得我头昏脑胀。"

Translation: This problem is so tricky that it makes me dizzy.

Based on the human body's experience, "昏" is a feeling of confusion and bewilderment that arises when faced with complex situations and not being able to understand the situation. "头昏脑胀" can be used to express the feeling of being completely at a loss and frustrated when dealing with a busy task.

(2) "我一时头脑发热,决定跳槽创业!"

Translation: I made the impulsive decision to switch jobs and start my own business.

The sensation of "热" (heat) can make people feel anxious and impatient. Based on this experience, "头脑发热" (brain fever) can describe someone who is not calm, impulsive, and decides to do something on a whim.

Human actions are driven by thoughts. In Chinese, there are also words that combine "共" with verbs to express instinctive actions that people may take under different psychological states. Here are some examples.

(3) "他日夜埋头苦干,最终实现了自己的目标。"

Translation: He worked tirelessly day and night, and eventually achieved his goal.

"埋头" (lowering one's head) means to focus on doing something without paying attention to what is happening around oneself, and not being easily distracted. "埋头苦干" means to work hard in silence and concentrate on the task at hand.

(4)"他垂头丧气地望着远方,似乎对未来已经失去了信心和希望。"

Translation: He looked downcast as he gazed into the distance, seeming to have lost confidence and hope.

"垂" means the dropping of one tip of something. The action of "垂头" gives people the most direct feeling of being unenergetic and looks very sad. This phrase has been extended to represent the psychological state of disappointment, which is very vivid and visual. In English, there are also many similar uses, where the physical state of the head is used to represent a person's mental state. For instance, "hold one's head high" can indicate a person feeling proud and optimistic.



Figure 5. Figures of "头昏脑胀", "埋头苦干", and "垂头丧气"

5. Analysis of Metonymy

"头" can stand for a measurement to measure the height or distance. In English, there are some expressions, such as "the boy is one head taller than his friend." Similar to "head" in English, "头" can also be used as a classifier to quantify the number of animals in Chinese, such as "十头牛" which means the number of cows is ten. In its literal sense, "十头" directly translates to "ten heads." However, the metonymic usage of "头" in this expression extends far beyond a mere enumeration of physical heads. Instead, it symbolizes a collective entity or group characterized by its members' heads, thereby representing a larger whole. Beyond its numerical significance, "十头" embodies broader cultural values and societal norms within Chinese culture. The emphasis on collective identity and group cohesion resonates with traditional Chinese philosophies such as Confucianism, which prioritizes harmonious relationships and social cohesion within communities. In addition, the notion of abundance and completeness reflected in "十头" aligns with cultural ideals of prosperity, fortune, and fulfillment, underscoring the aspirational nature of the expression.

"头" can be seen as a whole entity including eyes, nose, mouth, ears, and brain based on the basic meaning. These elements constitute the whole entity. "头" can also provide the possibility to think, reason, imagination, and mind. By means of metonymy, the brain can be substituted by the head.

(1)"聪明的人做事有头脑。"

Translation: Smart people do things with brains.

"头脑" is considered to be the organ that governs human thinking activities. However, in this usage, "头脑" no longer simply refers to the organ itself but rather to the intelligence and ideas generated by this organ. "有头脑" (have a brain) is used to describe someone who is talented and visionary. In English, there is also similar usage, such as "Two heads are better than one". Beyond its literal and metaphorical interpretations, "有头脑" reflects broader cultural values and societal expectations within Chinese culture. The emphasis on intellectual virtues and cognitive abilities aligns with the

traditional emphasis placed on knowledge, wisdom, and scholarly pursuits in Chinese society. Through its metonymic usage in "有头脑", the character "头" becomes a symbolic representation of intellectual prowess, rational thinking, and the capacity for discernment, reflecting the cultural esteem for intelligence and astuteness.

The expression "洗头" is a metonymic phrase commonly used to refer to the act of shampooing or washing one's hair. Here, "头" serves as a metonym for the entire head, specifically emphasizing the action of cleansing the hair and scalp. By associating "头" with the act of washing, this expression highlights the importance of maintaining cleanliness and hygiene, particularly in relation to personal grooming practices. Moreover, "洗头" reflects the cultural significance placed on hair care and cleanliness within Chinese society, where the appearance of one's hair is often seen as a reflection of one's overall health and well-being.

Similarly, the expression "寸头", which translates to "inch head," is another example of metonymic usage involving the character "头." In this context, "头" symbolizes a specific hairstyle characterized by closely cropped or shaved hair, typically to a length of approximately one inch. "寸头" is often associated with simplicity, practicality, and a sense of neatness, making it a popular choice among individuals seeking a low-maintenance hairstyle. By using "头" to denote a particular style of haircut, this expression highlights the importance of appearance and self-presentation within Chinese culture.

6. Interaction between Metaphor and Metonymy

Goossens (1990) coined a new word "metaphtonymy" to refer to the interaction phenomenon between metaphor and metonymy. The source and target domains can be joined together naturally in one complex scene.

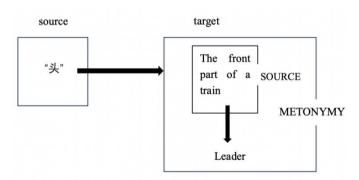


Figure 6. "Metaphtonymy" Usage of "火车跑得快,全靠车头带"

Consider the expression "火车跑得快,全靠车头带". According to our cultural background knowledge, "车头" means the head of the train, and the metonymic basis underlying the metaphor is INSTRUMENT IN THE ACT STANDS FOR THE PERSON. The locomotive, as the head of the train, embodies qualities associated with leadership, such as direction, guidance, and control. Just as the head leads and guides the body, the locomotive directs the train's movement, sets the pace, and ensures the

collective effort stays on track. It represents the driving force that propels the train forward, overcoming obstacles and achieving speed and efficiency. In a broader context, this saying is not limited to trains and can be applied metaphorically to various aspects of life, such as organizations, projects, or even personal endeavors. It serves as a reminder that strong leadership is instrumental in achieving success, emphasizing the importance of capable leaders who can inspire, guide, and lead others toward their goals.

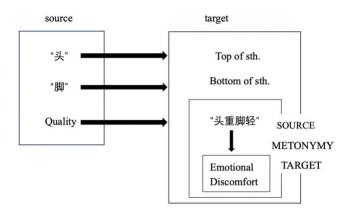


Figure 7. "Metaphtonymy" usage of "头重脚轻"

Here is another example: "头重脚轻". Metaphorically speaking, "头" (head) refers to the top of something and "脚" (feet) refers to the bottom of something. The metonymical mapping of "头" (head) and "脚" (feet) extends beyond their physical attributes to symbolize mental burden and emotional detachment, respectively. In this sense, "头重脚轻" becomes a powerful "metaphtonymy" for a state of mental discomfort or cognitive overload. The idiom "头重脚轻" in Chinese can be interpreted in different contexts. It may signify a sense of mental overwhelm or confusion, where one's thoughts feel scattered and disjointed, and one's emotions remain detached or distant. This dichotomy between head and feet emphasizes the internal conflict between rationality and emotionality, or logic and intuition.

7. Iconicity of "头"

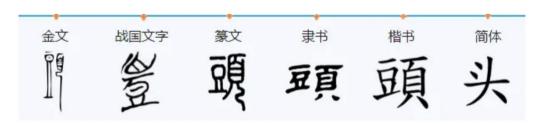


Figure 8. The Development of the Chinese Character "头"

The form of the character "头" visually resembles the concept of a human head. The character consists

of two main components: a square-like shape at the top, representing the rounded crown of the head, and a horizontal stroke below, possibly symbolizing the neck. This visual representation of the head aligns with the iconicity principle, where the physical form of the character directly mirrors the meaning it signifies. Thus, when a Chinese speaker encounters the character "头", they immediately recognize it as representing the anatomical part of the human body. The historical evolution of the character "头" contributes to its iconicity by preserving its visual resemblance to the human head across different script styles. From ancient oracle bone script and bronze inscriptions to modern simplified and traditional forms, the character "头" has maintained its iconic representation of the head, albeit with stylistic variations.

Moreover, the iconicity of "头" extends beyond its literal depiction of the head to encompass broader semantic associations. "头" symbolizes intelligence, wisdom, authority, and cognition in Chinese culture, so it encapsulates these symbolic meanings through its visual representation. Moreover, "头" carries connotations of authority and leadership. In Chinese culture, the head is often associated with power and governance, symbolizing the highest authority within a community or organization. As such, the character "头" evokes notions of leadership, responsibility, and decision-making, embodying the qualities of a wise and capable leader. Furthermore, "头" represents cognition, the process of acquiring knowledge and understanding through perception, reasoning, and intuition. It symbolizes the capacity for awareness, consciousness, and self-reflection, highlighting the interconnectedness of mind and body in shaping human experience. The iconicity of the character "头" is further exemplified in numerous idiomatic expressions it appears in. These expressions utilize the character to convey abstract concepts related to the head, such as emotions, mental states, or qualities. For instance, "头脑", which combines "头" with "脑" meaning "brain", is used to refer to one's mind or intellect. Similarly, "头疼" translates to "headache" but is often used metaphorically to describe a complex or challenging problem.

8. Conclusion

Polysemous words, with their multiple related meanings, offer a rich ground for exploring the nuances of language and the cognitive processes involved in interpretation. The Chinese word "头", which translates to "head" in English, exemplifies polysemy with its diverse range of senses. In addition to its literal meaning, "头" is often used metaphorically and metonymically, adding depth and complexity to its usage. This study conducts metaphorical analysis from four aspects (i.e., orientational metaphor, time metaphor, ontological metaphor, and structural metaphor), and it shows that "头" transcends its literal meaning of "head" and acquires additional layers of significance. For instance, it serves as a powerful metaphor for leadership and authority, drawing on the association of the head as the control center. In terms of metonymical usage, "头" becomes a symbolic representation of other concepts, such as intellectual prowess or a kind of hairstyle. The interplay between metaphorical and metonymical extensions adds further layers of meaning to the polysemous word "头", creating a complex web of associations and interpretations. By exploring these figurative extensions, we can

gain insights into the intricate interplay between language, cognition, and cultural associations.

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