Abstract: “When a white horse is not a horse,” also known as the ‘White Horse Dialogue,’ is a well-known paradox advanced by Gongsun Long. Since its appearance, it has inspired various interpretations and critiques in the past 2,200 years so that it becomes an intellectual puzzle in Chinese philosophy. This paper aims to reveal its meaning and implication by critically reviewing three contemporary approaches to Gongsun Long’s argument: the logical, the metaphysical, and the syntactical. It also suggests that although the proposition can be analyzed from the viewpoint of logic, Gongsun Long was not a logician; instead, he was concerned more about the semantics of general terms and their ontological and epistemological implications; moreover, he deliberately proposed the anti-common sense proposition by utilizing the use-mention distinction so as to spotlight the importance of language analysis in obtaining knowledge.¹

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²According to the Lushi Chunqiu and Zhanguo Ce, Gongsun Long is not the first person to hold this proposition; but in terms of the existing ancient texts, he is the first and only scholar who discusses this proposition in detail.
As we know, Gongsun Long (ca. 325-250 BCE) is one of the most influential scholars from the School of Names. This school is characterized by its careful and subtle semantic analysis as well as its surprising and controversial paradoxes. It was exactly because of this characteristic that they were sharply criticized by scholars from other schools in the pre-Qin times. Zhuangzi, for example, claimed that they confused people’s mind and distorted people’s meaning; although being able to win arguments, they couldn’t really persuade others\(^3\) (Zhuangzi – Tianxia).\(^4\) Xunzi blamed them as a kind of people who were used to advancing strange ideas and playing with unexpected words (Xunzi - Fei Shier Zi). And the Luishi Chuanqi made a similar charge (Lushi Chuanqi – Sheyinglan).\(^5\) Among the paradoxes raised by the school, Gongsun Long’s “bai ma fei ma [a white horse is not a horse]” is the one that has been frequently discussed from the ancient times to the present day. This proposition attracts consistent attention and triggers a series of arguments even among contemporary researchers so that it has become a puzzle of Chinese philosophy. By reviewing these arguments we can find three approaches to the puzzle: the logical, the metaphysical, and the syntactical.\(^6\) Now, let’s analyze these approaches respectively.

The logical approach centers on the intension and extension of key words that Gongsun Long used. It is based on Western logic, which was not introduced to China until the late 19\(^{th}\) century, but became a popular framework for researchers to study the texts from the School of Names. The works by Pang Pu and Wen Gongyi are contemporary examples of this approach.

Pang Pu (1979) completely translates the book Gongsun Longzi from ancient Chinese into modern Chinese. The discourse on the white horse unfolds in the following way. “Is it correct to say ‘a white horse is not a horse?’” “Yes.” “Why?” “The term ‘horse’ is used to name a shape, while the term ‘white’ is used to name a color. The term for a color is not the term for a shape. Thus, a white horse is not a horse.” “Having a white horse cannot be said of having no horse, right? Then, is not a white horse a horse? Since having a white horse is having a horse, why is the horse being ‘whited’ not a horse?” “When one asks for a horse, either a yellow horse or a black horse can meet that request. If one asks for a white horse, none of them can satisfy. Although having a yellow or black horse is having a horse, it does not mean having a white horse. Therefore, it is clear that a white horse is not a horse.” “If a horse is not recognized as a horse because it has a color, then, can we say there is no horse at all on the earth since in reality every horse has a color?” “Horses do have

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\(^1\)Throughout the paper all translations of Chinese texts are my own unless otherwise indicated.

\(^2\)For all ancient Chinese texts I quote from, the original book title is used and followed by the chapter heading.

\(^3\)The book says that Deng Xi and Gongsun Long’s language was separated from sense and mind.

\(^4\)There is also a semantic approach, which focuses on the meaning of terms that compose Gongsun Long’s argument. This approach is the most traditional and dominant one that scholars took between the Tang Dynasty and Qing Dynasty. Its basic method is xingu, interpreting a word by investigating its phonetic and morphological root or by referring to its synonyms. Modern studies of the Gongsun Longzi are based, in one way or another, on this approach.
color; hence there are white horses. Had horses no color, there would be only horses; how can one get white horses? Yet, as the white is not the horse, the white horse is a combination of the white and the horse. A horse which is associated with the color white is no longer a horse. So, a white horse is not a horse.” “What you have done is to use separated words ‘white’ and ‘horse’ to name a combinative thing ‘white horse.’ That is not valid.” “You believe that having a white horse is having a horse. Then, is it acceptable to say ‘having a white horse is having a yellow horse?’” “Not at all.” “That you think ‘having a horse does not mean having a yellow horse’ indicates you have differentiated ‘yellow horse’ from ‘horse.’ By doing so, you actually recognize that a yellow horse is not a horse. While holding ‘a yellow horse is not a horse, you believe ‘a white horse is a horse.’ This is nothing but a contradiction. When you suggest ‘having a white horse cannot be said of having no horse,’ you leave out the white. Had you not left the white out, having a white horse would not be said of having a horse. As for the white we discuss now, it is not the original ‘white’ as far as it is associated with ‘horse.’ On the other hand, the original meaning of ‘horse’ is not marked by any color, that is why both a yellow and a black horse can count as a horse. A white horse, however, is characterized by a color. The horse that is not marked by a color is different from the horse that is characterized by a color. This is the reason that I claim ‘a white horse is not a horse’” (pp. 17-19).

In Pang Pu’s view, the School of Names is characterized by its interest in logic; the argument on “white horse” exemplifies Gongsun Long’s understanding of logical issues. Gongsun Long rejected the judgment “a white horse is a horse” because “the ‘horse’ as an object does not have the attribute of whiteness; consequently, it is different from, or does not equal to, the subject of that judgment. Thus, the correct linking verb between the subject and object can only be ‘is not’” (p. 74). Pang Pu claims that on the surface Gongsun Long seemed to follow the rules of formal logic strictly. He did not accept any compound judgment that puts two different (not to mention opposite) objects together. And he strongly fought against the mode of thinking that recognizes both A = A and A = B. This means he could not think dialectically. Pang Pu goes on to argue that Gongsun Long “did not stress the absolute identity between the intension of a subject and an object, what he cared about was the intension of that subject and object” and that his analysis of the relation between the subject and the object was based on his theory of names and actualities (p. 78). According to Gongsun Long, a name (and its use) is correct only when it accurately corresponds to the entity or essence (i.e., shi) of the thing (i.e., wu) it designates; a subject or object is correct only when it accurately represents the real status (i.e., wei) of a thing. If one says “a horse is a white horse,” one is wrong because the semantic scope or attribution of “white horse” exceeds (i.e., guo) that of “horse.” The correct statement should be “a horse is a horse.” On the other hand, if one says “a white horse is a horse,” one is also wrong because the semantic scope or attribution of “horse” is narrower (i.e., kuang) than that of “white horse.” The correct statement should be “a white horse is a white horse.” Pang Pu concludes that both Aristotle and Gongsun

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7This is not a complete translation of the white-horse chapter of Pang Pu’s book; but it includes most of its passages.
Long suggested that at both sides of a linking verb there should be something that is either removed or added; yet, while in Aristotle’s case, that “something” is an unimportant noun, in Gongsun Long’s case, that “something” is a crucial noun. Consequently, Aristotle set the rules of formal logic, Gongsun Long established a sophistic school (p. 83).

Like Pang Pu, Wen Gongyi (1983) also compares Gongsun Long’s thought to Western logic, suggesting that as Western logicians pay more attention to extensional analysis as well as quantity and accuracy, Gongsun Long pays more attention to intensional analysis as well as concepts and judgments (p. 48). In Wen Gongyi’s view, Gongsun Long’s proposition includes three features. First, that he insisted a white horse is a not a horse is because he focused only on the intension of “white horse” and “horse” while ignoring the extension of the two terms. Second, he paralleled “white horse” and “horse” although in common sense they cannot be talked about in terms of the same category; this means he stressed the intensional rejection between the two terms at the expense of their extensional compatibility. Third, he based inference on the connection between terms (ming) and their referents (shi) rather than the extensional relationship between concepts; in other words, the judgment that “a white horse is a horse” is wrong because it merely concerns the conceptual meaning of the two words, but ignores the actual essence of “white horse” and its difference from “horse” (pp. 48-50).

The logical approach dominates studies of Gongsun Long. In general, it draws people’s attention to cognitive issues in ancient Chinese thought. Given the fact that most scholars in the pre-Qin times were concerned with ethical and political problems, this approach broadens the scope of China studies and helps correct biased interpretations of ancient Chinese thought as a whole. In particular, this approach clears the charge made by Gongsun Long’s critics who labeled him as a sophist. However, did he really address, or was he mainly interested in, logical issues? If the answer is “yes,” why did he stress the value of intensional analysis so much that the validity of extensional judgments was completely denied? Since he already admitted that in reality horses do have color, how could he reject “a white horse is a horse” as a sound statement in terms of the genus-species relationship? Suppose the debate on the white horse was limited to logical issues, then, both positions would be recognized as having truth-value and Gongsun Long could not even win verbally (duo ren zhi kou).

More importantly, if we want to comprehend the chapter on the white horse correctly, the hermeneutic principle must be followed, namely, we have to put it in the context of the whole book. The Gongsun Longzi includes six chapters: 1) a chapter on Gongsun Long’s bio; 2) a chapter on symbols and referents discussing the relationship of language to reality and establishing a theoretical foundation for the entire text; 3) a chapter on names and actuality exploring the connection between names and referents as well as specifying the rules of using names; 4) a chapter on investigation of changes reviewing the features of single and compound nouns and functioning as a footnote to the rules of using names; 5) a chapter on the hard and the white examining how we grasp the world conceptually as well as promoting analytic thinking; and 6) a chapter on the white horse comparing “horse” to “white horse” and highlighting the difference between the two terms. Taken together, the whole book...
focuses on semantic issues more than logical themes, discussing how we should use words carefully to identify their actual meaning and by so doing refine our knowledge of the world.

It seems reasonable to conclude that Gongsun Long was not a logician, but a semanticist; the white-horse proposition did not deny the genus-species relationship, but stressed the incompatibility between “horse” and “white horse.” Thus, the logical approach does not work well in understanding Gongsun Long’s thought.

The metaphysical approach focuses on the philosophical implication of Gongsun Long’s proposition. It develops the logical approach by illuminating the ontological base of the intension and extension of words that Gongsun Long played with. The works by Fung Yu-lan and Mou Zongsan are contemporary examples of this approach.

Fung Yu-lan (1948) claims that Gongsun Long believed that “a white horse is not a horse” is a valid proposition and he demonstrated his position in three respects. First, “horse” is a term for shape and “white” is a term for color; thus, “a white horse is not a horse.” Second, when one asks for a horse, either a yellow horse or a black horse can meet that request; yet, if a white horse is required, neither a yellow horse nor a black horse can meet that request. Since a yellow or black horse responds to the call for a horse rather than for a white horse, “a white horse is not a horse.” Third, horses do have color; had horses no color, there would be only horses, but no white horses. While “white” is not “horse,” “white horse” is a combination of “white” and “horse.” Hence, “a white horse is not a horse” (pp. 87-88).

Fung Yu-lan’s interpretation is characterized by his application of Western philosophy especially Platonic realism. In his view, Gongsun Long believed a white horse is not a horse because the intention and extension of the three terms “white,” “horse,” and “white horse” are different. While “white” refers to a kind of color, “horse” indicates a kind of animal, and “white horse” designates a kind of color plus a kind of animal. The term “horse” includes all horses no matter what color they are and the term “white horse” excludes all horses that are not white. The intention and extension of these terms are determined by or imply metaphysical entity: the universal “whiteness,” the universal “horsehood,” and the universal “white-horsehood.” These universals are not only distinct from one another but unspecified by any particular subjects such as “horse” or attributes such as “white” (pp. 87-89). In Fung Yu-lan’s view, the key to Gongsun Long’s argument is his stress on “horse,” “white,” and “white horse” as absolute and permanent names. “In this way he arrived at the same concept of Platonic ideas or universals” (p. 87).

Mou Zongsan (1979) analyzes Gongsun Long’s argument in the same vein. He suggests that the argument implies three logical insights. First, by claiming “a white horse is not a horse” Gongsun Long spotlighted the difference between special nouns and common nouns, or individual names and class names, or the particular and the universal (p. 115). Definitely, “white horse” is an example of the former and “horse” is an example of the latter. Gongsun Long disagreed with the statement “‘a white horse is a horse’ because it confuses the two types of concepts. Second, by comparing “a white horse is not a horse” to “a white horse is a horse,” Gongsun Long displayed the logical meaning of “fei,” the Chinese term for “is not” (p. 115). Mou Zongsan points out that “fei” has four usages: 1) indicating that a subject is different
from an object; 2) stating that a subject lacks a certain attribute; 3) stressing that the relationship between a subject and an object is exclusive; and 4) claiming that composite names (such as “cattle-horse”) do not equal to any names of individual items (such as “cattle” or “horse”). In fact, when Gongsun Long said that “a white horse is not a horse,” the term “is not” referred to the first usage, namely, “a white horse is different from a horse” (p. 117). Third, by stressing the independence of a universal horse from particular horses, Gongsun Long identified a kind of ontological essence embedded in concepts (p. 105). The horse in Gongsun Long’s eyes is separated from horses in reality. While concrete horses have various characteristics in color and size, etc., the horse does not have these characteristics; what it has is the horse-in-itself or the horse “as such.” The horse-in-itself represents a conceptual being, a universal entity (p. 106).

The metaphysical approach displays the ontological implication of Gongsun Long’s proposition and recognizes the ability and existence of philosophical investigation in ancient China. It challenges and makes people rethink the claim that ancient China has wisdom but no philosophy because it lacks abstract conceptions. While “horse” and “white horse” are interpreted as names indicating metaphysical universals and conceptual beings, one can suggest that unlike some scholars believed, Chinese language actually does not block representing and imparting thought. This point marks the crucial significance of the metaphysical approach. Moreover, this approach explains why Gongsun Long’s proposition is sound and goes beyond the scope of logic. As mentioned earlier, if the proposition is interpreted from a purely logical point of view, then, it could be considered sophistic as it denies the genus-species relationship between “horse” and “white horse” and could not reject “a white horse is a horse” as a valid statement. Yet, when “horse,” “white,” and “white horse” are each treated as an independent and universal entity, the genus-species relationship is no longer relevant and the context of discussion has been changed from a logical one to an ontological one. This tells us that to interpret Gongsun Long’s proposition properly, we have to grasp the metaphysical assumptions behind the key words of the proposition and realize that it is these assumptions that determine the meaning and development of Gongsun Long’s argument.

Nevertheless, we need to keep in mind that the aim of the chapter on the white horse is itself not to address the metaphysical implication of “horse,” “white,” and “white horse;” rather, it is to discuss the semantic meaning of these terms and their correct use with regard to their ontological commitment. Therefore, a comprehensive analysis of Gongsun Long’s argument should address the following issues: (1) in what sense Gongsun Long employed the term “horse” and “white horse;” (2) what his opponent actually meant by the two terms; (3) what were the differences between the

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9Some Western scholars such as Leibniz, Hegel, and Humboldt claimed that the Chinese language is not suitable for mental development and scientific thinking. Logan (1986) made a general conclusion about the characteristics of the Chinese language. His comparison between Chinese and Western language/culture represents the popular understanding of this subject among Western people.
two debaters’ metaphysical assumptions; (4) what was the connection between each debater’s metaphysical assumptions and his usage of the two terms; and (5) more basically, what role the character and/or grammar of language played in the debate on the white horse. As we have seen, the metaphysical approach deepens our understanding of Gongsun Long’s proposition by displaying its ontological implication and by illuminating the logical meanings of the term “fei” (is not). But, this approach does not explore the proposition from a linguistic or syntactical point of view; nor does it touch upon the connection of metaphysical assumptions to the usage of terms embodied in that proposition.

It should be safe to suggest that Gongsun Long and his colleagues in the School of Names aimed not to establish a metaphysical paradigm and use it to examine the correspondence between the real world and our knowledge of the world; instead, they centered on the nature and function of names, reviewing how names are related to things, in what ways names lead and mislead our thinking, and how knowledge can be obtained by carefully figuring out the differences between similar names. Thus, a sound interpretation of the white-horse proposition must be based and focused on linguistic analysis.

The syntactical approach centers on the semantic difference between the pragmatic function of designative and referential words. It follows Frege, Russell, Tarski, Carnap, and Quine to differentiate words employed to signal things from words to mention them. The works by Feng Yaoming and Liu Limin are contemporary examples of this approach.

Feng Yaoming (1989) holds that if we treat terms like “white horse” or “yellow horse” as logical predicates or descriptions and comprehend “is” or “is not” as conditional terms, then, Gongsun Long’s proposition would not be valid and consequently thought of as sophistic. Yet, Gongsun Long did not lose the argument; instead, he not only defended his position, but developed his thought by raising the conception of compatibility (xiangyu) and separation (xiangli). This is because he had some special philosophical ideas, which resulted in a series of determinations on reality and language (p. 176). Feng Yaoming goes on to suggest that by analyzing Gongsun Long’s argument, we can realize that he actually used terms like “white horse,” “white,” and “horse” as individual names and that “is” or “is not” is nothing but a symbol for equality or inequality (pp. 176-177). Eventually, Feng Yaoming draws one conclusion that the discussion between Gongsun Long and his opponents on the white horse is a kind of misunderstanding derived from different comprehension and use of individual names and logical predicates (p. 177).

Feng Yaoming develops Fung Yu-lan and Mou Zongsan’s research on Gongsun Long. On the one hand, he reviews the validity of opposite statements by Gongsun Long and his opponent in light of the reference rules of formal logic. On the other hand, he explores the metaphorical implication of Gongsun Long’s thought by applying Quine’s philosophy of language. Compared to his analysis of Gongsun Long’s ontological insight into the white-horse issue, his following point seems to shed more light on the meaning of Gongsun Long’s proposition, that is, unless Gongsun Long used “white horse,” “white,” and “horse” as individual names to mention names, his argument could not be sound (p. 187). What he suggests here is...
that Gongsun Long knew well and took advantage of the use-mention distinction and that his opponent misunderstood him because he was not aware of that distinction. Nevertheless, Feng Yaoming does not delve into the use-mention distinction and apply it to make a complete interpretation of Gongsun Long’s thought. That job is done by Liu Limin.

According to Liu Limin (2007), we should keep in mind that in the history of Chinese philosophy the School of Names was well-known for its semantic analysis of words; what it was concerned with is the meaning of words and the relationship between words more than the connection of names (ming) to things (shi). In pursuing philosophical pondering over language, they touched upon some issues in modern philosophy of language, and employed some techniques of analysis that relates to the use-mention distinction (p. 139). Liu Limin further points out that although Gongsun Long and his colleagues realized that distinction, they had no linguistic device to differentiate the use of words from the mention of words. This is to a large extent why their propositions were thought of as sophistic by scholars from other schools in pre-Qin China. Once becoming aware of this situation and putting relevant words of their propositions in quotation marks, we can see clearly the line of thinking behind these propositions and their philosophical value (pp. 143-144).

To Liu Limin, what Gongsun Long talked about was not the white horse or horse that people encounter as a kind of animal, but the meaning of the two terms “white horse” and “horse” (p. 253). In fact, his proposition is not “a white horse is not a horse;” rather, it is “‘white horse’ is not ‘horse.’” For Gongsun Long had mentioned that the term “horse” names a shape and the term “white” names a color; as the name for color is not the name for shape, “white horse” is not “horse.” In reality, horses do have color and there are white horses. But, if one focuses on the meaning of “horse,” there is nothing to do with color. Under the condition that “white horse” as a term combines “white” and “horse,” how can one identify it with “horse?” So, “white horse” is not “horse” (pp. 253-256). Furthermore, the idea that having a white horse cannot be said of having no horse [this is another way to say “a white horse is a horse”] is one that spotlights “white.” Yet, by stressing “white” this idea suggests having a “white horse” does not mean having a “horse.” In fact, having a horse is proved by “horse” rather than “white horse;” in other words, that a horse is a horse depends on “horse” instead of “white” or any color (pp. 256-258). Liu Limin concludes that in displaying the difference between “horse” and “white horse,” Gongsun Long aimed not to show the genus-species relationship between the two terms; instead, he tried bringing to light horse-in-itself, white-in-itself, and white X horse-in-itself, thus investigating the manner whereby people understand the world as well as the nature of knowledge (p. 259).

The use-mention distinction refers to two functions of a word in a sentence. To take Quine’s examples (1962, pp. 23-24), in the sentence “Boston is populous,” the word “Boston” is used to indicate a city; in the sentence “Boston is a noun,” the word “Boston” is used to mention the word itself. To differentiate the two functions, a word that is used in the latter sense is supposed to be put in quotation marks.
The syntactical approach hits the nail on the head when it applies the use-mention distinction to Gongsun Long’s proposition. This approach has four advantages. First, it is a kind of linguistic analysis per se and hence matches the nature of Gongsun Long’s thought and that of his school. While the use of terms centers on the real world and its relationship to language, the mention of terms focuses on the symbolic world and its relationship to meanings. While analysis of the former is to see how things can be grasped and the real world can be symbolically acted upon, analysis of the latter is to see how names can enliven our thinking and knowledge can be pragmatically obtained. Second, it discovers the very reason why the white-horse proposition has been misunderstood since its beginning. Although the use-mention distinction has a history as long as that of language itself, it was not graphically indicated in a written text by quotation marks and seriously discussed among some philosophers and linguists until the early 20th century. The white-horse proposition actually means that Gongsun Long was aware and made clever use of the distinction. Third, it is comprehensive and consistent, namely, not only valid in understanding all Gongsun Long’s propositions, but also applicable to all paradoxes advanced by other scholars from the School of Names. From time to time, researchers have made a certain insightful interpretation of Gongsun Long’s idea. However, this sort of interpretation cannot be used to explain his other ideas, not to mention that of his colleagues. The syntactical approach does not have this limitation. Fourth, it shows the necessary relationship of language to ontological, epistemological, and logical issues. Even if this approach is characterized by differentiating the use of terms from the mention of terms, it inquires into how “horse,” “white,” and “white horse” relate to being, knowledge, and truth. In so doing, it illuminates the connection between ancient Chinese thought and contemporary philosophy of language.

Both Feng Yaoming and Liu Limin’s respective studies of Gongsun Long’s proposition have their strengths and weaknesses. In the former case, the sense and implication of “horse,” “white,” and “white horse” is analyzed at both the semantic and ontological level. Moreover, the semantic sense of these terms is examined in light of the terms’ ontological implication; and in turn, the ontological implication is verified in terms of the semantic sense of these terms. This feature is exemplified in Feng Yaoming’s discussion on whether or not Gongsun Long was a nominalist; and this feature undoubtedly represents the strength of his study. Nevertheless, he does not pay attention to the role the Chinese language plays in forming and demonstrating the white-horse proposition; nor does he explore how the biases of Chinese language 1) enabled Gongsun Long to display the truth value of his paradoxes by playing with words and 2) made his opponents and critics misunderstand his ideas. Where the former case manifests its weakness is where the latter case shows its strength, which lies mainly in two respects. First, Liu Limin is sensitively aware of the influence of the Chinese language on Gongsun Long’s thinking. He repeatedly stresses how Gongsun Long took advantage of the biases of Chinese language to spotlight the semantic value and pragmatic ambiguity derived from terms like

11For a detailed discussion of this subject, see “Quotation” (http://plato.stanford.edu/entries/quotation/).
“horse,” “white,” and “white horse.” Second, Liu Limin brings to light the value of Gongsun Long’s argument by highlighting that this argument is in nature a reflection of the nature of language and that the essence of philosophy is nothing more but using language to investigate how knowledge is obtained through the operation of language. However, the latter case does not delve into the contemporary significance of Gongsun Long’s argument by comparing it to, and reviewing it through the theories of names growing out from 20th century Western philosophy of language. Hence, the latter case does not offer sufficient analysis of the ontological aspect of the white-horse proposition as the former case does.

References