

Gottlob Frege and Gongsun Long in Dialogue: An Exploration of Two Classical Paradoxes from the East and West

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Abstract

This work addresses the critical discussion featured in the contemporary literature about two well-known paradoxes belonging to different philosophical traditions, namely Frege's puzzling claim that "the concept *horse* is not a concept" and Gongsun Long's "white horse is not horse". We first present the source of Frege's paradox and its different interpretations, which span from plain rejection to critical analysis, to conclude with a more general view of the role of philosophy as a fight against the misunderstandings that come from the different uses of language (a point later developed by the "second" Wittgenstein). We then provide an overview of the ongoing discussions related to the *Bai Ma Lun* paradox, and we show that its major interpretations include—as in the case of Frege's paradox—dismissive accounts that regard it as either useless or wrong, as well as attempts to interpret and repair the argument. Resting on our reading of Frege's paradox as an example of the inescapability of language misunderstandings, we advance a similar line of interpretation for the paradox in the *Bai Ma Lun*: both the paradoxes, we suggest, can be regarded as different manifestations of similar concerns about language, and specifically about the difficulty of referring to concepts *via* language.

Keywords: concepts, elucidations, Gottlob Frege, Gongsun Long, language games, names, paradoxes, philosophy of logic, Ludwig Wittgenstein

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Gottlob Frege in Gongsun Long v dialogu: raziskovanje dveh klasičnih paradoksov z Vzhoda in Zahoda

Izvleček

To delo obravnava kritično razpravo, ki se v sodobni literaturi pojavlja o dveh znanih paradokseh, ki pripadata različnim filozofskim tradicijam, in sicer o Fregejevi uganki, da »pojem konj ni pojem«, in o Gongsun Longovi ideji »beli konj ni konj«. Najprej predstavljamo vir Fregejevega paradoksa in njegove različne razlage, ki segajo od preproste zavrnitve do kritične analize, na koncu pa predstavljamo splošnejši pogled na vlogo filozofije kot boja proti nesporazumom, ki izhajajo iz različnih rab jezika (to stališče je kasneje razvil »drugi« Wittgenstein). Nato podajamo pregled tekočih razprav, povezanih s paradoksom *Bai Ma Lun*, in pokažemo, da njegove glavne razlage vključujejo – tako kot v primeru Fregejevega paradoksa – zavračajoče razlage, ki ga imajo za neuporabnega ali napačnega, pa tudi poskuse razlage in popravila argumenta. Na podlagi našega branja Fregejevega paradoksa kot primera neizogibnosti jezikovnih nesporazumov predlagamo podobno razlago paradoksa v *Bai Ma Lun*: oba paradoksa lahko obravnavamo kot različni manifestaciji podobnih skrbi glede jezika, zlasti glede težav pri sklicevanju na pojme preko jezika.

Ključne besede: koncepti, razlage, Gottlob Frege, Gongsun Long, jezikovne igre, imena, paradoksi, filozofija logike, Ludwig Wittgenstein

Introduction

Gottlob Frege's paradox of the concept *horse* and Gongsun Long's paradox of the white horse are widely debated topics in contemporary Western analytic philosophy and Chinese philosophy, respectively. As philosophers of language working in the Western tradition, we are struck by the similarity of the critical discussions concerning the two paradoxes: while the temporal distance separating Frege and Gongsun Long makes the comparison difficult, this work intends to identify some common threads running through their interpreters' analysis. Critical reflection on such common threads may enhance our understanding of the two paradoxes, and perhaps also suggest some potential theoretical connections between their authors.

Sinology is not our field of expertise, and we surely cannot account for the complexity of the exegetical work required by texts such as Gongsun Long's, which constitute the bulk of the cultural iceberg of Chinese intellectual studies concerning logic and language. Thus, our approach to this matter qualifies as a theoretical reflection that attempts to include some of the contributions of both contemporary Western and Chinese philosophy. We are aware of the methodological limitations of our attempt, as we acknowledge the potential dangers in disentangling

translation-related aspects (better addressed *via* philological and historical analysis) from philosophical theorizing. Yet, we believe that the remarks on the limits of language put forward by the inventor of mathematical logic may suggest one untried interpretative stance for the analysis of the white horse paradox. In fact, the specific distinctions in the profound analysis of language first introduced by Frege, and later taken up by Wittgenstein, constitute one of the most significant contributions to Western thought, and tend to be shared ground among most contemporary scholars across the East and West.

The problems here discussed are to be regarded as related to the global questions in the philosophy of logic as defined by Hu and Hu (2022, 84), that is, to questions about propositions, paradoxes, reference, and the meaning of names, among others, that are overlapping concerns in the philosophy of language and ontology. In fact, what connects the two paradoxes is not, or not only, the reference to the concept *horse* (which is just a curious coincidence), but—we will suggest—the problem of distinguishing different ways in which we refer to concepts and objects by means of linguistic expressions. A survey of the interpretations of Frege's and Gongsun Long's paradoxical claims is carried out in parts I and II, respectively, while in part III we offer some general conclusions and a sketch of a possible direction for future research.

PART I

Gottlob Frege and the Paradox of the Concept Horse

“The Concept Horse is Not a Concept”: Frege on Concept and Object

The German philosopher Friedrich Ludwig Gottlob Frege is well known not only for the new foundation of mathematical logic that he set out with the publication of *Begriffsschrift* (*Conceptual Notation*) in 1879, but also for his analysis of language developed while building his logical formalism. Two main distinctions are among his main tenets:

- (1) Always distinguish between the linguistic expressions and their contents—a distinction not consistently kept in place by his contemporary mathematicians.
- (2) Always distinguish between concepts and objects, as well as between expressions for concepts (*Begriffswörter* or, currently, predicates or relations) and expressions for objects (*Eigennamen* or, singular terms).

In the introduction to his *Foundations of Arithmetic*, Frege takes the second distinction as one of the most important tenets in his philosophy. The distinction between concept and object becomes the central topic in a later essay, *Über Begriff und Gegenstand* (*On Concept and Object*), published in 1892, where Frege faces a great challenge in explaining this difference due to a peculiar characteristic of Indo-European languages, that is, the use of the definite article “the” (cf. Diessel 2006). In fact, to refer to objects we use singular terms, such as proper names and definite descriptions. The latter are expressions constituted by a description always preceded by a definite article, such as “*the* current monarch of England”, and by which we refer to individual objects (in this case, the object who is the monarch of England at this time, i.e., King Charles III). Indeed, the analysis of the definite article is fundamental to Frege’s logical theory (Frege 2013 § 11), and he develops an *ad hoc* formalism known in logic as “the iota operator”, after Russell’s peculiar interpretation of this formalization. In logic, “ $\iota x Fx$ ” (or “the $x Fx$ ”) means “the unique individual object x that has the property described by the predicate F ”.

Bruno Kerry, a colleague in Jena, Germany, objects to Frege that his distinction between concept and object is just relative to grammatical positions. Following the relevant role given by Frege to the definite article, the expression “the concept *horse*” should designate an object and not a concept. Kerry’s example is as follows:

(1) “The concept *horse* is a concept easily attained.”

We may compare it with sentences like

(2) Bucephalus is a horse.

In (1), the expression “the concept *horse*” refers to an object, while in (2) the expression “a horse” refers to a concept. Therefore, in so far as the same thing is considered now as an object and now as a concept, the distinction between concept and object simply depends on and is relative to the subject/predicate grammatical positions. To this criticism, Frege replies with a counterintuitive answer:

[...] the three words “the concept horse” do designate an object but on that very account they do not designate a concept as I am using the word. This is in full accord with the criterion I gave that the singular definite article always indicates an object, whereas the indefinite article accompanies a concept word. (Frege 1997, 184)¹

1 We will use the translation by Michael Beaney (1997), which is one of the most comprehensive

And on the following page he adds:

It must indeed be recognized that here we are confronted by an awkwardness of language, which I admit cannot be avoided, if we say that the concept *horse* is not a concept, whereas e.g. the city of Berlin is a city, and the volcano Vesuvius is a volcano. (ibid., 185)

Frege's claim is therefore the following counterintuitive assertion:

(3) The concept *horse* is not a concept

This awkwardness is partly due to the fact that Frege considers “concept” as a primitive term, and “One cannot require that everything be defined, any more than one can require that a chemist decompose every substance. What is simple cannot be decomposed, and what is logically simple cannot have a proper definition” (Frege 1997, 182). In analogy with geometric primitives (“point”, “line,” and “plane”), likewise the term “concept”—coined for something that is *logically* simple—cannot be properly defined, but only offered with what Frege calls “elucidations” or “hints”.

Frege also states that we should consider concepts as “*objects of a special kind*”, and that “to do justice at once to the distinction and to the similarity, we might perhaps say: an object falls under a first-level concept; a concept falls within a second-level concept. The distinction of concept and object thus still holds, with all its sharpness.” (ibid., 89) He offers mathematical examples following his fundamental idea—later taken up by Wittgenstein (1976, XXVI, 262) as one of Frege's most important tenets—that an attribution of numbers is a predication about concepts.² In a late work, Frege still reminds the reader that the words *the concept F* “do not really designate a concept (in our sense), even though the linguistic form makes it look as if they do” (Frege 2013, part I, § 4, footnote 1). In his writings, Frege often comments on the defects intrinsic to language and our way of speaking about concepts. Furthermore, in a letter to Russell written in 1902 he specifies that, *logically speaking*, the expression “is a concept” should be rejected (quoted by Burge 2005, 294).

collections of Frege's works.

2 The concept of *having a certain number* is a second-level concept. The notion of a second-level concept entails a particular relation among concepts, which differs from the subsumption (or inclusion) of a concept (or class) in another concept (or class)—as when I say: “horses are four-legged animals”. In this case, every individual horse has the property of being four-legged. However, in “the horses of the Emperor are four”, apparently each individual horse does not possess the property of being four, but it is the concept *horses of the Emperor* that falls *within* the concept of *being four* or *having the number four*.

A provisional conclusion is twofold:

Communication Hints: Theories may contain logically simple elements, and what is logically simple cannot be properly defined, but only “elucidated”. At first sight, Frege’s view of “concept” as logically simple and not definable may sound counterintuitive, or perhaps vague. In introducing new theoretical terms, we may have to appeal to elucidations and analogies: concepts, as *objects of a special kind*, are analogous to functions, which always require an argument to return a value.³

While Frege intends to talk about a concept, by necessity (given the intrinsic limitations of language) he is compelled to mention an object. Therefore, by interpreting his “elucidations” in their literal sense, we miss his thought. However, in introducing the notion of concept Frege relies on a reader “who does not begrudge a pinch of salt”, and who is therefore favourably disposed to get the intentions behind his words (see Frege 1997, 192).

Mathematical Logic: For a rigorous analysis and as to avoid such apparent contradictions, we need the resources of mathematical logic. Within formal language, it is not allowed to employ a definite description for a concept. Mathematical logic was at its beginning in Frege’s time, but soon the development of the lambda calculus by the American logician Alonzo Church invented a logical formulation for expressing concepts. In addition to the iota operator employed for singular terms, Church invented the lambda operator, by which we may express concepts while preserving a sharp distinction between concepts and objects.⁴

Notwithstanding the manifold logical developments of the Fregean distinctions, some doubts still remain regarding the real import of Frege’s remarks on the concept *horse* and the lacunae of everyday language, which seems to fail in clearly expressing the distinction between concept and object.

3 Such an analogy plays a fundamental role in Frege’s logical system, where concepts are conceived in analogy with functions whose value is a truth value. Frege consistently insists on the difference between the reference of a predicate (a concept) and its extension (or course of value). On the latter distinction, see footnote 6.

4 The lambda operator for expressing concepts ($\lambda x Fx$) and the iota operator for expressing singular terms are similar. The predicate “ λx . horse (x)” is a saturated expression that stands for the concept *horse*, against Frege’s requirement of expressing concepts only via unsaturated expressions. However, the distinction between concept and object is preserved by the assumption of two primitives: “E” for entity, and “T” for truth value. Concepts are thus defined as “ $E \rightarrow T$ ”, that is, as functions that, given an entity (E) return a truth value (T). This definition can be regarded as the exact application in logic of Frege’s analogy between concepts and functions.

Interpretations of Frege's Paradox

The literature on Frege's paradoxical claim "the concept *horse* is not a concept" features three main approaches to interpretation: (i) dismissals of the paradox as a mistake, or nonsense; (ii) attempts to repair Frege's claim and justify it; (iii) critical evaluations of Frege's claim as either incoherent or the expression of an intrinsic tension within his doctrines.

(i) Dismissals of the paradox as a mistake or nonsense:

A disenchanted Bertrand Russell (1903) maintains that objects can be named, whereas concepts can be both named *and* predicated; therefore, as remarked by Tyler Burge (2005, 294), there should be nothing to worry about the expression "the concept *horse*". For Terence Parsons (1986), who takes Frege to wrongly mix informal language and formal requirements, the statement "the concept *horse* is not a concept", rather than being paradoxical, is simply false. Following Parsons, after a refined analysis Burge (2005, 21) concludes that the paradox is "deeply counterintuitive", and that "it constitutes one of Frege's most serious mistakes". Neo-Wittgensteinian scholars, like Conant (2002), would consider Frege's paradox plain nonsense. In fact, "concept" and "object" are defined in Wittgenstein's *Tractatus* as "formal concepts", or "pseudo concepts" (Wittgenstein 1921, § 4, 126–27), that is, as something of which we cannot speak in a proper formalism, and which in logic corresponds to a variable. Therefore, any attempt to *speak of* concepts unavoidably falls into "*nonsensical pseudo propositions*" (ibid., § 4, 1272). While for Frege this particular form of nonsense plays a fundamental *elucidatory* role, it should be simply *unsayable* for Neo-Wittgensteinians.

(ii) Attempts to repair:

Michael Dummett, the British philosopher who was the first to define Frege as a philosopher of language, rejects the Fregean view of the problem as being about communication, and argues that, in the absence of a solution, the horse paradox "would be a *reductio ad absurdum* of Frege's logical doctrines" (Dummett 1981, 212). He then reformulates the problem on the basis of two Fregean principles: (a) concepts are the predicates' referents, that is, concepts are what predicates stand for, and (b) concepts are to be characterized by means of a chemical metaphor, by which we have to distinguish saturated entities from unsaturated entities: concepts are incomplete, or unsaturated entities, constituted by patterns extracted from a sentence. Thus, from sentences like

“Bucephalus is a horse.”

we may derive expressions like

“... is a horse”

which are incomplete and can be *saturated* by referential singular terms (such as, “Bucephalus”). Since the expression “the concept *horse*” should grammatically refer to an object, Dummett proposes reformulating the expression as follows:

“what ... ‘is a horse’ stands for.”

We may then obtain general specifications of the kind: “a horse is what ... ‘is a horse’ stands for.”

A more complex defence of Frege’s standpoint is given by Textor (2010a): by taking Dummett’s distinction between *complete* (or “saturated”) and *incomplete* (or “unsaturated”) expressions, Textor identifies the source of the concept paradox in Frege’s ‘mirroring principle,’ according to which both thoughts and their corresponding statements can always be decomposed into saturated and unsaturated parts. If language is the “bridge to thought and reference” (ibid., 135), we may go from words (perceivable objects) to (non-perceivable) concepts belonging to the sphere of thought. Again, if sentences mirror the thought, an incomplete predicate like “horse” is expected to mirror the incompleteness of what we refer to when we use the concept-word. Hence, a concept cannot be the referent of a singular term.

(iii) *Criticism of Frege’s paradox as a symptom of unsolved tensions:*

Crispin Wright (1998) gives one of the most complex criticisms of Frege’s view, concluding that he “did not deserve” his pinch of salt. Wright identifies Frege’s fundamental mistake in his (incorrect) application of the notion of reference to predicates.⁵ Likewise, Wright rejects Dummett’s solution, since the expressions “the concept *horse*” and “... is a horse” perform different grammatical roles, and so cannot be substituted *salva congruitate*. Eventually, Wright asks how exactly Frege is to communicate his semantic proposals about predicates. To appropriately address the question, we would need a “decent semantic theory” (Wright 1998, §III), yet Frege’s “elucidations”—by his own admission—fail to provide any proper definition. Moreover, they seem to derive from Frege’s mistaken application (without further elaboration) of the sense/reference distinction to both proper names and predicates. Against this, Wright reminds the reader that singular terms

5 This standard criticism is also endorsed by Donald Davidson (2004), for whom Frege paved the way to Tarski in accounting for the logical distinction between singular terms and predicates, but made the mistake of considering concepts as the referents of predicates. The true result of Frege’s discussion on the concept *horse* should be expressed in a standard metalogical way as: “*F*” is true of *x* iff *Fx*.

and predicates behave differently: while we may directly speak of the reference for a singular term (an object), we indirectly refer to predicates by giving their extension, or class. Nonetheless, Wright preserves the concept/object distinction by distinguishing what can only be *referred to* (that is, objects) from what can also be *ascribed*: we ascribe a property to an object, and the ascription—not the reference—is the feature characterizing concepts/properties. Frege forgot this difference and generated a paradox that should have been avoided.

Textor (2010b, 253) replies to Wright by arguing that the paradox might be solved by taking a stance according to which “reference as what we want to speak about and reference as semantic role come apart. Concept words refer to concepts, but their semantic role is specified by assigning extensions to them”. In contrast to Parsons, Burge, and Davidson, Textor maintains that when we speak of the reference of a predicate, we are not only referring to the predicate’s semantic value (its extension), but also to the concept/function as such. He thereby gives a justification of the Fregean fundamental distinction between a concept (or function) and its extension.⁶

Taking Frege’s View on “the Concept Horse” at Face Value

We shall not reach a definite conclusion regarding the dispute over Frege’s claim that “the concept *horse* is not a concept”. Yet, we consider that Wright is correct in saying—after Frege and Russell—that singular terms and predicates behave differently, and that we may refer to predicates indirectly by giving their extension. However, we may use extensions, or classes, as the *semantic value* of predicates (a common move in contemporary semantics); still, this does not eliminate the possibility of *speaking of* concepts as such, or in modern terminology, of speaking of concepts as functions from possible worlds to extensions. Reference and semantic value follow different routes here (cf. Textor 2010a; 2010b).

What remains of Frege’s view on “elucidations”, “hints”, and even “nonsense”? Some authors, like Picardi (2008) and Weiner (2005)—against those who objected to Frege’s paradox—give a more charitable reading of his remarks: far from being a

6 There is a wide discussion about unresolved tensions in Frege’s philosophy. One possible resolution of the tensions comes from taking into account seriously the tripartite distinction among sense, reference, and extension, as Frege does with regard to predicates (Wiggins 1984). Penco (2013) suggests that the sense of a concept should be intended as the procedure attached to the function from possible worlds to extensions. For a clear rendering of the view about the three-level analysis of the Fregean framework, see Perry (2019) and Penco (2020). These developments can partially dispel the ambiguity about the distinction between the semantic value and the reference of a concept, yet they leave the main paradox untouched, while preserving its elucidatory import.

mistake, Frege's paradox is what the Wittgenstein of the *Philosophical Investigations* would call an instance of the "misunderstandings" derived from our difficulty in following the varieties of the grammar of language. In a pleasant yet provocative discussion, Picardi reminds us that Russell too, eventually, comes to endorse a view similar to Frege's, whereas Weiner stresses the important function of Frege's elucidations, given their explanatory power that goes beyond the limits of language:

The value in elucidation—including elucidatory nonsense—is that, like music and poetry, it expresses something that cannot be expressed explicitly: something that cannot be literally true or false (Weiner 2005, 211)

While Wittgenstein's *Tractatus* considers "nonsense" as something lying outside the scope of logic, in the "second" Wittgenstein the idea that mathematical logic will solve all the problems in philosophy is abandoned altogether. However, Wittgenstein's later philosophy can also be considered under the influence of Frege: his use of logic for the clarification of conceptual confusions is consistently accompanied by his profound awareness of the different uses of language, and of the mistakes arising from the ambiguity of natural language—an ambiguity that Frege acknowledges as ultimately unavoidable. The philosophers' struggle against language is a topic that runs continuously through Frege's early works to his last (cf. Beaney 1997, 50–51, 369). As such, Frege's attitude towards language is certainly a preview of Wittgenstein's famous warning on the "bewitchment of our intelligence by means of language" (Wittgenstein 1953, § 109).

Thus, in giving "hints", or "elucidations", Frege may be legitimately regarded as engaged in one of the many language games made possible by the variety of uses of language for communication purposes. Unlike Frege, for Wittgenstein philosophy is essentially an analysis of language that does not aim at the development of new formalisms or at proposing new forms of scientific explanation. His acknowledgement of the bewitchment of our intelligence by means of language specifically points towards the difficulties that we encounter in the understanding and tracking of the language games that we are playing. Surely, when we use the terms of mathematical logic outside the system of logic, we cannot expect the clarity of the formal system. The acknowledgement of this kind of mistake is in fact one of the results of the philosophical enterprise:

The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language. These bumps make us see the value of the discovery. (ibid., § 119)

By admitting that “the concept *horse* is not a concept” is a kind of nonsense—although a useful way to introduce the reader to his formal system—Frege also indicates that “hints” are suggestions that touch the limits of the expressive power of language. Still, we are allowed to use different kinds of language games, so that what is considered a pseudo-proposition from the perspective of mathematical logic may still possess a real communicative value when used outside the system of logic. It is no accident that the term “pseudo-thoughts” is sometimes employed by Frege in his discussion of poetry, a form of linguistic expression that he greatly respects.

PART II

Gongsun Long and the “White Horse is Not Horse” Paradox

Gongsun Long’s Paradox: Short History of a Debated Classic Text

The paradoxical claim “white horse is not a horse” is presented in the *Bái Mǎ lùn* (*On the White Horse*, 白馬論), a chapter belonging to the *Gōngsūn Lóngzǐ* (公孫龍子). This short and intricate text of less than 4,000 characters from the pre-Qin period is attributed to Gōngsūn Lóng,⁷ who is regarded as one of the best representatives of the so-called School of Names (*Míngshí lùn*, 名實論). After a period in which it was regarded as an instance of court entertainment that used logical paradoxes and linguistic jokes as a form of divertissement, the GSLZ is now widely—yet not uncontroversially—considered an early contribution to classic Chinese philosophy of logic. The *Bái Mǎ lùn* (BML) is an independent unit, yet thematically related to other parts of the *corpus* and, in particular, to the *Zhǐwù lùn*, which is traditionally interpreted as focusing on “naming” and on the relationship between names and objects.⁸

The BML takes the form of a debate between two anonymous fictional characters: a persuader (P), usually identified as Gongsun Long, and an opponent (O). P provides support for the paradoxical claim that, under certain circumstances, a white

7 Following the convention, we will use “GSLZ” as an abbreviation for the *corpus*, and we will use “Gongsun Long” or, alternatively, its abbreviation “GSL” to refer to the either GSLZ’s unique author or its multiple authors.

8 Charles Angus Graham (1990) takes some of the essays in the GLSZ to be later additions. Although his view is widely accepted by Western scholars, it is still poorly received among Chinese scholars (Wang and Johnston 2020). A recent work by Thierry Lucas (2020) shows the difference in logical style between the two central chapters (*Báimǎ lùn* and *Zhǐwù lùn*) and the other chapters with a detailed analysis of binary comparisons among them (in § 4 of his paper). The analysis does not necessarily imply that the other essays in GLSZ are from a different time, but it does show that the two chapters display shared argumentative structure and logical features.

horse is not a horse, and O defends the common intuition that a white horse must indeed be a horse. The first argument of the BML is as follows:

O: “To say that ‘[a] white horse is not [a] horse,’ is that admissible?”

P: “It is admissible.”

O: “How is that possible?”

P: “‘Horse’ is what denotes shape, ‘white’ is what denotes colour. What denotes colour is not (the same as) what denotes shape. Therefore I say: “[a] white horse is not [a] horse.”⁹

The argument starts with O asking P on whether “white horse is not horse” is *logically* admissible. At a first glance, the argument seems to hinge on the separation of shape and colour: (the concept) “horse” must be applicable to horses of different colours, like a white horse, a yellow horse, or a black horse. However, a white horse, being white, excludes all horses of different colours; i.e., the concept “white horse” cannot apply to yellow horses or black horses. Since the concept “horse” needs to apply to horses of all different colours, we have to conclude that no actually existent horse can exhaust the variety of horses encompassed by the concept *horse*.

The paradox “white horse is not horse” (*Báimǎ fēi mǎ* 白馬非馬), although widely analysed, is still a source of new interpretations. Is Gongsun Long a naïve thinker who falls inadvertently into a trivial fallacy of reasoning? Is he perhaps just playing around with language and making logical tricks to amuse and amaze his readers? Or is he rather seriously engaged in the task of revealing something relevant about language, the world, and thought? As in the case of Frege’s “the concept *horse* is not a concept”, the nature of Gongsun Long’s paradox is a matter of ongoing debate.

Interpretations of Gongsun Long’s Paradox

The interpretative frameworks for GSL’s texts are typically spelled out in the theoretical terms of ontology, Platonism or nominalism, epistemology, and semantics. Within the various voices adding up to the discussion about the BML, we here identify three general methodological directions, namely, (i) plain dismissals and criticism of the argument, (ii) assimilations of the argument to Western classics, and (iii) attempts to repair the argument by means of analytic categories.

9 Translation by Johnston (2004).

(i) Argument dismissal and criticism:

For a long time, mainstream authors in the Chinese tradition looked upon Gongsun Long as a useless thinker, unworthy of being taken into serious account, or as a court jester. He was infamously regarded as a dialectician *par excellence* especially skilled in plays on language, paradoxes, and mischievous, hair-splitting arguments. Moreover, unlike the general spirit of Chinese philosophy, and from the perspective of the Confucian tradition, his teaching lacked commitment to morally oriented superior goals, and he was therefore considered a “talkative sophist” who had nothing substantial to say (cf. Suter, Indraccolo and Behr 2020, 5).

Even Zhuangzi, despite the fact that GSLZ is included in the Taoist canon, treated it with diffidence:

Rather than trying to prove by means of “horse” that “a horse” is not a “horse”, why not to prove by means of “not horse” that a “horse” is not a “horse”? (Itzutsu 1983, 362)

Itzutsu (*ibid.*, 362–63) comments on this passage by saying that, while Zhuangzi on the one hand admits that sophists like GSL may produce a right argument, on the other hand, he believes that “the conclusion which they reach thereby is devoid of real significance.” Dismissive approaches are also present to some extent in the contemporary literature. Christoph Harbsmeier finds that GSL is best described as a rather frivolous and logically unsophisticated character, although well equipped with argumentative skills and “capable of very subtle reasoning” (Harbsmeier 1989, 152–53). Following Pokora (1975),¹⁰ Harbsmeier recalls Han Feizi’s story about a certain sophist, Ni Yue, who was passing by custom house riding a white horse: unwilling to pay the tax due on a horse, Ni Yue maintained that “a white horse is not a horse”! Of course, the customs officer was not convinced. Still, according to Harbsmeier, GSL’s fierce defence of this statement rests on his ability to exploit the peculiar ambiguity of the ancient Chinese language, as in the specific statement “*Báimǎ fēi mǎ*”, that can be offered a twofold interpretation as either (a) a claim about objects (a white horse is not a horse, which is obviously untrue), or (b) about names/linguistic terms (the term “white horse” is not the term “horse”, which is trivially true).

Among the scholars who recognize the philosophical relevance of the GSLZ, some still criticize the argument as resting on a reasoning mistake. For example,

10 Pokora reports the anecdote from Huan T’an, in which a similar attempt to pass the frontier is attributed to GSL himself, concluding that “it is hard for empty words to defeat reality”. (Pokora 1975, 124)

Graham (1986) finds GSL “guilty of an elementary confusion of class membership with identity”, and Chad Hansen (1983, 161) considers the argument “*a simple and common deductive fallacy*”.

Dismissive approaches are often linked to the supposed frivolous character of useless sophism. Yet, on the basis of historical data, it has been argued by In-draccolo (2010, 8) that GSL may not have been “merely a court entertainer—an aspect which was utterly marginal in his active life—as he was primarily an expert politician and a shrewd diplomat, positively using his refined rhetorical skills in governmental practice.” Such an assessment highlights the value of GSLZ as an example of argumentative strategy, and it encourages the search for further assessments of its worth.

(ii) Assimilations of the argument to Western classics:

One of the most ancient and influential readings of the BML in the light of the Western classics is offered by Fung Yulan’s Platonic interpretation, whereby “horse” and “white horse” are treated as names referring to two distinct universals, or Ideas in a Platonic sense. By this interpretation, GSL would be ontologically committed to a two-world theory in which both concrete particulars and abstract universals exist. For Fung (1948, 87–88), to say that “A white horse is horse together with white. Horse with white is no horse”, is to distinguish between the universal “horseness” and the distinct universal “white-horseness”. Since the universal “horseness” implies no colour and it is attributed to all horses, it follows that “horseness” is not identical to “white-horseness”. The two terms (“white” and “white horse”) are intensionally and extensionally different, so only “horse” can be intended as horse as such, whereas “white horse” is horse together with white, hence it is not horse as such. The paradox dissolves, and the claim—clearly logically valid—amounts to the denial of the identity of the two universals. Fung Yulan’s Platonistic interpretation is supported, for instance, by Cheng Chung-Ying, who draws from GSL’s assumed Platonism that “given a certain logic, a language can generate an ontology which differs from the normally presupposed or assumed ontology of the language” (Cheng 1983, 346). Although in reference to Kant and to the analytic philosophy of language, Zhou Changzhong (1997) follows Fung (1948) in using the intension/extension distinction as one of the tools to interpret the paradox.

Joseph Needham takes a different direction, and—along the line of Marcel Granet (1934)—characterizes the Chinese way of thinking as “correlative” and “dialectical” as opposed to “analytical” and Aristotelian. However, against Chmielewski (1962) and along with Kou Pao-koh (1953), he thinks of the GSLZ as an exemplification of the Aristotelian syllogism (Needham 1956, 200). The Aristotelian

interpretation finds new life in more recent literature. Benická and Hubina (2013), for example, propose an analysis and translation of the BML which regards it as an example of Aristotle’s problem of predication. Dropping the problem of syllogism, they more generally react against those who create an “unwarranted gap between ‘Chinese’ and Greek (Western) ways of thought.” “Horseness” and “Whiteness” may be interpreted following the fundamental Aristotelian distinction between substance and quality, respectively. Under this reading, the argument displays logical consistency inasmuch as “white horse” and “horse” are intended in the light of the Aristotelian distinction in ontology between essential and accidental qualities (Benická and Hubina 2013, 14). With a careful reading of the text, they conclude that the ontological status of white horse and horse must differ: “horse” is characterized as an essential quality, and “white horse” is characterized as the accidental quality “whiteness”. Thus, “essence, though not explicitly stated, is suggested here by the Master” (ibid., 26). This reference to Aristotelian categories also has the merit of connecting two ancient authors—Aristotle and Gongsun Long—who are considered forerunners of the philosophy of language in their respective traditions.

(iii) Attempts to repair the argument by means of logical or analytical categories:

In the first half of the 20th century, the study of Chinese philosophy is given a fundamental turn by Hú Shìh (胡適), who plays a leading role in the introduction of Western philosophy to China. Hú (1922) stresses the centrality of the problem of names in the GSLZ and adopts a logical approach to its interpretation. The “white horse is not horse” thesis becomes intelligible, he suggests, once we take it to be about the relationship between name (roughly, the description) and reality (the property described). For Hu, the expression “white horse” signifies two perceived attributes, namely, the attribute “white” and the attribute “horse”, respectively, whereas “horse” signifies only one attribute, hence the assertion “white horse is not horse” (Hú 1922, 126). Hu’s account has also been regarded (Fung 2020a, 312) as an (unconscious) application of Bertrand Russell’s theory of definite descriptions, where any name refers *indirectly* via its descriptive content, a view that traces back to Gottlob Frege.

The view of GSLZ as a relevant text in ancient logic largely depends on the early interpretations by Graham and the Polish sinologist Janusz Chmielewski.¹¹ The latter, in his *Notes on Early Chinese Logic*, was the first scholar to employ symbolic logic in the analysis of the *corpus*. His novel approach encouraged the proliferation of more analytically oriented work aimed at repairing the argument by means of

11 We quote here from the original editions, yet it is worth to mention that Chmielewski’s works are also published in a more recent collection: Chmielewski (2009).

formal logic. Chmielewski's interpretation of the BML, framed within his broader view of early Chinese logic as intrinsically formal, is based on a specific class analysis whereby "horse" and "white" are names denoting neither concepts (universals) nor objects, but classes (the class of all the objects that are horses and the class of all the objects that are white, respectively).¹²

Chad Hansen (1986), followed by Graham (1989), argues that classical Chinese nouns should be interpreted as mass nouns, rather than as count nouns. Taking this feature as a main difference between Chinese and Indo-European languages, Hansen proposes a mereological interpretation of the BML based on the whole/part distinction. If "horse" is a mass noun like "water", the argument would be that a part is not identical with a whole. In the light of such an interpretation, Fung Yulan's and Chmielewski's analyses miss the target.

Hansen's mereological interpretation is challenged by Harbsmeier (1989, 155–81), Dan Robins (2000), and Chris Fraser (2007) among others. Against Hansen, Robins claims that Classical Chinese nouns can be used as either mass nouns or count nouns depending on the context. However, context dependence in this specific matter cannot be considered a distinctive and unique feature of the Chinese language. In fact—and also in English—the same term may be used either as a count noun or as a mass noun depending on the context. Consider, for example, the statements "we had a lot of beer" (mass noun) *vs.* "we ordered a beer" (count noun). Still, Indo-European languages mark many differences with inflections, which Chinese entirely lacks, thus making the interpretation of nouns more difficult. Fraser (2007) presents a deep critique of Hansen's proposal. On the one hand, he accepts that most instances of ancient Chinese nouns had a use as mass nouns, but on the other hand he claims that this is not enough to justify a mereological interpretation of the GSLZ. Together with his general criticism that a thinker's language cannot be said to have a fundamental role in shaping the more relevant

12 Against Needham, Chmielewski (1962, 10–11) presents BML's first argument in four statements, which is enough to exclude that it is an Aristotelian syllogism. His formalization assumes the following conventions: "A" for the class "horse", "B" for the class "white horse", "F" for the property of "rejecting-selecting colour." By definition, "horse"—denoting shape—does not possess the property of rejecting-selecting colour; then, the argument can be formalized as follows:

(1) $\neg F A$

the class "horse" has not the property of rejecting-selecting colour

(2) $F B$

the class "white horse" has the property of rejecting-selecting colour

(3) $(X) \neg F X. (X) F X = 0$

the intersection of the class of all classes that do not satisfy the property F and the class of all classes that do satisfy the property F is empty

(4) $A \neq B$

the class "horse" and "white horse" are not the same

aspects of his thought, he shows in great detail that the pre-Quin philosophers of language “did not appeal to the part-whole relation to explain the use of general terms” (Fraser 2007, 445). Hansen’s theory is therefore rejected.

This particular debate leads to a more general question about the conceptual tools to be used in the interpretative work on ancient texts. Harbsmeier (1989, 156) criticizes Hansen by ironically claiming that GSL “was not so intellectually advanced to pre-empt Lesniewski” (the inventor of mereology), so that the employment of mereological categories would constitute a case of “interpretative anachronism”. What does “interpretative anachronism” mean here? It seems to mean that ancient texts should not be given an interpretation based on contemporary categories, and, consequently, that only “ancient” categories may be legitimately employed for the task. Against extreme positions of this sort, Cheng (1983) maintains that the “problems of semantics and ontology can be varied, but the structure of these problems will remain universal”. We agree with Cheng and think that the problem is not *whether* to use contemporary categories or not, but *which* conceptual tools are better suited to enhance our understanding of the text at different levels (philological, philosophical, and logical).

Graham offers one of the first attempts to establish a clear link between the Chinese language and symbolic logic: in a discussion on the concept of being, in Appendix II of *The Disputers of the Tao* (1989), he presents the difficulties of the verb “to be”, which is used in too many functions in ancient Greek and Indo-European languages. That’s why Aristotle used to say that “being” is said in many ways: it works at the same time for existence, identity, and predication, with the risk of falling into ambiguity and confusion—a risk that is of no concern in symbolic logic, where the notion of “subject” disappears together with the notion of “being”. Although Graham (1989, 82, footnote 18) finds Chmielewski’s account “unconvincing”, he agrees about the similarity of Classical Chinese and symbolic logic:¹³

[...] Classical Chinese syntax is close to symbolic logic: it has an existential quantifier (*yu*) which forbids mistaking existence for a predicate and is distinct from the copula (...) and it has no copula linking subject to predicative adjective and no common symbol for them all. (Graham 1989, 411)

13 Chmielewski (1965, IV, 103–04) claims that the syntactic features of Chinese, often considered as source of the difficulty of developing logic, “hardly have any negative bearing in Chinese implicit logic; in fact, they are beneficial rather than detrimental to this logic, since they make the Chinese language more similar to the symbolic language of modern logic than any tongue of Indo-European type can claim to be. This latter point seems to be of special importance in connection with the (implicit) logic of functions.”

We find more recent examples of contemporary conceptual tools in authors, such as Yi (2018), with an elegant interpretation of BML. Mou (2020) introduces the distinction between “thick objects” as semantic-whole referents and, we might say, “thin objects” as specific referents. The interpretative choice between the two kinds of objects depends on different points of view. Mou connects the distinction to the Millian–Kripkean and the Lockean–Fregean (descriptivist) approaches to language, one depending on direct reference and the other depending on particular descriptions, or points of view. Therefore, according to Mou’s “double reference approach”, we may have in mind “both the semantic-whole referent and the specific part referent (if any) that is specific to a certain perspective focus” (Mou 2020, 201). This approach contributes to the following idea: the thick object as a whole, yet not characterized by an “essential” property (in Kripkean terms), is the object of direct reference. It is this object that provides the basis for different specific identities depending on the focus and on specific descriptions, so that we may justify both “white horse is horse” and “white horse is not horse”. This is possible because, in different contexts (provided by different sentential settings), the speaker may point to or focus on distinct specific parts from different perspectives.

Something similar is suggested by Fung Yiu-ming (2020b), who argues that the same sentence may be given two different readings depending on whether we interpret it with a Fregean descriptivist approach, or with a direct reference approach *à la* Kripke. In fact, with a charitable understanding of the opponent’s claim “white horse is horse”, we may regard the assertion as a simple analytic truth: such an understanding untangles the descriptivist reading for which the horse that has the property of being white is a horse, that is: $(x)[(Wx \& Hx) \rightarrow Hx]$. Yet, by employing the direct reference approach, it seems as if GSL is treating terms as rigid designators, that is, as terms referring to the same individuals (including abstract individuals), which should however be represented as constants in all possible worlds. As a result, the paradox cannot be expressed as $\forall x [(Wx \& Hx) \rightarrow \neg Hx]$,¹⁴ but rather as $\neg (a=b)$. (Fung 2020b, 167). Eventually, Fung also recognizes that GSL may oscillate between use and mention, insofar he sometimes refers to entities, and other times to the terms themselves. Thus, the paradoxical sentence may be interpreted either as “white horse is not the same [entity] as horse”, or alternatively, as “the name ‘white horse’ is not [referring to] the same [thing] as the name ‘horse’” (ibid.).

Zhou Changzhong (1997; 2020) interprets the BML as evidence of a large equivalence between the analytic philosophy of language in the West and early Chinese logic, with the latter being a version of the former at an earlier stage, for they share

14 The formula could be read as: *for every entity, if something is white and is a horse, then it is not a horse.*

“logic as their basic framework” and “a methodology and an analytical philosophy of language which take ontology and epistemology as their basis” (Zhou 2020, 102). Under this pragmatism-oriented stance, Zhou identifies in the argument the expression and employment of fundamental laws of logic (i.e., the principle of identity and the principle of noncontradiction), as well as of traditional metaphysical categories (particulars/object *vs.* universals/concepts or classes). Having placed the BML and analytic philosophy of language in a sort of *continuum*, Zhou identifies the peculiarity of the former in its restriction to “real contents” and “real-life examples”, whereas analytic philosophy of language in the West “[...] not only breaks through the everyday use and superficial grammar of natural language, but moreover also captures and presents its profound logical structure”. (ibid., 103).

GSLZ has become a fundamental text for comparative discussions of contemporary logic with regard to the Western tradition. Lucas (2020) argues that GSLZ is evidence of an argumentative logical style which is absent, for instance, in Confucius’ *Analects*. In his technically sophisticated study, Lucas compares Ancient Chinese to symbolic logic and provides a statistical analysis of GSLZ’s terms for logical connectives (e.g., *bù* 不, *ér* 而, and *qiě* 且), quantifiers (e.g., *yǒu* 有 and *wú* 無), and propositional operators (e.g., *yě* 也 and *fēi* 非).¹⁵

In addition to the analyses by Lucas (2020) and Fung Yiu-ming (2007; 2020a; 2020c), we may also refer to the early work of Fred Riemann (1981), who presents in an axiomatic system deriving the conclusions of BML in formulae. For instance, the conclusion that to be a white horse and to be a horse are not equivalent (ibid., 439) is rendered in formulae as:

$$\neg (x)(WHx \leftrightarrow Hx)$$

*(It is not the case that every entity is a white horse iff it is a horse)*¹⁶

Actually, Fung Yiu-ming goes so far as to claim that first order predicate logic suffices to disambiguate the various interpretations of the dialogue that represent GSL’s and his opponent’s respective viewpoints (Fung 2020b, 167). While this claim may seem too extreme, it is however undeniable that symbolic formulations avoid redundancy, and that in first order logic all is rendered with simplicity. Granted that the depth and complexity of the ancient Chinese classics could not possibly be reduced to a logical formalization, and granted that formalization requires previous conceptual clarification, the potential contribution of formalizations to

15 An example of his conclusions is as follows: using the linguistic terminology, Lucas (2020, 3176) suggests that “NP1 NP2 yě” stands for “NP1 is NP2,” and that “NP1 fēi NP2” stands for “NP1 is not NP2.”

16 We remark that in this case the quantifier has the widest scope, differently from the formulation criticized by Fung Yiu-ming and quoted above.

the interpreters' exegetical work should not go underestimated. In the following, we will move on with the discussion of some conceptual problems relevant to the assessment of the paradox. In fact, we believe that the complex interpretative problems entailed by Frege's and Gongsun Long's paradoxes cannot be solved by logical formalization alone, but essentially require conceptual clarification.

PART III

On the Hypothesis of a Common Concern across the Two Paradoxes

Bai Ma Lun's Interpretative Directions: Towards a Possible Compromise

Each of the three methodological directions briefly reviewed in the previous section can be regarded as different ways to deal with the same problem, that is, the problem of language ambiguity featured in the *Bai Ma Lun* text. The engagement with the text at issue, which typically requires a combination of philological exegesis, historical analysis, and philosophical reflection and theorizing, can be therefore viewed as a fight against its language ambiguity, which needs to be either explained or dissolved. Most of the interpretation proposals tend to ascribe the ambiguity of the text to specific problematic features of the GSLZ that are first identified and then appropriately made explicit and/or rectified. In some cases, the adopted strategy is the assimilation of such selected features to the traditional categories of the Western classics, or alternatively, their analysis by means of contemporary categories of the philosophy of language and logic. Interestingly, as we have seen in the previous paragraphs, the different accounts of the ambiguity in BML, as well as the explanatory proposals of Frege's paradox, seem to adapt to a similar taxonomy.

As with the readings of Frege about his concept paradox, with regard to the "white horse is no horse" claim, GSL has been interpreted alternatively as shifting the reference from contents to words (Harbsmeier 1989; Fung 2020b), as making a mistake in reasoning (e.g., Graham 1955; Hansen 1983), as dealing with logical inference (Chmielewski 1965; Rieman 1981; Fung Yiu-ming 2020a; 2020b), as using categories analogous to those at work in contemporary mereology (Hansen 1986), as resting on the Aristotelian and analytical distinction between essence and accident or particular and universal (Benická and Hubina 2013; Zhou 2020), or as dealing with different kinds of entities following either a Kripkean or a Fregean perspective (Mou 2020; Fung 2020b). Who is right?

While an overall assessment of the different proposals is outside of the scope of this work, we may still advance some suggestions by taking into account not only

the similarity of the discussions on Frege's and Gongsun Long's paradoxes, but also two important aspects that guide our reading. The first aspect regards the fact that in ancient times—at least, to the best of our knowledge—there is no documented explicit analysis of two Fregean distinctions discussed in Part I, that is, (i) the distinction between linguistic expressions and their referents, and (ii) the distinction between concepts and objects. In fact, this twofold distinction arises in Frege's discussion of the problems related to the essential difference between ordinary language and formalized language. With texts like the GSLZ, we can speak neither of formalized language, nor of natural language, given that what we nowadays call “language” was not conceptualized in a similar fashion in pre-modern times in China (cf. Möller 1997). However, quite independently of their historical origin, the Fregean distinctions hold in any context in which language is used. We may therefore suspect that the clash among the different interpretations of the BML may often be regarded as stemming from the difficulty of disentangling the two kinds of distinctions. Some authors seem to ascribe to GSL concerns about the distinction as in (i), whereas others tend to interpret the BML as revolving around the distinction as in (ii); moreover, both the readings may legitimately be regarded as consistent (hence, as possibly coexistent) within the GSLZ.

The second aspect concerns our observation that most of the accounts of the BML amount to an attempt to fix the argument by *eliminating* its essential language ambiguity. This is also a typical attitude among Frege's interpreters, who put forward solutions of either technical or theoretical nature to avoid the paradox. However, we concluded our analysis of the literature on Frege's paradox in Part 1 with the claim that language ambiguity, although unavoidable, may be a way to communicate new ideas to those readers who are ready to accept them. Therefore, inspired by Frege's remarks on his concept paradox, we advance a tentative reading of the white horse paradox by taking the intrinsic ambiguity of “white horse is not horse” as an indication that here Gongsun Long may be dealing with the *unavoidable* awkwardness of language, which falls short in properly and fully mirroring the essential concept/object and concept-words/object-words distinction.

Notably, the arguments in BML conclude with one of GSL's few metalinguistic statements:

“These are the world's perverse words and confusing statements.”

Given the seemingly anaphoric function of “these”, the claim appears to refer to the arguments previously expressed. However, this *finale* may also be equally considered as a general conclusion on the difficulties and confusion that linguistic statements may cause in the hearer, or reader. It is as if GSL faces a difficulty similar to the one encountered by Frege, a difficulty that the latter tries to overcome by resorting

to “nonsense”. The contrasting interpretations often forget a simple point that may be put in the form of an alternative possibility to be attended to: what if Gongsun Long was fighting, as Frege did, against the misunderstanding arising from the use of language? Even if one concedes that the focus of the BML is on argumentation, and perhaps on the exploitation of linguistic vagueness and ambiguity for political and diplomatic reasons, whereas Frege was more interested in finding ways to overcome the intrinsic problems of language via formalization, both seem to be very aware of the misunderstandings that arise from the use of language.

Postilla: on Concept and Object in GSLZ

We cannot avoid a short reference to the *Zhǐwù Lùn*, given its entanglement with the *Báimǎ lùn*. The title itself has been offered multiple and sometimes divergent translations, mainly due to disagreement on how to interpret the key character “*zhǐ*” (指), whose original meaning is “finger”, and that has been rendered as “universals” or “concepts” (Fung 1952; Needham 1956), “meanings” (Graham 1955), “point/pointer/act of pointing” (Reding 2002), “act/object of reference” in either speech or cognition (Cheng and Swain 1970), “marks” (Hú 1922) and “signs” (Thompson 1995).¹⁷

The use of the term “*zhǐ*” within a discourse on names and naming, with its range of translations spanning from “finger” (that is, an index by which we point to things) to “signs”, suggests a further interesting direction of research. In contemporary linguistics and philosophy of language, there is a wide discussion about the essential link between pointing gestures and demonstratives, such as “this” and “that” (notably, Russell thinks of demonstratives as the only ‘logically’ proper names). Indeed, demonstratives are signs of a special kind, since they are terms by which we refer to individuals, or objects. As we have seen, “*zhǐ*” is also sometimes translated with “meaning”, or “concept”—but why? A short remark may help clarify the relationship between the main function of the demonstratives in language and the rendering of “*zhǐ*” as “meaning” or “concept”: it is because we have concepts that we can *point* to specific things. If I say: “Look at *that*”, in front of a horse, in order for one to know what I am referring to, one would need to be (perceptually) acquainted with that particular object, which is the referent of the demonstrative “that”. In other words, one would need to possess the concepts referred to by the speaker: the horse as such? Its colour? Its mane? Its saddle? The exact referent of “that” in the example above may depend on the previous

17 Liu Tisheng (2020) provides a thorough investigation of the wide literature on the different meanings of the Chinese character (指).

discourse, or on the question under discussion. Concepts may therefore be regarded as playing a fundamental role in the referential process: pointing would be useless without concepts. Hence, the translation of “*zhi*” (指) as “concepts” seems fortunate, as well as theoretically legitimate.

We are not experts in Chinese philology and exegesis, but we cannot escape the feeling that the translation of “*zhi*” as “concept” and of “*wu*” as “object” brings about a remarkable set of arguments that unexpectedly fit Frege’s worries about the difficulty of speaking of concepts. Moreover, our intuition may be not inconsistent with some interpretations of the key Chinese characters from the other chapters comprised in the *GSLZ*, such as, for instance, the *Ming shi lun* (a chapter that revolves around demonstration) for which Jana Rošker (manuscript) proposes the translation of “*ming*” (名) as “concept” and of “*shi*” (實) as “actualities”. For key Chinese terms like “*zhi*” and “*ming*”, it seems difficult to avoid the continuous overlapping of different translations, all equally justified on different grounds. This overlapping, we suggest, might also be caused by the back and forth between the two distinctions we referred to in the previous section.

In sum, the different uses of language, as well as the challenges accompanying the attempts to make these distinctions clear cut, seem to be a concern common to both thinkers discussed in this paper, notwithstanding their distance in time. Under this general interpretative sketch, we may leave to the specialists of the *GSLZ* the further challenge of studying within the ancient Chinese text the interplay of the two (Fregean) distinctions, that is, the distinction between linguistic expressions and their referents, and between concepts and objects.

Concluding Remarks

In this text we have presented an overview of the discussions around two paradoxes from Gottlob Frege’s *Über Begriff und Gegenstand* and Gongsun Long’s *Bai Ma Lun*: the two works are very distant in time, yet not so much in content. Interestingly, a common pattern holds within the two debates. In their attempt to ‘make sense’ of the paradox, both Frege’s and Gongsun Long’s interpreters seem to opt for one of the following strategies: to disregard the paradox as unworthy of the philosophers’ attention or as a plain mistake, to dispel the paradoxical nature of the claim by interpreting it in the light of either novel or traditional philosophical categories and distinctions, or to repair the argument by means of logical and analytical categories.

The two texts at issue are perhaps also pursuing quite different goals: Frege wants to express the main ideas of his newly invented mathematical logic and its basic

concepts, whereas with regard to Gongsun Long it can perhaps be speculated (assuming a link between the text and the historical figure of a well-known expert in diplomatic matters) that he is probably aiming to present arguments that could be used to enhance various persuasive strategies in more important contexts. However, even under the assumption that these two texts and their paradoxical claims are hardly comparable, the contemporary literature discussing them, as we have shown, displays similar interpretative patterns and it largely employs similar philosophical categories and formalizations.

In this respect, we pointed out one particular reading of Frege's paradox—a reading that is not explicitly represented in the current discussions on the BML—which may suggest a novel interpretative direction with regard to Gongsun Long's work. After all, both Frege and Gongsun Long may have recognized the difficulty of dealing with the “awkwardness” of language, which falls short of expressing fundamental distinctions (such as the distinction between concept and object) with clarity and without ambiguity. So, both Frege's and Gongsun Long's paradoxes can be seen as warnings to the reader about the problems caused by different ways of using language, which can lead to confusion and misunderstandings.

Frege holds a disenchanted attitude towards the unavoidable misunderstandings of language. Given his capacity to invent a non-ambiguous symbolic mathematical language, he dares to use apparent contradictions (what he calls “nonsense”) to convey what he means outside his symbolic language. He certainly had an impact on Wittgenstein's *Tractatus*, but he had an even greater impact on the *Philosophical Investigations*, as evidenced by Wittgenstein's remarks on misunderstandings caused by different uses of language and presented in the last section of Part I of our text. This awareness brings about the suggestion that the source of misunderstanding is often to be found in the inability to understand which specific language game we are in. We should, for instance, be aware of whether we are speaking of either concepts or objects, or of linguistic expressions and their referents.

While Frege and Wittgenstein analyse the workings of language and its role in creating misunderstandings, maybe one of the possible aims for Gongsun Long is to teach the best argumentative strategies, whereby the mastery of language ambiguity can help to win a case. Future work may explore the extent to which this attitude matches the study of the strategic use of language in Western philosophy—especially since the development of pragmatics. In this paper, we limit ourselves to pointing out that the wide literature on the two paradoxes, in the end, may bring about the possible sources of misunderstanding as an open question in the interpretation of ancient Chinese texts.

We have insisted here on the possibility that the result of the discussion stemming from Frege's paradox—and from Wittgenstein's remarks on misunderstandings in language—may be of some interest to the analysis of Gongsun Long's work. However, we would like to show the other side, too: while Frege was striving to give advice for the clarification of logical and conceptual distinctions, it appears that Gongsun Long was joyfully playing with these distinctions. This playful attitude when dealing with language and its limitations might itself be regarded as one significant contribution of the Chinese tradition, a contribution that seems to match Wittgenstein's lesson: we play different language games, and the main source of misunderstandings is just our inability to tell which language game we are playing.

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