# More Mohist Marginalia:

# A Reply to Makeham on Later Mohist Canon and Explanation B 67

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#### **Abstract**

A new interpretation is presented of Mohist Canon and Explanation B 67 that clarifies the grammar and significance of these difficult passages while critiquing and building on previous work by Graham, Hansen, and Makeham. A novel feature of the interpretation is that it reads a pair of verbs in the second sentence of the Explanation putatively, instead of declaratively. A consequence of the interpretation is that on the Mohist theory of disputation (*biàn*), it is undecidable whether a fusion (*jiān*) of two things falls within the extension of the term for either constituent of the fusion. The Mohists' view seems motivated by an implicit attitude that, although a fusion of two kinds of things can be regarded as a single object, it nevertheless fundamentally remains a sum of different kinds of objects. Canon and Explanation B 67 thus implicitly place a limitation on the Mohists' conception of a fusion (*jiān*) and highlight a conceptual gap in their theory of disputation.

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## Introduction<sup>1</sup>

This note responds to an interpretation of Mohist Canon and Explanation B 67<sup>2</sup> published by John Makeham some years ago.<sup>3</sup> Makeham's interpretation makes significant contributions to our understanding of this passage, especially in calling attention to problems with two influential previous interpretations, those of A. C. Graham and Chad Hansen.<sup>4</sup> Yet his reading presents difficulties of its own, which I will attempt to rectify here.

Any interpretation of the obscure, often corrupt later Mohist texts is necessarily tentative and somewhat speculative. Hence I cannot claim that the account presented here conclusively resolves all interpretive problems arising

[page 229] from Canon and Explanation B 67. What I will claim is that my interpretation builds on the contributions of Graham, Hansen, Makeham, and others to offer the most convincing interpretation of this canon and explanation to date.

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<sup>&</sup>lt;sup>2</sup> I will follow Graham's numbering of the canons (jīng 經) and explanations (jīng shūo 經說). I take the italicized title *Canons* to refer to books 40 and 41 of the *Mòzǐ* 墨子, "Jīng Shàng" 經上 and "Jīng Xìa" 經下, and *Explanations* to refer to books 42 and 43, "Jīng Shūo Shàng" 經說上 and "Jīng Shūo Xìa" 經說下. I will refer to individual canons and the corresponding explanations by the unitalicized "Canon" or "Explanation," as in "Canon B 67" and "Explanation B 67." Where intelligibility is not affected, I will abbreviate such titles as "Cn. B 67" and "Exp. B 67."

<sup>&</sup>lt;sup>3</sup> John Makeham, "Mohist Marginalia: A New Interpretation and Translation of *Canon* and *Explanation* B 67 in the neo-Mohist Summa," *Papers on Far Eastern History* 39 (1989): 167–75. See also John Makeham, "Mohist Marginalia—Addenda and Corrigenda," *Papers on Far Eastern History* 40 (1990): 125–27.

<sup>&</sup>lt;sup>4</sup> See A. C. Graham, *Later Mohist Logic, Ethics and Science* (Hong Kong: Chinese University Press, 1978; reprint edition, 2003), 439–40; Graham, *Studies in Chinese Philosophy and Philosophical Literature* (Albany: SUNY, 1990), 200; and Chad Hansen, *Language and Logic in Ancient China* (Ann Arbor: University of Michigan Press, 1983), 153–55 and 190–91, n. 28.

Why do Canon and Explanation B 67 deserve further inquiry? These passages pertain to central issues in later Mohist semantics, logic, and ontology, which in turn are crucially important theories in the history of Chinese philosophy of language and logic. Explanation B 67 should also be of interest to students of Classical Chinese because of the complexity of its grammar and syntax. In addition, Hansen, Graham, and others contend that these passages are relevant to interpretation of the "White Horse Discourse" 白馬論 of the *Gōngsūn Lóngzǐ* 公孫龍子. Like Makeham (172), however, I will pass over this last issue here.

A key notion in the Mohists' conception of argumentation and judgment is *biàn* 辯, "disputation" or "distinction drawing." As Makeham explains (168), *biàn* is defined in Cn. A 74 as "contending over *bǐ* 彼 (exclusive alternatives)." *Bǐ* appears to be a technical notion

<sup>5</sup> I agree with Makeham in following Sūn Yíràng's emendation of yōu 攸 in Canon A 73 and A 74 to bǐ 彼, on the grounds that bǐ appears in the explanations to both canons and coheres well with a plausible interpretation of both canons and their explanations. (See Sūn Yíràng 孫詒讓, Mòzǐ Jiān Gǔ 墨子閒詁, Sūn Yǐkǎi 孫以楷 ed. (Taipei: Huazheng, 1995/1894): 285.) Graham proposes to emend the two instances of yōu in Cn. A 73 and A 74 and the two instances of bǐ in the corresponding explanations to fǎn 仮 (converse), a term that appears in Cn. B 30 and B 72 (2003: 184–85, 317–18). He gives two reasons: (1) Like the other canons in the section running from A 1 to A 75, Cn. A 73 should present a definition, but if the canon is emended to read bǐ, it does not present a definition (318). (2) The definition given in Cn. A 73 "agrees exactly with the use of fǎn in B 72" (185).

Graham's proposal is intriguing, and it is conceivable that all four graphs could be errors for  $f\check{a}n$ . But I hesitate to accept his emendation, for several reasons. First, if we read  $b\check{i}$  for  $y\bar{o}u$ , Cn. A 73 can still be interpreted as a definition, if need be. (Makeham makes a similar point on 174, n. 5. I myself believe that many of the canons from A 1 to A 75 are not definitions, strictly speaking, but for the purposes of this discussion we can set that issue aside.) Second, it is not obvious that the definition in A 73 really corresponds to the use of  $f\check{a}n$  in B 72. The point of B 72 is that whether [page 230]

or not something is the kind of thing designated by a term isn't determined arbitrarily by our deeming it so. For instance, I can refer to a dog as a "crane," but the dog is nevertheless a dog, not a kind of bird. Făn is cited as an explanation of this point, but Exp. B 72 does not specify precisely what făn is. The text does state clearly that it is inadmissible to collapse the distinction between "that" (bǐ 彼) and "this" (shì 是) by referring to both as "this" (shi), for doing so leaves the speaker referring to no specific kind of thing at all. This point, and the notion of făn, clearly seem related to the notions treated in A 73 and A 74. But it's not clear that făn just is the concept defined by A 73 as "it's inadmissible for two to be inadmissible." Cn. A 73 seems to be articulating a technical notion, presumably bǐ 彼, in terms of a version of the law of excluded middle. (Graham would disagree, since he proposes a different, more complex reading of A 73 based on his interpretation of the concept of *liang* 兩 ("two"). I will pass over this issue here.) But făn in B 72 does not concern the law of excluded middle. Rather, it seems to refer to a relation of opposition or contrariety that must hold between two terms for different kinds of things (at the same level of generality). One possibility, suggested by the use of the more common graph  $f \tilde{a} n \nabla$ (without the "person" radical) elsewhere in the classical literature, is that this relation is that of being logical contraries, which cannot both be true of the same thing but can both be false. (See, for example, Lüshì Chūnqiū 7.5: "Violence, cruelty, debauchery, and deceit are contrary ( $f\check{a}n \, \bar{k}$ ) to morality and the proper pattern; these propensities cannot both win, they cannot both stand"暴虐姦詐之與義理反也,其勢不俱勝,不兩立, in Lín Pǐnshí 林品石, ed., Lǚshì Chūnqīu Jīnzhù Jīnyì 呂氏春秋今註今譯, Vol. I (Taipei: Táiwān Shāngwù Yìnshūguǎn, 1985): 187.) The use of fǎn 反 in such contexts tends to suggest that the fǎn 仮 of Cn. B 72 is a distinct notion from that defined in A 73.

#### derived

[page 231] from the common use of the same graph to mean "that" or "other," as opposed to "this." It refers to what, modifying a notion from set theory, we can call pairs of *complementary* terms, such as *ox* and *non-ox*, and their extensions. Such pairs divide everything in the world into two mutually exclusive categories: any one thing is either an ox or a non-ox. As Exp. A 74 explains, in "contending over bi"—that is, biàn—"one side calls it 'ox,' one calls it 'non-ox'" (或謂之牛,或謂之非牛). The side whose assertion is "appropriate" or "fits" (dàng 當) the thing wins the disputation. Applying the law of non-contradiction, Exp. A 74 points out that the two alternatives "it's an ox" and "it's a non-ox" cannot both be appropriate of the same thing: one must be inappropriate.

Biàn, then, is conceived of as contending over which of two complementary terms "fits" (dàng 當) some thing. For any object, exactly one of any such pair of terms must fit. In the terminology of Exp. B 35, with respect to any term of our language, such as ox, any object should be either shi 是 (this) or  $f\bar{e}i$  非 (not-this).

A fundamental problem for the Mohists, as Makeham points out (168), is that neither objects in the world nor the terms of our language are organized as simply and neatly as this conception of *biàn* assumes. One set of problems concerns compound terms, such as *brothers-and-sisters* (siblings), *fruit-and-vegetables* (produce), or *oxen-and-*

[page 232] *horses* (draft animals). With respect to one of its component terms, is the extension of such a term *shì* 是 (this) or *fēi* 非 (not-this)? For instance, suppose I have two brothers and two sisters. Are my brothers-and-sisters "sisters"? It seems strange to say they are. But on the other hand, can we say they are "non-sisters"? That too seems counterintuitive.

The problem is complicated by the way the Mohists think of the extensions of compound terms. Terms such as *brothers-and-sisters* or *fruit-and-vegetables* can be regarded as referring to what the Mohists call a  $ji\bar{a}n$   $\Re$  (collection, whole, sum). Though they never define or explain  $ji\bar{a}n$  explicitly, in Exp. A 2 the Mohists give two examples to illustrate the notion. Two items together can count as a  $ji\bar{a}n$ , as can a measured length. These examples suggest that the notion of  $ji\bar{a}n$  includes both what we might think of as a group or set of items, such as a pair of shoes, and discrete objects that are divisible into parts, such as a measured length or a yardstick.  $Ji\bar{a}n$  contrasts with the notion of ti  $\Re$  (unit, part, member), which Cn. A 2 explains as "a portion of a  $ji\bar{a}n$ " (see Graham Later, 265). Exp. A 2 indicates that

occurred. But as we just saw, Graham's claim that  $f\check{a}n$  fits the definition in A 73 is questionable. So we have no strong reasons to believe the two instances of  $b\check{i}$  in Exp. A 73-74 are corrupt. Moreover, the reading of  $b\check{i}$  in Exp. A 74 is intelligible as it stands, and emendation to  $f\check{a}n$  does not improve intelligibility. Given the available data, then, the best explanation is that the received text of the two explanations is correct, providing *prima facie* grounds for emending the unintelligible  $y\bar{o}u$  攸 in Cn. A 73-74 to  $b\check{i}$  彼. Since this emendation provides a reasonable explanation of the canons, I conclude that  $b\check{i}$  is a more justified emendation than  $f\check{a}n$ .

<sup>&</sup>lt;sup>6</sup> Hence Makeham justifiably translates bǐ 彼 as "That" (168).

<sup>&</sup>lt;sup>7</sup> In set theory, the *complement* of a set S is the class of objects that are not members of S.

<sup>\*</sup>Cn. A 73 stipulates that "As to bǐ (exclusive alternatives), it's inadmissible that the two are both inadmissible" (彼,不可兩不可也). "Two" is unpacked in Exp. A 73 as "In all cases, oxen separated from non-oxen make two" (凡牛樞非牛,兩也). So bǐ refers to cases in which a kind of thing F is distinguished from its complement, non-F, and it cannot be the case that one can deny both the assertion "F" and "non-F." This claim is logically equivalent to the law of excluded middle: ~(~F & ~~F) is equivalent to F ∨ ~F. 

9 Exp. B 35 reads, "As to that which is biàn, one side calls it [the object in question] 'this,' one calls it 'not-this,' and the one which fits, wins" 辯也者,或謂之是,或謂之非,當者勝也. Cf. Graham (2003: 402–03).

<sup>&</sup>lt;sup>10</sup> Exp. A 2 reads, "Like one of two, [or] the starting point of a measured length."

examples of ti include one of a pair of items and the starting point of a measured length.

From other canons and explanations, we can infer that a wide variety of things can be treated as a  $t\check{i}$  (unit) or  $ji\bar{a}n$  (sum). As Graham explains (265), the two notions seem to be context-relative:  $ji\bar{a}n$  can in turn be treated as  $t\check{i}$  and counted as part of some larger  $ji\bar{a}n$ . For instance, it seems that each of the five fingers on a hand can be treated as a  $t\check{i}$ , the five together forming a  $ji\bar{a}n$ . But the five together can also be treated as a single  $t\check{i}$  (B 12), which can be regarded as a portion of the  $ji\bar{a}n$  formed by the hand or the body to which they are attached. Similarly, a finger and an arm are  $t\check{i}$  that are portions of a person's body (see Graham, Later, 475, where  $t\check{i}$  is translated as "members"). A person in turn can be regarded as a  $t\check{i}$  that is a portion of society, or all people. Individual oxen can be treated as  $t\check{i}$  that are parts of the  $ji\bar{a}n$  formed by all oxen. All oxen, on

[page 233] the one hand, and all horses, on the other, can be regarded as two  $t\check{t}$  that together form the  $ji\bar{a}n$  oxen-and-horses (Cn. B 67). But taken together, all oxen and horses can also be regarded as forming a single  $t\check{t}$ , which can be viewed as a portion of the  $ji\bar{a}n$  comprising all animals.

The underlying principle, as stated in Cn. B 11–12 and Exp. B 12, is that anything grouped together and separated off from other things can be considered a single  $t\check{t}$ . Hence the extension of a compound noun such as *oxen-and-horses* 牛馬 can be considered a single "unit" ( $t\check{t}$ ).

#### Canon B 11:

合與一,或復或否。說在樞。11

Together or one thing, in one case compound, in the other not. Explained by: Separating off.

## Canon B 12:

歐物一體也。說在俱一、惟是。

Separated-off things form one unit. Explained by: Both being as one, or being just "this."

Explanation B 12: 12

俱一,若牛馬四足。惟是,當牛馬。數牛數馬,則牛馬二。數牛馬,則牛馬 一。若數指,指五而五一。

"Both being as one": Like oxen and horses having four feet. "Being just 'this": Fitting *ox* or *horse*. If we count oxen and count horses, then oxen and horses are two. If we count oxen-and-horses, then oxen-and-horses are one. Like counting the fingers. The fingers are five yet the five are one.

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 $<sup>^{11}</sup>$  Following Graham, I insert a parallel 或 after 復 and emend 拒 to 樞. The Explanation to Cn. B 11 is lost.

<sup>12</sup> Omitting the head character, 俱, which, as Graham suggests, is probably a graphic error for 傴.

The "one thing" of B 11 and "both being as one" of B 12 seem to refer to cases in which things share a single property, denoted by a single term, such as *four-footed*, and hence can be considered as forming a single  $t\check{t}$ . In the case of being "just this," two kinds of things can be counted either as two  $t\check{t}$ , in which case oxen and horses are two items, or as a single, joint  $t\check{t}$ , in which case oxen and horses are viewed "together" as forming a single item denoted by the "compound" name *oxen-and-horses*.

Here a problem arises for the Mohists. If, as Cn. B 12 indicates, oxen-and-horses can be regarded as forming a single  $t\check{t}$ , then it seems they can be considered a single, compound object, what in mereology, the study of part-whole relations, is known as a "fusion." Then, by the view of  $bi\grave{a}n$  the Mohists present, the object referred to by oxen-and-horses should be either "oxen" or "non-oxen." But as in the brothers-and-sisters exam-

[page 235] -ple, with respect to the term oxen, oxen-and-horses don't seem obviously shi 是 (this) or  $f\bar{e}i$  非 (not-this). So either the law of excluded middle doesn't apply to such compound objects or the conception of bian articulated in the texts doesn't apply. The theory of bian must be supplemented by an explanation of how to deal with items (ti) that are wholes ( $ji\bar{a}n$ ) composed of different parts for which there are distinct names. This is the issue treated in Canon and Explanation B 67. 15

#### **Text and Translation**

The text and translation of the canon and explanation are presented below, followed in the next section by a line-by-line discussion. To facilitate comparison with other interpretations, I follow Makeham in dividing the text of the explanation into six parts, designated by Arabic numerals (1)–(6). However, I will argue that this division is misleading, and the text is more accurately divided into three statements, designated here by Roman

The converse issue, of whether the name of the whole applies to its parts, is dealt with briefly in a fragment found in *Mòzi* Book 44, *Dà Qǔ* 大取 (see Graham, *Later*, 471). The Mohists' principle appears to be "For all things not named by picking out amount or number, when broken up all [the parts] are this [thing]" (諸非以舉量數命者,敗之盡是也). The point is that the name of a whole generally applies to its parts as well, even when they are divided up. For example, a single part of the human body can still properly be called "human": "One human finger isn't one human, but the finger of this one human is this one human" (一人指非一人也,是一人之指乃是一人也). The exception is "things named by picking out amount or number," such as a large stone, the parts of which, when broken up into small pieces, are no longer "large."

 $<sup>^{13}</sup>$  As Makeham notes (168), this is one plausible way to explain why the Mohists think that  $ji\bar{a}n$  can in some contexts be considered ti. A fusion is roughly the same concept as what Hansen calls a "mass sum" (151–52) the scattered "object" formed by treating two or more distinct individuals as forming a single, concrete whole. On a mereological interpretation, jiān would be roughly equivalent to "whole" or "sum" and tǐ to "part" or "unit." As I have discussed elsewhere ("Language and Ontology in Early Chinese Thought," forthcoming in Philosophy East and West), we have limited but strong grounds to agree with Hansen that the Mohists held a mereological, or part-whole, ontology. Such an ontology yields a plausible explanation of the use of a measured length as an example of a jiān in Exp. A 2 (a measured length is an unlikely example of a set or class); of the use of ti, a word that typically refers to the human body or to individual physical objects (A 61, A 67), to refer to a collection of oxen and horses (Exp. B 12); and of the explanation in Exp. A 87 of "not [the same] ti" as "not connected or belonging," Hence, in what follows, I will proceed as if the Mohists do think of the oxen-andhorses of Cn. B 67 as a whole composed of oxen and horses as parts. However, my interpretation does not hang on this point. It could easily be rephrased, without mentioning part-whole relations, as addressing the issue of whether or not the extension of the compound term *oxen-and-horses* falls within the extension of the term *oxen*.

14 Alternatively, if we reject the mereological interpretation of Mohist ontology, the problem would be that each individual in the extension of oxen-and-horses should be either "oxen" or "non-oxen." <sup>15</sup> The converse issue, of whether the name of the whole applies to its parts, is dealt with briefly in a fragment

numerals (i)–(iii). For convenience, I have included the full text of Graham's, Hansen's, and Makeham's translations in an Appendix.

Canon B 67:

不可牛馬之非牛與可之同,說在兼。

Deeming not admissible oxen-and-horses' being non-oxen

[page 236] and deeming it admissible are the same. Explained by:  $Ji\bar{a}n$   $\Re$  (collection, sum).

Explanation B 67:

- (i) (1) 或非牛而非牛也可 (2) 則或非牛或牛而牛也可。<sup>17</sup>
  - (1) If it's admissible that, some [part of the sum oxen-and-

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horses] being non-oxen, [oxen-and-horses] are non-oxen, (2) then it's admissible that, some being non-oxen and some oxen, [oxen-and-horses] are oxen.

- (ii) (3) 故曰「牛馬非牛也」未可、「牛馬牛也」未可,(4)則或可或不可(5)而 曰「牛馬牛也未可」,亦不可。
  - (3) Therefore, if saying "oxen-and-horses are non-oxen" is inadmissible [and] "oxen-and-horses are oxen" is inadmissible, (4) then treating one [of those two

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<sup>16</sup> Here I follow Zhāng Chúnyī's **張純一 (《增訂墨子閒詁箋》**) division of the canons, which is also adopted by Graham, Makeham, and Hansen, among others. Many Chinese editors follow Sūn Yíràng in dividing the canons differently, so that the words bù kě 不可 "deeming inadmissible" fall at the end of Canon B 66 instead of the beginning of B 67. In my view, placing the phrase bù kě 不可 at the head of B 67 provides a better explanation of the text, for three main reasons; (i) Almost all explanations, including all of those surrounding B 67, have a head character. If the phrase is placed in B 66, then Exp. B 67 lacks a head character. If the phrase is placed in B 67, there is an obvious head character, the word  $b\dot{u}$   $\vec{\Lambda}$ . (That  $b\dot{u}$   $\vec{\Lambda}$  is the second, not first, graph in Exp. B 67 is not a problem, since head characters are known to have sometimes entered the text in the second position rather than the first.) (ii) Omitting bù kĕ from the canon renders its content obscure and eliminates the thematic relationship between canon and explanation. Whatever the details of the explanation, its topic is clearly whether and how the terms X or Y can be applied to the compound object that is the sum of X and Y. But without bù kĕ, the canon would read, "Oxen-and-horses' being non-oxen and deeming it permissible are the same" 牛馬之非牛與可之同—that is, presumably, something's being non-X and deeming it permissible that that thing be non-X are "the same." This statement is inherently puzzling, unrelated to the central themes of Mohist semantics and logic, and irrelevant to the explanation. (iii) Without bù kĕ, the syntax of the canon is doubtful and probably unintelligible. If the canon includes bù kĕ, then the grammatical subject of the text comprises two parallel verb phrases. The object of the first verb, the phrase "oxen-and-horses' being non-oxen" 牛馬之非牛, provides an obvious antecedent for the pronoun  $zh\bar{i}$  之 "it," the object of the second. But if bu ke is omitted, the grammatical subject becomes the conjunction of the nominalized sentence "oxen-and-horses' being non-oxen" and the verb phrase "deeming it permissible" 可之, and it is difficult to see what the antecedent of zhī 之 "it" could be. Grammatically, the most likely antecedent would be "non-oxen" 非牛, but semantically this reading is nonsensical.

 $<sup>^{17}</sup>$  The original text of statement (1) reads: 或不非牛而非牛也可. Following Zhāng Chúnyī and Graham, I take the  $b\dot{u}$  不 following first  $h\dot{u}o$  或 in the explanation to be the head character and have omitted it accordingly.

claims] as admissible and the other as not admissible (5) and [thus] saying "oxen-and-horses are oxen' is inadmissible" is likewise not admissible.

- (iii) (6) 且牛不二、馬不二而牛馬二,則牛不非牛、馬不非馬而牛馬非牛非馬, 無難。
  - (6) Furthermore, if, oxen not being two and horses not being two, oxen-andhorses are two, then there's no difficulty, without oxen being non-oxen or horses being non-horses, in oxen-and-horses being non-oxen and non-horses.

## Discussion

Canon. "Deeming not admissible oxen-and-horses' being non-oxen and deeming it admissible are the same. Explained by: Jiān 兼."

Asked whether oxen-and-horses are oxen or not, we might initially think it natural to reply, "No, oxen-and-horses are not oxen." That is, we would accept the claim "oxen-andhorses are non-oxen," deeming it "admissible." Against this, the canon contends that rejecting this claim—deeming it "inadmissible"—is the same as accepting it. By "the same," the canon probably means that accepting and rejecting the claim are similar kinds

[page 238] of attitudes, expressing judgments based on equal, parallel grounds. 19 Hence if the claim is taken to be admissible, then in an equivalent, parallel way it can also be taken to be inadmissible. The grounds for and against the claim are presented in statement (i) in the explanation. But the core idea, as identified in the canon, is that "oxen-and-horses" is a jiān (collection, sum) comprising oxen and horses. A portion of this *jiān* is in fact oxen; hence it is problematic to claim, without qualification, that oxen-and-horses are *not* oxen.

Thus far, my interpretation and those of Graham, Hansen, and Makeham largely agree. Concerning the underlying purpose of the canon, however, there is less agreement. Graham holds that the purpose is to show that neither "oxen-and-horses are oxen" nor "oxen-andhorses are non-oxen" is an acceptable claim (Later, 440). Rather, the correct claim is that oxen-and-horses are non-oxen and non-horses. More broadly, Graham thinks the purpose of the canon is "to dismantle the apparently self-evident principle that the whole is not one of its parts" (Studies, 200), which he suggests was conventionally expressed as "ox and horse are not ox" (199). Refuting this principle makes it unusable by a sophist such as Gongsūn Lóng 公孫龍, who on Graham's interpretation applies it to argue that a white horse is not a horse.<sup>20</sup>

nevertheless fail to be the most justified interpretation). The others appear to be based not on part-whole relations, but on whimsical claims about criteria for distinguishing different kinds of things and on a confusion about the levels of generality of different sorts of terms, I will pass over these issues here, except to note that even on the part-whole interpretation, it would be odd for the Mohists to refute "white horses are non-horses" by repudiating the principle that the whole is not equivalent to one of its parts. They have other, more compelling theoretical resources available, in particular their distinction between kinds of things that "exclude each other"

<sup>&</sup>lt;sup>18</sup> Graham makes a similar point (440).

<sup>&</sup>lt;sup>19</sup> Graham, Hansen, and Makeham all translate *túng* **□** in Cn. B 67 as "there are the same grounds for," rather than simply "the same." This translation is not mistaken, since having similar grounds is most likely part of what is meant by túng here. But the connotation of the original seems wider than this. Túng here probably means something more like "amount to the same kind of thing" or "are the same sort of judgment."

<sup>&</sup>lt;sup>20</sup> One or two, though not all, of the arguments in the "White Horse Discourse" 白馬論 of the Gōngsūn Lóngzǐ 公孫龍子 might be interpretable as treating white and horse as two parts of a whole (though that may

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Against Graham, I will argue that the underlying theme of Exp. B 67 is that the sum of oxen-and-horses cannot be distinguished unambiguously as oxen or non-oxen, because it is combination of two things, oxen and non-oxen. Contrary to Graham, the Mohists do not argue that the whole is not one of its parts, but that it comprises *both* of its parts. As Makeham rightly says in commenting on Graham, what the Mohists seek to show is that "the whole is not one but two" (172). This interpretation is more consistent with the major theoretical concern of Mohist semantics and logic, which is not part-whole relations but how to distinguish different kinds of things.

Makeham agrees with Graham that the text aims to show that there are no grounds for asserting either claim over the other, since both are "equally illegitimate" (170). But he holds that the purpose of the canon is not to reject the principle that the whole is not the part. It is to show that the claims "oxen-and-horses are oxen" and "oxen-and-horses are non-oxen" both "are illicit because they fail to conform to the requirements of disputation [biàn] proper" (172).

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The view I will defend combines elements from Hansen's and Makeham's accounts but is distinct from both. I propose that the purpose of the canon and explanation is limited to more or less just what the canon says: the text aims to show that the judgment that an assertion of the form "X+Y are non-X" is inadmissible is similar in kind to, and rests on the same grounds as, the judgment that it is admissible. The canon and explanation neither defend nor reject either judgment. Rather, the explanation defends the conditional statement that if we admit the claim that X+Y are non-X, then we must also admit the parallel claim that X+Y are X, and vice versa. (The two claims appear to be contradictory, but in the Mohists' view they are not, since they refer to different portions of a jiān.) If one asserts either claim, the other is assertible too; so Hansen is right to say the Mohists view them as equally assertible. However, the text does not commit to a definite position on whether the claims are admissible or legitimate or not. More specifically, contra Graham and Makeham, it does not commit itself to the view that they are both unacceptable or illegitimate.

A consequence of the position the text does take is that asserting either "oxen-and-horses are oxen" or "oxen-and-horses are non-oxen" in disputation (*biàn*) would be pointless, since the criterion by which one justifies one of the claims supports the other equally well. So Makeham is correct to hold that the significance of the canon is that a disagreement between these claims does not qualify as a legitimate *biàn* (disputation). I will return to this point in the discussion of statement (iii) below.

**Explanation, statement (i).** "(1) If it's admissible that, some [part of the sum oxen-and-

(xiāng wài 相外), such as oxen and horses (no single point in space can simultaneously be both "ox" and "horse"), and those that can "fill each other" (xiāng yíng 相盈), such as "hard and white" or white and horse (a single point can simultaneously be both "white" and "horse"). See Cn. and Exp. A 65–66.

horses] being non-oxen, [oxen-and-horses] are non-oxen, (2) then it's admissible that, some being non-oxen and some oxen, [oxen-and-horses] are oxen."

Here the text does not assert that it is or is not admissible to hold that oxen-and-horses are oxen or non-oxen. It merely asserts that *if* a certain criterion is taken as a basis for claiming that oxen-and-horses are *not* oxen, the same approach to identifying a criterion can be applied to claim that oxen-and-horses *are* oxen.

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One possible criterion for judging whether a  $ji\bar{a}n \not\equiv (sum) X+Y$  is X or non-X is that part of the compound is denoted by the term we assert. Statement (i) claims that if someone were to contend on the basis of this criterion that oxen-and-horses are non-oxen, since part is non-oxen, then by exactly the same criterion one could contend that oxen-and-horses are oxen, since part is oxen. On this point, Graham, Hansen, Makeham, and I agree. Graham, Hansen, and I also agree roughly on the parsing of statement (i), though oddly Hansen places a full stop after the first, dependent clause (see the Appendix).

A flaw in Makeham's interpretation of this part is that he breaks it into two sentences, interpreted as two assertions: "(1) Since some are non-oxen, then non-oxen is admissible. (2) Accordingly [ $z\acute{e}$  則], since some are non-oxen and some are oxen, then oxen is also admissible." Grammatically, (1) and (2) are two clauses of a single sentence, linked by the logical connective  $z\acute{e}$  則 (if...then...). As far as I know, in the *Canons*  $z\acute{e}$  則 is always used to form logical or causal conditional statements, sometimes alone, sometimes in combination with  $ru\grave{o}$  若 (if). To mean what Makeham proposes, (2) should begin with  $g\grave{u}$  故, not  $z\acute{e}$  則. Hence I believe Makeham's parsing is incorrect.

Since this part of Exp. B 67 is a conditional, it asserts neither the antecedent nor the consequent, and *a fortiori* it asserts neither that oxen-and-horses are oxen nor that they are non-oxen. Rather, the implication is that if, in disputation, someone claims either that "oxen-and-horses are non-

[page 242] oxen" or that "oxen-and-horses are oxen," one can argue on equivalent grounds for the contradictory claim. Either both are admissible ( $k\check{e}$   $\overline{\P}$ ) or both are not. <sup>22</sup>

**Explanation, statement (ii).** "(3) Therefore, if saying 'oxen-and-horses are non-oxen' is

<sup>21</sup> Two typical examples are provided by Exp. B 12, translated above: "If we count oxen and count horses, then  $(z\acute{e})$  oxen-and-horses are two. If we count oxen-and-horses, then  $(z\acute{e})$  oxen-and-horses are one." Clearly in this passage the text is not asserting the antecedents of the two conditionals, but merely stating them as conditions under which the relevant consequents follow. I do not have space here to argue case-by-case that every instance of  $z\acute{e}$  in the *Canons* is best interpreted as a connective of material or causal implication, but a quick survey of the text suggests this is probably true. (On this point, see also Graham, *Later*, 141f.) Of course, Exp. B 67 could be an exception to this rule, but Makeham provides no reason to think it is.

This point can be related to one of the moves in disputation (bian) detailed in Cn. A 97. On one plausible interpretation of that canon, it says that in bian one must "fix the criterion ( $v\bar{i}n$  因) to differentiate the way" by which to distinguish whether something is shi 是 or  $f\bar{e}i$  非. The explanation indicates that one is to identify what part or aspect of the thing under discussion we are to examine in order to determine whether the thing is shi 是 or  $f\bar{e}i$  非—the parts where it is "so" ( $r\acute{a}n$  然) or "not so" ( $b\grave{u}$   $r\acute{a}n$  不然). For instance, our criterion for whether someone counts as a "dark man" (cf. Cn. A 96) will presumably be the color of his skin, not his eyes or hair. In the case of oxen-and-horses, if we fix the criterion for oxen as "part of the whole is oxen," then oxen-and-horses are oxen. But by exactly the same token, the criterion for non-oxen would be that part of the whole is non-oxen, and thus oxen-and-horses are non-oxen. It seems that however we fix the rule, both "it's oxen" and "it's non-oxen" are admissible.

inadmissible [and] 'oxen-and-horses are oxen' is inadmissible,<sup>23</sup> (4) then treating one [of those two claims] as admissible and the other as not admissible (5) and [thus] saying "oxen-and-horses are oxen" is inadmissible is likewise not admissible."

My interpretation of this complex statement diverges significantly from those of Makeham, Graham, and Hansen. Since I believe none of their interpretations renders the statement intelligible, I will explain in detail why the present proposal is more convincing.

Besides the general demand that any interpretation cohere with a justi-

[page 243] fied account of the text as a whole, a satisfactory reading of statement (ii) must satisfy several more specific requirements. First, since the statement begins with  $g\dot{u}$  故 (therefore), a plausible interpretation must show how it (or a relevant part of it) follows from statement (i). Second, it must provide a convincing parsing of this grammatically complex statement. Third, it must explain how the clause that comes after the logical connective  $z\dot{e}$  則 (then)—on Makeham's numbering, either part (4) or parts (4) and (5)—connects to or follows from what comes before. Fourth, it must explain the antecedents of the two instances of the pronoun  $hu\dot{o}$  或 (one, some) in part (4). The interpretation proposed here satisfies each of these requirements, and in my view is superior to its rivals on all four counts. For brevity, however, I will concentrate on the second and fourth requirements, which I think the three other interpretations clearly fail to satisfy.

As I will explain below, like Graham, I believe the most justified parsing treats the entire statement as forming a single conditional sentence. The general point of the statement I take to be this. From statement (i), it follows that if either of "oxen-and-horses are non-oxen" or "oxen-and-horses are oxen" is admissible then both are, and if either is inadmissible, then both are. Thus, obviously, statement (ii) concludes, it is inadmissible for someone to affirm one of these two statements and deny the other. More specifically, alluding back to the subject of the canon—the claim that oxen-and-horses are non-oxen—statement (ii) considers the case in which someone holds that "oxen-and-horses are oxen" is inadmissible. In such a case, by statement (i), both "oxen-and-horses are non-oxen" and "oxen-and-horses are oxen" are inadmissible. This is just what the antecedent of statement (ii) says. Alternatively, we could interpret the antecedent as drawing the conclusion from statement (i) that neither "oxen-and-horses are non-oxen" nor "oxen-and-horses are oxen" has been established. Given statement (i), both must be considered "not-yet-admissi-

[page 244] ble" (wèi kě 未可).24

Now if both claims are inadmissible, or if they are "not-yet-admissible," then, as the consequent of statement (ii) says, clearly it is not admissible to deem just one of them, "oxen-and-horses are non-oxen" (the antecedent of the first  $hu\dot{o}$  或), admissible and one, "oxen-and-

Another plausible parsing of part (3) is to place  $y\bar{u}e$   $\Box$  outside the scope of the conditional and punctuate after it, rather than after  $g\dot{u}$  故, yielding "Therefore, we say: If 'oxen-and-horses are non-oxen' is inadmissible [and] 'oxen-and-horses are oxen' is inadmissible…." I think the present parsing is more justified, because it preserves parallelism between the two instances of  $y\bar{u}e$   $\Box$  and because  $g\dot{u}$   $y\bar{u}e$  故 $\Box$  does not occur elsewhere in the later Mohist texts. However, both versions make sense of the text, and the point of the text is not seriously affected either way, I think. As to the placement of  $g\dot{u}$  故 (therefore), I believe it must fall outside the scope of the conditional, or the word would be redundant.

<sup>&</sup>lt;sup>24</sup> I agree with Graham (*Later*, 125) that *wèi kě* 未可 (not-yet-admissible) may refer to the status of a claim that has not yet been established as admissible, yet hasn't been conclusively established as not admissible, either. This interpretation is speculative, however, since *wèi kě* 未可 occurs nowhere else in the later Mohist texts.

horses are oxen" (the antecedent of the second  $hu\dot{o}$  或), not admissible and thus assert that "oxen-and-horses are oxen" is inadmissible. This point follows from statement (i).

On this interpretation, the fundamental point of statement (ii) is *not* that it is incorrect to assert that "oxen-and-horses are oxen" is inadmissible. It's that since, on the grounds given in statement (i), neither the claim that oxen-and-horses are oxen nor the claim that they are non-oxen can be established without admitting the other as well, it's unacceptable to insist on *one* of these claims while denying the other, as someone who asserts only "oxen-and-horses are non-oxen" does.

The interpretation of this statement is a focus of disagreement between the competing interpretations. My view is that the text does not commit itself to rejecting, or deeming inadmissible, the two claims in (3). It only articulates the logical point that if someone asserts that one of the claims is admissible or inadmissible, then both must be. It is certainly plausible to argue, as Makeham does, that the text does reject both claims. But because statements (i) and (ii) are both conditionals, I think the present interpretation is more justified.

Why are the claims in (3) phrased negatively, in the form "...is inadmissible," instead of positively, for instance as "...is admissible...is also admissible"? I suggest that the point of statement (ii) is to reject the claim that 'oxen-and-horses are oxen' is inadmissible, which is likely to be made by an

[page 245] opponent who insists that oxen-and-horses are non-oxen—the claim originally mentioned in the canon. Phrasing the two claims in (3) in the negative may have helped the writers to move more smoothly on to this rejection in (5).

I will now defend the details of this interpretation while comparing it with Graham's, Hansen's, and Makeham's.

The first point I want to consider in examining the other three interpretations is how they parse the statement. Roughly, my parsing is: "Therefore, if (not-A and not-B), then not-C," where "C" is a complex sentence formed using the conjunction  $\acute{e}r$   $\overleftarrow{\Pi}$ . I take the statement as a whole to be one long conditional, which is roughly parallel in structure to statement (iii).

Graham's translation reads: "Therefore, if it is inadmissible to say either 'Oxen-and-horses are not oxen' or 'Oxen-and-horses are oxen,' then, it being admissible of some but not the others, it is likewise inadmissible to say "Oxen-and-horses are oxen" is inadmissible." Thus his parsing is: "Therefore, if not (A or B), then (C and not (not A))," which is equivalent to "If not A and not B, then C and A." Since "A" is "oxen-and-horses are oxen," this parsing has the text saying, in effect, "If 'oxen-and-horses are oxen' is *in*admissible... then... 'oxen-and-horses are oxen' is admissible." This is not exactly a logical contradiction, as Hansen (191) and Makeham (172) suggest, but it is certainly a strange thing for the text to say. Hence Graham's interpretation is unpersuasive. However, Graham's parsing correctly treats the entire statement as a conditional that the Mohists take to follow from statement (i). That is, as I will argue in a moment, he is correct to take the scope of the logical connective  $z \neq \emptyset$  to comprise the entire structure of statement (ii) after the incipient "Therefore."

Hansen's translation is: "Therefore, if we say "Ox-horse is non-[page 246] ox" is inadmissible' and "Ox-horse is ox" is admissible' then we treat [it] as

<sup>&</sup>lt;sup>25</sup> In Graham's *Studies* (200), there is a typographical error in the last sentence of this statement, which reads "it is likewise inadmissible to say "Oxen-and-horses are *not* oxen" is inadmissible" (my italics). According to his *Later* (439), the word 'not' should be omitted.

partially admissible and partially inadmissible. And it is, further, inadmissible to say "Oxhorse is ox" is *in*admissible." His parsing restricts the scope of the zé 則, dividing the statement into two independent, coordinate clauses joined by ér 面: "Therefore, (if (not-A and B), then C). And [ér 面] not (not B)." Graham and I think that the conjunction ér 面 indicates that Hansen's "C" and "not (not-B)" are part of a single complex clause, which forms the consequent following  $z \neq \emptyset$ . Against this, Hansen argues that the scope of the  $z \neq \emptyset$ need not include the ér 雨, "unless there is a convention about which connectives dominate," and that the two instances of  $y\bar{u}e \ \Box$  (say) in statement (ii) indicate the beginnings of two parallel, independent structures (191). Hansen's parsing is conceivable. But the parsing I have proposed also accounts for the parallelism between the two instances of  $v\bar{u}e = 1$ . Moreover, Hansen's parsing is highly unusual, and it does not adequately account for the role of the conjunction ér 面. In the Canons and Explanations, ér 面 is typically used either in combination with other words as a logical connective or alone as a conjunction forming a serial verb construction, as it appears to be here (see Graham, Later, 141f, and 152). Strictly speaking, such serial verb constructions are coordinate constructions. But, as Edwin Pulleyblank points out, they "differ from true coordinate constructions in that the order cannot be changed without changing the meaning,"26 and they are "very common even where English uses various kinds of more explicit subordination."<sup>27</sup> I suggest that, as Pulleyblank indicates, the logical or semantic relation between clauses joined by ér is tighter than mere coordination. One preliminary way to characterize the relation might be to say that the clause preceding ér typically indicates the contingent (neither necessary nor sufficient)

[page 247] conditions under which the clause following it holds. If this is the case, then  $\acute{e}r$  雨 always links two (or more) parts of a complex grammatical structure, of which the main idea is expressed in the clause following  $\acute{e}r$  雨. The word is not used to introduce a new, independent clause standing alone. Thus, in response to Hansen, we can say that in a sentence like (ii) indeed there probably is a convention about which connective dominates: It is overwhelmingly likely that  $z\acute{e}$  則 does. The best explanation of Exp. B 67, I think, is that every instance of  $\acute{e}r$  雨 is functioning to form a serial verb construction, and thus that the clause following  $\acute{e}r$  雨 is part of a serial verb construction that forms the consequent following the logical connective  $z\acute{e}$  則.

Besides observations about the grammatical function of  $\acute{e}r$   $\overline{\mathbb{m}}$ , I can offer two further points to support this contention. First, if statement (ii) meant what Hansen proposes, a clearer and more direct way to express that meaning would be to omit the conjunction  $\acute{e}r$   $\overline{\mathbb{m}}$  entirely.  $Y\bar{u}e$   $\square$  alone does all the expressive work Hansen's interpretation needs. Hence his reading cannot explain the function of  $\acute{e}r$   $\overline{\mathbb{m}}$  in the sentence.

Second, on Hansen's parsing, to squeeze a reasonable interpretation out of statement (ii),

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<sup>&</sup>lt;sup>26</sup> Pulleyblank's example of a serial construction that isn't truly coordinate is: "I opened the door and walked in" does not mean the same thing as "I walked in and opened the door."

<sup>&</sup>lt;sup>27</sup> Outline of Classical Chinese Grammar (Vancouver: UBC Press, 1995), 45.

<sup>&</sup>lt;sup>28</sup> Another remote possibility, which would support Hansen's parsing, is that the entire conditional "if we say 'Ox-horse is non-ox' is inadmissible and 'Ox-horse is ox' is inadmissible then we're treating one as admissible and one inadmissible" (故曰「牛馬非牛也」未可、「牛馬牛也」未可,則或可或不可) functions as the first verb phrase in the serial verb construction that ends with "saying "oxen-and-horses are oxen" is inadmissible' is likewise not admissible." But this parsing would make nonsense of the text. First, the long verb phrase makes the obviously false statement that if we treat both as admissible then we treat one as admissible and the other as inadmissible (as discussed below, Hansen proposes, unpersuasively, to avoid this problem by emending the text). Second, the verb phrase would contradict the phrase following *ér* 雨, which says that it's inadmissible to deem "oxen-and-horses are oxen" inadmissible.

he must emend the text, deleting the second  $w \grave{e} i \not\equiv (not)$  in part (3). This emendation is not justified by external evidence, by parallels between closely related parts of the text, by hypotheses about systematic graphic permutation, or by other considerations. It is based only on Hansen's

[page 248] claim that the text is unintelligible otherwise (191). It is thus a conjectural emendation, which as a matter of methodology is inherently less justified than any coherent, intelligible interpretation that accepts the received text, as the present interpretation does. Thus I agree with Makeham (171) that Hansen's argument for the emendation is unconvincing.

Whereas Graham and I translate statement (ii) as a single sentence and Hansen translates it as two, Makeham parses it as three separate sentences. On his interpretation,  $z\acute{e}$  則 in statement (ii) does not express a conditional and  $\acute{e}r$  而 does not indicate a serial verb construction, as described above. I argued in the discussion of statement (i) that  $z\acute{e}$  則 in the *Canons* functions as a logical connective indicating the conditional (on this point, see also Graham, *Later*, 141f.). I have also just argued, against Hansen, that  $\acute{e}r$  而 here is best interpreted as indicating that part (4) expresses the conditions under which part (5) holds, and that  $\acute{e}r$  而 probably does not stand at the head of a sentence. Hence I conclude that Makeham's reading cannot give a satisfactory explanation of the logical structure of statement (ii). Indeed, Makeham's parsing of Exp. B 67 as a whole seems to me internally incoherent. Grammatically, statements (ii) and (iii) are extremely similar, yet he parses them in radically different ways. In statement (iii), unlike statement (ii), he interprets  $z\acute{e}$  則 and  $\acute{e}r$  而 in exactly the way for which I have been arguing.

Let me consider now the consequent of the conditional, parts (4) and (5) on Makeham's numbering. There are two main issues to discuss. The first is the interpretation of part (4), the five graphs that follow the connective  $z\acute{e}$  則:  $hu\grave{o}$   $k\check{e}$   $hu\grave{o}$   $b\grave{u}$   $k\check{e}$  或可或不可 ("one/some admissible, one/some not admissible"). The second is the logical relation between part (4) and part (5).

In interpreting part (4), the first point to note is the theoretical role of  $k\check{e}$   $\square$  (admissible). As a term of evaluation,  $k\check{e}$  refers to what we might call logical or semantic "admissibility"—to whether an assertion is permissible or logically possible given semantic and logical rules of language use and, in

[page 249] some cases, contextually supplied premises.<sup>29</sup> An assertion is  $k\check{e}$  if it is free of contradiction, inconsistency, or other logical or semantic error.<sup>30</sup>  $K\check{e}$  overlaps with the concept of truth, in that any assertion that is true will also be  $k\check{e}$  and any assertion that is not  $k\check{e}$  cannot be true. However, unlike truth,  $k\check{e}$  generally does not refer to the relation between an assertion and the world. For that, the Mohists use  $d\grave{a}ng$  當 (fitting, appropriate). Nor does  $k\check{e}$  apply to objects. If an object falls within the extension of a term, the Mohists would say it is  $sh\grave{i}$  是 (this) or  $r\acute{a}n$  然 (so), not  $k\check{e}$ .

Hence the best explanation of the clause "huò kě huò bù kě" will probably be that it concerns two assertions, one admissible and one not. The clause is unlikely to refer to objects, such as oxen and horses, for in that case it should read, "huò shì huò fēi" 或是或非 (some are

<sup>&</sup>lt;sup>29</sup> Hansen (154) glosses  $k\check{e}$   $\square$  as "logically possible" and "semantically possible." He suggests that a claim is  $k\check{e}$   $\square$  if "there could conceivably be situations in which it would be appropriate to utter it."

<sup>&</sup>lt;sup>30</sup> Exp. B 71 glosses *bèi* 誖 (inconsistent, contradictory, perverse) as "not *kě* (admissible)" (誖,不可也) and *kě* (admissible) as "not inconsistent" (是不誖).

this, some are not). Nor is it likely to refer to whether two assertions are true of something or not, in which case it should read "huò dàng huò bù dàng" 或當或不當 (one fits, one does not). The syntax seems simple, the most natural interpretation being "one is admissible, one is not admissible." Since the two instances of "one" probably refer to assertions, they most likely refer to the two assertions mentioned in the preceding line, part (3).

An obstacle to this proposal is that part (3) states that both claims are *in*admissible, rather than one admissible and one not. But if we consider the logical relation between parts (4) and (5), we can see how part (4) is probably referring to the claims in (3). As explained a few paragraphs back, the conjunction  $\acute{e}r$   $\overleftarrow{m}$  is typically used to form serial verb constructions indicating the conditions under which something occurs, when those conditions are weaker than necessary or sufficient conditions. Examples of this use of  $\acute{e}r$   $\overleftarrow{m}$  are provided by statements (i) and (iii) of this very explanation. State-

[page 250] ment (i), for instance, begins: "some being non-oxen [ $\acute{er}$  雨] they are non-oxen" (或非牛雨非牛也). Now part (5) refers to the act of claiming that "oxen-and-horses are oxen" is inadmissible. That act can be seen as following from the conditions in part (4) if we interpret (4) putatively and take the pronouns in (4) to refer to the two claims in (3). That is, a person might *treat* one of the two claims "oxen-and-horses are oxen" and "oxen-and-horses are non-oxen" as admissible and the other as inadmissible, and in so doing go on to claim that "oxen-and-horses are oxen" is inadmissible. And, to reiterate, the overall point of statement (ii) is that if, as statement (i) has shown, the status of these two claims is equivalent, then it is inadmissible to deem just one of them inadmissible, as a disputer who asserts the claim in Cn. B 67 presumably does ("oxen-and-horses are non-oxen").

Now let me consider the other interpretations. Graham reads "huò kě huò bù kě" as "it being admissible of some but not the others." He does not explain the line further; in particular, he gives no indication of what the word "it" refers to. My guess is that it refers to the term oxen. That is, Graham's interpretation is, in effect, "the term oxen is admissible of some portions of oxen-and-horses but not others." However, if this is Graham's interpretation, it faces two problems. First, it seems to garble the syntax of the line. The most natural reading is "one/some is admissible, one/some is not admissible," but his interpretation reads, "with respect to some, it is admissible, with respect to others, it is not admissible." Second, his interpretation treats  $k\check{e} = 1$  as evaluating the relation between an assertion and objects, which seems incorrect, as just explained. A third problem we have already mentioned: On Graham's interpretation, the logical relation between parts (3), (4), and (5) is puzzling. He appears to render the text as, "if it is inadmissible to say...'Oxen-and-horses are oxen,' then...it is likewise inadmissible to say "Oxen-and-horses are oxen," is inadmissible."

Hansen renders "huò kě huò bù kě" as "we treat [it] as partially admissible and partially inadmissible." He too does not explain what the "it" in his translation refers to. Going by the context provided by the preceding line, "it" appears to refer to oxen-and-horses, or "oxhorse," in

[pages 251] Hansen's rendering. But one reason Hansen gives for emending the text is that doing so yields coherence between *huò kĕ huò bù kĕ*, which says "some admissible, some not admissible," and the preceding lines, which say the two claims "oxen-and-horses are non-oxen" and "oxen-and-horses are oxen" are both *in*admissible (191). So here Hansen seems to take "some" to refer to the two claims. This is correct, I think, but I do not see how it fits together with Hansen's translation. Nor does Hansen explain why the Mohist would bother making a statement as empty as "If 'ox-horse is non-ox' is inadmissible and 'ox-horse is ox' is admissible, then one of these claims is admissible and one inadmissible." As to the logical

relation between (4) and (5), on Hansen's parsing there is none. I pointed out the problem with this reading earlier: It makes the  $\acute{e}r$   $\overrightarrow{m}$  at the head of part (5) redundant.

Makeham reads (4) as, "Accordingly, it is in some respects admissible and in other respects inadmissible." He specifies that "it" refers to the claim "oxen-and-horses are non-oxen" (171). He does not explain what "in some respects" refers to. Presumably it refers to considering the horses, on the one hand, and the oxen, on the other. But there are several problems with this interpretation. First,  $hu\dot{o}$  或 generally refers to either some of a group or one of a pair. Makeham does not explain how it can mean "in some respects" or why this reading is preferable to the more natural reading, "some/one is admissible, some/the other is inadmissible," which seems to refer to *two* claims, not one. Second, it is not clear how (4) follows from the preceding three parts. Part (1), according to Makeham, says that "oxen-and-horses are non-oxen" is admissible; parts (2) and (3) explain why some disputers would say it is inadmissible. How does the conclusion follow that it is in some respects admissible, in some inadmissible? Third, on my reading, though not Makeham's, the text so far has not actually asserted that "oxen-and-horses are non-oxen" is admissible in any respect. It has considered only conditionals.

Like Hansen, Makeham treats (5) as logically independent of (4). However, his interpretation has a further problem, for there is a tension be-

[pages 252] tween his reading of (5) and his reading of (4). Part (4), on his view, states that the claim "oxen-and-horses are non-oxen" is in some respects admissible and in others not. But a consequence of his reading of (5) is that it is inadmissible to deny "oxen-and-horses are oxen," as a proponent of "oxen-and-horses are non-oxen" must. Hence by (5), on Makeham's reading, "oxen-and-horses are non-oxen" seems in *no* respect admissible.

**Explanation, statement (iii).** "(6) Furthermore, if, oxen not being two and horses not being two, oxen-and-horses are two, then there's no difficulty, without oxen being non-oxen or horses being non-horses, in oxen-and-horses being non-oxen and non-horses."

The four interpretations generally agree concerning the parsing and translation of this statement. The interpretive questions here concern the statement's significance. In my view, none of the previous interpretations satisfactorily accounts for the logical relation between statements (ii) and (iii) (or between Makeham's parts (5) and (6)). The problem is that, at least on some interpretations, the end of statement (ii) (part (5)) and statement (iii) (part (6)) seem to contradict each other. For instance, both Hansen and Makeham hold that part (5) states that it is inadmissible to claim that "oxen-and-horses are oxen" is not inadmissible, then presumably it is wrong to claim that oxen-and-horses are non-oxen. But statement (iii) seems to accept this claim, as it states that there's no difficulty in claiming that oxen-and-horses are non-oxen and non-horses. Conversely, if oxen-and-horses are non-oxen and non-horses, as (iii) states, then presumably it's inadmissible to say they're oxen. But then (iii) seems to contradict (5). None of the previous interpretations shows how to explain away this apparent contradiction. Moreover, since (iii) is the final statement in Exp. B 67 and is less ambiguous than (ii), it seems to be a key to the point of the whole passage.

The interpretation I propose explains the apparent contradiction away by pointing out that (5) is in fact not a claim the text asserts, but part of the consequent of a conditional, statement (ii). The point of the conditional is not to assert that "oxen-and-horses are oxen" is admissible. It is that we must treat the claims "oxen-and-horses are oxen" and "oxen-and-hor-

[page 253] ses are non-oxen" similarly: if we take either to be admissible or inadmissible,

then we must take both to be so. The text does not contradict itself, because it never actually asserts that "oxen-and-horses are oxen" is admissible or that "oxen-and-horses are non-oxen" is inadmissible.

The purpose of statement (iii), I suggest, is to extend the point of statements (i) and (ii) from assertions about whether or not the predicate *oxen* applies to the sum oxen-and-horses to those about whether or not the *pair* of predicates *oxen* and *horses* apply. Obviously, the claim "oxen-and-horses are oxen and horses" (*niu mă niu mă yě* 牛馬牛馬也) is admissible. Hence the text omits discussion of this claim. But by Cn. B 67 and statement (i), the antithetical claim must also be true for each of the predicates *oxen* and *horses*. That is, if "oxen-and-horses are oxen and horses" is admissible, then "oxen-and-horses are non-oxen and non-horses" should also be admissible. Statement (iii) explains that this is indeed unproblematic, provided we recognize that oxen-and-horses is the sum of two kinds of things. Since one of these, oxen, are non-horses, and the other, horses, are non-oxen, by the same grounds that permit us to assert that oxen-and-horses are oxen and horses, we can also assert that oxen-and-horses are non-oxen and non-horses.

If this interpretation is correct, then Graham is mistaken in claiming that the point of the canon is that both of the claims "oxen-and-horses are oxen" and "oxen-and-horses are non-oxen" are unacceptable, and only the claim "oxen-and-horses are non-oxen and non-horses" is correct.<sup>31</sup>

[page 254] Rather, the latter claim is simply another consequence of statement (i), which entails that there are the same grounds for all three of these assertions, as well as for the assertion "oxen-and-horses are oxen and horses." Of these claims, perhaps the one the text comes closest to actually asserting is "oxen-and-horses are non-oxen and non-horses," since presumably the Mohists would affirm the antecedent of the conditional in (iii). But the overall point of the canon and explanation is not to endorse or reject any of these claims over the others. It is to show that they are all on a par logically. Indeed, it would be inconsistent for the text first to claim, in statements (i) and (ii), that if "oxen-and-horses are non-oxen" is admissible then so is "oxen-and-horses are oxen," and then to go on to insist in statement (iii) that only "oxen-and-horses are non-oxen and non-horses" is admissible.

<sup>&</sup>lt;sup>31</sup> As mentioned in the second paragraph of my discussion of the canon, Graham believes the point of Cn. B 67 is "to dismantle the apparently self-evident principle that the whole is not one of its parts" (*Studies*, 200). As he sees it, the text refutes this by showing that "it makes no more sense to say 'X and Y are not X' than 'X and Y are X'; ...what should have been said is that X and Y are non-Y and non-X" (200). Graham does not explain how "X and Y are non-Y and non-X" amounts to a rejection of the claim that the whole X-and-Y is not one of its parts, X or Y. It looks to me instead like one way of reiterating that claim, or more precisely the claim that the whole is not either one of its parts.

<sup>&</sup>lt;sup>32</sup> For instance, Hansen interprets "oxen-and-horses are non-oxen" as "some of it (ox-horse) is non-ox (the horse part)" (154).

program. It seems rather to be a clarification of a loophole or defect in that program. After all, the Mohists are explaining how two apparently contradictory assertions can be admissible at the same time, contrary to their original un-

[page 255] derstanding of bi 彼 (exclusive alternatives) and bian 辯 (disputation). To their demerit, they merely explain the anomaly, without presenting a principled or systematic solution by which to avoid it.

Like Graham, Makeham seems unjustified in saying that the point of the canon is "to show that the two propositions ["oxen and horses are oxen" and "oxen and horses are non-oxen"] are equally illegitimate" (172) and in holding, again with Graham, that the point of statement (iii) is that of the claims mentioned, only "oxen-and-horses are non-oxen and non-horses" is admissible (171).<sup>33</sup> Again, the text neither explicitly endorses nor rejects any of the assertions. It merely explains the relationship between the grounds for them, showing that if one grants that any of them are admissible, then all three are.<sup>34</sup> The overall point of the canon and explanation is exactly what the canon says, no more and no less: there are equal grounds for deeming "oxen-and-horses are non-oxen" admissible or inadmissible.

However, Makeham provides an insightful observation about the broader consequences of Cn. and Exp. B 67. Although, disappointingly, the text does not develop this point explicitly, what Exp. B 67 shows, Makeham points out, is that contending over whether oxenand-horses are oxen or non-oxen is not a legitimate case of *biàn* 辯 (disputation). A legitimate *biàn* is a dispute over which one of two complementary terms, such as *oxen* 

[page 256] and *non-oxen*, fits something. The Mohists stipulate that the two terms in question must be exclusive alternatives, which cannot both be impermissible (Cn. A 73) and cannot both fit the object (Exp. A 74). In Exp. B 35, they identify two sorts of failure to meet these criteria. One is a case in which the two terms in fact refer to the same thing, such as when one party deems something "dog" and the other "hound," when *dog* and *hound* are understood to be coreferential. The other is a case in which the two terms refer to different, but not exclusive alternatives, such as when one party deems something "ox" and the other "horse." In these sorts of cases, both terms could fail to fit the object. For instance, if the object in question were a goat, then both *dog* and *hound* and both *ox* and *horse* would fail to fit.

Makeham observes that B 67 illustrates a third sort of case in which "a third possibility has not been excluded," namely that the thing in dispute turns out to be neither X nor non-X, but both X and something else (172). As he says, "once it is recognized that *níu-mă* is two [as statement (iii) says], then the dispute over whether *níu-mă* is *fēi níu*...or *níu* is seen to be an example of 'failing to engage in disputation' (B 35) because the two parties are not disputing the same object" (171). Because the object in this case is a *jiān* that is a combination of two kinds of things, here we can contend that both *oxen* and *non-oxen* fit, and that, as Exp. B 67

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<sup>&</sup>lt;sup>33</sup> Makeham suggests that this statement is "a disguised tautology" (171). This claim seems unfounded, since "non-oxen and non-horses" is not logically equivalent to "oxen and horses." (Makeham's suggestion (171) that  $f\bar{e}i \ niu$  非牛 (non-ox) is equivalent to  $m\check{a}$  馬 (horse) seems to me unjustified.)

Though the text does not make the point explicitly, in this context seven claims can be made of oxen-and-horses: that they are oxen-and-horses, that they are oxen, that they are horses, that they are non-oxen, that they are non-oxen, that they are non-oxen and non-horses, and that they are non-(oxen-and-horses). (In Chinese, the last claim would be *niu mǎ fēi niu mǎ 牛馬非牛馬*.) As Hansen correctly remarks (154), by the principles the Mohists present in Exp. B 67, all of these are potentially admissible except the last, which is the only one structurally analogous to the self-contradiction "oxen are non-oxen."

<sup>&</sup>lt;sup>35</sup> Strictly speaking, the case in question does not conform to the characterization of "failure to engage in disputation" given in Exp. B 35. Nevertheless, Makeham's basic point stands.

explains, it is equally permissible or impermissible to assert both. Unlike the examples the Mohists give in Exp. B 35, in this case what prevents the two claims from constituting a proper bian (disputation) is not a semantic relation between the terms at stake, but the nature of the object in question—namely that it is a sum or aggregate of two distinct kinds of things, which prevents it from being clearly  $shi \not\equiv or fei \not\equiv$ . The lesson is that in semantics and argumentation, jian must be handled differently from other objects.

To sum up, Cn. and Exp. B 67 leave us with two main sets of implica-

[page 257] tions about *biàn* and *jiān*. First, a natural consequence of B 67, though not one the text itself presents explicitly, is that any dispute over whether one of the terms *X* or *non-X* applies to the sum of the two things or kinds of things X+Y is undecidable. Any criterion one picks will be arbitrary, and one could equally well pick an antithetical criterion, yielding the opposite answer. So there can be no "winner" between the pair of claims "X+Y is X" and "X+Y is non-X" (or even between "X+Y are X+Y" and "X+Y are non-X and non-Y"). Such a dispute fails to meet the formal criteria for a proper instance of *biàn* as set forth in A 74, A 75, and B 35. Unfortunately, the Mohists fail to incorporate this point fully into their explicit account of disputation.

Second, Exp. B 67 suggests there is a limit to the extent to which the Mohists really consider  $ji\bar{a}n$  to form  $t\check{i}$ —or at least that they implicitly draw commonsense distinctions between the way in which different sorts of  $ji\bar{a}n$  can be considered individual  $t\check{i}$ . In my view, if they genuinely regarded the sum oxen-and-horses as forming a single, individual "unit," then they would simply admit that this unit does *not* fall under the extension of *oxen*, and thus only "oxen-and-horses are non-oxen" would be considered admissible. But instead they hold that fundamentally  $n\acute{i}u$   $m\check{a}$  (oxen-and-horses) are two things, not one. Cn. B 12 states that segregated things can form "one unit," but a  $ji\bar{a}n$  such as oxen-and-horses still does not form a single unit in the same sense that the  $ji\bar{a}n$  comprising only oxen does, and perhaps the  $ji\bar{a}n$  comprising all and only oxen is not a single unit in the same sense as a single oxen, either.

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# **Appendix: Competing Translations of Canon and Explanation B 67**

## Proposed translation:

Canon. Deeming not admissible oxen-and-horses' being non-oxen and deeming it admissible are the same. Explained by:  $Ji\bar{a}n \not\equiv \text{(collection, sum)}$ .

Explanation. If it's admissible that, some [part of the sum oxen-and-horses] being non-oxen, [oxen-and-horses] are non-oxen, then it's admissible that, some being non-oxen and some oxen, [oxen-and-horses] are oxen. Therefore, if saying "oxen-and-horses are non-oxen" is inadmissible [and] "oxen-and-horses are oxen" is inadmissible, then treating one [of those two claims] as admissible and the other as not admissible and [thus] saying "oxen-and-horses are oxen" is inadmissible" is likewise not admissible. Furthermore, if, oxen not being two and horses not being two, oxen-and-horses are two, then there's no difficulty, without oxen being non-oxen or horses being non-horses, in oxen-and-horses being non-oxen and non-horses.

# Makeham:

*Canon*. There are the same grounds for regarding "Oxen and horses are non-oxen" as inadmissible as there are for regarding it as admissible. Explained by *jian*, 'mass-sum compounding.'

Explanation. (1) Since some are non-oxen, then non-oxen is admissible. (2) Accordingly, since some are non-oxen and some are oxen, then oxen is also admissible. (3) Thus it is said that "oxen and horses are non-oxen' is inadmissible," and also that "Oxen and horses are oxen' is inadmissible." (4) Accordingly, it is in some respects admissible and in other respects inadmissible. (5) And, it would also be inadmissible to say that "oxen and horses are oxen' is inadmissible." (6) If oxen are not two, and horses are not two, but oxen and horses are two, then, without the oxen being the non-oxen and the horses being the non-horses, there is no difficult-

[page 259] ty with "Oxen and horses are non-oxen and non-horses." ("Marginalia," 169)

## Graham:

*Canon.* There are the same grounds for denying that oxen-and-horses are not oxen as for admitting it. Explained by: the total of the two.

Explanation. If it is admissible that since some are not oxen they are not oxen, then since some are oxen though some are not, it is equally admissible that they are oxen. Therefore, if it is inadmissible to say either "Oxen-and-horses are not oxen" or "Oxen-and-horses are oxen," then, it being admissible of some but not the others, it is likewise inadmissible to say "'Oxen-and-horses are oxen' is inadmissible." Moreover, if neither oxen nor horses are two, but oxen and horses are two, then, without the oxen being the non-oxen or the horses being the non-horses, there is no difficulty about "Oxen-and-horses are non-oxen and non-horses." (Graham, Later Mohist Logic, 439)

## Hansen:

*Canon*. There are the same grounds for treating "ox-horse non-ox" as either inadmissible or as admissible. Explained by: *chien* ['compounding'].

Explanation. If, when part is non-ox, "is non-ox" is admissible. Then since part is ox thought part is not, "is ox" is also admissible. Therefore, if we say "'Ox-horse is non-ox' is inadmissible" and "'Ox-horse is ox' is admissible" then we treat [it] as partially admissible and partially inadmissible. And it is, further, inadmissible to say "'Ox-horse is ox' is inadmissible." Moreover, ox is not two; horse is not two, yet ox-horse is two, thus ox is not non-ox, horse is not non-horse yet there is no difficulty with "ox-horse is non-ox-non-horse." (Language and Logic, 154)