

**Distinctions, judgment, and reasoning in classical Chinese thought**

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July 2012

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### Abstract

The paper proposes an account of the prevailing classical Chinese conception of reasoning and argumentation that grounds it in a semantic theory and epistemology centered on drawing distinctions (*biàn* 辯) between the similar and dissimilar kinds of things that do or do not fall within the extension of ‘names’ (*míng* 名). The paper presents two novel interpretive hypotheses. First, for pre-Hàn Chinese thinkers, the functional role associated with the logical copula is filled by a general notion of similarity or sameness (*tóng* 同). Second, these thinkers’ basic explanation of reasoning is that it is a process of moving from a comparison of whether something is similar to a ‘model’ or ‘standard’ (*fǎ* 法) to a judgment about whether that thing is part of a certain kind (*lèi* 類). Classical texts treat judgment as the attitude of predicating a ‘name’ of something, or, equivalently, of distinguishing whether something is the kind of thing denoted by a certain term. Reasoning is treated as a process of considering how some acts of term predication, or drawing distinctions, normatively commit one to making further, analogous predications or drawing further, analogous distinctions. Inference is thus understood as the act of distinguishing something as a certain kind of thing as a result of having distinguished it as similar to a relevant ‘model’ or ‘standard’. The paper concludes by summarizing the consequences of the proposed account of early Chinese semantic and logical theories for the interpretation of other areas of classical Chinese thought.

**Keywords:** Chinese logic, distinctions, analogical reasoning, kinds, models

## Distinctions, judgment, and reasoning in classical Chinese thought

CHRIS FRASER\*

### 1. Introduction

Scholarship on Chinese logic since the first half of twentieth century has displayed a marked tendency to seek and emphasize equivalences between Chinese and Western logical concepts and theories while downplaying the distinctive features of classical Chinese logic. In some cases, Chinese logical concepts have been hastily equated with Western notions.<sup>1</sup> In others, the basic structure of Chinese logical theory has been neglected.<sup>2</sup> In still others, that structure has been addressed, but in an oddly ad hoc, incoherent way.<sup>3</sup> Much energy has been

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<sup>1</sup> To cite only a few selected examples, *Hu 1969*, 93–98, interprets the later Mohist ‘Lesser Selection’ as explicitly introducing various forms of deductive and inductive inference. *Tán 1964*, 420, identifies the Mohists’ concept of *cí* 辭 (phrasing) with the proposition and treats their notion of *shuō* 說 (explanation) as a three-stage argument, albeit one modeled on medieval Chinese Buddhist logic, not the syllogism. *Chén 1996* straightforwardly identifies the Mohist concepts of *míng* 名 (names), *cí*, and *shuō* with the contemporary notions of ‘concept’, ‘proposition’, and ‘inference’. Similarly, *Sūn 1994*, 263, identifies *míng* and *cí* with ‘concept’ and ‘proposition’ and holds that *shuō* is a ‘proof’ aimed at establishing a *cí* as ‘thesis’ or ‘conclusion’. Neither writer considers how the theoretical roles of the Chinese concepts might render such identifications problematic. *Harbsmeier 1998* equates the Mohist concept of *biàn* 辯 (distinction-drawing) with ‘logical analysis’, an interpretation that generates such incongruous consequences as his statement that for the Mohists, ‘The aim of logical analysis was to establish a correct description of the world’ (331)—as if they took ‘logical analysis’ to be an empirical field of study. *Zhang and Liu 2007*, 88, equate the role of the Mohist notion of *fǎ* 法 (models) in naming with that of essence in Aristotle’s account and identify inference by comparison with *fǎ* as a form of deduction (94), when in fact such inferences are typically analogical.

<sup>2</sup> *Harbsmeier 1998* entirely omits discussion of the four core techniques identified in the Mohist ‘Lesser Selection’ (see section 7 below) or their theoretical significance. *Zhang and Liu 2007* survey various logical notions from different parts of the Mohist corpus while making no attempt to examine how these might fit together into a unified framework.

<sup>3</sup> *Graham 1978* and *1989* present an elaborate, systematic interpretation of later Mohist semantics and logic, yet Graham’s controversial view that the later Mohist texts are organized according to a fourfold division of knowledge prompts him to claim that the single word *biàn* refers to two distinct fields in different parts of the *Mòzǐ*. On Graham’s account, in the later Mohist canons, *biàn* is part of ‘disputation’, the study of names and relations between names, which yields a priori, logically necessary judgments based on analysis of the definitions of names. By contrast, in the ‘Lesser Selection’, he claims it is part of ‘description’, the study of relations between names and objects, which yields knowledge that is contingent and transient. His account thus splits into at least two fields what for the Mohists appears to have been a single theory of *biàn*, incorporating semantics and rudimentary principles of logic and rhetoric and applicable to any area in which discussion or debate might arise as to whether something is *x* or not, where ‘*x*’ is any term. Besides raising a puzzle as to why the Mohists would use a single label for two discrete fields, Graham’s proposed distinction between ‘description’ and ‘disputation’ collapses as soon as we observe that canons such as A74 and B35, which he claims concern ‘disputation’, are clearly also concerned with ‘description’, since they treat the issue of which of two opposing terms fits an object, and also that some canons addressing name-object relations (such as A78) employ the same notion of ‘necessity’ (*bì* 必) that he associates with ‘disputation’. For an overview of criticisms of Graham’s approach, see *Fraser 2003*. For detailed critiques, see *Harbsmeier 1980*, *Geaney 1999*, and *Chong*

devoted to demonstrating that classical Chinese thinkers indeed ‘were logical’ or possessed the same logical concepts as the classical Greeks, such as the laws of excluded middle or non-contradiction, or as modern logic, such as quantifiers or conditionals.<sup>4</sup> Such projects sometimes appear motivated by dubious premises, such as that it would be possible for speakers of an interpretable language to somehow be ‘non-logical’ or to apply a ‘special logic’<sup>5</sup> or that Western thought presents normative standards that Chinese thought must meet lest it be judged somehow inadequate.

Expressions of such logical laws can surely be found in the later Mohist dialectical texts, sometimes as direct statements, sometimes as indirect assumptions.<sup>6</sup> But what is especially notable about the Mohists’ treatment is that—unlike in Aristotle, for example—neither such laws nor other principles of deductive logic—whether sentential or term logic—are explicitly thematized. They are simply not the focus of theoretical attention. Instead, the focus is on *biàn* 辯, a concept that, despite previous scholarly attention,<sup>7</sup> remains insufficiently articulated.

Classical or pre-Hàn (prior to 206 BCE) Chinese texts univocally refer to processes of reasoning, argumentation, and debate or disputation as *biàn* (roughly, ‘distinguishing’ or

1999. (For convenience, references to the later Mohist texts will be given using the numbering system in *Graham 1978*.)

<sup>4</sup> See, e.g., *Cheng 1965*, *Paul 1993*, *Sün 1994*, *Harbsmeier 1998*, and *Zhang and Liu 2007*.

<sup>5</sup> *Hansen 1983* incisively critiques both the bizarre yet once common view that Chinese thought is ‘non-logical’ or incommensurable with familiar patterns of inference and the equally misguided view that the empirical study of implicit reasoning patterns in Chinese texts demonstrates that early Chinese thinkers shared the concepts and theories of ancient or modern Western logic. The former view is exemplified in *Bodde 1939* and *Nakamura 1960*, the latter in *Chmielewski 1962* and *Cheng 1965*. Hansen rightly makes the Quinean-Davidsonian conceptual and methodological point that users of a language could not systematically fail to follow basic rules of logic without thereby rendering themselves unintelligible. At the same time, however, that these users conform to basic norms of logic by no means entails that the concepts and theories by which they articulate and explain those norms will coincide with familiar Western ones.

<sup>6</sup> Explanations A73–74, for instance, clearly express some version of the principle of excluded middle and employ a principle of non-contradiction, although their conception of these principles probably addresses the semantics of terms, rather than the truth of statements.

<sup>7</sup> Several previous studies have explored the significance of *biàn*, including, for instance, *Graham 1978*, *Hansen 1983*, *Zhang 1996*, *Chong 1999*, *Fraser 2009a*, *Robins 2010*, and *Fraser 2012*. *Chong 1999* presents a particularly judicious and instructive evaluation of competing interpretations.

‘distinction drawing’) or *biàn shuō* 辯說 (distinguishing and ‘explaining’ or ‘persuading’).<sup>8</sup> *Biàn* plays a role partly comparable to dialectics in Greek thought, but perhaps even more central and wide-ranging. The notion of *biàn* stands at the heart of early Chinese conceptions of many cognitive activities. Interpreted narrowly, as ‘distinguishing’, *biàn* is the core process in sense perception.<sup>9</sup> It is also the process we engage in when we carefully evaluate a claim or think through a difficult problem.<sup>10</sup> It is an important object of knowledge,<sup>11</sup> through which it guides action. It is the crux of what we do whenever we argue, dispute, or reason with each other. Indeed, it seems to be regarded as the core or fundamental cognitive operation (*Xúnzǐ* 22/13–21), and the opening lines of the Mohist ‘Lesser Selection’ depict it as effectively the basis for all intellectual activity (*Mòzǐ*, 45/1-2). The various uses or aspects of *biàn* give the notion a set of conceptual roles roughly overlapping those of recognition, evaluation, judgment, reasoning, and debate.

The purpose of this paper is to give the concept of *biàn* a fuller characterization than previously available and to show how it stands at the center of the conceptual framework of classical, or pre-Hàn (479–206 BCE), Chinese thought, influencing the structure of fields as diverse as semantics and ethics. Specifically, the paper will explain how, for classical Chinese thinkers, *biàn* functions as a fundamental theoretical concept in semantic theory, epistemology, and logic or the theory of argumentation. Prevailing classical Chinese theories in fields we might categorize as semantics, epistemology, psychology, and logic or rhetoric

<sup>8</sup> Occasionally the texts instead use the partly synonymous term *yì* 議. See, among many possible examples, *Xúnzǐ* 18/102 or *The Annals of Lü Buwei* 4.5 or 7.5. Citations to *Xúnzǐ* give chapter and line numbers in the Harvard-Yenching concordance to *Xúnzǐ*, which can be conveniently accessed at <http://ctext.org/>. Citations to the *Annals* (also available at [http://ctext.org](http://ctext.org/)) give the standard section numbers, as in [Knoblock and Riegel 2000](#). Note that for the purposes of this paper I use the terms ‘classical’ and ‘early’ to refer to Chinese texts from the pre-Hàn or Warring States era, from roughly 479 to 206 BCE. All translations from the Chinese are my own.

<sup>9</sup> See *Xúnzǐ* 22/12–21. For a detailed discussion of the role of discrimination in early Chinese theories of sense perception, see [Geaney 2002](#).

<sup>10</sup> See, e.g., *Mòzǐ* 35/5–10. Citations to *Mòzǐ* give chapter and line numbers in the Harvard-Yenching concordance to *Mòzǐ*, accessible at <http://ctext.org/>.

<sup>11</sup> See, e.g., *Mòzǐ* 17/12, *Zhuāngzǐ* 2/70. Citations to *Zhuāngzǐ* give chapter and line numbers in the Harvard-Yenching concordance to *Zhuāngzǐ*, also accessible at <http://ctext.org/>.

all seem to be structured largely around the idea that the basic cognitive operation is that of distinguishing similar from dissimilar kinds of things, typically by comparison with a model or standard of the kind in question. This operation is the crux of *biàn*. For expository purposes, we can think of *biàn* (distinction drawing) as the central node of a web of concepts that includes similarity (*tóng* 同) and difference (*yì* 異), kinds (*lèi* 類), models (*fǎ* 法), and various types of inference. Its place in this web makes it the core explanatory notion underlying mainstream early Chinese theories about language, knowledge, and cognition. An alternative way of capturing its centrality is to say that early Chinese theorists regard perception, cognition, reasoning, and argumentation as all based on pattern recognition—that is, the practical ability to distinguish and respond to relevantly similar stimuli in a similar, normatively correct way—and pattern recognition is an apt description of the outcome of *biàn*. To expand slightly, pre-Hàn theorists see cognition, reasoning, and logic as based on norms governing the semantics of terms; they explain the semantics of terms by appeal to their proper use; and they explain the use of terms by appeal to the ability to distinguish similar from different kinds of things according to public norms. This is the general outlook that drives mainstream theories such as those of the Mohists and Xúnzǐ, and it is the prevailing view against which critics such as the *Zhuāngzǐ* writers react when they question whether there is any universal or unchanging basis for drawing distinctions.<sup>12</sup>

The paper presents two novel interpretive hypotheses that follow from this account of *biàn*. First, section 5 will propose that for early Chinese texts that treat language and logic, the functional role associated with the logical copula is filled by a general notion of similarity or sameness (*tóng*). Specifically, for the later Mohists, the classical Chinese thinkers who devote the most attention to language and logic, the significance of an assertion that we

<sup>12</sup> See, for instance, the arguments in such texts as *Zhuāngzǐ*, Book 2, “Discourse on Evening Things Out” and Book 17, “Autumn Waters.”

would interpret as stating that ‘ $F$  is  $G$ ’ is in effect that  $F$  is ‘the same’ as  $G$  in one of several relevant ways that things can be similar. Evaluating the truth of such an assertion is understood as a process of distinguishing whether  $F$  and  $G$  are indeed ‘the same’. Second, section 7 will suggest that the Mohists’ and other classical theorists’ basic explanation of reasoning is that it is a process of moving from a comparison of whether something is similar to a ‘model’ or ‘standard’ (*fǎ*) to a judgment about whether that thing is part of a certain kind. Classical texts treat judgment as the attitude of predicating a ‘name’ of something, or, equivalently, of distinguishing whether something is the kind of thing denoted by a certain term. Reasoning is treated as a process of considering how some acts of term predication, or drawing distinctions, normatively commit one to making further, analogous predications or drawing further, analogous distinctions. Inference is thus understood as the act of distinguishing something as a certain kind of thing on the basis of having distinguished it as similar to a relevant ‘model’ or ‘standard’.

## 2. *Biàn* 辯

As a first step toward supporting these generalizations, we can examine prominent uses of the concept of *biàn* in classical Chinese texts. Early texts employ the word *biàn* (usually written 辯, but sometimes 辨) in a number of interrelated ways, which seem to stem from three overlapping basic meanings. The core uses of the word seem to be as a verb referring to the act of distinguishing or discriminating things from each other and as a noun referring to distinctions. A second common use refers to argumentation. Here *biàn* is interpretable roughly as ‘to argue, dispute, or debate’ as a verb and ‘debate, argument, or disputation’ as a noun. A third, less salient use is as an adjective describing people or actions that are intelligent, clever, or skilled. The latter two uses of *biàn* can plausibly be explained as extensions of the core sense, and they probably retain the basic connotation of

distinguishing, dividing, and discriminating. For pre-Hàn thinkers, a debate or an argument is in effect an activity aimed at drawing distinctions. The adjectival use of *biàn* implies a conception of intelligence, cleverness, or wits as competence in distinguishing or discriminating things incisively and correctly. An illuminating English interpretation for *biàn* in this sense might be ‘discriminating’, as when we speak of discriminating taste or discriminating intelligence.

The conceptual ties between the three uses help to explain why pre-Hàn texts frequently use the graph ‘辨’ interchangeably with ‘辯’. In modern Chinese, these graphs express two distinct homonyms: *biàn* 辨 refers specifically to distinguishing or distinctions, *biàn* 辯 to argument or debate. By contrast, pre-Hàn texts do not regularly distinguish these words graphically. A likely explanation is that, besides sharing the same pronunciation, the two graphs were conceptually so deeply intertwined that they were considered alternate ways of writing a single word, which referred both to drawing distinctions and to the process of discussing or debating how to draw distinctions.

In the following subsections, I will make a few observations about the first set of uses of *biàn* and then discuss the second set in more detail. The third use I will set aside without further comment.

### *Biàn as ‘distinguishing’ and ‘distinctions’*

The gist of my observations about the first set of uses is that *biàn* is a central cognitive process closely associated with early Chinese conceptions of knowledge and that its conceptual role overlaps extensively with our notions of evaluating and judging. When used as a noun referring to distinctions, *biàn* is often treated as an important object of knowledge, particularly in the *Mòzǐ*. For instance, the texts speak of knowing ‘the distinction between *shì* 是 and *fēi* 非 and between benefit and harm’ (MZ 11/7, 35/7) or ‘the distinction between duty

(*yì* 義) and not-duty’ (17/13). Use of the word *biàn* as an object of *zhī* 知 (knowing) is less common in other texts (although see, e.g., *Zhuāngzǐ* 2/70). But it is typical to find knowledge presented as a matter of correctly differentiating *shì-fēi* (what is-this versus what isn’t-this) or *tóng-yì* 同異 (similar or different kinds of things). A famous passage in *Mencius* states that knowledge is ‘the heart of *shì-fēi*’ (6A:6, referring probably to the *shì-fēi* attitudes of the heart, which was regarded as the organ of cognition), and *Xúnzǐ* (2/12) explains knowledge as deeming *shì* as *shì* and *fēi* as *fēi*—in other words, getting *shì-fēi* distinctions correct. This link between *biàn* and knowing carries over when we consider the verbal use of *biàn* to mean roughly ‘to distinguish’. According to the *Xúnzǐ*, *biàn* in the sense of ‘distinguish’ is the basis for perceptual knowledge and semantics. Perceptual knowledge involves correctly distinguishing similar and different things, and names refer to things on the basis of distinctions between them (22/13–23).

Used as a verb, interpretable roughly as ‘to distinguish’, *biàn* often plays a conceptual role that overlaps those of English notions such as ‘evaluate’, ‘identify’, ‘recognize’, or ‘judge’. This suggests that for ancient Chinese thinkers, cognitive operations such as evaluation, recognition, and judgment are understood as processes of distinguishing and discriminating.<sup>13</sup> For instance, the *Mòzǐ* describes its rebuttal of fatalism as an attempt to *míng biàn* 明辨 (clearly judge or evaluate) the fatalists’ claims (35/5–6). The *Mencius* refers to accepting a large wage ‘without distinguishing ritual and duty’ (不辨禮義)—that is, without evaluating or judging whether accepting such remuneration in a particular situation

<sup>13</sup> Hansen 1983, 125, is thus correct to insist that ‘the core sense of “discriminate” still undergirds the analysis’ of *biàn* throughout the Mohist dialectical texts. He is also correct that *biàn* sometimes refers to, in his words, ‘immediate judgments—like perceptual judgments’ (120–21) and that it ‘seems to lie at the base’ of all other ‘linguistic activities’ (126). However, as we will see below, in the same passage he is probably mistaken to claim that *biàn* ‘are not viewed as the conclusions of a process of reasoning’. That *biàn* is importantly distinct from deductive or formally valid inference does not entail that it is not a kind of argument or does not comprise a ‘process of reasoning’ yielding ‘conclusions’ of some kind. Although in some cases *biàn* might refer to a direct, immediate judgment, in others it might involve an explicit process of reasoning.

accords with the guidelines of ritual and morality (6A:10). Similar uses of *biàn* occur in *Xúnzǐ* (e.g., 8/37), *The Annals of Lü Buwei* (e.g., 12.3), and *Zhōngyōng* 中庸 (sect. 22).

### *Biàn as disputation or argument*

In the second group of uses, *biàn* refers to disputation and is the main term for debate, argument, or discussion in early Chinese texts. The texts describe *biàn* in this sense at several levels of generality. The most general set of descriptions depicts it as the overall process of cognitive evaluation, reasoning, and judgment that stands at the heart of all intellectual activity and is (partly) the basis for descriptive or propositional knowledge. A second set of descriptions depicts *biàn* as a dialectical, apparently competitive, argumentative activity, a kind of debate or dispute between two parties or contending views. A third, much more specific set of descriptions presents *biàn* as a process of disputing whether some term does or does not fit some thing—that is, whether or not that object is part of the extension of the term.

The crucial observation to make about the two more general descriptions is that they both involve distinguishing whether things are *shì-fēi* (this versus not-this) or *tóng-yì* (same versus different). The relation between the three types of descriptions, then, is probably that *biàn* in the narrow sense of disputing whether a term does or does not fit a thing is the core constitutive activity of *biàn* in the two more general senses.<sup>14</sup> *Biàn* in the general sense of discussion or disputation is in effect just an extended process of *biàn* in the narrow sense of disputing whether to predicate a term of something, in which both sides make assertions that function as inferential grounds for their claim that a term does or does not fit.<sup>15</sup> *Biàn* in the sense of evaluation and judgment is the aim or outcome of this activity.

To illustrate these points, we can look at how *biàn* is explained in the Mohist

<sup>14</sup> As Hansen 1983, 120, observes, *biàn* is fundamentally ‘the fixing of distinctions for naming and judgment’.

<sup>15</sup> Chong 1999, 17, is thus correct that *biàn* has ‘both inferential and descriptive aspects’.

Dialectics and the *Xúnzǐ*, the two classical texts that discuss the concept in the most detail.

The opening lines of the later Mohist *Xiǎoqǔ* 小取 (‘Lesser Selection’) essay offer a general description of *biàn* as an extremely wide-ranging activity of inquiry and judgment.

夫辯者，將以明是非之分審治亂之紀，明同異之處察名實之理，處利害決嫌疑。焉摹略萬物之然，論求群言之比。

以名舉實，以辭抒意，以說出故，以類取，以類予。

*Biàn*—by it we clarify divisions between *shì* and *fēi* to examine the guidelines of order and disorder; clarify points of sameness (*tóng*) and difference (*yì*) to discern the patterns of *míng* (names) and *shí* (stuff, things); and settle benefit and harm to resolve uncertainty and doubt. Only then can we lay out what is so of the myriad things and sort out parallels in groups of statements.

By means of ‘names’ (*míng*) we present objects, by means of phrasing (*cí*) we express thoughts, by means of explanations (*shuō*) we bring out reasons, and on the basis of kinds (*lèi*) we select and propose. (*Mòzǐ*, 45/1-2)

This short passage presents a rich cache of information about early Chinese thought, from which I will highlight just a few observations. First, notice the fundamental role of *biàn* in intellectual and practical activity and the vast scope of its application. It is depicted as the general method of achieving understanding in virtually all areas of inquiry and practice. The passage suggests that *biàn* is the basic cognitive activity by which we guide proper conduct, including political activity; determine the proper relations between words and things; undertake inquiry, achieve knowledge, and even organize science. Specifically, it is the means by which we can determine ‘what is so’ of things—what terms are predicable of them, and thus what assertions are correct—and ‘sort out parallels’ between various types of statements, thus determining what relations between statements might provide good grounds for accepting one statement on the basis of another.<sup>16</sup> Second, the passage clearly indicates that the basis for *biàn*, and the core activity involved in it, is drawing distinctions between *shì* versus *fēi*, same versus different, order versus disorder, and benefit versus harm. Third, the

<sup>16</sup> *Graham 1978* is thus right to emphasize the ‘descriptive’ aspects of *biàn* in the ‘Lesser Selection’, although there is no reason to accept his claim that *biàn* there refers exclusively to an ‘art of description’ instead of disputation or argumentation. As *Chong 1999* contends, it can refer to both. See too *Fraser 2003*.

overall process of *biàn* involves identifying certain objects or situations by using words, stating thoughts about these things by using ‘phrasing’ (phrases or clauses), and giving reasons for what we say by using ‘explanations’. So, overall, *biàn* involves stating thoughts and giving reasons for them.<sup>17</sup> Thus there are clearly strong functional analogies between *biàn* and our concept of an argument, in which we give premises in order to support a conclusion, although structurally and conceptually there are also important differences between the two.<sup>18</sup> Finally, the outcome or conclusion of an argument is that we make a judgment and assert some sentence as true. Given the functional similarity between *biàn* and an argument, then, it would seem to follow that in the Chinese theoretical scheme, the functional equivalent of asserting a sentence is drawing a distinction and thereby applying a term to something.

If we look to the *Xúnzǐ*, our second chief source for classical theories about language and logic, we find both a similar broad application of *biàn* and also a similar narrow, concrete function. On the one hand, *Xúnzǐ* makes it clear that the overall purpose of *biàn* is to rectify the sociopolitical disorder caused by improper use of language, including faulty assertions, and to express *dào*, clarify social ranks and roles, and facilitate the completion of practical affairs. But more specifically and concretely, for *Xúnzǐ* the point of *biàn* is to rectify the use of names. Its ultimate purpose is to settle what terms are applied to what things and thus enable authorities to guide subordinates precisely in following the *dào*.

今聖王沒，天下亂，姦言起，君子無執以臨之，無刑以禁之，故辨說也。實不

<sup>17</sup> In this respect, the interpretation in *Tán 1964* of *biàn* as a series of sentences that state claims and provide reasons for them is defensible, although his identification of *biàn* with the syllogism or Buddhist *yīnmíng* 因明 logic is not. As *Chong 1999* observes, *biàn* typically include an inference preceded by a description that fixes a kind, not by the mediation of a middle term.

<sup>18</sup> We can thus acknowledge Hansen’s point that *biàn* does not refer to an argument ‘in the sense of proof’ (1983, 120), while still agreeing with Chong that *biàn* may often involve reasoning and that it is typically ‘an activity of justifying a claim by giving reasons’ (1999, 15)—an activity we can defensibly characterize as giving an argument for a conclusion. The notion of *biàn* is not linked to an explicit concept of deductive consequence or strict logical necessity. But it is linked to various types of informal reasoning, typically analogical, in which some claims are offered as inferential grounds for others.

喻然後命，命不喻然後期，期不喻然後說，說不喻然後辨。... 辨說也者，不異實名以喻動靜之道也。期命也者，辨說之用也。辨說也者，心之象道也。(正名)

Now the sage-kings are gone, the world is in disorder, and licentious statements arise. The gentleman lacks a powerful position from which to oversee them and lacks punishments with which to prohibit them. So he engages in *biàn-shuō* (distinction-drawing and persuasion). If stuff [that is, the things referred to] is not communicated, we name things. [That is, we stipulate names corresponding to the things referred to.] If naming does not enable us to communicate, then we try to reach agreement on what we're referring to. If reaching agreement on what we're referring to does not enable us to communicate, then we engage in explanation (*shuō*). If explanation does not enable us to communicate, we engage in distinction-drawing (*biàn*).... As to *biàn-shuō*, without deviating from the proper relation between stuff and names, we use it to communicate the *dào* of action and inaction. Agreement in naming things is the function of *biàn-shuō*. *Biàn-shuō* is the heart's [means of] representing the *dào*.

The Mohist Dialectics gives a complementary, more precise explanation of the narrow, specific sense of *biàn*. The text explains it as ‘contending over converses’, such as ‘ox’ and ‘not-ox’, to determine which of two such converse terms is predicable of something—which term fits the thing.

經：辯，爭彼也。辯勝，當也。

經說：(辯)。或謂之牛，或謂之非牛，是爭彼也。... (A74)

Canon: *Biàn* is contending over converses. Winning in *biàn* is fitting the thing.

Explanation: One calls it ‘ox’, the other calls it ‘non-ox’. This is contending over converses.

經說：... 或謂之牛，其或謂之馬也，俱無勝，是不辯也。辯也者，或謂之是，或謂之非，當者勝也。

Explanation: ... One calls it ‘ox’, the other calls it ‘horse’, and both fail to win—this is not *biàn*. As to *biàn*, one calls it *shì*, the other calls it *fēi*, and the one that fits wins. (B35)

So *biàn* amounts to a dispute concerning the application of two opposing terms, exactly one of which must fit the object. As the Mohists explain it, in *biàn* we debate not whether a particular sentence is true, but whether, with respect to some term, some object is *shì* or *fēi*—whether the term applies to that thing.<sup>19</sup>

To us, of course, the act of applying a term to something, as described in these

<sup>19</sup> The Mohists also treat cases in which, for various reasons, a *biàn* is not well formed, such that the object under consideration might be claimed to be both *shì* and *fēi*. For a discussion, see *Fraser 2007*.

passages, is a speech act with the pragmatic force of an assertion. Such assertions are what contemporary philosophers such as Quine and Davidson have called ‘one-word sentences’. The text makes this clear, because the descriptions it gives of the act of applying a term are the functional equivalent of *de re* ascriptions of attitudes analogous to beliefs. These descriptions identify some object and then report what ‘name’ or ‘phrase’ a speaker asserts of it or what attitude the speaker holds about it. Classical Chinese writers express such ascriptions by the formulas ‘*wèi zhī* 謂之’ (‘call it’) or ‘*yǐ wéi* 以為’ (‘take it as’). The object in question is first specified by the person (or text) making the ascription, who then goes on to state what the speaker making the assertion deems that object to be—what term the speaker predicates of it. The speaker’s speech act itself may involve uttering only a single word, but the description of that act combines a subject and a predicate, producing a complete judgment or assertion.<sup>20</sup>

So we can say, then, that *biàn* is functionally analogous to a debate over which of two contradictory assertions, such as ‘This is an ox’ and ‘This is not an ox’, is true. But it is crucial to notice that this is *not* the way ancient Chinese theorists themselves conceive of the matter. To them, what we think of as a judgment or assertion is the act of distinguishing something as a certain kind of thing and accordingly applying a predicate term to it (or withholding the term, as the case may be). Indeed, it is not difficult to see how they can employ the notion of *biàn*, or distinction drawing, in this way to explain all types of assertions, not only noun predication. For in Classical Chinese, a verb phrase—a logical term—can stand alone as a grammatical sentence, and any sentence can be nominalized to become a term simply by adding *shì* or *fēi* to its head. In the theoretical framework of classical Chinese thought, then, what we regard as the act of evaluating the truth or falsity of an assertion could in every case be construed as the act of distinguishing, with respect to

<sup>20</sup> On this topic, see also the more detailed treatment in *Fraser 2012*.

some contextually identified term, whether an object or situation at hand is either *shì* or *fěi*.

*The role of biàn in early Chinese society*

*Biàn* in the broad sense of a rhetorical contest between two parties arguing for different, opposing ways of drawing some distinction appears to have been the primary form of public discussion, debate, or persuasion in classical China. Competitive *biàn* often took place in the court of a regional lord or a state sovereign. These events appear to have been rooted partly in the practice of litigation and partly in the rhetoric used by court advisors in the ‘persuasions’ (*shuō*) through which they tried to influence political policy. Like much legal argumentation, such *biàn* often took the form of citing a precedent, analogy, or model (*fǎ*) and explaining why the case at hand should be treated similarly or not.<sup>21</sup> Focusing as they did on distinguishing cases that either did or did not fall within the extension of a certain kind, *biàn*-debates naturally tended to take the form of analogical argumentation.

*Biàn* as public debate or disputation could be pursued for a variety of ends, some extolled by ancient writers, some condemned. Constructively, it could be a means of clarifying and defending the right way (*dào*). Through it, one could lead others to distinguish *shì-fěi* correctly and thus obtain knowledge. Of *biàn* in this sense, Xúnzǐ says that ‘the gentleman must engage in *biàn*’ (*Xúnzǐ* 5/42, 5/53) and *The Annals of Lü Buwei* remarks that in the course of study, one must occasionally engage in ‘disputation and persuasion’ (*biàn shuō*) in order to expound the *dào* (4.3). This would also be the sense in which Mencius explains that he has no choice but to engage in disputation, since as a follower of the sages he must attempt to rectify people’s hearts and refute the pernicious sayings of Yáng Zhū and Mò Dí (3B:9).

<sup>21</sup> Cua 1985 was among the first scholars to point out the similarities between Chinese *biàn* and legal reasoning. See also Garrett 1993 and Harbsmeier 1998.

But *biàn* could also degenerate into a superficial game of trying to outtalk the opponent, an idle contest of wits aimed at defending sophistries, or even a simple quarrel. This side of *biàn* explains Mencius's chagrined response when told he has a reputation for being 'fond of *biàn*' (3B:9). Early texts are uniformly disparaging about such empty or flippant *biàn*. *The Annals of Lü Buwei* complains that 'those in the world who study engage in much *biàn*. Their statements are facile and phrasings are upside-down. They don't seek the facts. They strive to demolish each other, with victory as their [sole] purpose' (15.8). The *Zhuāngzǐ* 'Under Heaven' essay says that *biàn zhě* 辯者—'those who *biàn*', a phrase interpretable as 'dialecticians' or 'disputers'—'exaggerate people's hearts and change people's intentions. They can defeat people's mouths, but cannot persuade their hearts' (33/79). It complains that Hui Shī, a famously skilled *biàn zhě*, 'took opposing people as the substance of his activity and desired to make a name for himself by defeating people; that's why he couldn't get along with everyone' (33/83). In his account of the 'six schools', Sīmǎ Qiān complains that the 'School of Names'—various figures associated with the *biàn zhě*—'determine things only by names and neglect people's feelings'. They twist words so that 'people cannot get back to the thought' they were trying to express.<sup>22</sup> Practitioners of this sort of antagonistic or frivolous *biàn* cared only for victory, even at the cost of distorting the opponent's point, and they defended bizarre claims such as that 'chickens have three legs' without regard for the facts.<sup>23</sup>

The constructive and the detrimental aspects of *biàn* are helpfully contrasted in this excerpt from a 3rd-century B.C. text preserved in several later sources:

辯者別殊類使不相害，序異端使不相亂，抒意通指，明其所謂，使人與知焉，不務相迷也。故勝者不失其所守，不勝者得其所求。若是，故辯可為也。及至煩文以相假，飾辭以相悖，巧譬以相移，引人聲使不得及其意。如此，害大

<sup>22</sup> See the remarks on the *míng jiā* 名家 in *Shǐ Jì* 130. Text available at <http://ctext.org/shiji/tai-shi-gong-zi-xu>.

<sup>23</sup> For an extensive discussion of the significance of public *biàn* and the activities of the *biàn zhě*, see *Fraser 2005*.

道。夫繳紛爭言而競後息，不能無害君子。

Those who *biàn* separate distinct kinds so that they don't interfere with each other and arrange different starting-points so that they don't confuse each other. They express intentions, communicate what they're referring to, and clarify what they're talking about. They make it so that others share their knowledge and don't strive to perplex each other. So the winner doesn't lose what he defends, and the loser gains what he's seeking. If done this way, then *biàn* is admissible. When it comes to complicating phrases to falsify each other's words, embellishing phrases to pervert what each other says, and giving trick analogies to twist the other's point, they stretch the other's words so there's no way to get to his thought. If done like this, *biàn* interferes with the Great *Dào*. Engaging in tangled debates and competing to see who's last to quit can't but be harmful to a gentleman.<sup>24</sup>

Of particular interest are the details of the positive description in the first half of the passage.

Ideally, participants in *biàn* should seek to clearly distinguish distinct kinds (*lèi*) of things and different bases or 'starting points' for using a term.<sup>25</sup> Keeping these distinctions straight, they clarify the assertions they are making and the things they are referring to and through this process jointly obtain knowledge. The key to this approach to knowledge is keeping distinctions clear and correct. Conversely, in the harmful style of *biàn*, opponents distort and twist each other's words, making them come out false or inconsistent or extending them in unintended ways. They obfuscate the differences between kinds of things and uses of words, offering flippant arguments for bizarre assertions to achieve victory at all costs. (The 'White Horse Discourse' of Gōngsūn Lóng 公孫龍 is probably an example of this style of disputation, as it consists of frivolous arguments for the obviously false claim that white horses are not horses.<sup>26</sup>)

While explaining the notoriety of some early Chinese dialecticians, such as Gōngsūn Lóng, the passage also links their activities to mainstream Chinese philosophy of language,

<sup>24</sup> These remarks, attributed to Zōu Yǎn 鄒衍, are quoted in Liú Xiàng's *Bié Lù* 別錄, among other sources. See *Sīmǎ* 1959, 2370.

<sup>25</sup> A 'starting point' or 'tip' (*duān* 端) is the basis for a distinct way of using a general term. As Xúnzǐ explains, 'honor' has two 'starting points', honor with respect to moral standing and honor with respect to social status. A person can be morally honorable while having low social status or socially honored while being morally disgraceful. See *Knoblock* 1994, section 18.9.

<sup>26</sup> For a detailed discussion, see *Fraser* 2005, section 6.

epistemology, and logic. As we will see below, ancient Chinese semantic theories explained the use of general terms, and thus communication, by speakers' ability to distinguish (*biàn*) things or stuff (*shí* 實) as of the same or different kinds (*lèi*) and to apply the same name (*míng*) to all stuff of a kind. Cognition or judgment is treated as the attitude of distinguishing an object as being of the kind denoted by some term. Knowledge is a reliable ability to draw distinctions correctly, manifested by an ability to apply terms correctly. Reasoning is a process of analogical extension, taking distinctions already drawn as a basis for distinguishing further things as 'the same' or 'different' (*tóng* vs. *yì*), 'this' or 'not-this' (*shì* vs. *fēi*), 'so' or 'not-so' (*rán* 然 vs. *bù rán* 不然). Thus semantics, knowledge, and reasoning are all seen as grounded in a process of distinguishing similar from different kinds of things—that is, *biàn* in the narrow sense of distinction-drawing, the core component activity of *biàn* in the broader sense of disputation. The sections that follow sketch the links between *biàn* in the narrow sense and these other areas.

### 3. *Shuō* 說

Before moving on to discuss semantics and argumentation, let me say a few words about the concept of *shuō* (explanation or persuasion), which we have seen mentioned in both the Mohist Dialectics and the *Xúnzǐ*. The *Xúnzǐ* typically uses '*biàn-shuō*' 辨說 as a compound noun, implying that 'disputation-and-explanation' are a single activity, perhaps with two stages or two coordinate parts. According to one remark, *biàn* (disputation) without *shuō* (explanation) amounts to mere quarreling (4/4). One particularly informative discussion locates *shuō* among a series of four interrelated discursive activities leading up to *biàn* (22/36–41). The first is naming things (*mìng* 命), by which we attempt to communicate them to others. If explicitly naming what we are talking about does not enable us to communicate, we move on to a second step, seeking agreement (*qī* 期) in specifying precisely what objects

we are talking about. If these steps fail to secure communication, we move on to *shuō*, here presumably explaining why we distinguish the objects as taking a certain name. If *shuō* too is unsuccessful—probably because one interlocutor rejects the other’s explanation—we move on to *biàn* and try to settle the issue by debating how to draw the relevant distinctions. (*Xúnzǐ* seems to assume that successful communication requires that both sides agree about what is stated.) The text explains that the function of *biàn-shuō* is to reach agreement on which names apply to which objects. *Shuō* is probably the part of this overall discursive process in which we explain our reasons for drawing naming distinctions one way rather than another.

The remarks from the Mohist ‘Lesser Selection’ quoted above treat *shuō* as an aspect or a component of *biàn* devoted to ‘bringing out reasons’. Moreover, the Mohist Dialectics treats *shuō* in one of a series of passages that appear to be preliminaries to its characterization of *biàn*.<sup>27</sup> This suggests that *shuō* is a component of the preliminary process leading up to *biàn* in the narrow sense of a judgment about how to distinguish things. Thus *biàn* in the broad sense (‘debate’) probably includes *shuō* as a component; *shuō* presents grounds for drawing distinctions one way or another and so supports and explains *biàn* in the narrow sense (‘distinguish’). The *Xúnzǐ* often speaks of the two as a single process probably because ideally the dialectical process of *biàn* should always include *shuō*: in discussing how to distinguish something, we should explain our reasons.

Incorporated into *biàn* in this way, *shuō* is in effect the process of explaining reasons for distinguishing something as *shì* or *fěi*. It is thus similar to stating the premises of an argument, except that early Chinese sources recognize no standard or typical form or structure for a *shuō* nor place any constraints on the completeness of its content. So *shuō* is not a syllogism or proof. Nor is it an argument, strictly speaking, insofar as it comprises only reasons (*gù* 故) and not a conclusion. Often a *shuō* is simply one or more examples or models

relevant to the case at hand. Sometimes it comprises other, inferentially related terms or distinctions that can be used as criteria for drawing the distinction in question. Sometimes it may be a conditional statement that can be used for an inference similar to *modus ponens* or *modus tollens*. In a well-known *Zhuāngzǐ* story about a wheelwright who considers statements in ancient books mere ‘dregs and sediments’ of dead men, *shuō* is simply any explanation or account that supports the speaker’s assertions (13/71–72).

#### 4. Distinguishing *shì-fēi*: semantic theory

If the foregoing account is correct, then the outcome of *biàn* is to distinguish or recognize something as a certain kind of thing, denoted by a certain term.<sup>28</sup> That is, *biàn* is a process of judging whether some thing or situation *F* is the kind of thing properly denoted by the term *G*. This process is a form of pattern recognition, and in fact it is the same basic model that early Chinese thinkers use to explain perceptual recognition.<sup>29</sup>

Whether or not this sort of distinction-drawing judgment is correct will thus be determined by whatever determines when a term is used correctly—an issue that falls under the rubric of semantic theory or theory of meaning. This is an interesting connection, because the semantic theories of the *Xúnzǐ* and the Mohist Dialectics indeed explain communication and the correct use of words precisely by appeal to the concept of similarity and the ability to distinguish, in practice, similar from dissimilar things—again, concepts closely related to pattern recognition. Their shared underlying theory is that speakers use the same words of the same things because they have learned, through practical training, to distinguish the various similar things denoted by some term in the same way. Thus, according to the Mohists, when

<sup>27</sup> For instance, Canon A72 has ‘Explanations/persuasions are that by which one clarifies’ 說所以明也.

<sup>28</sup> In the limiting case in which we judge whether something is or is not a certain particular, the kind in question could comprise only a single object. However, according to Canon A78, the Mohists probably treat names of particulars as proper names (in their terminology, ‘private’ or ‘personal’ names 私名), which, as they put it, ‘stay’ (止) in only one particular thing.

we use a word to ‘present’ (*jǔ* 舉) or refer to something, we in effect ‘show’ the listener what that thing is ‘like’ (A31, B53). The thing is similar to paradigms of the kind of thing denoted by that word, with which the listener is already familiar. Knowing what something is ‘like’ (*ruò* 若) is all we need in order to know the thing itself (B70).<sup>30</sup>

For example, if I refer to an object in another room as ‘table’, I am informing you that the object is similar to the kind of thing conventionally distinguished as a table. One way that the Mohists explain communication is that saying a word such as *table* is like pointing to a model table for you to see. Another explanation they give is that words are like measurement tools. Calling something by a word is similar to giving you its measurement; it tells you what the thing is like.

經：聞所不知若所知，則兩知之。說在告。

說：... 夫名以所明正所不智，不以所不智疑所明。若以尺度所不智長。

Canon: On hearing that what you don’t know is like what you know, you know both. Explaining by: Informing.

Explanation: ... As to names, we use what we understand to correct what we don’t know; we don’t use what we don’t know to cast doubt on what we understand. It’s like using a ruler to measure a length we don’t know. (B70)

We can use a ruler to measure length because we know the length of the marks on the ruler and we see that the thing measured is the same length as the distance between two of the marks. Analogously, through language, we can use what listeners are familiar with to inform them about what they don’t know. By using a name of something, we indicate that the thing is relevantly similar to the other things conventionally referred to by that name. When we say something is ‘white’, we are indicating that it is the same color as the other things we call ‘white’.

So things are regarded as taking the same name because they are of the same kind,

<sup>29</sup> See *Fraser 2011*.

<sup>30</sup> For a more detailed discussion, see *Fraser 2009a*.

and they are regarded as being of the same kind because they are similar in some way. This interpretation is supported by both the Mohist Dialectics and the *Xúnzǐ*, among other texts.

*Xúnzǐ* indicates that naming is based on similarities and that all similar things take the same name:

...然後隨而命之：同則同之，異則異之 ... 使異實者莫不異名也，不可亂也，猶使同實者莫不同名也。

Then we go on to name them: If they are similar, we name them similarly; if they are different, we name them differently. . . . We cause it to be that different stuffs all take different names and do not permit confusion [in the use of the different names for different stuffs]. We also cause it to be that similar stuff all takes the same name. (Book 22, ‘Correct Names’)

The Mohists tell us that general terms, such as *mǎ* 馬 (horse), refer to all things of the same *lèi* 類 (kind), and anything similar must take the same name.

說：... 命之馬，類也。若實也者，必以是名也。...

Explanation (A78): ...Naming it ‘horse’ is [an example of] a kind [name]. As to anything like the stuff [that is, anything similar to the stuff we call ‘horse’], we must use this name....

When do two or more things count as similar or ‘alike’ (*ruò*), such that they belong to the same kind and take the same name? Why are some similarities between things relevant to determining their kind and others not? Such questions constitute a major point of controversy in classical Chinese philosophy of language. Mohist Canon A86 informs us that being ‘of the same kind’ lies in ‘having a respect in which they’re the same’ (有以同，類同也). This explanation seems too broad, however, as it would allow nearly any group of things with any shared feature to count as a kind, thus making identification of kinds highly arbitrary. The Mohists do specify certain general criteria for distinguishing kinds, such as ‘shape and visual appearance’ (NO1–2), and they explain that some things, such as a piece of wood and the night, are so different that they cannot be compared at all and so cannot be considered ‘of a

kind' (B6).<sup>31</sup> However, the criteria they provide are probably insufficient to adequately explain the basis for kind distinctions. This issue is among the chief weaknesses of later Mohist semantics and epistemology, but pursuing it here would take us beyond the scope of this paper.<sup>32</sup> By comparison, Xúnzǐ sketches an account according to which things are conventionally distinguished into kinds on the basis of how they affect human sense organs, since the sense organs of members of the same species, he claims, discriminate things in a similar way (22/16).

### 5. A hypothesis about similarity and *biàn*

So far, we have been focusing on the notion of similarity in being 'of the same kind' and thus part of the extension of the same general term. However, Mohist Canons A86 and A87 identify four distinct types of sameness and difference that may serve as the basis for *biàn*, including, most likely, cases involving the use of singular terms. (The texts do not differentiate between the notions of 'similar' and 'same', using a single word, *tóng* 同, for both.) The four are: (1) Sameness in being 'of the same kind', discussed above. This contrasts with difference in the sense of two things lacking any respect in which they are similar. (2) Sameness in being identical or coextensive (重同), as when two names refer to the same stuff (二名一實). This contrasts with difference in the sense of being two distinct stuffs. (3) Sameness in being parts of the same unit (體同), as when things are included within a single whole (不外於兼). This contrasts with difference in the sense of not being connected or attached (不連屬). (4) Sameness in being together or united (合同也), as when things share

<sup>31</sup> The point of Canon B6 is that although we may apply similar predicates to them, things of utterly different kinds cannot be compared. Although we can speak of both a piece of wood and the night as being 'long', the length of a piece of wood cannot be compared with the length of the night. Although we can speak of both an aristocrat and morally fine conduct as 'noble', we cannot compare whether an aristocrat or an instance of conduct is 'more noble'.

<sup>32</sup> For further discussion, see *Fraser 2009a*.

the same location (俱處於室). This contrasts with difference in the sense of not being in the same place (不同所). As *Graham 2003*, 335, suggests, this sense of sameness might refer to the relation between the hard and the white features of a hard, white stone (B37), the body and the cognitive functions of a living thing (A22), or the length and breadth of an object (B4). Different aspects or features of a single thing are considered to be ‘the same’ in this sense.

This taxonomy of four types of similarity or difference prompts the following observation. The Mohists take the general notion of ‘sameness’ (*tóng*) to express at least four different relations: identity or coextension, part-whole relations, jointly being constituent features or components of something, and sharing some similar feature and thereby being ‘of a kind’ and part of the extension of the same general term. These relations correspond roughly to those of identity, part versus whole, constitution, and predication, which in European languages are all typically expressed using the verb *to be*, or the copula. We can say, for example, that Cicero is Tully, in the sense that he is identical with Tully; that Cicero’s finger is Cicero, in the sense that it is part of the whole that is Cicero; that Cicero is his body, in the sense that he is (partly) constituted by his body;<sup>33</sup> and that Cicero is human, in the sense that he falls under the kind *human* and the general term ‘human’ is correctly predicable of him. The Mohists thus appear to be explaining all four of these types of assertions by appeal to their concept of sameness or similarity.

This observation invites an intriguing hypothesis about the role of the concepts of similarity or ‘sameness’ (*tóng*) and distinction-drawing (*biàn*) in early Chinese semantics and logic. The parallel between the forms of similarity or sameness the Mohists identify and our

<sup>33</sup> Strictly speaking, an exact analogue of ‘sameness in being united’ might instead be that (for example) Cicero’s height and his weight are ‘the same’ in jointly being features of Cicero. But for the purposes of this discussion, I suggest we can extend the Mohists’ notion of ‘sameness in being united’ to incorporate the

use of the verb *to be* strongly suggests that the concept of similarity or sameness plays a theoretical role for classical Chinese theorists analogous to that of *to be* or the copula in European languages. My hypothesis, then, is that for the Mohists—and, I suggest, for early Chinese thinkers more generally, given the conceptual role of *biàn* in texts throughout the early literature—the functional roles that in Western thought have traditionally been played by the logical copula are filled by a loose, general concept of similarity. Thus, for them, the significance of a typical nominal sentence in Classical Chinese of the form ‘X Y 也’ is probably that X is the ‘same’ as Y. That is, they implicitly understood assertions in Classical Chinese that we would translate into the form ‘*F* is *G*’ as in effect claiming that *F* and *G* are ‘the same’ in one of the several senses of ‘sameness’ specified above.<sup>34</sup> Evaluating the truth of such an assertion would be understood as distinguishing (*biàn*) whether or not *F* and *G* are indeed ‘the same’ in some relevant respect. More generally, early Chinese theorists probably regarded assertion, judgment, and reasoning all as processes of distinguishing whether things are ‘the same’ or not.<sup>35</sup> Stating a fact about the world would have been seen as a matter of identifying a sameness or difference, in one of the various senses of ‘sameness’. ‘White horses are horses’ would be interpreted as in effect claiming that white horses and horses are ‘the same’; ‘oxen are not horses’ as claiming that oxen and horses are ‘different’. If these interpretive hypotheses are correct, then it is no exaggeration to say that *tóng* (similarity or sameness) and *biàn* (distinguishing same and different) are the core explanatory notions in classical Chinese philosophy of language, epistemology, and logic, and that for early Chinese theorists, the fundamental cognitive operation is that of distinguishing similar from dissimilar

constituted object of which the ‘united’ items are features or aspects. For of course Cicero, the person, and his body are indeed ‘united’ and do ‘share the same location’.

<sup>34</sup> Of course, the copula may have other functions beyond these four, as might the rough concept of ‘sameness’. An obscure fragment in the ‘Greater Selection’ (*Dà Qǔ* 大取) suggests that the Mohists may have been investigating further respects in which things can be similar or ‘the same’, but for the purposes of this discussion I will omit these details.

<sup>35</sup> An earlier version of this hypothesis is presented briefly in *Fraser 2009a*, section 6.

objects, in the broad sense of ‘similar’ or ‘same’ that they employ.

### 6. Judging *shì-fēi* in practice

Suppose we are wondering whether some thing *F* is or is not *G* and thus whether it is correct to use the term ‘*G*’ of it. Perhaps we have discovered an unfamiliar animal and are trying to determine whether it counts as an ox or not. How do we decide the issue?

Early Chinese thinkers’ answer, as expressed in a rudimentary theory that we find in both the Mohist Dialectics and the *Xúnzǐ*, appeals to the notion of a model, paradigm, or criterion. We cite a model (*fǎ* 法) of the kind of thing denoted by the term in question. Then we compare whether the thing at hand is similar to the model or not. If it resembles the model, it is *shì*—that is, the thing is *G*. If not, then it is *fēi*—it is not-*G*. The Mohists’ stock example of the role of such models is artisans’ use of tools such as the compass or setsquare to determine whether something is round or square:

輪匠執其規矩，以度天下之方圓，曰：中者是也，不中者非也。

The wheelwright and carpenter grasp their compass and setsquare and with them measure square and round things in the world, saying, ‘What coincides is *shì* (this, right); what does not coincide is *fēi* (not-this, wrong)’. (26/41–42)

Both the core books of the *Mòzǐ* and the Dialectical texts make it clear that this sort of comparison with models is the pivotal step in the overall process of *biàn*. The opening paragraphs of Book 35, ‘Condemning Fatalism’, explain that to *biàn* (distinguish as *shì* or *fēi*) an assertion clearly and correctly, models or standards are needed as criteria:

然則明辨此之說將奈何哉？子墨子言曰：必立儀。言而毋儀，譬猶運鈞之上而立朝夕者也，是非利害之辨，不可得而明知也。故言必有三表。

So then how do we clearly *biàn* these doctrines? Our Master Mòzǐ states, We must establish criteria. To make statements without criteria is analogous to marking sunrise and sunset on a turntable. The distinctions between *shì* and *fēi* or benefit and harm cannot be obtained and clearly known. So statements must have the ‘three standards’.

In this early version of the Mohist theory, the criteria of comparison for analogical judgment

are called ‘*biǎo*’ (‘standards’). In the terminology of the two later versions of the theory (Books 36 and 37), they are called ‘*fǎ*’ (models), thus making the link between *biàn* and *fǎ* explicit.

Consistent with this earlier theory, the first in the series of Mohist canons leading up to the account of *biàn* in Canon A74 indicates that comparison with a model (*fǎ*) is the basis for determining whether an assertion in *biàn* is ‘so’ (correct) of a thing.<sup>36</sup>

經：法，所若而然也。(A70)

Canon: Models are what something is like and thereby is ‘so’.<sup>37</sup>

The later Mohist ‘Lesser Selection’ (*Xiǎo Qǔ*) elaborates on the role of comparison to models thus:

效者，為之法也。所效者，所以為之法也。故中效，則是也。不中效，則非也。

Emulating is the model for deeming things [that is, deeming them *shì* or *fēi*]. What one emulates is the model by which one deems. So if the thing accurately emulates [the model], it is *shì*. If it does not accurately emulate it, it is *fēi*.

The foregoing passages from the *Mòzǐ* are familiar to many scholars. What is seldom noticed, however, is that in a brief but invaluable comment on argumentative methodology, the *Xúnzǐ* presents a similar view:

凡議必先立隆正，然後可也。無隆正則是非不分而辨訟不決。

In all debate, one must first establish paradigms of correctness, only then is it permissible [to proceed]. If one lacks paradigms of correctness, then *shì-fēi* are not differentiated and debates are not resolved. (18/102–103)

In other words, as a general approach to resolving debates (*yì* 議), *Xúnzǐ* proposes to proceed by establishing ‘paradigms’ against which to compare rival assertions in order to distinguish

<sup>36</sup> Moreover, Canons A95–96 explore the detailed application of models (*fǎ*) to guide *biàn*. For brevity, I will omit these details.

<sup>37</sup> An alternative translation might be, ‘Models are that which, a thing being like them, the thing is “so”’.

*shì* from *fēi*. The word interpreted here as ‘paradigm’, *lóng* 隆,<sup>38</sup> is used frequently throughout the *Xúnzǐ* as a verb to refer to exalting something as the highest standard to follow, such as the Zhōu dynasty system of rituals (9/22), and as a noun to refer to the epitome or apotheosis of something, such as good government (14/18). One passage treats *lóng* as parallel to the concept of *fǎ* (8/11), and the two can play similar roles—for instance, Xúnzǐ claims that in mourning, three years is the ‘paradigm’ (*lóng*) (19/106)—a normative claim equivalent to saying that three years is the ‘model’ (*fǎ*). Xúnzǐ contends that the ‘kingly regulations’ of the Zhōu dynasty are ‘the greatest paradigm in the world’, which set ‘the boundaries of *shì* and *fēi*’. The text goes on to posit the distinctions drawn by the Zhōu ‘kingly regulations’ as a paradigm against which to compare a rival thinker’s teaching about how to apply the term ‘disgrace’ (*rù* 辱), which Xúnzǐ considers mistaken. He holds that the sage-kings themselves take these distinctions as a model (*fǎ*) (18/111). Since the rival teaching is dissimilar from the model, according to Xúnzǐ, it must be rejected. The convergence between Xúnzǐ’s methodological remarks here, the pattern of argument he employs, and the Mohist account of the role of models in *biàn* suggests that the Mohists are not presenting proprietary, in-house debating techniques but articulating a common, shared conception of reasoning and argumentation.

For my present purposes, this conception of how models guide judgment is significant in three respects. First, it illustrates how judgment is understood as an act of distinguishing similarities by analogical comparison with models. Second, it indicates that at the most concrete, fundamental level, the process of *biàn* is understood as one of comparing objects against models and distinguishing them as similar or different. Third, as I will now explain, the conceptual relations between models, similarity, and *biàn* suggest that the Mohists and

<sup>38</sup> *Lóng* appears here as part of the phrase *lóng zhèng*, interpretable roughly as the paradigm or epitome of what is correct or upright. Although *lóng zhèng* is used only a handful of times in the *Xúnzǐ*, the word *lóng* is

Xúnzǐ interpret not only judgment, but reasoning itself as a process of drawing distinctions on the basis of comparison to models.

### 7. An early Chinese model of reasoning and argument

As we have seen, the Mohists' explanation of how we determine whether or not to predicate a general term of something is based on a form of practical analogical inference. If our model is *G*, and the thing in question is relevantly similar to the model, then we infer that it too counts as *G*. Indeed, when Canon A70 states that a model is 'what something is like and thereby [*ér* 而] is so', the connective *ér* 而 ('and thereby') arguably expresses a type of what *Sellars 1953* calls material inference, from deeming something similar to deeming it 'so'.<sup>39</sup>

A second interpretive hypothesis I propose, then, is that the simple Mohist theory of predication examined above may also provide a key to understanding classical Chinese logical theories. Classical thinkers' core or basic conception of reasoning, I suggest, is that it is a process of moving from a comparison of whether something is similar to a model or standard to a judgment about that thing—that is, to distinguishing it as *shì* or *fěi*.<sup>40</sup> It is obvious how this simple explanation applies to analogical reasoning, since it directly describes an implicit analogical inference. And in support of this second interpretive hypothesis, we can note that arguments by analogy are by far the most common form of argumentation or reasoning in early Chinese texts. Of course, besides analogical arguments, examples of what we could construe as deductive and (non-analogical) inductive reasoning

frequently used with a similar meaning.

<sup>39</sup> Material inferences contrast with formal inferences, in that they proceed from premises to conclusion on the basis of their material content, not their logical form. Familiar examples include the inferences from 'This is red' to 'This is colored' and from 'It is raining' to 'The street will be wet'.

<sup>40</sup> This hypothesis was introduced in *Fraser 1999* and is presented briefly in *Fraser 2009a*, section 7. Chong presents a similar view when he says that, for the later Mohists, 'the activity of giving a standard in order to describe correctly is the same as the activity of giving a reason in order to defend a claim' (1999, 11).

also occur in early texts.<sup>41</sup> But when they explicitly discuss reasoning and argumentation, early Chinese theorists—the writers of relevant parts of the *Mòzǐ* core chapters, the Mohist Dialectics, the *Xúnzǐ*, and *The Annals of Lü Buwei*, for instance—do not seem to explicitly consider these other types of reasoning. I suggest that this may be because they regard all three types as different applications of a unified basic pattern, which is roughly the following. The speaker (or writer) cites or proposes a model or standard as a guide for drawing the distinction in question and thus deeming something *G* or not-*G*. The speaker next indicates how the case at hand is or is not relevantly similar to the model or standard and then asserts that the thing in question should be deemed or treated as *G* or not-*G* accordingly. The model or standard may be an example of the kind of thing under consideration or another term linked to *G* by material inference relations.<sup>42</sup> This basic pattern seems to represent the dominant conception of reasoning in classical Chinese texts.

This interpretive hypothesis is necessarily tentative, as it is a generalization from the limited body of pre-Hàn texts that explicitly discuss the methodology of judgment and inference.<sup>43</sup> I propose it for consideration because of the potential insight it might provide into early Chinese rhetoric and other areas of thought. It coheres well with the methodological remarks we have surveyed in the *Mòzǐ* core chapters, the Mohist Dialectics, and the *Xúnzǐ*, as well as the general practice of argumentation as attested in these texts and others, such as *Mencius* and *The Annals of Lü Buwei*.<sup>44</sup> It also explains why pre-Hàn theorists seem to consider all inference a matter of what, in their terminology, we can call *tuī lèi* 推類,

<sup>41</sup> Examples of causal reasoning are also common, such as in the parts of the Mohist Dialectics devoted to mechanics and optics. For brevity, however, I set these aside here.

<sup>42</sup> Such relations articulate norms governing the use of the concepts in question, such that (for example) a speaker who applies a certain concept in some case is therefore also committed to applying a second concept (or excluded from doing so, if the relation between the concepts is one of incompatibility).

<sup>43</sup> It is also not intended to be exhaustive, covering every instance of reasoning in the classical literature. Such a broad claim would be foolhardy.

‘pushing’ or ‘extending’ kinds.<sup>45</sup> The hypothesis describes a process of ‘extending’ similarity judgments—judging something to be part of, and thus ‘the same as’, a certain kind on the basis of some similarity it bears to things of that kind. Inference is seen as a process not of moving from the truth of one sentence to the truth of another, but of moving from one similarity discrimination to another. The use of the expression ‘*tuī lèi*’ tends to support the suggestion that classical thinkers regard reasoning and argumentation as fundamentally based on analogy or pattern recognition.

A further major point in support of this hypothesis is that in the most detailed text about reasoning and argumentation we have from early China, the later Mohist ‘Lesser Selection’ (*Xiǎo Qǔ*), reasoning is indeed explained purely in terms of analogies, parallels, and similarity. I have already cited two short passages from the ‘Lesser Selection’ that support this claim. One indicates that whether an assertion should be accepted is determined on the basis of kind relations—that is, similarity relations (‘we select or propose on the basis of kinds’ 以類取，以類予). The other indicates that *shì-fēi* judgments are decided by similarity to models (‘if the thing accurately copies [the model], it is *shì*; if it does not accurately copy it, it is *fēi*’). Still more evidence for the hypothesis comes in the sequel to these passages, which presents four basic argumentative techniques used in *biàn*.<sup>46</sup> All are based on similarity judgments and analogical inference. The four are:<sup>47</sup> (1) Giving analogies (*pì* 譬), which the text explains as ‘bringing up other things and using them to clarify it’ (舉也[=他]物而以明之). This probably refers to drawing an analogy between the case at hand

<sup>44</sup> One good illustration of the hypothesized conception of reasoning is the long series of analogy-based arguments in the well-known dialogue between Mencius and King Xuān in *Mencius* 1A:7. Another is the dialogue between Yīn Wén and the King of Qí in *Annals* 16.8.

<sup>45</sup> Sources for this terminology include Mohist Canon B2, *Xúnzǐ* Book 22, and *The Annals of Lü Buwei*, section 25.2. The prevalence of reasoning based on extending ‘kinds’ (*lèi*) is also illustrated by references to ‘kinds’ in numerous passages in other texts, such as *Mèngzǐ* 1A:7 and 6A:12, for example.

<sup>46</sup> These techniques may have been considered methods frequently employed in the *shuō* (explanation) phase of a *biàn* debate.

and another, more familiar or easily understood one in order to clarify the basis for one's assertion about the present case and thus presumably justify it. (2) 'Parallelizing' (*móu* 侷), or drawing linguistic parallels, explained as 'comparing phrasing and jointly proceeding' (比辭而俱行). This technique is difficult to interpret precisely,<sup>48</sup> but it most likely refers to any inference in which one affirmative assertion is used to support another on grounds of linguistic parallelism. To 'parallelize' is to make or justify an assertion on the basis of formal similarities—specifically, similarities in phrasing—to other assertions, as when one infers from 'white horses are horses' that 'riding white horses is riding horses'. Here the basis for inference is again analogical, but the operative analogy is between the formal structure of assertions, not their content or the things they are about.

Whereas analogy is based on similarities between things and 'parallelizing' on similarities in phrasing, the other two techniques, 'pulling' and 'pushing', are technically forms of *argumentum ad hominem*, grounded in similarities between the discursive commitments of the two opponents.<sup>49</sup> In these techniques, the immediate basis for our assertion is the opponent's commitment to a similar assertion concerning what we take to be a similar case. (3) 'Pulling' (*yuán* 援), or appealing to the opponent's precedent, is glossed in the text as 'saying, "you are so, how is it that I alone cannot be so?"' (曰：子然，我奚獨不可以然). This seems to be a 'defensive' form of *argumentum ad hominem*, in which one defends an assertion by citing an analogous, precedent assertion the opponent accepts and challenging him to identify a dissimilarity between the present case and the precedent. (4) 'Pushing' (*tuī* 推), or analogical extension, is explained as 'on the grounds that what they

<sup>47</sup> For a detailed interpretation of the four techniques, see *Fraser 2009a*, section 7.2. For a somewhat different interpretation, compare *Robins 2010*, 262.

<sup>48</sup> The interpretive difficulties surrounding *móu* are explored in *Fraser 2009a*, section 7.2, and in *Robins 2010*.

<sup>49</sup> I owe this helpful characterization of the four to *Robins 2010*. I use the phrase '*argumentum ad hominem*' here in the original, positive sense of an argument that seeks to rebut an opponent from premises the opponent

don't accept is the same as what they do accept, propose it' (以其所不取之同於其所取者，予之). By contrast with 'pulling', this seems to be an 'offensive' form of *argumentum ad hominem*, in which one proposes a new assertion on the grounds that it is similar to assertions the opponent already accepts.

This is not the place for a detailed interpretation or discussion of the four methods. For our purposes here, the key observation about them, relating back to the principle that we 'select and propose on the basis of kinds', is that all are specifically procedures for analogy-based argumentation, aimed at distinguishing similarities and differences among kinds of objects, situations, or assertions. All involve positing something—an object, a generally accepted assertion, or a prior assertoric commitment by one's interlocutor—as a model or standard and then, on the basis of a purported similarity to it, drawing an inference to a new assertion. They are thus just the sorts of argumentative techniques that, according to the interpretive hypotheses I have proposed, we would expect to find the Mohists emphasizing. Moreover, they are the *only* such argument moves the 'Lesser Selection' presents.<sup>50</sup> The text does not, for example, introduce any rhetorical methods that imply a model of argumentation grounded in deductive inference. This feature of Mohist logic is also explained well by our hypotheses.

So far in this section, I have been discussing explicit theories and techniques of argumentation in early Chinese texts, which should be the key to understanding classical thinkers' views of logic and reasoning. These provide the primary data for any account of early Chinese logic. Of course, even if pre-Hàn texts do not explicitly discuss deductive or non-analogical inductive inference as methods distinct from *biàn* and 'model-based'

himself has introduced, not the negative, fallacious sense of attacking the person offering an argument rather than addressing its substance.

reasoning, they may still present pieces of reasoning that can be interpreted as deductive or inductive arguments.<sup>51</sup> How does the proposed hypothesis concerning the prevailing conception of reasoning in classical China explain these? Is this explanation superior to alternative hypotheses, such as that the writers are implicitly applying an inchoate conception of reasoning similar to the syllogism, for example, or to *modus ponens*?

In response to these questions, a clarification and a caveat are in order. To clarify, the import of the proposed hypothesis is not merely that pre-Hàn writers tend to employ ‘model-based’ reasoning more frequently than other types of reasoning. It is that, given the prevailing logical theories at the time, even when these writers present what we may interpret as instances of, for example, deductive reasoning, they probably construe these as a matter of presenting models and then affirming or denying similarities. The necessary caveat is that in moving away from explicit remarks about logical or rhetorical method in the early sources, we must proceed cautiously, recognizing the limits to what we can establish. Pieces of informal reasoning are often open to multiple interpretations. Different readers might interpret the same bit of informal discourse as presenting either an analogical or a deductive argument, for instance. Moreover, that a piece of reasoning can be interpreted as instantiating a particular type of inference does not show that the reasoner possesses or is guided by a clear conception of that type of inference. Conversely, there may be no way to establish conclusively that an ancient writer is *not* implicitly employing a particular conception or theory of inference. For these reasons, in interpreting pieces of reasoning in early texts that appear in isolation from methodological remarks, we may be unable to confirm that the writer seeks to present one sort of reasoning (such as model-based reasoning) rather than another (such as a deductive argument). The most we can endeavor to show is that a text can be

<sup>50</sup> The text also mentions the concepts of ‘supposing’ (*jiǎ* 假), used to introduce counterfactual assumptions, and ‘some’ (*huò* 或), used to indicate that an assertion applies to only some, not all of a thing. But these are

explained more simply, coherently, and comprehensively as an application of one form of reasoning rather than another.

With these points in mind, let me suggest that at least some prominent examples of purportedly deductive arguments in early Chinese texts may be explained better by the hypothesis that the reasoners are working from a conception of model-based reasoning than by the hypothesis that they are applying an implicit conception of deductive reasoning. For brevity, I will examine just a pair of examples, both cited by scholars as paradigms of deductive reasoning in pre-Hàn sources. Consider the following passage, adduced as a leading example of ‘syllogistic’ reasoning in an early text (*Harbsmeier 1998*, 279, *Cikoski 1975*, 325).

齊有事人者，所事有難而弗死也。遇故人於塗。故人曰：固不死乎。對曰：然。凡事人以為利也。死不利，故不死。

In Qí there was a servant whose master got into difficulty, but the servant did not die on his behalf. He met an acquaintance on the road. The acquaintance said, ‘Indeed, you didn’t die!’ He replied, ‘It’s so. All service to others is for benefit. Dying does not benefit. So I didn’t die’. (*Annals of Lü Buwei*, 18.4)

The supposed syllogism is ‘All service to others is for benefit. Dying does not benefit. So I didn’t die’. However, this is not actually a syllogism—nor a quasi-syllogism—and only with substantial rewriting can it be reformulated as one.<sup>52</sup> Alternatively, perhaps the servant’s explanation could be interpreted as applying an enthymematic version of *modus tollens*, in which he argues, in effect, that since service to another is for benefit, and death in service to

presented in a separate section from the four major argumentative techniques and do not involve inferences.

<sup>51</sup> *Harbsmeier 1998*, 279ff. presents a series of examples that he interprets as deductive inferences.

<sup>52</sup> *Harbsmeier 1998*, 279, recasts the argument as ‘Everyone who serves others aims at profit for himself...If I commit suicide that does not aim at profit for myself...*Ergo*: I did not commit suicide’. The rephrasing still does not produce a valid syllogism. Cast in syllogistic form, the argument presumably would yield the conclusion ‘No dying is service’ or ‘My death is not service’, rather than ‘I didn’t die’. The servant could then make an additional inference from the premise that service does not require death on the master’s behalf to the conclusion ‘I didn’t die’.

another does not benefit, one does not die in service to another.<sup>53</sup> With suitable elaboration, either interpretation might explain the servant's defense of his actions, but both require considerable rephrasing of his remarks, which do not correspond neatly to either pattern of inference. By contrast, our hypothesis about model-based reasoning offers a simple, direct explanation of the servant's words. He first cites the model or standard that guides his activity in service: 'Service is in order to benefit'. What matches this standard, he will do; what does not match it, he will avoid. He points out that death does not match the standard, so he did not die. On this interpretation, the servant's defense closely parallels the general form of practical reasoning presented at *Mòzǐ* 32/1–2, which proposes that we apply 'benefiting people' as a model (*fǎ*) for conduct and then inquire, 'Does it benefit people? Then do it. Does it not benefit people? Then stop'.

My second example has been cited as a prominent instance of *modus ponens* in early Chinese sources (*Harbsmeier 1998*, 285). In this passage, Confucius's protégé Zǐ Lù seeks to dissuade him from accepting an offer of employment from Bì Xì, governor of the city of Zhōng Móu, who had supposedly betrayed the minister who appointed him. Zǐ Lù reasons as follows:

子路曰：昔者由也聞諸夫子曰：親於其身為不善者，君子不入也。佛肸以中牟畔，子之往也如之何？

Zǐ Lù said, 'In the past I heard it from you, sir: "Regarding someone who treats those close to him badly, the gentleman does not get involved". Bì Xì is using Zhōng Móu to revolt. Your going to him—what is to be said about it?'<sup>54</sup>

Roughly, the purported *modus ponens* here is: (1) If someone treats those close to him badly, the gentleman does not get involved with him. (2) Bì Xì treats those close to him badly. (3) So you should not get involved with him. Again, however, the inference is not explicit.

<sup>53</sup> The full argument might run roughly as follows: '(1) In all cases, one enters service only if one benefits. (2) Assumption: I enter service. (3) So, by (1), I benefit. (4) If I die in service, I do not benefit. (5) So, by (3), (4), and *modus tollens*, I do not die in service'.

<sup>54</sup> See *The Analects of Confucius*, section 17.7, available at <http://ctext.org>.

Considerable rewriting is needed to produce a valid instance of modus ponens. Indeed, since Zǐ Lù's 'persuasion' (*shuō*) concludes with a question, rather than an explicit conclusion, it is unlikely that his rhetoric here is guided by a conception of deductive inference.

By comparison, Zǐ Lù's reasoning aligns closely with the Mohist methodology of *biàn*, as it is plausibly interpreted as an instance of 'pulling' (*yuán*), or citing the other party's precedent and challenging him to explain how the case at hand is different. Zǐ Lù cites a standard Confucius himself has endorsed for the conduct of the gentleman: with respect to someone who does ill to those near him, the gentleman stays aloof. Zǐ Lù points out that Bì Xī has performed actions that distinguish him as a person of this kind—thus the case at hand matches the standard—and asks Confucius to explain why he does not follow his own guideline. In idiomatic English, Zǐ Lù's question can be rendered roughly as 'What is to be said about your going to him?' or 'How is it that you are going to him?' Interpreted literally, however, the point of his phrasing ('如之何') is to ask what Confucius's proposed action is 'like'.<sup>55</sup> Zǐ Lù distinguishes this as an action of the same kind as foolishly getting involved with an untrustworthy person. Since Confucius seems to disagree, Zǐ Lù challenges him to explain what action-kind it is similar to instead.

As these cases illustrate, a Mohist-inspired conception of reasoning as drawing distinctions by comparison to models seems to explain many instances of purportedly deductive argumentation in early texts at least as well as, and probably better than, familiar conceptions of deductive reasoning. Indeed, given their conception of reasoning and argumentation as centered on *biàn*, I suggest that classical Chinese thinkers may well have interpreted what we see as paradigmatic forms of deductive inference such as modus ponens (MP) or modus tollens (MT) in terms of proposing models and comparing things with them.

<sup>55</sup> As Pulleyblank 1995, 34, explains, this construction should be interpreted causatively as 'make it like what?', yielding idiomatic translations along the lines of 'how is one to deal with it?'

Within their theoretical framework, depending on the context, early Chinese theorists could have interpreted modus ponens ( $P \supset Q, P \therefore Q$ ), for instance, along roughly the following lines: ‘P is a model or standard for Q. The case at hand is relevantly similar to P. So we distinguish it as Q’. Modus tollens ( $P \supset Q, \sim Q \therefore \sim P$ ) they could have interpreted thus: ‘In deeming P, take Q as a model. The case at hand is different from Q. So we distinguish it as not-P’.<sup>56</sup> When they give what we construe as deductive arguments, then, classical writers might still understand what they are doing as a matter of citing models, pointing out similarities, and drawing distinctions accordingly. Of course, unlike modus ponens, modus tollens, or any deductively valid argument, the resulting patterns of distinction drawing are not truth-preserving. Even if their ‘premises’ distinguish things correctly, their ‘conclusion’ might nevertheless fail to do so. However, they are not intended to be truth-preserving. Pre-Hàn logical theorists did not employ a notion of valid inference, and indeed they rejected the idea that inferences based on formal structure could be invariably reliable (*Hansen 1983, Fraser 2009a, Robins 2010*). Intriguingly, in their original context, both examples of purportedly deductive reasoning discussed above are regarded as yielding *incorrect* conclusions. The servant’s remarks are considered a sophistical defense of a great wrong, which illustrate how ‘phrasings’ are inadequate for judging affairs correctly. Zǐ Lù’s challenge is hastily dismissed by Confucius through a series of metaphors implying that he is incorruptible and must accept Bì’s offer or waste his talents.

### **8. Concluding remarks: significance for other fields**

The hypotheses I have presented bear directly on our interpretation of ancient Chinese

<sup>56</sup> Of course, these *biàn*-inspired reinterpretations of MP and MT are inconsistent with each other, in that they construe the material conditional differently. The point is that early Chinese theorists might take informal pieces of reasoning we interpret as MP or MT and interpret them in terms of models, similarity, and distinctions in different contexts in ways that are ad hoc but entirely reasonable.

philosophy of language and logic. Beyond this, however, since the explicit study of logic and argumentation in a culture tends to reflect concepts and reasoning practices employed in a variety of fields, the significance of these hypotheses—if they are correct—may extend to our interpretation of other areas of Chinese thought as well, where they may help to guide new interpretations or to support and explain existing ones. I will conclude by remarking on a few examples in which this may be the case.

In moral psychology and action theory, a starting point for many Western theories, going back to the ancient Greeks, is the belief-desire model of action, typically paired with a syllogism-like model of practical reasoning. If early Chinese thinkers employ a distinction-drawing model of reasoning, not a syllogistic model, we should be cautious about assuming that they implicitly apply a belief-desire model to treat action and practical reasoning. Instead, as I have proposed elsewhere (*Fraser 2009b*), they probably apply a ‘discrimination-and-response’ model, in which the agent distinguishes her situation as being of one kind or another and then responds to it according to either brute dispositions (as when we seek what we desire) or norms in which she has been trained (as when we act in conformance with ritual propriety). Such a model also suggests that that Chinese theorists are unlikely to bifurcate reason from the passions or the cognitive functions from the conative. Instead, as is well known, they tend to associate all of these functions with a single action-guiding organ, the *xīn* 心 or heart-mind, which guides action by drawing *shì-fēi* distinctions and triggering practical responses. Early Chinese moral psychology thus may focus on training the agent’s overall ability to distinguish and respond to situations appropriately, rather than appealing to abstract reasoning processes or seeking to shape the agent’s affective or conative states.<sup>57</sup>

In ethics, the hypotheses I have discussed would lead us to expect to find an emphasis on emulating virtuous models and general behavioral paradigms, such as ritual propriety,

rather than on deducing particular consequences from universal ethical principles. This is not to suggest that early Chinese thinkers lack a notion of higher-level, relatively abstract ethical standards—in some contexts, they are very obviously applying such notions, such as the concept of *yì* 義 (duty) or the Mohists' concept of benefit (*lì* 利). But in ethical reasoning we can expect to see such higher-level criteria expressed as models and applied through similarity comparisons, rather than stated in propositional form and applied through deductive inference, as in a practical syllogism.

In epistemology, the interpretations I propose suggest that the basic conception of knowledge will be a practical ability, namely knowing how to distinguish and name things.<sup>58</sup> This form of know-how can then be used as a basis for articulating a conception of propositional knowledge. Also, since knowledge will be based mainly on pattern recognition, the early Chinese conception of knowledge is likely to emphasize the notion of reliability over that of explicit, propositional justification.

The discrimination-and-response model of thought and action also makes it relatively unlikely that Chinese thinkers would develop representational or mentalistic conceptions of the mind. To them, fundamentally, performing a cognitive function properly is exercising the ability to perform a practical skill, such as distinguishing and naming things correctly. It is not a matter of holding, reflecting on, or manipulating certain sorts of mental representations. This point helps to explain the absence of mentalistic conceptions of action or reasoning in early Chinese thought and the frequent references to an 'empty' psychological state from which actions seem to issue automatically, without self-conscious thought.<sup>59</sup>

Finally, in the philosophy of science, Chinese thinkers can be expected to regard

<sup>57</sup> For discussion of this possibility, see *Fraser 2009b*.

<sup>58</sup> I discuss this conception of knowledge further in *Fraser 2011*.

<sup>59</sup> On 'emptiness' and its links to action in Daoist thought, see *Fraser 2008*. Similar references to automatic, unselfconscious action are common in the *Xūnzi*, such as at 5/60–61 and 8/59–61. The distinction-drawing

scientific knowledge as concerned primarily with taxonomy, models, and algorithms, not deductive systematization. The dominant mode of explanation will be by models, analogies, and taxonomical description, not by deductive-nomological explanation from general laws.

A detailed defense of these programmatic generalizations about various fields of classical Chinese philosophy is beyond the scope of this paper. My aim is simply to present them as food for thought. They do seem to me plausible and potentially fruitful, however, and the high degree of coherence between these generalizations—assuming they turn out to be accurate—and the interpretive hypotheses of this paper lends support to the latter.

### Acknowledgements

Earlier versions of this paper were presented at ‘The History of Logic in China’, International Institute for Asian Studies, Amsterdam, The Netherlands, November 24–25, 2010, and at the annual conference of the Australasian Society for Asian and Comparative Thought, University of Hong Kong, July 12, 2001. I am grateful to Jane Geaney, Dan Robins, Chad Hansen, and an anonymous referee for helpful comments that prompted numerous revisions.

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model of reasoning probably helps to explain the relative absence, noted long ago by *Fingarette 1972*, of a subjective, ‘inner’ psychology in early Chinese thought.

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