



Ways of Doing Cross-Cultural Philosophy

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In 1971, Antony Flew wrote:

Philosophy, as the word is understood here, is concerned first, last and all the time with argument. It is, incidentally, because most of what is labelled *Eastern philosophy* is not so concerned—rather than any reason of European parochialism—that this book draws no materials from any source east of Suez.¹

This passage appears in Flew’s *Introduction to Western Philosophy*. As the title suggests, this book is about Western philosophy. Given that this is the topic of his inquiry, there is perhaps no reason why he should venture into what is often labelled “Eastern philosophy”.² However, rather than simply claiming that a study of Eastern philosophy is beyond the scope of his concern and leaving it at that, Flew assumed that philosophers “east of Suez” are not concerned with argument and took this assumption to license himself to disregard it.

Anyone who has even a slight knowledge of the history of Eastern philosophy, especially the philosophies that have developed in China and India, including Buddhist philosophy, would find Flew’s characterisation of Eastern philosophy amusing (to put it mildly). In China and India, debates have been a cornerstone of intellectual and socio-political activity. Indeed some Buddhist traditions still use debate as part of education to this day. Philosophical literature sprang out of highly detailed examinations of the techniques and methodologies of debate and argumentation. For instance, Indian Nyāya literature contains analyses of correct reasoning, Buddhist *pramāṇavāda* tradition investigates perception and inference as means to acquire knowledge, and the Chinese Mohist canon includes a study of correct judgements. Numerous texts can be cited which demonstrate that

philosophical literature in China and India is full of rigorous theorisation about arguments and rational reasoning.³

In fairness, it should be said that the understanding of Eastern philosophy assumed by Flew was based on a certain reconstruction of Indian philosophy that was popular at his time.⁴ This reconstruction emphasised the possibility and importance of non-conceptual, purely perceptual experience and identified rational thinking and argumentation as problematic. However, this view of Eastern philosophy—a view which is still common not just among the customers of New Age bookstores but also among philosophers—hardly represents the philosophies even of India, let alone the various philosophical traditions “east of Suez”. A more accurate representation of Eastern philosophy is now widely available (in fact, it was already available when Flew penned the problematic passage). Dismissal of Eastern philosophy along Flew’s line is, these days, considered to be intellectually dishonest.

That said, some scholars have claimed that there is, strictly speaking, no tradition of studying *logic* in the East, or if there is, that it fails to match the sophistication achieved in the West.⁵ That is, it is claimed that even though philosophers of the Eastern traditions have taken debates and argumentation as important to topics of philosophical inquiry, they have nevertheless failed to reflect on and examine the principles that underly argumentation and rational reasoning. According to these scholars, argumentation has been put to use in elaborating on the nature of language, knowledge, reality and ethics; yet, there are no investigations of the principles underlying these modes of argument apart from the particular arguments that employ them. It is claimed that Eastern philosophers have not abstracted principles of reasoning and argumentation from particular instances and they have not formalised those principles in order to examine the features and properties of the principles. This is often unified in the idea that there is no development of *formal* logic in the East. As we will see, this has been taken to imply that there is no tradition of *logic* in the East.

In this paper, I will first show that there is, indeed, no development of formal logic in the East. However, I will argue that the lack of the development of formal logic does not entail the lack of the development of logic *tout court*. I will use this point to show how to undertake a cross-cultural dialogue between Eastern and Western logicians. My examination of the possibility of cross-cultural dialogue about logic will serve as a case study of showing how to do cross-cultural philosophy and how to use non-Western materials as part of contemporary philosophy.

Formal Logic

The contemporary Western literature on logic is largely based on the formal conception of logic. One way to articulate this conception is to say that logic and logical concepts are thought of as a concern with the ways that arguments or reasoning should “look”. Proposition logic is concerned with the propositional form of argument: $A \supset B$, A so B , where \supset is a conditional and A and B are propositional variables that stand for any propositions. Contemporary logicians take the forms such

as $A \supset B$, A so B as the object of study and delegate the question of what propositions A and B stand for as irrelevant. They investigate the systematic ways of separating those forms of argument that should be considered “valid” from those that are “invalid”. Valid forms are those where the truth of the premises (what appears before “so”) guarantees the truth of the conclusion (what appears after “so”) *no matter what propositions A and B stand for*. For instance, the form: $A \supset B$, A so B , is often considered (though not by everyone)⁶ as valid because if we assume that $A \supset B$ and A are true, B must also be true, no matter what A and B stand for. Predicate logic is concerned with quantifiers and predicates involved in arguments. It is concerned with such forms of argument as: $\exists xPx$ (something is P) so $\forall xPx$ (everything is P) where P is a predicate. To elaborate on this form, assume that something (no matter what it is) is P . Does that assumption guarantee that everything is P ? Not necessarily. We can imagine a situation with two objects a and b (again, the exact identity of these objects is irrelevant) where a is P (thus something is P) but b is not P (thus *not* everything is P). So many logicians consider this form of argument to be invalid.⁷

The formal conception has led contemporary logicians to focus on the properties of formal languages that express the forms of argument. Instead of focusing on the forms of argument and reasoning expressed in natural languages such as English or Chinese or Sanskrit, they are concerned with the languages that consist of such terms as A , B (as propositions), \supset , \exists , \forall , P (as a predicate) and a (as a proper name). The focus of inquiry for contemporary logic concerns the nature of such languages. For instance: What sentences are expressible in a language consisting, for instance, only of \exists , \forall , P , a (and variables)? What expressible power would it give if we added \Box (necessity operator) to the language? What forms come out valid in what (formal) language?

Can we find studies of argument and questions like these in Eastern material? I think the answer is no. Many Chinese and Indian philosophers have investigated various features of argument and rational reasoning.⁸ However, we do not find in Eastern texts formal analyses of arguments and rational reasoning as articulated above nor do we find definitions of validity in terms of the form of arguments rather than their contents. Thus, there is no development of formal logic in the East.⁹

Because of the lack of formal logic, some scholars have been led to think that there is no tradition of studying logic in the East. For instance, Hansen claims, “Technically, classical China had semantic theory but no logic”.¹⁰ By separating formal analysis of argument from the investigation of cognitive process and identifying cognitive process as the focus of Indian and Buddhist philosophers, Siderits argues that it is a mistake to think of them as engaging with a study of logic.¹¹ More specifically about Buddhist “logic”, Garfield has this to say: “[Buddhist logic] never reaches a level of sophistication that would lead us in the modern world to take it seriously as a sophisticated account of reasoning or of consequence relations in general”.¹²

I think that we can resist these conclusions. The accounts of reasoning and argumentation that have been advanced by Eastern logicians should be taken seriously despite the fact that they did not develop a formal account of logic. I will also argue that the Eastern logic traditions can make important contributions to

the contemporary logic literature. Before explaining how to do so, however, I have to note that the dominance of formal conception in the Western logic literature constrains the methodology for studying the relevant Eastern literature.

Comparative Philosophy

If no formal study of arguments and rational reasoning is found in Eastern texts, it would seem that we cannot rely on the dominant comparative methodology for studying the logical concepts expressed by Eastern philosophers. A comparative method seeks equivalences and differences between Eastern and Western concepts.¹³ It assumes that we can achieve an understanding of the philosophies of different traditions in comparative terms based on the following methodological assumption: if one is already familiar with certain concepts in the Western tradition and wishes to understand the concepts made use of by Eastern philosophers or *vice versa*, one can grasp the “foreign” concepts by comparing them—finding equivalences and differences—with the concepts one already has.

If examination of arguments based on their forms cannot be found in the Eastern texts, however, and the formal conception of logic provides the dominant paradigm in contemporary logic literature, this comparative method of investigating Eastern philosopher’s theorisation of logical principles cannot even get off the ground. This is because no concepts expressed in Eastern texts pertain to formalised language expressing various forms and, thus, are unable to be recognised as *logical* concepts by the Western logicians.¹⁴ If this is right, a comparative philosopher would have to accept that the study of logic did not develop in the East and also accept the inference that the lack of formal logic entails the lack of logic *tout court*. It would thus seem that if we wish to conduct a legitimate investigation of logic material in the relevant Eastern literature, we would need to employ a different methodology.

Cross-Cultural Philosophy of Logic

An alternative method of engaging with Eastern material on logic could be conceived as follows. Consider the early 20th century debate between Frege and Hilbert—two of the main figures in modern logic—about consistency.¹⁵ They agree that consistency is a logical concept. Their agreement about this fundamental logical concept, however, seems to end there. For Hilbert, consistency pertains to the formal structure that can be instantiated by anything including “tables, chairs and beer mugs”.¹⁶ From his point of view, consistency pertains to a formal system where a formal system is conceived as just a scaffolding without any material attached. It followed that a system of geometry can be shown to be consistent by showing that a system of numbers is consistent so long as the two systems share the same consistent scaffolding. Hilbert took this scaffolding to be what logical principles are about. Against Hilbert, Frege claims that the thought expressed by a geometric system is different from that expressed by a number system. One is about geometric figures whereas the other is about numbers. He argued that Hilbert owes us a justification for the inference from the consistency of his number system (assuming that one can show this) to the consistency of the geometric system. For Frege, this requires 1) an analysis of concepts in a way that

brings out the complexity involved in the contents of the individual terms appearing in the system, and 2) a demonstration of the reducibility of one set of concepts and relations into another. The consistency of a set of thoughts hinges not only on the scaffolding but also on the contents of the concepts and relations involved in the set of thoughts. For Frege, logical principles are concerned with the contents of concepts and not only with the scaffolding that can be filled and used in many different ways. Frege was thus arguing that the formal conception, at least in the way that it is articulated above, is not all there is to the field of logic.

Was Frege wrong to think that the formal conception alone should not define the field of logic? The influence of the Hilbert-style approach in the 20th and 21st centuries might suggest so. However, Hilbert was ultimately silent about why Frege was wrong.¹⁷ Nor has anyone after Hilbert demonstrated that logic is exclusively formal. In fact, it is an open question whether or not logical principles—the principles that underlie rational reasoning and argumentation—must be understood according to the formal conception in Western literature. Thus, we cannot claim that the lack of formal analysis of argument is a sign of the lack of the development of logic without begging the question about what counts as a study of logic.

If this is right, the lack of formal analyses of arguments and reasoning and the lack of formal logic do not entail the lack of logic as such. Chinese and Indian philosophers investigate logical issues concerning good and bad argumentation and reasoning. They are concerned with such questions as: What follows from what? What counts as good reason? When is your reasoning warranted? They do not address these questions from a formal perspective. Instead, Chinese philosophers address these questions as part of investigating the cognitive processes of distinguishing similar from dissimilar kinds of things.¹⁸ Indian (and Buddhist) philosophers answer them by analysing the ways in which we acquire knowledge.¹⁹ The fact that they do not address these questions from a formal perspective does not imply that they do not engage with *logical* concepts or that they do not study *logic* without the assumption that logic is exclusively formal.

In fact, if we pay attention to the different perspectives from which Eastern philosophers address logical questions, we can develop a new approach to Eastern material on logic. Rather than comparing the ideas expressed by Eastern philosophers with what Western logicians know about logic, we can instead treat Eastern logic texts as sources of inspiration for a new perspective on contemporary philosophical issues. In dialogue with those Eastern texts which address logical issues from their own distinct perspectives, we can develop original solutions to contemporary issues based on the conceptual resources found in Eastern traditions. This is like fusion cuisine enjoyed by the cosmopolitan citizens of the world. Fusion cuisine is not simply a juxtaposition of two or more cuisines but is genuinely novel fare that draws on different culinary traditions. In a similar way, we can facilitate new ideas by drawing on and advancing arguments from both Eastern and Western philosophical traditions. This approach makes the “cross-cultural” part of cross-cultural philosophy redundant. One might say that it is to do philosophy.

If we were to adopt this new cross-cultural approach to philosophy, there is a possibility that we can uncover alternative conceptions of logic that have been neglected as a result of uncritically embracing the current, dominant Western view. For instance, Chinese logicians do not separate logical investigation from the cognitive process of discriminating this or that. Because of the focus on the act of discrimination, their logical investigation can be described as psychologistic.²⁰ The psychologistic conception of logic has been discredited in modern times. This is because a logical study is conceived as a study of rationality that some acts of reasoning may qualify. But, in order for reasoning to be the object of assessment, the standard for what counts as rational or irrational must be separate from the act of reasoning itself. The formal conception of logic was developed partly to overcome the difficulty of accounting for *rational* reasoning because the process in which a reasoner goes through does not tell us whether the reasoning is rational or irrational. Instead of conceding that the Chinese investigation of the process of making discrimination falls outside the field of logic, however, we can develop an alternative conception of what counts as good reason based on the study of the way in which we discriminate similar from dissimilar things. Based on this alternative conception, we can then challenge the formal conception of logic that dominates contemporary Western literature.²¹ This will not only contribute to the study of Chinese logic but, more importantly, expand the horizon of logical inquiry and enrich its analytical categories.

There is an extensive body of literature that examines the history of Western logic. Very few attempts have been made to integrate these historical and tradition-specific investigations into a contemporary examination of the conceptions of logic that determine rational reasoning and argumentation. No one has drawn on non-Western resources to propose an alternative conception. No logicians trained in the Western logical tradition have attempted to undertake a thorough and comprehensible analysis of the various Eastern logic traditions and use them to examine critically the contemporary Western conception of logic. It is time that such a study of argumentation and logical reasoning is conducted from a cross-cultural perspective. ¶

1 Anthony Flew, *Introduction to Western Philosophy* (London: Thames & Hudson, 1971), p. 36.

2 For the sake of convenience, I refer to the region “east of Suez” by “the East” in contrast to “the West” and call philosophies and philosophers of this region “Eastern philosophy” and “Eastern philosophers” respectively. The outdated label “Eastern philosophy” ignores differences between different traditions (and even within each tradition). However, those differences do not concern us for this paper and it is convenient to use the label. I should also mention that my examples are all drawn from the philosophical traditions that have flourished in China and India (including Buddhist philosophical tradition) because of my research interest, but I do not suggest that there are no philosophical traditions outside of China and India.

3 See Tom Tillemans, “Introduction: Buddhist Argumentation”, *Argumentation* 22 (2008), 1–14 (pp. 1–3).

4 See John Clayton, *Religions, Reasons and Gods: Essays in Cross-Cultural Philosophy of Religion* (Cambridge: Cambridge University Press, 2006), pp. 131–32.

- 5 See Jay L. Garfield, *Engaging Buddhism* (Oxford: Oxford University Press, 2015); Chad Hansen, “Logic in China”, *Routledge Encyclopedia of Philosophy* (London: Routledge, 1998); and Mark Siderits, “Deductive, Inductive, Both or Neither?”, *Journal of Indian Philosophy* 31 (2003), 303–21.
- 6 For example, Graham Priest, “The Logic of Paradox”, *Journal of Philosophical Logic* 8 (1979), 219–41.
- 7 If we also consider two-place predicates, i.e., relations between two things, then Aristotelian syllogisms can be shown to be a fragment of predicate logic.
- 8 For China, see for example, Hu Shih, *The Development of the Logical Method in Ancient China* (New York: Paragon Press, 1969/1922) and Christoph Harbsmeier, *Science and Civilization in China, Volume 7, Part I: Language and Logic*, ed. by K. Robinson and J. Needham (Cambridge: Cambridge University Press, 1998). For India, see several articles collected in *Indian Logic: A Reader*, ed. by Jonardan Ganeri (Richmond: Curzon, 2003).
- 9 There are several senses in which logic can be said to be “formal”. See John G. MacFarlane, *What Does It Mean To Say That Logic Is Formal?*, PhD Dissertation, University of Pittsburgh, 2000. In this paper, the “formal conception of logic” is meant to refer to the conception of good and bad arguments and reasoning as articulated above.
- 10 Hansen, “Logic in China”.
- 11 Siderits, “Deductive, Inductive”.
- 12 Garfield, *Engaging Buddhism*, p. 242.
- 13 For a long history of the use of this method in China, see Joachim Kurtz, *The Discovery of Chinese Logic* (Leiden: Brill, 2011).
- 14 This is a specific instance of the general problem associated with comparative method articulated in Koji Tanaka, “Davidson and Chinese Conceptual Scheme”, *Davidson’s Philosophy and Chinese Philosophy*, ed. by Bo Mou (Leiden: Brill, 2006), pp. 55–71.
- 15 The following discussion draws on Patricia Blanchette, “Frege and Hilbert on Consistency”, *Journal of Philosophy* 93 (1996), 317–36; “The Frege-Hilbert Controversy”, *The Stanford Encyclopedia of Philosophy* (Spring 2014 Edition), Edward N. Zalta (ed.), available at: <<http://plato.stanford.edu/archives/spr2014/entries/frege-hilbert/>>.
- 16 This is a famous remark that Hilbert is considered to have made.
- 17 See the correspondence between Frege and Hilbert in Gottlob Frege, *Philosophical and Mathematical Correspondence*, ed. by Gottfried Gabriel, Hans Hermes, Friedrich Kambartel, Christian Thiel and Albert Verrart; trans. by Brian McGuinness and Hans Kaal (Chicago: University of Chicago Press, 1980).
- 18 See Chris Fraser, “Distinctions, Judgment, and Reasoning in Classical Chinese Thought”, *History and Philosophy of Logic* 34 (2013), 1–24; Dan Robins, “The Later Mohists and Logic”, *History and Philosophy of Logic* 31 (2010), 247–85.
- 19 See *The Role of the Example (Dṛṣṭānta) in Classical Indian Logic*, ed. by Shoryo Katsura and Ernst Steinkellner (Vienna: Arbeitskreis für Tibetische und Buddhistische Studien Universität Wien, 2004); Bimal Krishna Matilal, *The Character of Logic in India*, ed. by Jonardon Ganeri and Heeraman Tiwari (Albany: State University of New York Press, 1998); Koji Tanaka, “Buddhist Philosophy of Logic”, *Blackwell Companion to Buddhist Philosophy*, ed. by Steven Emmanuel (Chichester: Wiley-Blackwell), pp. 320–30; Tom Tillemans, *Scripture, Logic, Language: Essays on Dharmakīrti and His Tibetan Successors* (Boston: Wisdom Publications, 1999).
- 20 See Martin Kusch, *Psychologism* (London: Routledge, 1995).
- 21 This point was elaborated on in Koji Tanaka, “Psychologism from a Classical Chinese Point of View”, a paper presented at the Australasian Association of Philosophy Conference, 2015.