

■ 中国现代外国哲学学会分析哲学专业委员会 编

# 中国分析哲学

ANALYTIC PHILOSOPHY IN CHINA 2009

## 2009



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# 中国分析哲学 2009

*Analytic Philosophy in China*

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# 中国分析哲学

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## 卷首语\*

江 怡

2009年，对当代分析哲学来说是一个重要的年份：分析哲学的奠基人弗雷格的奠基性著作《概念文字》发表130周年、分析哲学的主要创始人之一维特根斯坦诞辰120周年、维也纳学派在中国的传人洪谦先生诞辰100周年、分析哲学的主要创始人之一罗素访华90周年、分析哲学的早期主要代表维也纳学派发表宣言《科学的世界概念：维也纳学派》80周年。在这个特殊的时候，回忆分析哲学在中国的百年历史，我们会发现，分析哲学带给中国哲学的不再是一种理解哲学性质的看法，更重要的是如何处理哲学问题的方法；哲学分析的方法对中国哲学来说不再是一种舶来品，而是变成了研究中国哲学的一种必不可少的基本方法。进入21世纪以来，分析哲学在中国哲学界以及整个学术界的声音和影响正在逐渐增强，重视哲学分析的作用已经成为当代中国哲学家们的普遍共识。正是在这样的思想条件下，《中国分析哲学》应运而生了：她将成为中国哲学家们以分析的方式讨论思想理论的重要平台，成为中国哲学家形成和提出自己创造性思想的孵化器，成为中国哲学家与西方哲学家共同交流的重要途径。

我们知道，哲学分析方法在中国哲学中的占位，经历了几代哲学工作者的努力。张申府先生、张岱年先生最早介绍维也纳学派哲学时，就把这种哲学首先理解为哲学分析的方法，指出这样的哲学分析与唯物辩证的方法可以相辅相成，共同贡献于中国哲学事业的发展。冯友兰先生曾在中国哲学史著作中反复强调逻辑分析对中国哲学研究的重要性，金岳霖更是积极倡导以分析的方式处理中国哲学中的基本问题。他不仅通过分析建立了自己的知识论体系，弥补了中国传统哲学中的空白，而且用分析的方法讨论中国传统哲学的“道”概念，最终确立了自己的哲学信念。洪谦先生作为维也纳学派的中国传人，将毕生贡献给了分析哲学事业，他不仅大力宣传维也纳学派的分析精神，而且积极推进逻辑实证主义哲学的发展。沈有鼎、周礼全等逻辑学家更是以逻辑分析的方法深入研究中国传统哲学中的逻辑思想，整理出了具有中国传统特色

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的中国逻辑学。进入新世纪之后，当代中国哲学家们全面深入地推进了分析方法在哲学研究中的重要作用，通过分析阐述、对话交流等方式讨论了英美分析哲学在早中晚等各个时期的发展，涉及逻辑经验主义、批判理性主义、科学哲学中的历史主义、逻辑实用主义等众多内容，形成了国内外思想交流的共同平台。

特别值得注意的是，意识到澄清概念意义和分析命题意义的重要性，已不仅是我国分析哲学研究者的大力提倡，而是已经成为我国当代哲学家们的普遍共识，比较明显地表现在西方哲学史研究和中国哲学史研究中。20世纪90年代以来，我国西方哲学史研究发生了一些重要变化，其中之一就是对“存在”概念意义的澄清。围绕着对这个概念意义的理解，哲学家们形成了不同的解释阵营。一种意见认为，我们以往误解了西语中的“Being”一词，用“存在”概念翻译这个词，导致我们与西方哲学拉开了距离，所以应当恢复这个西语的本来意义，即“是”。但另一种意见则认为，“Being”一词在西语中原本就有“存在”的意义，所以无须改变原译名的用法，否则只会导致更多的混乱。还有意见认为，我们可以在不同的语境中使用不同的译名，不必在所有的情况采用统一译名。这场争论表面上看，涉及的是翻译问题，实际上关系到如何理解西方哲学，即通过对西方哲学概念意义的澄清，深入讨论西方哲学的重要问题。在中国哲学研究中，张岱年先生的《中国古代哲学概念范畴要论》（1982）开启了用分析的方法处理中国哲学概念的先河。当代研究者们（特别是港台学者）更加关注用逻辑的方法论证中国传统哲学命题的意义分疏，取得了许多重要成果，例如对《墨经》的研究。如今，越来越多的中国传统哲学的研究者认识到，对传统哲学概念的辨析，不仅可以有助于我们更好地揭示传统智慧的内容，而且有利于我们重构中国哲学的论证关系。2009年6月在华东师范大学举行的“中国哲学与分析哲学国际学术研讨会”，就集中反映了这样一种共识。

如果说当今西方哲学家把分析哲学的遗产主要归结为哲学分析的方法，那么，围绕着如何认识和使用这种方法，20世纪的中国哲学家们曾展开了各种思想论战，引发了当代中国哲学的不同发展路径。在西方分析哲学中，哲学分析方法的精髓在于以科学探究的方式追求语言意义的清晰和严格。但正是这种对哲学的科学态度，遭到了坚持哲学以追求道德理想为目标的中国哲学家们的强烈反对，由此形成了20世纪20年代到30年代在中国哲学界发生的“科玄之战”。同时，在强调经验证实的分析方法与提倡社会革命的政治理想之间，也发生了影响后世的“问题与主义之争”。冯友兰先生虽然大力宣传逻辑分析对中国哲学的重要意义，但他在新理学的体系建构中却没有坚持运用这种方法，而是强调形而上学在新理学中的决定作用，由此造成了他与洪谦先生在20世纪40年代的一场学术公案。这些思想论战虽然表面上针对不同时期的不同问题，但实际上都关系到中西不同思维方式之间的交锋，其实也是我们长期简化地理解西方

哲学的结果，即把西方哲学看做与中国哲学截然不同的、铁板一块的一种思维方式。当今的中国哲学家们已经认识到，即使当代西方哲学家们也会对哲学的性质持有不同的理解，以何种方式讨论哲学问题就变成了哲学流派分野的主要依据。由于冯友兰、金岳霖等哲学家早已指出，中国传统哲学严重缺乏逻辑分析，因而大力提倡和运用分析方法讨论中国哲学，自然就成为当今中国哲学家们推进哲学发展的重要内容。

反思分析哲学在中国的百年历史，我们可以从正反两个方面理解哲学分析方法对中国哲学研究的重要意义。一方面，严格的逻辑分析使我们清楚地看到了中国思想传统中的明显缺陷，哲学史研究从以往对“经史子集”的经典引证，走向了对哲学概念的体系建构；而中国哲学学科的确立，正是按照西方哲学模式对中国传统经典文本进行义理分梳的逻辑结果。但另一方面，完全按照西方哲学的模式建构中国哲学，又使得我们失去了中国传统思想中的“天人之道”、“人世之道”；而由此带来的中国哲学研究中的缺失，往往被归咎于逻辑分析方法的运用。不幸的是，在当代中国哲学研究中，哲学分析方法总是被看做西方哲学思维方式的典型代表，因而，在任何一次中西哲学争论或冲突中，分析哲学总是遭到“野蛮的”（即武断的）攻击。然而，这完全是对分析哲学及其哲学分析方法的误解。

概括地说，分析哲学的特征主要表现在这样几个方面：首先，它与现代逻辑具有非常密切的关系。至少在分析哲学诞生之初，现代逻辑就被看做哲学研究的主要手段，而且，早期的分析哲学家大多都是根据现代逻辑从事哲学分析活动；虽然某些分析哲学家并没有强调逻辑分析方法的重要作用，但逻辑的观念和基本逻辑思想完全深入到分析哲学家的具体工作之中。其次，分析哲学与当代哲学中的“语言的转向”有着密切关系，甚至有哲学家认为，它正是这种转向的必然结果；而且从时间上看，语言转向的发生与分析哲学的诞生几乎是同时出现的，因此，分析哲学注定是以语言分析为主要对象的。再次，“分析哲学”的名称就标明了这种哲学的分析性特征，即以分析作为哲学研究的基本方法，无论是逻辑的分析还是概念的分析；而且，这样的分析并非与综合方法完全对立，因为分析哲学家们大多都是经验主义者，因而他们处理的问题恰恰是需要归纳综合的经验内容，所以，分析作为一种哲学研究方法，在分析哲学的视野中，与综合方法并非背道而驰，而是相得益彰。当然，以上概括并未完整地阐明分析哲学的基本特征。事实上，分析哲学的魅力正在于，我们总是在哲学分析的活动中不断发现这种哲学为我们开启的新视野。

我们希望，《中国分析哲学》的出版能够为中国哲学事业的发展贡献绵薄之力；我们更希望，我们对分析哲学的研究以及对哲学分析方法的运用，能够为中国哲学屹立于世界哲学之林作出更大的贡献！

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专文

## Probability and Danger<sup>\*</sup>

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University of Oxford

**Abstract:** The lecture concerns the epistemological structure of situations in which many small risks add up to a large one. Examples include the Lottery Paradox, the Preface Paradox, and recent puzzles about quantum-mechanical blips. Such situations pose a threat to the principle that competent deduction is a way of extending our knowledge (‘multi-premise closure’), since it seems that most of what counts as knowledge by everyday standards involves such small risks, and that competently deducing the conjunction of many such items of knowledge from the conjuncts takes us to a conclusion that is too risky to constitute knowledge. Thus we seem to face a dilemma between scepticism and abandoning multi-premise closure. I argue that the dilemma is false. In extreme cases, knowledge and chance come radically apart; one can know truths that have a high chance of being false (but aren’t). More generally, I argue that the ordinary distinction between safety and danger has a structure that is modal rather than probabilistic, and satisfies closure and factiveness conditions analogous to those for knowledge. It can be modelled using a notion of close possible worlds. This conception of safety is used as an analogy for knowledge, and leads to a closeness-based interpretation of possible worlds semantics for epistemic logic. To avoid the notorious problem of logical omniscience—that according to the standard semantics everyone knows all the logical consequences of what they know, even without performing any deductions—a relation of epistemic counterparthood between formulas is introduced, which both solves other problems for a safety conception of knowledge and formally articulates the idea that how much one’s knowledge is closed under deduction depends on one’s logical competence.

**Keywords:** Knowledge; safety; probability; epistemic logic; logical omniscience; lottery para-

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\* This is The 2009 Amherst Lecture in Philosophy Williamson gave in 2009. The Amherst Lecture in Philosophy each year brings a distinguished philosopher to Amherst College for a public lecture. Thanks to Professor Timothy Williamson for contributing his lecture essay to our volume for the first time in print. —editor.

dox; preface paradox

1. Much of recent and not-so-recent philosophy is driven by tensions, or at least apparent tensions, between common sense and natural science—in the terminology of Wilfrid Sellars, between the manifest image and the scientific image of the world. These tensions arise most saliently in metaphysics and the philosophy of mind, but are far from confined to those branches of philosophy. In this lecture, I will discuss one specific form they take in contemporary epistemology.

Central to common sense epistemology is the distinction between knowledge and ignorance. Knowledge is not usually conceived as coming in quantifiable degrees; we do not ask and could not answer ‘To what degree does she know where the station is?’.<sup>①</sup> By contrast, a continuum of numerical degrees of probability is central to contemporary natural science. The point is not merely that a framework of probabilities has to some extent displaced a framework of knowledge and ignorance in the scientific image of cognition. Worse, probabilistic reasoning seems to destabilize common sense conceptions of knowledge. As so often, we cannot just blandly assert that the manifest image and the scientific image are both fine in their own way, but useful for different purposes. We face *prima facie* conflicts between them which seem to imply that if the scientific image is accurate, then the manifest image is radically misleading. We have to do the hard work of analysing the apparent conflicts in detail, to determine what their upshot really is.

Elsewhere, I have argued that the sort of probability most relevant to the epistemology of science is probability on the evidence, and that the evidence is simply what is known; thus knowledge is a precondition, not an outdated rival, of probability in science (Williamson 2000). I have also shown that much of the supporting argument for that conclusion is robust even when recast in probabilistic form (Williamson 2008). But those arguments do not entitle us to ignore specific probabilistic considerations that seem to undermine common sense epistemology. This lecture concerns one such threat to a non-probabilistic conception of knowledge.

2. Why is deduction useful? The obvious answer is that it is a way of extending our knowledge. It is integral to that answer that extending one’s knowledge in this way depends on the temporal process of

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① For discussion of the (un)gradability of knowledge ascriptions see Stanley 2005; 35–46.

carrying out the deduction, for one knows more after doing so than one did before. Moreover, one cannot expect to obtain knowledge thereby unless the deductive process involves forming a belief in the conclusion. This suggests a principle along the following lines, now often known as ‘Multi-Premise Closure’ (Williamson 2000: 117):

MPC If one believes a conclusion by competent deduction from some premises one knows, one knows the conclusion.

Here competence is intended to stand to inference roughly as knowledge stands to belief. One can no more hope to attain knowledge of the conclusion by less than competent deduction than one can hope to attain it by deduction from premises of which one has less than knowledge. But competence does not require knowledge that the deduction is valid, otherwise the attempt to use MPC to explain how deduction extends knowledge would involve an infinite regress of knowledge of the validity of more and more complex deductions (Carroll 1895). MPC is closer to the dynamics of cognition than is the static principle that one knows a conclusion if one believes it, knows it to follow deductively from some premises, and knows the premises.

At first sight, there is no tension between MPC and a scientific account of cognition. Mathematics is essential to science, and its main role is to extend our knowledge by deduction.

Perhaps some fine-tuning is needed to capture exactly the intended spirit of MPC. Nevertheless, some such principle seems to articulate the compelling idea that deduction is a way of extending our knowledge. I will not discuss any fine-tuning of MPC here. Nor will I discuss challenges to MPC that are closely related to traditional sceptical puzzles, for instance where the premise is ‘That is a zebra’ and the conclusion is ‘That is not just a mule cleverly painted to look like a zebra’. It is generally, although not universally, agreed that such examples do not refute a properly formulated closure principle for knowledge.<sup>①</sup> Even if we start by answering the question ‘Do the spectators know that that is a zebra?’ in the affirmative and then the question ‘Do they know that it is not just a mule cleverly painted to look like a zebra?’ in the negative, once that has happened and we are asked again ‘Do they know

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<sup>①</sup> The example is of course from Dretske 1970; the other classic version of such a challenge to closure is Nozick 1981. For critical discussion of such objections to closure see Vogel 1990 and Hawthorne 2005.

that it is a zebra?’ we are now inclined to answer in the negative. Thus the supposed counter-example to closure is not stable under reflection.

The probabilistic threat to MPC starts from the truism that many acceptably small risks of error can add up to an unacceptably large one. The most obvious illustration is a version of the Lottery Paradox (Kyburg 1961). Suppose that for some positive real number  $\delta$  a risk of error less than  $\delta$  is acceptable. Then for any suitably large natural number  $n$ , in a fair lottery with  $n$  tickets of which only one wins, for each losing ticket the statement that it will lose has an acceptably small risk of error, but all those statements together logically entail their conjunction, which has a probability of only  $1/n$ —the structure of the lottery being given—and *a fortiori* an unacceptably large risk of error. This does not constitute a clear counter-example to MPC, since one can deny that the premises are known: even if a ticket will in fact lose, we do not know in advance that it will; we only know that it is almost certain to. But can we legitimately treat knowledge of lotteries as a special case?<sup>①</sup> For example, does not a scientific study of human perception and memory show that even in the best cases they too involve non-zero risks of error? If we reacted to the Lottery Paradox by insisting that knowledge requires zero risk of error, that requirement seems to constrain us to denying that there is human knowledge by perception or memory, and more generally to force us into scepticism. Even beliefs about our own present mental states seem to carry some non-zero risk of error. But if knowledge of our contingent circumstances is unobtainable, the distinction between knowledge and ignorance loses most of its interest.

A version of the Preface Paradox helps make the point vivid (Makinson 1965). Suppose that I compile a reference book containing large quantities of miscellaneous information. I take great care, and fortunately make not a single error. Indeed, by ordinary standards I know each individual item of information in the book. Still, I can reasonably acknowledge in the preface that since almost all such works contain errors, it is almost certain that mine does too. If I nevertheless believe the conjunction of all the individual items of information in the book (perhaps excluding the preface), the risk of error in that conjunctive belief seems so high that it is difficult to conceive it as knowledge. Thus MPC seems to fail, unless the standard for knowing is raised to sceptical heights.

One advantage of the objection to MPC from the Preface Paradox over the generalization from the Lottery Paradox is that it avoids the unargued assumption that if a true belief that a given ticket will lose

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① See Hawthorne 2004 for discussion.

fails to constitute knowledge, the reason must be just that it has a non-zero risk of error. For whether a true belief constitutes knowledge might depend on all sorts of factors beyond its risk of error; for example, its causal relations. By contrast, the objection from the Preface Paradox makes trouble simply by conjoining many miscellaneous items of what by common sense standards is knowledge; it does not depend on the subject matter of that putative knowledge.

The common sense epistemologist seems to face a dilemma; either reject MPC or become a sceptic. The first horn is not much better than the second for common sense epistemology. If deduction can fail to extend knowledge, through the accumulation of small risks, then an explicitly probabilistic approach seems called for, in order to take account of those small risks, and the distinction between knowledge and ignorance is again sidelined, just as it is on the sceptical horn.

However, the argument for the dilemma is less clear than it seems. It trades on an unexamined notion of risk. It treats risk as a probabilistic matter, but what sort of probability is supposed to be at issue? The problem does not primarily concern the agent's subjective probabilities (degrees of belief), for even if the agent has perfect confidence in every conjunct and their conjunction, that does not address the worry that the risk of error in the conjunction is too high for the agent's true belief in it to constitute knowledge. Nor do probabilities on the agent's evidence do the trick. For since the probability of any item of evidence on the evidence of which it is part is automatically 1, the probability of any conjunction of such items of evidence on that evidence is also 1. But whatever exactly the items of evidence are, some variant on the Preface Paradox will arise for them too. This may suggest that risk should be understood as a matter of objective probabilities (chances), at least for purposes of the argument.

In a recent paper, John Hawthorne and Maria Lasonen-Aarnio have developed just such a chance-based argument.<sup>①</sup> It can be adapted for present purposes as follows. Assume, with common sense, that we have at least some knowledge of the future. For example, I know that my carpet will remain on my floor for the next second. Nevertheless, as an instance of quantum indeterminacy, there is a non-zero chance, albeit a very small one, that the carpet will not remain on the floor for the next second, but will instead rise up into the air or filter through the floor. Now suppose that there are  $n$  carpets, each in a situation exactly like mine. Let  $p_i$  be the proposition that the  $i$ th carpet remains on the floor for the

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<sup>①</sup> See Hawthorne and Lasonen-Aarnio 2009. I have omitted various subtleties from the argument that are not of present concern; my reply in Williamson 2009 pays more attention to them.

next second (for expository purposes, I write as though from a fixed time). Suppose also that nothing untoward will in fact happen, so all those propositions about the future are true:

(1)  $p_1, \dots, p_n$  are true.

We may assume:

(2) Each of  $p_1, \dots, p_n$  has the same high chance less than 1.

We may also assume, at least to a good enough approximation, that the carpets and their circumstances do not interact in any way that would make the chances of some of them remaining on the floor depend on the chances of others doing so; the  $n$  propositions about the future are independent of each other in the sense that the chance of any conjunction of them is simply the product of the chances of the conjuncts. In brief:

(3)  $p_1, \dots, p_n$  are mutually probabilistically independent.

For large enough  $n$ , (1), (2) and (3) together entail (4):

(4) The chance of  $p_1 \& \dots \& p_n$  is low.

Imagine that one is in a good position to monitor each carpet. One believes of each carpet that it will remain on the floor, competently deduces the conjunction of all those propositions from the conjuncts and thereby comes to believe that all the carpets will remain on the floor:

(5) One believes  $p_1 \& \dots \& p_n$  by competent deduction from  $p_1, \dots, p_n$ .

We may treat (1) – (5) as a relevantly uncontentious description of the example. A further plausible claim about the example is that one knows of each carpet that it will remain on the floor, in much the way that I do with my carpet: