Chi-Ming Lam

Childhood, Philosophy and Open Society

Implications for Education in Confucian Heritage Cultures

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Implications for Education in Confucian
Heritage Cultures

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This book is dedicated to my wonderful wife, Miu-Yin Wong, and my beautiful daughter, Cho-Kiu Lam, without whom my life would be greatly impoverished.

Introduction by the Series Editors

This is an important, ground-breaking book which makes a significant contribution to both theory and practice concerning the educational ideal of fostering critical thinking in children for full participation in an open society. The book is unique in the area of philosophy and education in that Chi-Ming Lam, a colleague of mine at the Hong Kong Institute of Education, provides a clear and persuasive justification for Popper's falsificationist epistemology, considering both theoretical and practical arguments. Another first is that the book examines these important matters with particular reference to Confucian cultures.

The argument of this book is presented in three parts, each of which describes a different but inter-connected component of the study. The first part provides theoretical and practical justifications for Popper's controversial falsificationist epistemology, laying the groundwork for developing a Popperian theory and practice of education. The author then goes on to examine the political and educational implications of Popper's falsificationist epistemology, and theoretically explicates the compatibility of this epistemology with Confucianism, and how Lipman's Philosophy for Children (commonly known as P4C) programme helps to achieve Popper's educational ideal of fostering critical thinking in children for full participation in an open society. In the second part of the book there is a discussion of whether Lipman's P4C programme can promote children's critical thinking, which is rare (some would argue non-existent) in Hong Kong, a Confucian heritage society. The author then provides a systematic and empirical assessment of the effectiveness of the programme in promoting critical thinking of a group of Hong Kong first year secondary students. Although the results of this assessment are generally positive, thereby demonstrating the feasibility and utility of P4C as a way of achieving Popper's educational ideal in schools, particularly within the context of Confucian heritage cultures, the resultant positive effects are likely to be considerably reduced, or even cancelled out, due to the view held by many adults that children are incompetent in the sense of lacking reason or maturity in society. In the third part of the book, Chi-Ming Lam examines how such construction does children a great injustice and offers a reconstruction of childhood – reflected and

reinforced by the P4C programme – for fostering the development of children's critical thinking and thus of Popper's open society. The book concludes by summarizing the outcomes of the study, explains the implications of these outcomes for theory and practice, and makes several suggestions for further research.

The book has several important, indeed unique, features. It represents a first attempt to explicitly examine how Lipman's P4C programme helps to achieve Popper's educational ideal of fostering critical thinking in children for full participation in an open society. In developing a Popperian theory and practice of education, the author not only explores Popper's epistemological, political, and pedagogical concerns, but also considers related sociological implications. As such, Chi-Ming Lam's book is the first truly systematic investigation into the effectiveness of Lipman's P4C programme on promoting children's critical thinking in Hong Kong, China.

This book is not just an important contribution to the philosophy of education but also to promoting a deeper understanding, amongst education researchers, policy makers and practitioners, of education in Confucian heritage cultures. It deserves to be widely read.

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Contents

Chapter 1
Introduction

1.1 Philosophy and Influence of Karl Popper

Karl Popper is one of the most important and influential philosophers of the twentieth century. His ideas have influenced, above all, the advancement of the philosophy of science, social philosophy, and political philosophy. As an illustration of Popper's contribution to political philosophy, his conception of an open society, which was introduced in his book titled *The Open Society and Its Enemies* (Popper, 1966a, 1966b), played a great role in continental European discussions in the second half of the twentieth century and has even led to practical consequences, particularly George Soros' establishment of the Open Society Institute and Central European University, Popper himself could hardly have foreseen (Albert, 2006).

A key characteristic of Popper's philosophy is the unification of his thought by a focal concern with the nature and growth of knowledge. As he puts it, for example, when discussing his two political works titled *The Poverty of Historicism* (Popper, 2002a) and *The Open Society and Its Enemies* (Popper, 1966a, 1966b),

> Both grew out of the theory of knowledge of *Logik der Forschung* and out of my conviction that our often unconscious views on the theory of knowledge and its central problems ("What can we know?", "How certain is our knowledge?") are decisive for our attitude towards ourselves and towards politics. (Popper, 2002b, p. 131)

What is Popper's theory of knowledge, or epistemology, then? Basically, Popper (2008) rejects the ideas that knowledge, especially scientific knowledge, normally grows by accumulation, i.e. by discovering and collecting more and more facts, and that it can be acquired and stored in a human mind. The reason is that these ideas encourage the emergence of authorities, who, being not supposed to err, tend to cover up their errors, if any, to maintain their position of authority, thereby leading to intellectual dishonesty. Instead, Popper (1979/2009) stresses the importance of Socrates' insight into our ignorance and of his concomitant demand for intellectual modesty, which can heighten our awareness of the uncertainty of scientific knowledge while undermining our dogmatic belief in the authority of science. Accordingly,

he advances two core epistemological theses. First, knowledge is conjectural and generally grows by the detection and correction of erroneous theories. So there can be no authorities, but better and worse theorists: as often as not, the better the theorists, the more aware they will be of their ignorance and limitations. Second, we are all fallible, yet should learn from our errors so that we can avoid them in the future. It implies the adoption of a critical attitude, or an attitude of searching for error, in which we try to falsify our theories rather than verifying them. Indeed, it is Popper's application of this critical or falsificationist methodology to various fields of philosophy that "provides his intellectual contribution with a *systematic* [italics added] character, which makes him a giant in the contemporary philosophical setting, which too often is devoted to sterile specialization" (Pera, 2006, p. 273). Given his systematic approach to philosophy, not surprisingly, it is widely believed that Popper's ideas are still a source of inspiration to develop a good method for approaching, and possibly solving, some of the major problems in modern society. One notable example of such modern social problems is education.

Popper (2002b) himself was closely connected with the education of schoolchildren as early as 1922: following his success in matriculation examinations in 1922, he acquired the qualifications at a teacher training college to teach first in primary schools after 2 years and then mathematics, physics, and chemistry in secondary schools later on. However, due to a lack of teaching posts then, Popper worked as a social worker with neglected children for a year. In 1925, Popper enrolled at the new Pedagogic Institute in Vienna, the purpose of which was to further and support the educational reform in primary and secondary schools. This can be seen as a sign of his commitment to the study and practice of education in that he did so by giving up work without any financial help. Popper was eventually appointed to a teaching post at a secondary school in 1930, where he worked for 7 years until he became a professional philosopher in 1937.

It is noteworthy here that Popper started his writing career at the Pedagogic Institute and had written several articles on schooling during his study there. For instance, while, in one article, he suggested that any attempt to promote a community within the school should be aware of the immense importance of retaining students' individuality (Bailey, 2000), in another one, he advocated that the school should cultivate in students not only a critical understanding of social injustices, but a respect for law and justice on which democracy was founded (Hacohen, 2002). More importantly, although Popper had made many statements about schooling and education, the fact remains that he had not offered a sustained analysis of an educational theory. In a somewhat similar manner, many educationists have made references to Popper's thoughts in their work, yet very few of them have endeavoured to explore the potential of a genuinely Popperian approach to educational matters (Bailey, 2000). And, interestingly, among those few educationists who have attempted to do so, a lot of them used independent project work as the primary learning task for students, such as Burgess' (1977) "independent study" (p. 147), Wettersten's (1999) "independent conduct of research" (p. 100), and Swann's (2006) "student-initiated curricula" (p. 266). Relevant and significant as they are, such problem-solving tasks are hardly adequate to foster the development of an open

society – a political and educational ideal espoused by Popper. The main reason is that an open society requires the active participation of a well-informed and socially-aware citizenry, who, apart from a capacity for solving their personal problems, have the ability to collaboratively solve social and political problems through rational critical discussion. But it is really difficult, if not impossible, for students to acquire the requisite knowledge and skills for successful participation in a fruitful discussion by focusing on independent projects or individual efforts.

1.2   Aims and Significance of the Study

The aim of this study is to develop a Popperian theory and practice of education for promoting an open society. Specifically, the study is designed to develop an educational programme for fostering critical thinking in children, especially when they are involved in group discussion.

This study is significant in at least two ways. First, to my knowledge, the present study is the first systematic, though only exploratory, investigation into the effectiveness of Matthew Lipman's Philosophy for Children (commonly known as P4C) programme on promoting children's critical thinking in Hong Kong, China. Indeed, numerous studies have indicated that the P4C programme can enhance the intellectual and social development of children. By way of illustration, Fisher (1998), based on a wide-ranging review of research projects on P4C, claims that students, after taking P4C lessons, become more ready to ask questions, to challenge others' assertions, and to explain their own ideas – the cognitive behaviour characteristic of critical thinking; and Haynes (2008), focusing her attention on UK studies, states that

> whether in rural, suburban or inner city areas, in Wales, Scotland and England, recent studies have added to the growing and international body of evidence that philosophy with children is an intervention that can demonstrate academic and social gains for children across a wide spectrum of ability and background. (p. 163)

It is expected that the P4C programme will produce positive results in the present study.

Second, in developing a Popperian theory and practice of education, this study not only explores Popper's epistemological, political, and pedagogical concerns, but also considers the related sociological implications – a perspective hardly ever adopted by educationists who have attempted to address various issues from a Popperian viewpoint. However, examining the findings from sociological studies of childhood is crucial to the promotion of critical thinking in children. For one thing, it is these findings that reveal how children are constructed by adults as incompetent in the sense of lacking reason or maturity (Woodhead, 2009), which reinforces the traditional structure of adult authority over children in society and thus runs counter to the goal of fostering critical thinking in children. For another thing, since they took off in the early 1980s, sociological studies of childhood have generated a viable new paradigm of childhood that has a number of enlightening features. For example, the new childhood paradigm demands to accept, recognize, and understand

children in their own right without necessarily shaping their life in accordance with
criteria for a later successful adult life; intends to give voice to, or recognize agency
in, children; and seeks to expose structural opportunities for, and limitations on,
children (Qvortrup, Corsaro, & Honig, 2009). The significance of such an approach
consists in the fact that it strives to displace the overwhelming assertion made on
childhood by the domain of common-sense reasoning, which

> serves to "naturalize" the child in each and any epoch: it treats children as both natural and
> universal and it thus inhibits our understanding of the child's particularity and cultural difference
> within a particular historical context. Children, quite simply, are not always and everywhere the
> same thing; they are socially constructed and understood contextually, and sociologists attend to
> this process of construction and also to this contextualization. (Jenks, 2009, p. 94)

1.3   Argument and Outline of the Book

The argument of this book is presented in three parts, each of which describes a
different but connected component of the study. In the first part, Chap. 2 provides
theoretical and practical justifications for Popper's controversial falsificationist
epistemology, laying the groundwork for developing a Popperian theory and prac-
tice of education; while Chap. 3, after examining the political and educational
implications of Popper's falsificationist epistemology, theoretically explicates the
compatibility of this epistemology with Confucianism, and how Lipman's P4C
programme helps to achieve Popper's educational ideal of fostering critical think-
ing in children for full participation in an open society. In the second part, consid-
ering that the discussion of whether Lipman's P4C programme can promote
children's critical thinking is rare if not non-existent at all in Hong Kong, argu-
ably a Confucian heritage society, Chap. 4 undertakes a systematic and empirical
assessment of the effectiveness of the programme in promoting critical thinking
of a group of local Secondary 1 students. Although the results of this assessment
are generally positive, thereby demonstrating the feasibility and utility of P4C as
a way of achieving Popper's educational ideal in schools, particularly within the
context of Confucian heritage cultures, the resultant positive effects are likely to
be considerably reduced, even cancelled out, by the construction of children by
adults as incompetent in the sense of lacking reason or maturity in society. In the
third part, accordingly, Chap. 5 expounds on how such construction does children
an injustice and offers a reconstruction of childhood – reflected and reinforced by
the P4C programme – for fostering the development of children's critical thinking
and thus of Popper's open society.

   With regard to the content of this book, it starts with the present introductory
chapter that gives the background to, and a synopsis of, this study. The present
chapter first provides a brief description of the philosophy and influence of Popper.
It then states the aims, and explains the significance, of the study. Finally, it describes
in outline the argument and content of this book.

   Chapter 2 begins by discussing the problem of the bounds of reason which,
arising from justificationism, disputes Popper's non-justificationist or falsificationist

epistemology. After considering in turn three views of rationality that are intended to solve this problem, viz. comprehensive rationalism, critical rationalism, and comprehensively critical rationalism, it then turns to the practical side of the issue and explores some possible ways of implementing the Popperian approach. Lastly, this chapter examines Popper's influence on scientific practice, and whether falsification is an effective strategy for solving scientific problems.

Chapter 3 starts with a discussion about the political ideal of open society Popper espouses, emphasizing its main values and practices. It then examines the role played by education in creating and sustaining an open society, focusing on its aims, curricula, and pedagogy. Finally, this chapter explores the possibility of applying Popper's critical rationalism to education in Confucian heritage cultures, and how Lipman's P4C programme helps to achieve the Popperian ideal.

Chapter 4 begins by reviewing the literature on the issue of whether children can do philosophy. It then states the questions, and explains the significance, of an empirical study that evaluates the effectiveness of Lipman's P4C programme on fostering children's critical thinking within a Chinese Confucian context. After detailing the participants, instruments, design, procedure, and pilot study of the empirical study, lastly, this chapter presents the results of the main study, draws conclusions from them, and makes recommendations for future research.

Chapter 5 starts with an examination of how the dominant views of childhood are constructed in the fields of philosophy, psychology, and sociology. It then deconstructs, or problematizes, these taken-for-granted views, together with their associated practices, in order to expose the social injustices children face. Finally, this chapter explores how justice can be restored to children through reconstructing the concept of childhood, highlighting the importance of establishing a coherent public policy on promotion of agency in children and also the importance of empowering them to participate actively in research, legal, and educational institutions.

This book concludes with Chap. 6 that begins by summarizing the outcomes of this study. The chapter then explains the implications of these outcomes for theory and practice. Lastly, it makes several suggestions for further research.

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Chapter 2
Theoretical and Practical Justifications for Popper's Non-justificationism

2.1 Introduction

This chapter starts the first part of the argument of the present book. It aims to lay the groundwork for developing a Popperian theory and practice of education (in Chap. 3) by providing theoretical and practical justifications for Popper's falsificationist epistemology. It is important in that while a distinctive character-istic of Popper's philosophy is the unification of his thought (particularly his political and educational thoughts) by a focal concern with the growth of knowl-edge, there is much controversy not only in the philosophical literature over the legitimacy of his falsificationist epistemology, but also in the psychological literature over the feasibility and utility of his falsificationism as a heuristic.

Based on a rather simple thesis that we can learn from our mistakes despite our fallibility, Karl Popper develops a *non-justificationist* theory of knowledge and of its growth. According to Popper (1989), knowledge, especially scientific knowledge, grows through unjustified conjectures (i.e. tentative solutions to our problems) which are controlled by criticism, or attempted refutations (including severely critical tests). While these conjectures may survive the criticism and be accepted tentatively, they can never be positively justified: they cannot be estab-lished either as certainly true or even as probable in the sense of the probability calculus. As he puts it,

> Criticism of our conjectures is of decisive importance: by bringing out our mistakes it makes us understand the difficulties of the problem which we are trying to solve. This is how we become better acquainted with our problem, and able to propose more mature solutions: the very refutation of a theory … is always a step forward that takes us *nearer to the truth* [italics added]. And this is how we can learn from our mistakes. (Ibid., p. vii)

Indeed, many scholars, like R. Bailey (2000) and Notturno (2000), regard this non-justificationist or falsificationist epistemology as the most distinctive feature of Popper's philosophy. Yet, Popper's non-justificationism is also what makes his philosophy so unpopular: many of the epistemologists with whom he is contempo-rary, Popper (1989) maintains, are justificationists or verificationists who demand

that we should accept only those beliefs which can be verified or probabilistically confirmed. This partly accounts for Bartley's (1976) seemingly exaggerated assertion that "If he [Popper] is on the right track, then the majority of professional philosophers the world over have wasted or are wasting their intellectual careers" (p. 463). Is Popper on the right track? If so, why do so many philosophers reject his teachings? In the following discussion, I start with the problem of the bounds of reason which, arising from justificationism, disputes Popper's non-justificationist epistemology. After considering three views of rationality that are intended to solve this problem – viz. comprehensive rationalism, critical rationalism, and comprehensively critical rationalism – in turn, I then turn to the practical side of the issue and explore some possible ways of implementing the Popperian approach. Finally, I consider Popper's influence on scientific practice, and whether falsification is an effective strategy for solving scientific problems.

2.2   The Problem of the Bounds of Reason

Although Gettier's (1963) polemical but persuasive counter-examples have showed that one can have *justified true belief that p* without *knowing that p*, where *p* is a sentence, Haack (1993) claims that mainstream epistemologists still see knowledge as justified true belief: one knows that *p*, if and only if one believes that *p*, *p* is true, and one has good grounds for the belief. It is within this justificationist context that the problem of the bounds of reason emerges. To put it in a nutshell, the problem is that we are unable to verify or justify our beliefs rationally. In fact, this problem had been widely discussed by sceptical philosophers as early as the Hellenistic period. For example, Pyrrho of Elis, regarded as the founder of the sceptical tradition, suggests suspending judgement in order to achieve tranquillity, since good grounds can be found not only for any belief but also against it (Annas & Barnes, 1994). However, just as A. Bailey (2002) maintains that "an examination of Sextus' Pyrrhonism will be an examination of the original source of most of the disjointed arguments and recommendations that pass for scepticism today" (p. 20), it seems sensible to turn to the influential arguments of Sextus Empiricus for a sceptical understanding of the problem.

According to Sextus (1994), there are at least three modes of suspension of judgement which derive from infinite regress, hypothesis and reciprocity:

> [166] In the mode deriving from infinite regress, we say that what is brought forward as a source of conviction for the matter proposed itself needs another such source, which itself needs another, and so *ad infinitum*, so that we have no point from which to begin to establish anything, and suspension of judgement follows…. [168] We have the mode from hypothesis when the Dogmatists [the philosophers with positive beliefs], being thrown back *ad infinitum*, begin from something which they do not establish but claim to assume simply and without proof in virtue of a concession. [169] The reciprocal mode occurs when what ought to be confirmatory of the object under investigation needs to be made convincing by the object under investigation; then, being unable to take either in order to establish the other, we suspend judgement about both. (p. 41)

While the infinite regress mode shows the logical impossibility of verifying or justifying anything, both the hypothetical and reciprocal modes are intended to rule out the possibility of circumventing the problem of infinite regress. More specifically, Sextus' objection to the hypothetical mode is that if the dogmatist is convincing when s/he makes a hypothesis, then the sceptic will be no more unconvincing when s/he hypothesizes the opposite. As for the reciprocal mode, it is in reality a more complicated case of the hypothetical mode since, in such a circular mode, the argument intended to establish the dogmatist's claim rests for its effect on the hypothesis that the claim in question can already be established (A. Bailey, 2002). Taken together, Sextus' three modes (or arguments) deny our claims to rationally justified true belief and thus to knowledge.

Persuasive as Sextus' sceptical arguments are, their implication that we should suspend judgement about everything can hardly be accepted, because what follows is suspension of all beliefs: Sextus (1994) asserts that "Suspension of judgement is a standstill of the intellect, owing to which we neither reject nor posit anything" (p. 5); yet one who believes that *p* is clearly one who mentally posits that *p*. Accordingly, the fideists, for instance, who affirm that knowledge of religious matters can be obtained only through faith and cannot be established by rational means, do not follow the counsel of Sextus. Instead, without recourse to reason due to its limitation, they suggest making a subjective commitment to or a choice of what to believe. However, this kind of subjective irrationalism renders not only the choice between competing beliefs arbitrary but also the irrationalist immune from criticism. Bartley (1982) explains the latter in terms of a *tu quoque* (you as well) argument: "To any critic, the irrationalist can reply: 'tu quoque', reminding him that people whose rationality is similarly limited should not berate others for admitting to and acting on the limitation" (p. 135). As the *tu quoque* argument can be used by everybody – including the irrationalist's opponent, no rational criticism of subjective commitments is possible if this argument is not defeated.

Indeed, apart from demonstrating the problem of the bounds of reason that we are unable to verify or justify our beliefs rationally so any choice between competing ideas is arbitrary and irrational, the sceptical and fideistic arguments challenge the possibility of Popper's conception of rationality: they imply the impossibility of the *progress* of knowledge and the *criticism* of theories respectively. Yet, according to Popper (1989), "it is essentially their [scientific theories'] critical and progressive character – the fact that we can *argue* about their claim to solve our problems better than their competitors – which constitutes the rationality of science" (p. vii). Obviously, as long as the above-mentioned arguments go undefeated, Popper's assertion can hardly be defended.

2.3   Solution One: Comprehensive Rationalism

2.3.1   Two Dogmatic Approaches

To stop the infinite regress of justifications, dogmatists argue for the possibility of achieving certain basic beliefs, which do not require further justification but can be

used to justify other beliefs, because their truth can be comprehended immediately – immediate knowledge of basic propositions or first principles. The attempt to identify the source of this immediate knowledge divides the dogmatists: while empiricists appeal to experience as a source of immediate knowledge, rationalists or intellectualists appeal to reason or intellectual intuition. However, just as Van Fraassen (2002) holds that the criteria of use of the term "empiricism" are not very strict or extensive, the meanings of the terms "reason" and "rationalism", which can be used in opposition to "irrationalism" or "empiricism", are not distinct. Following Popper (1966), "reason" and "rationalism" will be used here in a wide sense to cover not only intellectual activity (intellectualism) but also observation and experiment (empiricism). In other words, the terms "rationalism" and "intellectualism" will be used in opposition to "irrationalism" and "empiricism" respectively.

In response to the claim of empiricism that our senses enable us to know immediately the truth of certain propositions, or observation statements, the sceptics have long asserted that such observation statements as "The boat is stationary" and "The oar is straight" do not provide a secure basis for knowledge. The reason is that our senses often offer us conflicting appearances – for example, "The same boat appears from a distance small and stationary, but from close at hand large and in motion…. The same oar appears bent in water but straight when out of it" (Sextus, 1994, p. 31) – without telling us which appearance should be taken for reality. As we can never, according to Sextus, ascertain whether the real world is as it appears to be, we can never assume any observation statement to be true on the basis of our experience. Ironically, it is Hume, a Scottish empiricist philosopher himself, who influentially develops and strengthens such sceptical argument against empiricism in the history of modern philosophy. As Bartley (1982) puts it,

> Hume's own arguments showed that – apart from the question of the reliability and dubitability of sense experience itself – the empiricist criterion was inadequate: it excluded not only claims about God and angels but also scientific laws, causality, memory, and claims about other people. None of these could be reduced to sense experience; empiricism in effect [was] reduced to solipsism – to a variety of radical subjectivism. (p. 140)

Accordingly, what renders empiricism untenable is its exclusion of numerous obviously tenable laws, principles, concepts and views, including the popularly held belief that other people exist and have minds.

With respect to the claim of intellectualism that our intellectual intuition enables us to see immediately – by thinking alone – the truth of certain first principles, or self-evident propositions, an exemplar of such truths is mathematical knowledge. For one thing, intellectualists believe that substantial a priori knowledge (i.e. knowledge of a reality independent of our beliefs and experience) exists and that the truths of mathematics relate to an objective reality which is independent of our minds (Carruthers, 2004). Indeed, the remarkable achievement of Euclidean geometry, in which the truth of theorems is proved by self-evident processes of reasoning from self-evident axioms, has inspired the composition of several important philosophical works in the geometrical manner – with axioms, theorems, and proofs (Musgrave, 1993). Examples include Hobbes' *Leviathan*, Descartes' *Principles of Philosophy* and Spinoza's *Ethics*. Yet, the sceptical response to intellectualism, despite the

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