


VOLUME 1 No 2 (2010)



COMPARATIVE PHILOSOPHY

*An International Journal of Constructive Engagement
of Distinct Approaches toward World Philosophy*

OPEN ACCESS

www.comparativephilosophy.org

ISSN 2151-6014



COMPARATIVE PHILOSOPHY

*An International Journal of Constructive Engagement
of Distinct Approaches toward World Philosophy*

OPEN ACCESS / ISSN 2151-6014 / <http://www.comparativephilosophy.org>

EDITOR

Bo Mou, *San Jose State University, USA*

INTERNATIONAL EDITORIAL BOARD

ADVISORY BOARD

Robert Audi, *University of Notre Dame, USA*; **Dagfinn Follesdal**, *Stanford University, USA*; **Michael Krausz**, *Bryn Mawr College, USA*; **Ernie Lepore**, *Rutgers University, USA*; **Shu-hsien Liu**, *Academia Sinica, Taiwan, ROC*; **Tommy Lott**, *San Jose State University, USA*; **Rita Manning**, *San Jose State University, USA*; **A.P. Martinich**, *University of Texas at Austin, USA*; **Adam Morton**, *University of Alberta, Canada*; **Thomas Pogge**, *Yale University, USA*; **Graham Priest**, *University of Melbourne, Australia*; **John Searle**, *University of California at Berkeley, USA*; **Kwong-loi Shun**, *Chinese University of Hong Kong, Hong Kong*; **Richard Tieszen**, *San Jose State University, USA*; **Mary Wiseman**, *City University of New York, USA*; **David Wong**, *Duke University, USA*; **Xianglong Zhang**, *Peking University, China*.

EDITORIAL COMMITTEE

Mohammad Azadpur, *San Francisco State University, USA*; **Karin Brown**, *San Jose State University, USA*; **Yiu-ming Fung**, *Hong Kong University of Science and Technology, Hong Kong*; **Steven Geisz**, *University of Tampa, USA*; **Soraj Hongladarom**, *Chulalongkorn University, Thailand*; **Jonathan Ichkawa**, *University of St. Andrews, UK*; **Nevad Kahteran**, *University of Sarajevo, Bosnia*; **Joseph Kaipayil**, *Jeevalaya Institute of Philosophy, India*; **Yuedi Liu**, *Institute of Philosophy, Chinese Academy of Social Sciences, China*; **Martin Ovens**, *Oxford University, UK*; **Carlos Sanchez**, *San Jose State University, USA*; **Sor-hoon Tan**, *National University of Singapore, Singapore*; **Anand Vaidya**, *San Jose State University, USA*; **Manuael Vargas**, *University of San Francisco, USA*; **Haiming Wen**, *Renmin University of China, China*; **Marshall D. Willman**, *New York Institute of Technology, Nanjing Campus*; **Zhihua Yao**, *Chinese University of Hong Kong, Hong Kong*.

Comparative Philosophy is a peer-reviewed international journal of philosophy, with emphasis on the constructive engagement of distinct approaches to philosophical issues, problems, themes from various philosophical traditions/styles/orientations of doing philosophy for the sake of their joint contribution to the common philosophical enterprise, and/or on general theory and methodology of comparative philosophy. [For further information about the emphasis, coverage and orientation of the journal, see the homepage of its website.]

Taking the open-access approach, *Comparative Philosophy* is published in English on the World Wide Web without subscription cost. The journal is published by the following non-profit university institutions: **Center for Comparative Philosophy** and **University Library, San Jose State University**, San Jose, California 95192, USA.

Comparative Philosophy is to primarily publish original articles of high-quality. Submissions of articles to *Comparative Philosophy* are judged through a blind refereeing process and selected for publication on the basis of their academic quality, relevance to constructive engagement, and significance to comparative philosophy. The editorial team is free to publish as few articles as are judged to meet a high standard of quality. Depending on need, the Journal might include a special column of essays on a specific theme, a “Constructive-Engagement Dialogue” section, or a “Recent Work” section. [For “Authors Guidelines”, see the “Submissions” part at the website of the Journal.]

Comparative Philosophy is currently a biannual journal (January/February and July/August of each year). The Journal is published in a typeset format that can be read on-screen or printed by the reader. Besides the ISSN of the Journal, the physical appearance and Universal Resource Locator (URLs) are permanently fixed to allow for reliable citations.

The copyright of an article published by *Comparative Philosophy* remains with its author(s); the Journal does not manage rights and permissions for other uses of the article (such as its translation or reprint) but have them at the discretion of its author(s), provided that full reference is made to *Comparative Philosophy* as the original (English) medium of publication.

COMPARATIVE PHILOSOPHY

An International Journal of Constructive Engagement
of Distinct Approaches toward World Philosophy

Volume 1 No. 2 (July 2010)

EDITOR's Words 1

ARTICLES

EL-BIZRI, Nader / The Labyrinth of Philosophy in Islam 3

PRIEST, Graham / The Logic of the *Catuskoti* 24

RECENT WORK

TIWALD, Justin / Confucianism and Virtue Ethics: 55
Still a Fledgling in Chinese and Comparative Philosophy

EDITOR'S WORDS

As the editor of the Journal, I would like to make two notes on the “form” and “content” of the current issue, both of which are related to some distinguishing features of the Journal. As for its “form”, this issue consists only of two research articles together with one essay on recent work. Since the formal establishment of the Journal via its debut issue earlier this year, we have received a substantial amount of submissions. As the journal quality is top concern, and as a strict peer-review procedure has thus been implemented whether a submission is unsolicited or not, only few have been accepted. As a non-profit academic journal not published by a commercial press with paid subscription, the Journal does not have a commitment to quantity; the Editorial team is free to publish as few articles as are judged to meet a high standard of quality. However, on the other hand, this procedure does not just mean the negative harshness to authors who submit their work; rather, the Journal has endeavored to have the review procedure constructive and positive: we have tried our best to provide constructive feedback and useful concrete comments to the authors of all those submissions that passed the pre-review inspection and went into the peer-review procedure, whether or not they were accepted. With consideration that all the relevant work is based on editorial team members’ and referees’ voluntary work without financial compensation due to the non-profit nature of the Journal, this is not easy but we strive to contribute to the healthy development of the profession through this kind of constructive service to our colleagues.

As for its “content”, the two research articles in this issue are respectively concerning philosophy in Islam and early Buddhist/Indian logic; one essay is on recent work on Confucianism and virtue ethics. One prominent feature of the essays appearing in the Journal lies in their philosophical relevance in view of their emphasis on constructive engagement of distinct approaches. Indeed, one *prima facie* reaction to articles whose topics are outside a scholar’s own “focus” tradition (whether it is Western philosophy, Chinese philosophy or some other) is a sort of “it is irrelevant to my research”. Such an attitude might be appropriate if the articles’ basic emphasis is merely on history instead of philosophy, and when the researcher’s primary interest is in historical description instead of doing philosophy. However, one of the shared features of the articles included in this journal lies in its philosophical-relevance emphasis and thus they are intrinsically relevant to the philosophical interest and inquiry of philosophy scholars and students, no matter which specific traditions they study (e.g., Chinese or Indian philosophy) and no matter which style of philosophy they instantiate (e.g., analytic or "Continental" philosophy), given that they work on issues and topics under examination in the journal articles. For a philosopher would

be intrinsically interested in distinct approaches to the issues and topics under her philosophical (instead of merely historical) examination and in their reflective relation to her current working approach, whether or not she takes some other distinct approach also as her (current) working approach, which may be related to her training/specialty background, personal research interest or the need of the current study. In this sense, and to this extent, the Journal via its published articles is to distinguish itself both by its a “global” concern with comparative philosophy and constructive engagement of all philosophical traditions, which is neither limited to the East-West dialogue nor to the analytic-“Continental” engagement nor to the Greek-style *nous* alone (or the Chinese-style *dao* alone), and by its foregoing “local” concern with the published articles’ significance and relevance to *philosophical* studies of any *ad hoc* philosophical tradition, due to its emphasis on philosophical engagement on a series of issues and topics that can be jointly concerned via appropriate philosophical interpretation. Indeed, the two concerns are so closely related and thus jointly addressed in the Journal.

Bo Mou
June 2010

THE LABYRINTH OF PHILOSOPHY IN ISLAM

NADER EL-BIZRI

ABSTRACT: *This paper focuses on the methodological issues related to the obstacles and potential horizons of approaching the philosophical traditions in Islam from the standpoint of comparative studies in philosophy, while also presenting selected case-studies that may potentially illustrate some of the possibilities of renewing the impetus of a philosophical thought that is inspired by Islamic intellectual history. This line of inquiry is divided into two parts: the first deals with questions of methodology, and the second focuses on ontology and phenomenology of perception, by way of offering pathways in investigating the history of philosophical and scientific ideas in Islam from the viewpoint of contemporary debates in philosophy. A special emphasis will be placed on: (a) interpreting the ontology of the eleventh century metaphysician Ibn Sīnā (known in Latin as: Avicenna; d. 1037 CE) in terms of rethinking Heidegger's critique of the history of metaphysics, and (b) analyzing the philosophical implications of the theory of vision of the eleventh century polymath Ibn al-Haytham (known in Latin as Alhazen; d. ca. 1041 CE) in terms of reflecting on Merleau-Ponty's phenomenology of perception.*

Keywords: *being, epistemology, Martin Heidegger, Ibn al-Haytham (Alhazen), Ibn Sīnā (Avicenna), Maurice Merleau-Ponty, ontology, optics, perception, phenomenology, philosophy (Islam), science (Islam)*

PART I

1. LINGUISTIC POINTERS AND CONCEPTUAL DIRECTIVES

The expression, 'Islamic philosophy', as it is rendered in the English language, or in associated European idioms ('*philosophie islamique*'), refers in its technical linguistic sense to what is known in the original Arabic language as '*falsafa*'. The term was historically coined in Arabic to adapt to the use of the Greek designation, '*philosophia*', within classical Islamic intellectual traditions. The English appellation, 'Islamic philosophy', would be literally translated back into the Arabic language as, '*al-falsafa al-islāmiyya*', which points to a relatively modern usage of this expression in the context of referring to Islamic philosophical thinking in general terms. Consequently, '*al-falsafa al-islāmiyya*' may broadly refer to thought as it is inspired by Islam, and it would thus surpass the limits of the more clearly defined historical determination of the philosophical

EL-BIZRI, NADER: Affiliated Research Scholar, Department of History and Philosophy of Science, University of Cambridge, UK. Email: nebizri@aol.com

legacy in Islam as *falsafa* per se. Accordingly, ‘*al-falsafa al-islāmiyya*’ would include, in casual idiomatic usages, Islamic intellectual traditions that are not purely philosophical, but may be associated also with the Muslim schools of *kalām* (dialectical systemic theology) and of ‘*irfān*’ (traditional monotheistic mysticism and gnosis), or even of *tasawwuf* (Sufism). The term, ‘*falsafa*’, in its classical and more specific technical sense, refers to a family of traditions in philosophy per se which gave expression to adapted assimilations, critical interpretations, and innovative expansions of Greek Peripatetic, Platonist, Neo-Platonist, and Neo-Pythagorean schools of thought within a diverse Muslim cultural *milieu*. The appellation ‘*falsafa*’ would have sufficiently designated a movement in philosophical thinking that is connected with Islam as a religion and civilization without the need to affirm that it was Islamic (*islāmiyya*). The ambivalent use of the designator, ‘*falsafa*’, in relatively modern terms, would moreover encompass what some mystically-oriented Muslim scholars would take to be a way of life that rests on meditative spiritual exercises (*al-riyādāt al-rūhīyya*) which aim at perfecting the self (what in Arabic is designated by the term ‘*al-nafs*’ [literally: ‘the soul’]) and refining its faculties in the hope of attaining wisdom, justice, happiness, and potentially aiming at the disclosure of the ultimate principles of reality which are taken to be *veiled*.¹ In broad terms, *falsafa* generated isomorphic epistemic and ontological systems of thought which combined Greek legacies in philosophy with dynamic reflections on Abrahamic monotheism as a revealed religion while placing a particular emphasis on the multifarious interpretations of the religious teachings of Islam across diverse confessional expressions and denominations.

2. COMPARATIVE INQUIRIES?

It is perhaps insufficient to establish comparative studies in relation to classical texts and authors without taking certain precautionary methodological steps, which can be validated from the viewpoint of historiography, philology, paleography, and the distinction between traditions along the lines of historical and cultural differences, with their epistemic and ontological entailments. To avoid the conventional methodological strictures that are associated with the investigation of classics, perhaps it is more prudent if comparative inquiries are initially undertaken with respect to legacies that have well-documented historical and textual interconnections. In the case of the history of ideas in Islam, the focus would be directed toward the sequence of civilization and the linguistic-conceptual transmission of knowledge from the Greek language into Arabic (at times via the agency of the Syriac language), and then from Arabic into Latin (occasionally via the agency of the Hebrew language). This procedure secures a context for the comparative historical study of texts and their intercultural adaptations within interlinked intellectual traditions. Accordingly, it would not be

¹ In general, mystics in Islam (*al-‘urrāf* or *al-‘arīfūn*) focus on meditations, contemplations, fasting, spiritual exercises (*al-riyādāt al-rūhīyya*), and ritualistic forms of worship and prayer in view of connecting with what they consider to be the order of divinity while also aiming at the disclosure of the principles of reality, which they believe to be *veiled* (*mahjūb*) and can only be *unveiled* (*kashf*) via spirituality (*rūhānīyyāt*), instead of rationalistic deliberation and logical proof.

controversial if comparative inquiries focus on the reception and response to the philosophical legacy of Ibn Sīnā (Avicenna) or Ibn Rushd (Averroes) by St. Thomas Aquinas or the European scholastics. The same can be said about the investigation of the assimilation of the scientific *oeuvre* of al-Hasan ibn al-Haytham (Alhazen) by thirteenth century Franciscan scholars of optics (like Roger Bacon or Witelo). Such inquiries are considered *acceptable* from the standpoint of textual analysis, historiography, philology, paleography, and the history of science and philosophy. However, the conceptual and methodological elements become more complex and ambivalent, or, even doubted by some classicists, historians of ideas, philologists, or mediaevalists, when the analysis is undertaken from the viewpoint of contemporary debates in philosophy. This issue becomes further complicated, and confronted with greater opposition, when *falsafa* is examined from the standpoint of contemporary approaches in epistemology, ontology, or critical theory. This is principally due to the manner in which *falsafa* is studied in mainstream modern academia, namely, by being posited as an historical tradition that is surpassed and disconnected from modern thought. This mode of picturing *falsafa* is dominant in scholarship on Islamic philosophy despite its traces still constituting a living intellectual movement that is practiced, albeit, mimetically or in reproductive terms, within selected religious Islamic seminaries; this is the case particularly in Iran, and, up until the beginnings of the twentieth century, in places like the Azhar academy in Cairo.² The investigation of *falsafa*, as an historical legacy, within the curricula of mainstream European-American academia, embodies an archaeological bent on studying philosophy in relation to Islam. This academic penchant regulates the methodology of the guardians of archival documentation. The historian of ideas studies the intellectual history of Islam in the spirit of an antiquarian compiler of knowledge who reports the textual material, and endeavors to document it, in order to primarily serve the establishment of library references. The aims and objectives of such learned exegetes and custodians of archiving, differ from the purposes of philosophers per se, who focus on the evolution of concepts and on the questions of ontology, epistemology, logic, value theory, etc.

The methodologies of historiography, philology, and paleography, in the analysis of texts and the archival tracing of their channels of transmission, aim principally at establishing textual documents. This approach has been historically shaped by the development of classicist and mediaevalist methods of studying Greek and Latin texts, ultimately affecting the investigation of Islamic textual sources, given that most scholars in the academic field of Islamic Studies in Europe and North America were, until recently, closely connected in pedagogic and methodological terms with the broader area of Oriental Studies. Scholarship in Islamic Studies within European and American academia was guided by the narrow trajectories of Orientalism. While it is historically evident that the

² The mimetic reproduction of past philosophical traditions in contemporary Muslim religious circles takes into account some of the pressing lived problems of socio-politics, ethics, and the applications of the religious law while being based on traditionalist ontological and epistemological foundations that have not been radically reformed since pre-modern times. One poignant example that presents itself in this regard is embodied in an implicit presupposition of a pre-Keplerian cosmology when reflecting on the questions of metaphysics (*al-ilāhīyyāt*) in relation to Islam.

orientalists facilitated the retrieval of non-European intellectual textual legacies, and also assisted in situating them in their historical and cultural contexts, their studies were nonetheless generally marked by ideological and colonialist perspectives that still require corrective reforms in terms of rewriting many chapters in the history of philosophy and science. After all, the question concerning the distortive implications of Orientalism in scholarship and culture is still controversial and remains fervently debated. We are intellectually indebted to the reflections of Edward Said in this regard who ushered a new critical attitude toward Oriental Studies, and challenged the unquestioned complacencies in representing the Orient through the ideological prisms of Orientalism, which served, until recently, the European colonial material interests (Said, 1978).³

Besides these aforementioned obstacles, additional difficulties arise due to the manner by which pre-seventeenth century history of science and philosophy is generally removed from the central debates in contemporary philosophical thinking. After all, philosophers feel less restricted studying figures like Descartes, Leibniz, Newton, Kant or Hegel, than they do when dealing with thinkers from epochs earlier than the seventeenth century or the high Renaissance. Exceptions do emerge, such as with studies in Neo-Thomism, or the analysis of Aristotelian doctrines in relation to contemporary questions in the philosophy of mind, but these remain marginal with regard to the current central topics of philosophizing *per se*. Furthermore, while considering the contributions of philosophers of the Islamic civilization (*al-falāsifa*) within the mainstream philosophy department curricula (especially in non-Muslim contexts), these are usually concealed within the deep folds of mediaeval European thought. Islamic philosophy is rarely investigated from perspectives that are not strictly confined within mediaevalist studies. The academic value of the philosophers of Islam is usually measured in philosophical scales according to how they facilitate the pedagogic and intellectual understanding of European scholasticism, the mediaeval interpretation of the Greek corpus in general, and the Aristotelian tradition in particular.

3. IMPASSES OR HORIZONS?

Studying the impetus of philosophizing in relation to Islam, as a faith and civilization, from a contemporary standpoint in philosophical thinking remains a desideratum that points to diverse obstacles, which can be summarized as follows: 1. *Historical* (since *falsafa* is principally posited as being mediaeval); 2. *Cultural* (by assuming that *falsafa* is incommensurably *oriental*); 3. *Textual-archival* (that *falsafa* was transmitted in fragments to the European context and its intellectual influence within philosophy gradually decreased and disappeared); and 4. *Islamicate* (in the sense of resisting [prudently, dogmatically, or politically] what some Muslim scholars see as being a contamination of the traditionalist Islamic legacies with unnecessary and alien philosophical constructs that are derived from American/European sources). These methodological strictures, coupled with the

³ European Orientalism had further prolongations within American discourses on the Orient in serving US foreign policies; these were also dialectically paralleled by *historical materialist* geopolitical approaches to integrating the Muslim communities within the Soviet Union.

historicist angst regarding anachronism in historiography, can be surpassed through the careful steps of opening up the horizons of reflection on common questions in epistemology, ontology, logic, in addition to the assessment of responses to questions within the fields of philosophy of science, religion, and art. By way of illustrating the possibilities of such analytics, and in terms of pointing out some novel pathways for thinking, in spite of the conventional methodological strictures, the second part of this present paper offers two case-studies that investigate the potentials of renewing the philosophical engagement with the history of ideas in Islam. In this sense, I examine the ontology of Ibn Sīnā (Avicenna; d. 1037 CE) from the standpoint of Heidegger's critique of the history of metaphysics,⁴ and I reflect on the epistemic dimensions of the theory of vision of Ibn al-Haytham (Alhazen; d. ca. 1041 CE) from the viewpoint of Merleau-Ponty's phenomenology of perception.

4. RENEWAL IN PHILOSOPHIZING?

The present course of investigation in this paper aims at finding ways by which the impetus of philosophizing in relation to the history of ideas in Islam can be renewed. So, is it indeed possible to develop a new school of *falsafa* that is contemporary and retains various forms of epistemic, hermeneutic, and textual interconnections with intellectual history in Islam? In what ways would it also contribute to elucidating contemporary mainstream philosophical debates in relation to science, religion, technology, art, politics, ethics, society and culture?

Just like the early Islamic philosophers and theologians developed their intellectual traditions in response to their encounters with the Greek corpus, and by confronting the theoretical and practical challenges of their own epoch, new forms of *falsafa* can be shaped in connection with Islam and in direct philosophical engagements with modernity in its variegated forms. For instance, investigating Ibn Sīnā's ontology, from the standpoint of critically rethinking Heidegger's critique of the history of metaphysics, would not necessarily or readily result in the development of a novel way of philosophical thinking, as this initially took place in the case of al-Kindī's reading of the Neo-Platonized version of the Aristotelian corpus that was available to him in the ninth century.⁵ Nevertheless, this intellectual exercise might allow for a third pathway in thought to emerge that would revive some aspects of ontology in the history of ideas in

⁴ I initiated this specific line of ontological inquiry elsewhere (El-Bizri, 2000). The phenomenological investigation of selected philosophical traditions in Islam is also supported by a book-series that I co-edited with Anna-Teresa Tymieniecka (President, World Phenomenology Institute, Hanover, New Hampshire) and Gholam-Reza Aavani (Director, Iranian Institute of Philosophy, Tehran), which is entitled, *Islamic Philosophy and Occidental Phenomenology in Dialogue* (a series that is published by Springer [formerly, Kluwer Academic Publishers] in Dordrecht and Berlin).

⁵ The transmission and translation of manuscripts that were associated with the Aristotelian corpus, within the scholarly circles in Islamic civilization in the ninth century, resulted in the attribution of two texts to Aristotle, which were imbued with Neo-Platonized leitmotifs. The first text was the so-called *Theology of Aristotle* (in Arabic: *al-Thīyūlūjīyyā*), and the second was the *Book of Pure Goodness* (in Arabic: *Kitāb al-khayr al-mahd*; in Latin as: *Liber de Causis*).

Islam in a manner that actively engages with reflections on the question of being in our age and its techno-scientific bearings, while also being situated within the circles of contemporary philosophical deliberation and thinking. Similarly, an inquiry about Ibn al-Haytham's optics, from the viewpoint of the phenomenology of perception, can potentially open up new possibilities for reflections in epistemology, and approach the history of the exact sciences in Islam beyond the narrow confines of historiography per se.

5. BREAKING THE MOLD?

Current advancements in techno-science, the development of efficient and wide ranging capacities in telecommunications, and the technical as well as economic facilitation of travel and study abroad (along with the establishment of various branches of European and North-American universities in Asia and the Middle East) entice us to rethink inherited epistemic models of picturing the history of philosophy and science. The potentials of emancipation and the generation of novel schools of philosophy in this present century, by way of being inspired by intercultural intellectual histories, cannot be arrested or compromised in terms of succumbing to the restrictions imposed by the custodians of archives within the circles of classicists, mediaevalists, and orientalists. The dominance of Orientalism and Eurocentric models in understanding and studying Islamic philosophy is no longer sustainable, even if it is still deeply entrenched in the most established and oldest institutions of higher-education in Europe and North-America. Moreover, the construction of knowledge, its dissemination, adaptive reception, and interpretive assimilation through sequences of civilizations, and in cultural-political terms that modulate the sociology of philosophical and scientific knowledge, cannot be all contained by the rules of reportage and documentary archiving. The intellectual heritage of a people cannot simply be posited as relics from the past that can only be studied through the narrow channels of academic expertise in documenting traditions. This is especially the case if such heritage is still a living source of cultural inspiration for multiple communities, and partly shapes, in tacit forms, some of their inherited outlooks on the universe concerning truth, goodness, beauty, justice and governance. This is clearly the case with respect to the history of philosophical and scientific ideas in Islam which reflects on socio-cultural dimensions that classicists, mediaevalists, and scholars of Oriental Studies are unable to fully acknowledge or recognize. This state of affairs reveals the need to be more directly engaged in critically analyzing these past legacies from the viewpoint of the potential connection of their fundamental elements with contemporary concerns in thinking. Greater possibilities are now available for studying the classics through developments in narrative analysis, critical theory, post-modernist discourse, the technicalities of epistemology and logic in the Analytic School in philosophy, along with the unfolding of the horizons of fundamental ontology, hermeneutics, phenomenology, and deconstruction. All offer enriching differential potentials for the renewal of philosophical inquiry, cultural dialogue, and intellectual exchanges across civilizations. Having stated that, it remains indeed essential to rely at times on philology, paleographic textual analysis, the critical editing of manuscripts, the

production of annotated translations, and the establishment of exegetical commentaries, which are based on sound historiography, all in order to render the classical sources accessible. Such noble aims may be sufficient from the viewpoint of establishing the classical material on sound historical and textual grounds. However, from the perspectives that surpass the limits of these conventions, what are the epistemic, cognitive, and cultural entailments of the history of philosophy and science? And how do these inform contemporary debates in philosophy and their relationships with science, religion, art, politics, ethics, and culture? Do historical precedents have any implications with respect to inspiring, informing, or dialectically differing from our contemporary outlooks on the human condition, the cosmos, divinity, truth, goodness, beauty, and justice? Can they elucidate our grasp of the evolution of concepts and the taxonomies of knowledge and its canonization? Finally, what value do they bring to discussions regarding epistemology, ontology, logic, and value theory? These philosophical interrogations are customarily set outside the spheres of historiography, philology, paleography, and the archival documentation in the academic fields of Oriental and Islamic Studies.

6. PREPARATORY STEPS IN COMPARATIVE INQUIRY

In reflecting on the possibilities of renewing the impetus of philosophizing in relation to Islam, and thus in rekindling the potential reanimation of *falsafa* in contemporary terms, a measured prudence ought to be exercised. One's own voice as interpreter ought to be clearly distinguished from that of the original author of a historical text in order to show with lucidity where deviations and new propositions are presented, which belong to the spheres of critical analytics and hermeneutics, instead of being part of the textually-oriented practice of exegesis and documentation. This state of affairs doubles the interpretive activity to ensure that the classical text is soundly situated in its appropriate context in terms of its documented interconnections with other constellations of texts and pathways of transmission across languages and intellectual traditions. This activity can be intertwined with analyses that lift some of the old propositions from their narrowly determined historical spheres, by way of assessing their potencies in generating renewed and innovative horizons for philosophical thinking. Such matters do not fall squarely within the professional academic domain of the career-oriented study of philosophy and its history, especially in relation to Islam. However, many scholars, academics, and philosophers find themselves personally torn between contemporary philosophy from one side (with its various branches, quarrels, and most prominent Analytic-Continental bifurcation) and the attractiveness of other intellectual traditions that do not belong to modern American-European philosophy. Hence, they find themselves situated in a region between philosophy per se (narrowly labeled as 'Western' or 'Occidental') and the intellectual heritage of non-European civilizations (Chinese, Indian, Islamic). The biographical and intimately personal becomes intricately interwoven with the conceptual and academic, in such a way that areas of specialization and concentration result in sets of publications and communications that address topics that seem to be incommensurable or incompatible. Philosophers who find

themselves in such circumstances seem to deal with antinomies while mediating multiple intellectual loyalties. The individual scholar would have to modify themes, methodologies, and procedures of disseminating research in view of serving narrowly delimited spheres of study, which separate contemporary philosophy from the historical depositories of wisdom and knowledge in non-European traditions. It therefore becomes an urgent call for thinking about this question by those who find themselves trapped in this gap between traditions. It is this *space*, as the liminal region of the in-between, that we are driven more pressingly to occupy within this current century. We therefore start with conversations, dialogues, exchanges at the margins, and through comparative studies. Eventually, the intensification of such intellectual activities may result in works of synthesis, isomorphic unification, and the merging of horizons which offer novel possibilities for thought and the renewal of philosophy. In this process, many thinkers will continue to adjust their intellectual persona depending on academic readership and scholarly audience, along the lines of dividing disciplines and oscillations over fissures in their philosophical thought, while proceeding by way of leaps from one intellectual tradition to another.

7. FALSAFA IN THIS CURRENT CENTURY?

It is unclear whether the investigation of philosophy, in the shadows of the field of Islamic Studies, and under the specter of Oriental Studies, connects with contemporary philosophy beyond the domains of comparative analysis. Would *falsafa* emerge in novel forms in our current century, which render it a relevant school of contemporary thought? The implications of this question can extend further in terms of renewing the Chinese or Indian philosophical tradition in response to contemporary philosophy, modernity, techno-science, and the organization of the models of modern episteme and material culture. Yet, the question concerning *falsafa* remains at this stage more intimately connected with the standpoint of those inspired by the history of ideas in Islam and those who partake in contemporary debates in philosophy.

This set of philosophical interrogations on methods of inquiry that we have traversed so far is meant to act as a prolegomenon to future reflections on this matter, while building on previous attempts to address this question in the endeavor to rekindle the possibilities it may offer in its potential unfolding. Such aspirations have been situated hitherto at the margins of the academic procedures that separate Islamic Studies from philosophy per se within the university curriculum, due to the pedagogical and methodological directives that are professionally controlled by influential authoritative peers in academia. These concrete aspects of academic life, the cultivation of scholarship, the destining of individual apprentices on career-paths, and the educational shaping of the formative constitution and aggregation of young academics, all point to the actual practicalities of specializing in Islamic philosophy. To gain proper grounding, it is not sufficient to study in a philosophy department, particularly for those who are not native speakers (or have the linguistic competence of native speakers) of the Arabic language (namely, the *lingua franca* of classical Islamic civilization), or of the Persian or Turkish language (with emphasis on Ottoman, which is not a lived

and practiced linguistic tradition anymore). Besides the need to acquire a solid, or at least, a good working-knowledge of Arabic and/or Persian (or in some cases, of Ottoman Turkish), the research student at advanced graduate studies must also have a firm grounding in the history of ideas in Islam. This curriculum of language, history, and culture is shaped by Middle Eastern Departments and Faculties of Oriental Studies. Added to this is the historical aspect of *falsafa* as it is principally studied in mainstream academia. This would thus further require grounding in historiography, philology, paleographic textual analysis, and the assessment of manuscripts, along with a specific bent on conducting research through tedious biographical-bibliographical instruments, which rely heavily on annotations, and on reporting relegated narratives, anecdotes, and chronicles of past historians, travelers, commentators, copyists of codices, compilers of compendia, glossators and scholiasts. Having passed through these academic curricula, the research student, or doctoral candidate, who desires specializing in Islamic philosophy, would have been already cultivated as a scholar of Islamic Studies and not as a philosopher per se. Those who are able to retain their interest in contemporary philosophy would then either do it at the margins of their work in Islamic Studies, or they would be affiliated with philosophy departments that offer courses on Islamic philosophy, without conducting the most advanced forms of closely studying texts in their original language. Consequently, students become commentators on the primary sources through the agency of secondary or tertiary literature, and they acquire the reputation of being non-experts in the field as their work is assessed by the established scholars in the field of Islamic Studies. The gap widens with time and career progression, and the opportunities to oscillate between disciplines become narrower and riskier. Hence, a movement from contemporary philosophy toward Islamic Studies in investigating *falsafa* (or moving the other way round) all appear again as a series of leaps. The picture becomes furthermore unhandsome when Ancient Greek and, at times, Latin, are posited as additional linguistic requirements in the formation of scholars who endeavor to study *falsafa*, especially when their prospective inquiries are expected to be conducted in a restricted domain of comparativeness from the viewpoint of mediaevalist research that focuses on the documented transmission of knowledge from Greek into Arabic and Arabic into Latin.

8. THE BARRIERS OF CONTEMPORARY PHILOSOPHY

Besides the obstacles that result from the methods of historiography, philology, and paleography (in the domains of Oriental and Islamic Studies), the divisions within contemporary philosophy enact additional epistemic and conceptual barriers in the face of comparative research. Engagement with the history of philosophy from a contemporary standpoint is principally conducted within the so-called 'Continental School' in terms of the manner in which it mediates some of its central investigations regarding its critical reinterpretation of the history of philosophical and scientific ideas. Numerous controversies arise within this contemporary movement in philosophizing. For instance, a focus on Heidegger's critique of the history of metaphysics, which is undertaken against the horizon of the unfolding of science and the essence of technology, is itself burdened by

quarrels within the field of Heideggerian Studies and its reception by philosophers from other intellectual traditions: disputes arise over the interpretation of technical, Heideggerian terms, or with regard to the determination of the course of the development of Heidegger's thought, or the translation of Heidegger's edited German texts into English, French or Italian. Additional polemics emerge in terms of the political shadows that are recast in recurrent patterns over Heidegger's biography, or by way of the diverse forms of opposition that his thought continues to face from the Husserlian phenomenologists and the Analytic philosophers, along with controversies that arise in terms of reading his works through the writings of J.P. Sartre, J. Beaufret, J. Derrida, and E. Levinas.

These multiple barriers become higher and frequently established when we consider the interpretation of the history of philosophy through Heideggerian perspectives. Classicists, mediaevalists, phenomenologists, and analytic philosophers all raise various differential doubts regarding such undertakings. The entirety of such polemics become hypercritical when an attempt is made in interpreting the ontology of Ibn Sīnā (Avicenna) from the standpoint of Heidegger's critique of the history of metaphysics despite the fact that Avicennism (*al-Sīnawīyya*)⁶ belongs to the history of European thought, at least in its Latinate scholasticism, along with the implicit impact it had on foundational figures in modern philosophy, such as Kant and Hegel. The conceptual circumstances are perhaps less harsh when focusing on the *oeuvre* of Merleau-Ponty. Nonetheless, reading the history of science from a phenomenological viewpoint is not without its epistemic and methodological obstacles. These take more severe expressions when the inquiry focuses on the scientific legacies of brilliant polymaths like Ibn al-Haytham (Alhazen), in spite of his direct influence on the history of science in Europe, and even on architectural and artistic practices within the *perspectivae* traditions from the twelfth century until the period of the high Renaissance (El-Bizri, 2009, 2010; Kemp, 1978, pp. 134-61; 1984, 1989; Lindberg, 1971, pp. 66-83; 1997, pp. 355-68). Albeit, one can still resort to elegant combinations of epistemology and the history of science in terms of conducting this line of analysis based on the deployed methods akin to historians like A. Koyré, and more probingly, by thinkers like G. Bachellard, in view of bridging the gap between historical epistemology and the philosophy of science.

PART II

9. CASE-STUDIES

How can we account for what is named by the appellation '*falsafa*' in contemplation of the locked and suspended philosophical possibilities that remain concealed within the labyrinthine folds of its arrested intellectual histories? We reflect in this sense on the horizons of the renewal of the impetus of philosophical thinking in relation to the history of ideas in Islam, which surpass the limitations of academic assignments, in view of genuinely desiring the unfolding of original

⁶ Avicennism (*al-Sīnawīyya*) constitutes the legacy of Ibn Sīnā (Avicenna) in philosophy and science.

thought that is re-collective, de-structuring, and re-constructive in its modes of revealing the gravity of critically rethinking the inherited conventional methodologies.

In view of this thought-provoking call for thinking, we may tangentially appeal to foundational, classical traditions that had a deep impact on philosophizing in Islam, and exercised a profound influence on European scholarship in both the mediaeval and Renaissance epoch. For the sake of undertaking pathways that may inspire this endeavor, we will now turn to the scenes of instruction within the legacies of two groundbreaking eleventh century polymaths: Ibn Sīnā (Avicenna) and Ibn al-Haytham (Alhazen). Both luminaries offer pointers and directives that may partly assist us in reformulating some of the essential classical questions in ontology and epistemology, respectively in relation to reflections on the questions of being and perception. This line of inquiry presents us with selected philosophical pathways amongst many, which may potentially facilitate the founding of new modes of rethinking *falsafa*, as it is inspired by the intellectual history in Islam, and in a manner that is oriented by lived aspirations in the unfurling of original thinking.

10. IBN SĪNĀ'S ONTOLOGY

Turning our gaze toward the ontological question concerning *being*, we reflect on Ibn Sīnā's philosophical legacy that offers us a concretized intellectual context to investigate the impetus of metaphysics in the history of ideas in Islam. Ibn Sīnā's ontology constituted one of the most influential legacies of *falsafa* in the intellectual history of Islamic civilization. This foundational tradition presents us with fundamental ontological notions that can be effectively assessed through dialectical and critical engagements with Heidegger's thought. The focus on Ibn Sīnā's ontology may also assist us in initiating a potentially critical dialogue revolving around Heideggerian notions that interrogated the rudiments of classical metaphysical thinking.

Ibn Sīnā's thinking not only had an impact on Thomism and Scotism, but was also widely assimilated within European mediaeval and Renaissance scholarship. Any philosophical inquiry about the continuance of classical Greek traditions in philosophy within mediaeval schools cannot be complete and probingly thorough unless it takes into account the transmitted contributions of the principal philosophers of mediaeval Islamic civilization in general, and of Avicennism in particular. It would not be an exaggeration to suggest that inquiries about Heidegger's critique of the history of metaphysics in reference to mediaeval philosophical doctrines would be incomplete if the principal conceptual bearings of Avicennism are not also critically examined, or if the prolongations of this longstanding tradition in classical ontology are not adequately investigated. Ibn Sīnā's legacy has its own European history, even if it is still considered by some philosophers, historians or theologians (principally in a non-Muslim *milieu*) as being the tradition of "the (oriental-Muslim) other" that has been veiled within that history. Ibn Sīnā's metaphysics belongs to the history of classical ontology that has been interrogated by Heidegger, even though Avicennism was not explicitly examined in detail within the Heideggerian legacy.

I do not imply in this context that Heidegger was not aware of the assimilation of Ibn Sīnā's tradition within the European Latin scholarly circles. However, he might not have fully acknowledged the extent of the influence that has been exercised by Avicennism in that intellectual historical-cultural *milieu*. It might have been the case that Heidegger implicitly assumed that the entailments of Ibn Sīnā's metaphysics unquestionably belong to classical ontology, or he did not believe that Avicennism was integral to what he grasped as being the history of (Western) metaphysics.

The effort in reflecting on the fundamental notions of Ibn Sīnā's ontology, from the standpoint of critically thinking about the entailments of Heidegger's critique of the history of metaphysics, constitutes an ontological inquiry that is akin, in many aspects, to Heideggerian investigations that have been conducted on classical ontology, including studies on mediaeval European scholars of the caliber of St. Thomas Aquinas, Duns Scotus, Francisco Suárez, or Meister Eckhart. Such ontological inquiry would be principally focused on Ibn Sīnā's account of being (*al-wujūd*) in terms of contingency (*al-inkān*) and necessity (*al-wujūb*), and in relation to the question concerning the distinction and connection between essence (quiddity; *al-māhiyya*) and existence (*al-wujūd*). Additional ontological aspects of Ibn Sīnā's philosophy relate to his epistemology and his conception of the soul (*al-nafs*) and its cognitive faculties (El-Bizri, 2003), along with reflections on the logical, etymological and linguistic properties of his metaphysical thinking; this includes the consideration of the innovative conceptual elements in his metaphysics that surpassed many of the notions that were associated with the Aristotelian and Platonist traditions (El-Bizri, 2001, 2006a, 2008a). Taking this into account, the conceptual elements that may be derived from Heideggerian perspectives on scholasticism may well assist us dialectically in investigating the extent of the applicability of Heidegger's critique of metaphysics across a variety of classical ontological traditions (including Avicennism), while furthermore opening up pathways to rethinking some of the principal notions of Ibn Sīnā's ontology in terms of relevant contemporary topics of philosophical debate. However, one must proceed in this context with caution given that our grasp of both thinkers (Ibn Sīnā, and Heidegger) is still faced with epistemic and doctrinal difficulties, in addition to variegated *querelles d'écoles* that surround their legacies.

From a Heideggerian viewpoint, philosophy is in essence an inquiry into *being* (*Die Philosophie ist das Fragen nach dem Sein*), and a reflection about the withdrawal of the meaning, truth and place of *being* (*Sein*) from thought. Thinking finds its possibilities in displacing the histories of thought, and the epochs that were grounded on them, in the great comings and goings of the foundational seasons in philosophy. The history of metaphysics and classical ontology is said to be a history of the oblivion of the ontological difference between *being* and beings and its abandonment in thought, which is closely connected to the unfolding of the essence of technology that is not strictly technological, but is essentially a mode of en-framing (*Ge-Stell*) beings in their *being*, and positing them as standing-reserve (*Bestand*). This forgetfulness of *being* is a mark of the self-persecuting character of the beingness of *Dasein*, namely, as that being who inquires about its being-in-the-world, and lets *being* reveal itself (*Dasein* conceived herein as: *être-là*, or *être-*

le-là; Beaufret, 1985; El-Bizri, 2006b, 2006c). The history of philosophy is seen from this perspective as a grand drama of decline despite the heights of our technological age, which in its powerful rationalities, stands at what some picture as being the limits of the closure of metaphysics, its last frontiers, as the end of philosophy!

Heidegger reflected on the question of *being* (*Seinsfrage*) in his investigation of the basic problems of phenomenology in the summer lecture course of 1927 in Marburg (not published until 1975), which complemented the thesis of his major opus, *Sein und Zeit* (published in 1927, yet completed in 1926). Heidegger partly mediated the development of his own fundamental ontology by way of analyzing some of the principal theses of scholasticism regarding the constitution of the *being* of a being in relation to the classical controversy over the distinction and connection between *essentia* and *existentia*. It is well documented in his meditations on this question (in *Die Grundprobleme der Phänomenologie*) that the initial conceptual foundations of this ontological tradition were laid down by Avicenna [Ibn Sīnā] (Heidegger, 1975, p. 113).

The focus on Ibn Sīnā's ontology can well be mediated by the manner he addresses the question of *being* (*mas'alat al-wujūd*) and the reflection on the internal dialectics that modulate his conception of the ontological bearings of the modalities of necessity and contingency with regard to the relationships between essence and existence, and the determination of the ontological difference between beings and the *being* of beings. This is the case even though the distinction between essence and existence is hinted at with ambivalence in the Aristotelian tradition in terms of thinking about what is intended from the saying, 'tode ti' (the 'thisness' of a present extant thing, or what in Scotism is designated in Latin as, 'haecceitas', namely, 'singularity in identity'), in contrast with the vague and hard to apprehend expression, 'to ti ēn einai' ('what it was for something to be the thing it is'). And yet, what is aimed at by these utterances, along with the Aristotelian categories, all refer back to the sustaining and leading fundamental meaning of 'ousia' ('substance'), which is always said alongside the various meanings of 'being' (*Metaphysics*, Books *Theta* and *Zeta*; Aristotle, 1924). Consequently, the ontological question concerning the meaning of *being* becomes a metaphysical interrogation about the notion of substance.

Heidegger suggests furthermore that Ibn Sīnā's distinction between essence and existence underlies the Kantian thesis about *being* (*Kritik der reinen Vernunft: Critique of Pure Reason*; Kant, 1929, A598-B626):

Being is obviously not a real predicate; that is, it is not a concept of something which could be added to the concept of a thing; it is merely the positing of a thing, or of certain determinations as existing in-themselves. Logically, it is the copula of a judgment.

This thesis is noted in the context of speculating about the impossibility of having an ontological proof in terms of reflecting on the transcendental dialectical inferences of pure reason. Based on this, *realitas* meant *essentia* and it constituted an ontological problem besides the metaphysical reflections on the meaning of *essentia/substantia*. So, how does 'reality' and 'existence' belong to a being, let alone their ontological interconnection defined? Moreover, how can the

distinction between essence and existence be interpreted in terms of the ontological difference between beings and *being*? According to Heidegger, the distinction between *essentia* and *existentia* does not correspond with the ontological difference between beings and *being*. Rather, it belongs to one side or the other of this binary bifurcation, namely, by positing primordial essence as an opposite counterpart of primordial existence.⁷

The problem of the *distinctio* and *compositio* between the *essentia* of a being and its *existentia* lies at the roots of the Kantian thesis about *being* (Heidegger, 1975, pp. 109-110). This can be articulated in terms of the following scholastic disjunctive binaries: *ens infinitum* vs. *ens finitum*; *ens increatum* vs. *ens creatum*; *ens necessarium* vs. *ens contingens*; *ens per essentiam* vs. *ens per participationem*; *actus purus* vs. *ens potentiale*; *ens a se* vs. *ens ab alio*; etc.⁸ The *ens perfectissimum* is: *ens a se*, *ens infinitum*, *ens increatum*, *ens necessarium*, *ens per essentiam*, *actus purus*. These notions offer Latin renditions of what Ibn Sīnā noted with regard to *wājib al-wujūd bi-dhātīhi* and *wājib al-wujūd bi-ghayrihi*, namely, by respectively differentiating (in ontological terms): *Necessary-Being-due-to-Its-Self* from *necessary-being-due-to-something-other-than-itself qua contingent-being-in-itself* (Ibn Sīnā, 1874, pp. 262-3; 1960, p. 65; 1975, pp. 36-9, 43-7, 350-5; 1985, pp. 255, 261-5, 272-5, 283-5; El-Bizri, 2006a, 2008a). *Necessary-Being-due-to-Its-Self* is without quiddity and definition or description, and Its essence is *being*. The Necessary Existent due to Its-Self as Necessary Being *qua* Necessary Existence/Existing is Pure *Being*. All that can be uttered about Necessary Being is ‘*il y a*’ (Levinas, 1979, pp. 24-30),⁹ ‘*es gibt sein*’, ‘*there is*’, ‘*hunālika*’ ... ‘*huwa*’...

There is a manifold of dialectical dynamics that surround the meditations on *wājib al-wujūd* per se: The *Necessary-Existent* is a determinate onto-theological being or existent that moves from pure *being* to determinateness in *being*. To evoke a Hegelian parlance we would say that pure *being* is sublated into determinate *being*, moving from *being-itself* to *being-within-itself* as *being-for-itself* and *being-for-other*. This describes the double movement of emanating otherness from sameness and then re-attracting otherness to sameness. Despite investigating *being qua being*, an onto-theological turn is already attested with Aristotle’s conception of metaphysics as theology, albeit, a new foundational phase in metaphysical thinking arises with the way Ibn Sīnā systemically conferred autonomy to ontology from the determinants of theology in reflecting on the question of *being*.

Ibn Sīnā’s reflections on the relationship between essence and existence, based on the context of his account of the question of *being*, in terms of the modalities of necessity and contingency, found its highest consummation in Hegel’s essentialism in the logical unfolding of *Begriff* (*Wissenschaft der Logik*; Hegel,

⁷ In the Islamic context, and in the historical reinterpretations of Ibn Sīnā’s metaphysics, Suhrawardī (fl. 12th cent.) argued in favor of the primacy of essence over existence, while Mullā Sadrā (fl. 17th cent.) affirmed the primacy of existence over essence.

⁸ The distinction between essence and existence, founded ontologically by Ibn Sīnā, becomes: a *distinctio realis* in Thomism; a *distinctio formalis* or *modalis* in Scotism; and a *distinctio rationis* with Suárez.

⁹ We reflect here on the onto-theological implications of Levinas’ critical response to Heidegger in terms of thinking about the hypostasis of *l’exister sans existant* (existing without existent).

1969)¹⁰ and prior to the associated Kantian thesis that *being is not a real predicate*, as Heidegger proclaimed (Heidegger, 1975). The matter to be thought is how *being* is the indeterminate immediate universal that is the most abstract and simple self-evidence in *presencing*? This echoes the Kantian proposition that perception is the sole character of actuality, as Kant held in the context of assessing the postulates of empirical thought in his *Kritik der reinen Vernunft* (*Critique of Pure Reason*; Kant, 1929, A225-B273). Perception corresponds in this context to the disclosure of extant beings in perceptual acts. Hence, extant actual existents are perceived beings which are uncovered and disclosed in apperception through the inner-worldly phenomenal fields of perception.

11. TRANSITION

An insight into the line of thinking that may have also converged seeing with knowing can be detected in comparative terms by contemplating the meaning that is aimed at in the first proposition that opens Aristotle's *Metaphysics*, namely, "*pantes anthrōpoi tou eidenai oregontai phusei*" (*Metaphysics*; Aristotle, 1924, A, 980a 21). This line is customarily translated as, "*All humans by nature desire to know*". However, here is an alternative polemical reading proposed by Heidegger: "*Im Sein des Menschen liegt wesentlich die Sorge des Sehens*" ("*The care for seeing is essential to the being of the human being*"; Heidegger, 1953, section 36). Herein, *eidenai* (to know, to see) is understood as being linked to *eidos* (outward appearance, look) insofar that the latter is construed as being the visible form of something. Knowing is transmuted into an act of seeing, whereby *horan* (sight) brings about knowledge of things more efficiently than all the other senses, and is hence irreducible to, the order of mere sense perception. The correspondence between knowledge and vision is perhaps attested in the manner in which Plato reinforced the cognitive character of *theōria* over that of *epistēmē*, whereby vision shows rather than tells. In addition, and as noted by Aristotle, *horan* highlights the differences between things (*Metaphysics*; Aristotle, 1924, A, 980a 25). Hence, it may be seen as being akin to the etymological root of the word, '*theōria*', whereby the Greek terms '*thea*' ('spectacle') and '*horaō*' ('to see', 'to look') are brought together to determine the expression, '*theōria*', which names a concept that refers to the act of seeing a spectacle, or looking at a view (McNeill, 1999, p. 174); the care for seeing intersects with the desire to know. Both find their roots in curiosity and in the modern advent of *Die Zeit des Weltbildes* (The time of the world-picture, or the apprehension of the world as a picture), wherein *theōria* becomes a representational mode of seeing with the human subject turning into the grounding Archimedean vantage point (McNeill, 1999, p. 221). This mode of addressing the question of *being* pulls thought toward reflections on the ontological determinants of perception.

12. IBN AL-HAYTHAM'S PHENOMENOLOGY OF PERCEPTION

¹⁰ In Hegelian essentialism, being is simply the becoming of essence, while the becoming of being is a transition from being to essence.

Although numerous studies have been conducted on the *Optics* (in Arabic: *Kitāb al-manāzīr*; in Latin: *De Aspectibus* or *Perspectivae*) of al-Hasan Ibn al-Haytham (Alhazen, d. ca. 1041 CE; Ibn al-Haytham, 1972, 1983, 1989, 2001, 2002), and on its reception, assimilation and maturation within the *perspectivae* traditions in the history of science and art (Kemp, 1978, pp. 134-61; 1984, 1989; Lindberg, 1971, pp. 66-83; 1997, pp. 355-68), ambiguities still do hitherto surround the epistemological and ontological entailments of his theory of visual perception (El-Bizri, 2005). Ibn al-Haytham's thinking speaks to us in an effective manner that is relevant in its attuned bearings to the thrust of phenomenological theories of perception, and their connection with the fundamental questions of ontology and epistemology.

Ibn al-Haytham offered an experiential analysis of how the manifestation of a thing in its plenitude through its visible aspects, which are detected in a continuum of manifold appearances, occurs by way of contemplation and bodily spatial-temporal displacement. Vision manifests the fullness of the volumetric massing of a thing as a constituted unified structure through the partial givenness of its apparent aspects in successions of continuous perceptions. This state of affair is illustrated by way of multiple perspectives, such that a thing is never seen in its entirety instantaneously and immediately, since the appearance of some of its sides entail that its remaining aspects are unseen. Hence, a partial disclosure of an opaque object in vision is always associated with the concealment of some of its surfaces. In visual perception, a visible object that is given through direct vision and immediate intuition reveals some of its surfaces or sides while its remaining aspects are veiled. A distinction is posited here between authentic *qua* proper appearances, namely, those which relate to a concrete act of seeing where the sides of the visible object are perceived in immediate intuition and direct vision, and inauthentic *qua* imagined appearances, namely, those which designate the imaginary surplus that accompanies the authentic appearances in the constitutive perception of the object of vision in its imagined totality. So, the full silhouette of a thing is constituted by its spatial-temporal bodily displacement¹¹ and the essential unity between its authentic and inauthentic appearances. Hence, perspective is essentially a phenomenon of the mystery of spatial depth, which demarcates my situation in the world as being distinct from other perceivers, yet, it is also through spatial depth and temporal horizons that my relations with other perceivers and things are opened up.

The object of vision appears as a constant presence despite its optical variations in natural perspective and immediate intuition. Seeing does partly let things self-show themselves as they are, for what appears in the spectacle is led back to an order of familiarity, and, as Ibn al-Haytham showed, seeing is a mode of recognition, discernment, and comparative measure (*al-ma'rifa wa-al-tamyīz wa-al-qiyās*)¹² that allows what appears to self-show itself as it is given in its own

¹¹ This refers to the movement of the perceiver around the object of vision and/or the movement of the object of vision itself in such a way that its sides are revealed in succession to the observer.

¹² Ibn al-Haytham offered a physiological-neurological-psychological analysis of visual perception that went beyond the geometrical-physical explication in optics of the introduction of light rays into the eyes. Based on Ibn al-Haytham's experimental explanations (which rested on mathematics, physics, anatomy, and a series of experiential tests), only light *qua* light and color

apparition in presencing. However, the semblance of constancy in presence is not guaranteed after the lapsing of a considerable period of time, given that things are subject to becoming and change (*al-taghayyur*).

Space-time, depth and place, as well as the corporeal engagement of the observer within the spectacle, all ground perception and its veridical potentials. It is through movement that the partial self-giveness of the formal reality of what is seen is affirmed in its wholeness. Perceptual acts are affirmed and corrected by other complementary verifying perceptions, whereby judgments resulting from certain errors in vision get rectified by way of additional verified data that rest on the acuity and sensitivity of vision itself, rather than doing away with the epistemic possibilities that this powerful perceptual capacity offers to cognition.¹³ Investigating the veridical conditions of vision in the science of optics was pivotal in Ibn al-Haytham's endeavor to mathematize the notions of physics (El-Bizri, 2007a, 2008c), and to establish the foundations of scientific experimentation (*al-i'tibār*) and controlled testing, as they were grounded on the accurate registering of repeated observational data and geometrical modeling in determining the procedures of verification, demonstration, and proof. The precision of Ibn al-Haytham's experiments was remarkable to the level that most of his tests, with their corresponding scientific instruments and designed experimental installations, were accurately reconstructed and reenacted about three centuries later by Kamāl al-Dīn al-Fārisī, as described in the latter's *Tanqīh al-manāzir* (*The Recension of [Ibn al-Haytham's] Optics*), and resulted in the reconfirmation of most of Ibn al-Haytham's observations and data (al-Fārisī, 1928).

Following phenomenological directives, we note that something lets itself be brought to light or brightness in its appearing, and self-shows itself from itself, in that very condition of being lit and visible to a presencing observer. This event describes the unfurling of what may be referred to in Greek as, "*apophainesthai ta phainomena*", namely, "what shows itself from itself, just as it shows itself from itself". It is ultimately a translation of the maxim that animates phenomenology: "*zu den Sachen selbst*" ("to the things themselves"). And phenomenology is conceived here as being a fundamental ontology (*Fundamentalontologie*) that elucidates the question of *being* (*Seinsfrage*) by way of a hermeneutic and eidetic reflection on what is pointed out by the appellations, '*phainō*', (bringing beings to light or brightness), '*phainesthai*' (showing itself from itself), and '*phainomenon*' (what self-shows itself from itself). In other words, a phenomenon becomes

qua color constitute pure sensations, while seeing (vision) consists ultimately of complex physiological-neurological-psychological processes (El-Bizri, 2005; 2009).

¹³ It is perhaps the case that the stationary gaze of Descartes on objects of vision might have led him to distrust the veridical conditions of sense perception as delineated in his *Meditationes de Prima Philosophiae* [*Meditation on First Philosophy*] (Descartes, 1993). It is worth stating herein that Ibn al-Haytham's account of the *normal* conditions of sight involve the following parameters: 1- The viewed object must be bright; 2- the distance between the object and the eye should be optimal (not too close and not too far); 3- the object should be in a plane with the eye; 4- the body of the object should have a proper volume; 5- if the body is transparent it should still allow for the trapping of some light rays; 6- a completely transparent body that does not trap any light rays is virtually invisible; 7- the distance between the viewer and the object of vision should comprise a transparent space; 8- the viewer should have sufficient time to view the object of vision; 9- the eye should be healthy; 10- the eye should be able to concentrate on the object vision (Ibn al-Haytham, 1983 and 1989, sections I.2 [1-26], I.8 [1-11]; El-Bizri, 2005).

indicative of itself, and already presupposes a perceiver, whereby appearance does not conceal the essence of a thing as much as it reveals it in presencing, if not even by letting essence become self-shown as an apparition (Heidegger, 1953, section 7; Sartre, 1943, pp. 11-6).

The thrust of Ibn al-Haytham's theory of visual perception implicitly points to the possibilities of grasping optics, not merely as a scientific discipline that inquires about the conditions of sight and light in terms of an epistemology of photosensitive surfaces, but more as an eidetic inquiry about the constitution of forms in their essential ordering of geometric structures that is grounded on experiential and experimental verifications.

Vision is a mode of de-distancing that brings things that are not at hand nearer from their remoteness, and renders beings accessible even from afar. Linear perspective (*perspectivae artificialis*), and its pictorial order, does demarcate a distance between the eye of the observer and the objects of vision. Nonetheless, it de-distances beings in sight by assimilating the spectacle in the form of a picture. However, the distances or intervals that are cleared by vision, and accordingly brought into nearness in de-distancing, are not objective or measurable as such. Rather, they are existentially estimated in the very circumspect act of seeing as a spatial mode of encountering beings in de-distancing. In this context, Ibn al-Haytham affirmed experimentally the visibility of spatial depth (*Kitāb al-manāzīr*, II.3 [67-126]; Ibn al-Haytham, 1983, 1989) in contrast with the eighteenth century immaterialist thesis of Berkeley.¹⁴ After all, Berkeley believed that the distance from the eye to a given object of vision, as spatial depth, cannot be immediately perceived, but only suggested by mental cues offered to vision. Berkeley argued that sight does not show or in any way inform us that the visual object, which we immediately perceive, exists at a distance, given that objects produce two-dimensional projections on the retina. As a consequence, there cannot be an immediate vision of space or three-dimensionality. Furthermore, spatial depth cannot be perceived, but is simply experienced, and so is the case with the estimation of the size of objects at a remote distance. Relying on the convergence of the eyes in judging the cues of the apparent size of a visible object, Berkeley, following the classical mathematicians (mainly Euclidean and Ptolemaic) who were critically interrogated by Ibn al-Haytham on this question, evokes the angle of vision as the principal estimative determinant.

The philosophical thrust of the affirmation of the visibility of depth by Ibn al-Haytham is best elucidated in Merleau-Ponty's phenomenological analysis of the perception of space (Merleau-Ponty, 1945, pp. 294-309; El-Bizri, 2004). Based on our experiential situation in the world, we are not granted the simultaneous immediacy of seeing depth from our perspective, as well as seeing it in profile from the position of a viewer who looks at it laterally. However, this does not readily reduce the primacy of depth (*profondeur*) into simply being a dimension like breadth (*largeur*), given that *depth* is the most existential of all the dimensions, since it intrinsically belongs to our personal perspective that offers a

¹⁴ Refer to Berkeley's views in: sections 2-28, 41-51 of *An Essay towards a New Theory of Vision* (1709); sections 43-44 of *A Treatise Concerning the Principles of Human Knowledge* (1710); the first dialogue in *Three Dialogues between Hylas and Philonous* (1713), along with remarks in *The Theory of Vision Vindicated and Explained* (1733); (Berkeley, 1948-1957; 1965).

self-openness to the world and onto an inter-subjective worldly otherness. Being the ground of our perspective on things, depth furnishes us with a space of openness to communicate with others by way of merging the horizons of our fields of vision and sensory perception, along with the associated exchange of signifiers that rest on this lived inter-subjective experience of our being-in-the-world (*In-der-Welt-sein; être-dans-le-monde*). *Depth* is ultimately the dimension by which things appear as enveloping one another rather than being juxtaposed. Unlike mathematical representations, depth highlights the manner in which reality impinges on and confronts us with a sense of mystery in its eventful presentations that call for thinking about the place of *being*, truth and meaning.

Based on this introductory inquiry, and upon other complementary studies that were highlighted in the accompanying annotations, it is hoped that novel pathways for rethinking Islamic intellectual history, from the standpoint of contemporary philosophical debates, can indeed be undertaken in view of renewing the impetus of philosophizing in relation to Islam.

ACKNOWLEDGEMENTS

I thank Bo Mou, the Editor of *Comparative Philosophy*, and the three anonymous referees for their helpful comments which assisted me in refining this paper.

REFERENCES

- Aristotle (1924), *Metaphysics*, David Ross (ed.) (Oxford: Oxford University Press).
- Beaufret, Jean (1985), *Dialogue avec Heidegger, Vol. 4: Le chemin de Heidegger* [*Dialogue with Heidegger, Vol. 4: Heidegger's Pathway*] (Paris: Editions de Minuit).
- Berkeley, George (1965), *Berkeley's Philosophical Writings*, David M. Armstrong (ed.) (New York: Macmillan Publishing Company).
- (1948-57), *The Works of George Berkeley, Bishop of Cloyne*, Arthur Aston Luce and Thomas Edmund Jessop (eds.), 9 vols (London: Thomas Nelson & Sons Ltd.).
- Descartes, René (1993), *Meditationes de prima philosophia (Méditations Métaphysiques)* [*Metaphysical Meditations*], trans. (Latin into French) Michelle Beyssade (Paris: Garnier-Flammarion).
- El-Bizri, Nader (2000), *The Phenomenological Quest between Avicenna and Heidegger* (Binghamton, NY: Global Publications, SUNY at Binghamton).
- (2001), "Avicenna and Essentialism", *Review of Metaphysics* 54: 753-78.
- (2003), "Avicenna's *De Anima* between Aristotle and Husserl", in Anna-Teresa Tymieniecka (ed.), *The Passions of the Soul in the Metamorphosis of Becoming* (Dordrecht: Kluwer Academic Publishers), pp. 67-89.
- (2004), "La perception de la profondeur: Alhazen, Berkeley et Merleau-Ponty" [*The Perception of Depth: Alhazen, Berkeley and Merleau-Ponty*], *Oriens-Occidens: sciences, mathématiques et philosophie de l'antiquité à*

- l'âge classique. Cahiers du centre d'histoire des sciences et des philosophies arabes et médiévales, CNRS 5*: 171-84.
- (2005), "A Philosophical Perspective on Alhazen's *Optics*", *Arabic Sciences and Philosophy* 15: 189-218.
- (2006a), "Being and Necessity: A Phenomenological Investigation of Avicenna's Metaphysics and Cosmology", in Anna-Teresa Tymieniecka (ed.), *Islamic Philosophy and Occidental Phenomenology on the Perennial Issue of Microcosm and Macrocosm* (Dordrecht: Springer), pp. 243-61.
- (2006b), "Being-towards-death: On Martyrdom and Islam", *Cristianismo nella storia* 27: 249-79.
- (2006c), "Uneasy Meditations Following Levinas", *Studia Phaenomenologica* 6: 293-315.
- (2007a), "In Defence of the Sovereignty of Philosophy: al-Baghdādī's Critique of Ibn al-Haytham's Geometrisation of Place", *Arabic Sciences and Philosophy* 17: 57-80.
- (2007b), "Imagination and Architectural Representations", in Marco Frascari, Jonathan Hale, Bradley Starkey (eds), *From Models to Drawings: Imagination and Representation in Architecture* (London: Routledge), pp. 34-42.
- (2008a), "God: essence and attributes", in Timothy Winter (ed.), *The Cambridge Companion to Classical Islamic Theology* (Cambridge: Cambridge University Press), pp. 121-40.
- (2008b), "Hermeneutics and Tradition: Re-gathering the *Epistles of the Brethren of Purity*", in Sami Erdem (ed.), *Islam ve Klasik* (Istanbul: *Bilim ve Sanat Vakfı*), pp. 339-60.
- (2008c), "*Le problème de l'espace: approches optique, géométrique et phénoménologique*" [*The Problem of Space: Optical, Geometrical and Phenomenological Approaches*], in Graziella Federici Vescovini and Orsola Rignani (eds), *Oggetto e spazio. Fenomenologia dell'oggetto, forma e cosa dai secoli XIII-XIV ai post-cartesiani* (Firenze: Edizioni del Galluzzo), pp. 59-70.
- (2009), "Ibn al-Haytham et le problème de la couleur" [*Ibn al-Haytham and the Problem of Color*], *Oriens-Occidens sciences, mathématiques et philosophie de l'antiquité à l'âge classique. Cahiers du centre d'histoire des sciences et des philosophies arabes et médiévales, CNRS 7*: 201-26.
- (2010), "Creative inspirations or intellectual impasses? Reflections on relationships between architecture and the humanities", in Soumyen Bandyopadhyay, Jane Lomholt, Nicholas Temple and Renée Tobe (eds), *The Humanities in Architectural Design: A Contemporary and Historical Perspective* (London: Routledge), pp. 123-35.
- al-Fārisī, Kamāl al-Dīn (1928), *Tanqīh al-manāzir* [*Recension of (Ibn al-Haytham's) Optics*], 2 vols (Hyderabad: Osmania Publications Bureau).
- Hegel, G. W. F. (1969), *Wissenschaft der Logik (The Science of Logic)*, translated by A.V. Miller (London: George Allen & Unwin).
- Heidegger, Martin (1953), *Sein und Zeit [Being and Time]* (Tübingen: Max Niemeyer Verlag).
- (1975), *Die Grundprobleme der Phänomenologie [Basic Problems of Phenomenology]* (Frankfurt am Main: Vittorio Klostermann).

- Ibn al-Haytham (1972), *Opticae thesaurus Alhazeni*, Friedrich Risner (ed.); reprint from the 1572 edition (New York: Johnson Reprint Corporation).
- (1983), *Kitāb al-manāzir [Book of Optics]*, Vols I-III, ed. A. I. Sabra (Kuwait).
- (1989), *The Optics of Ibn al-Haytham, Books I-III, On Direct Vision*, trans. A. I. Sabra, 2 vols. (London: Warburg Institute).
- (2002), *Kitāb al-manāzir [Book of Optics]*, Vols IV-V, A. I. Sabra (ed.) (Kuwait).
- (2001), *Alhacen's Theory of Visual Perception*, trans. Albert Mark Smith (ed.) (Philadelphia: American Philosophical Society).
- Ibn Sīnā (1874), *Kitāb al-Hidāya [Book of Guidance]*, ed. Muhammad 'Abdu (ed.) (Cairo).
- (1975), *Kitāb al-Shifā', al-ilāhiyyāt [Book of Healing, Metaphysics]* George C. Anawati, Ibrahim Madkour, Said Zayed (eds.) (Cairo).
- (1985), *Kitāb al-Najāṭ, al-ilāhiyyāt [Book of Deliverance, Metaphysics]*, Majid Fakhry (ed.) (Beirut).
- (1960) *al-Ishārāt wa-al-tanbīhāt [Pointers and Directives]*, Vol. III, Sulayman Dunya (ed.) (Cairo).
- Kant, Immanuel (1929), *Kritik der Reinen Vernunft (Critique of Pure Reason)*, trans. Norman Kemp Smith (New York: Macmillan & Co., Ltd.)
- Kemp, Martin (1978), "Science, Non-Science, and Nonsense: Brunelleschi's Perspective", *Art History* 1: 134-61.
- (1984), *Geometrical Perspective from Brunelleschi to Desargues* (Oxford: Oxford University Press).
- (1990), *The Science of Art: Optical Themes in Western Art from Brunelleschi to Seurat* (New Haven: Yale University Press).
- Levinas, Emmanuel (1979), *Le temps et l'autre [Time and the Other]* (Paris: Presses Universitaires de France).
- Lindberg, David C. (1971), "Lines of Influence in the 13th cent. Optics: Bacon, Witelo, and Pecham", *Speculum* 46: 66-83.
- (1997), "La réception occidentale de l'optique arabe" [*The Occidental Reception of Arabic Optics*], in Roshdi Rashed and Régis Morélon (eds), *Histoire des sciences arabes, vol. II: Mathématiques et physique* (Paris: Le Seuil), pp. 355-68.
- McNeill, William (1999), *The Glance of the Eye: Heidegger, Aristotle, and the Ends of History* (Albany: State University of New York Press).
- Merleau-Ponty, Maurice (1945), *Phénoménologie de la perception [Phenomenology of Perception]* (Paris: Gallimard).
- Sartre, Jean-Paul (1943), *L'être et le néant, essai d'ontologie phénoménologique [Being and Nothingness: An Essay in Phenomenological Ontology]* (Paris: Gallimard).
- Said, Edward (1978), *Orientalism* (New York: Pantheon Books, Random House).

THE LOGIC OF THE *CATUSKOTI*

GRAHAM PRIEST

ABSTRACT: *In early Buddhist logic, it was standard to assume that for any state of affairs there were four possibilities: that it held, that it did not, both, or neither. This is the catuskoti (or tetralemma). Classical logicians have had a hard time making sense of this, but it makes perfectly good sense in the semantics of various paraconsistent logics, such as First Degree Entailment. Matters are more complicated for later Buddhist thinkers, such as Nagarjuna, who appear to suggest that none of these options, or more than one, may hold. The point of this paper is to examine the matter, including the formal logical machinery that may be appropriate.*

Keywords: *catuskoti, tetralemma, Buddhist logic, unanswerable questions, Nagarjuna, Mulamadhyamakakarika, truth predicate, paraconsistency, First Degree Entailment, many-valued logic, relational semantics*

1 INTRODUCTION: ENTER THE *CATUSKOTI*

The *catuskoti*¹ is a venerable principle in Buddhist logic. How it was deployed seems to have varied somewhat over the thousand-plus years of Indian Buddhism. However, it was clearly a contentious principle in the context of Indian logic. It is equally contentious to modern commentators, though the contention here is largely in how to understand it²—including how to interpret it in terms of modern logic. As one modern commentator puts it (Tillemans 1999, 189):

Within Buddhist thought, the structure of argumentation that seems most resistant to our attempts at a formalization is undoubtedly the *catuskoti* or tetralemma.

PRIEST, GRAHAM: Boyce Gibson Professor of Philosophy, University of Melbourne; Distinguished Professor of Philosophy, Graduate Center, City University of New York; Arch Professorial Fellow, University of At. Andrews. Email: g.priest@unimelb.edu.au

¹Actually, *catuskoti*, but I ignore the diacriticals in writing Sanskrit words, except in the bibliography.

²For a review, see Ruegg 1977, 39 ff.

For a start, the *catuskoti*, whatever it is, is something which sails very close to the wind of violating both the Principles of Excluded Middle and of Non-Contradiction. Commentators who know only so-called “classical” logic, in particular, are therefore thrown into a tizzy.

The point of this article is to make sense of the *catuskoti* from the enlightened position of paraconsistent logic. I shall not attempt to discuss all the historical thinkers who appealed to the *catuskoti*. I shall be concerned mainly with how it functioned in the thought of Nagarjuna and his Madhyamaka successors. Here, its use is, perhaps, both the most sophisticated and the most puzzling.¹

2 A FIRST APPROACH

2.1 BACK TO THE BEGINNING

But let us start at the beginning. In the West, the *catuskoti* is often called by its Greek equivalent, the *tetralemma*, meaning ‘four-corners’. The four corners are four options that one might take on some question: given any question, there are four possibilities, *yes*, *no*, *both*, and *neither*.

Who first formulated this thought seems to be lost in the mists of time, but it seems to be fairly orthodox in the intellectual circles of Gotama, the historical Buddha (c. 6c BCE). Thus, canonical Buddhist texts often set up issues in terms of these four possibilities. For example, in the *Mijjhima-Nikaya*, when the Buddha is asked about one of the profound metaphysical issues, the text reads as follows:²

‘How is it, Gotama? Does Gotama believe that the saint exists after death, and that this view alone is true, and every other false?’

‘Nay, Vacca. I do not hold that the saint exists after death, and that this view alone is true, and every other false.’

‘How is it, Gotama? Does Gotama believe that the saint does not exist after death, and that this view alone is true, and every other false?’

‘Nay, Vacca. I do not hold that the saint does not exist after death, and that this view alone is true, and every other false.’

‘How is it, Gotama? Does Gotama believe that the saint both exists and does not exist after death, and that this view alone is true, and every other false?’

‘Nay, Vacca. I do not hold that the saint both exists and does not exist after death, and that this view alone is true, and every other false.’

‘How is it, Gotama? Does Gotama believe that the saint neither exists nor does not exist after death, and that this view alone is true, and every other false?’

‘Nay, Vacca. I do not hold that the saint neither exists nor does not exist after death, and that this view alone is true, and every other false.’

¹As Tillemans 1999, 189, notes.

²Radhakrishnan and Moore 1957, 289 f. The word ‘saint’ is a rather poor translation. It refers to someone who has attained enlightenment, a Buddha (Tathagata).

It seems clear from the dialogue that the Buddha's interlocutor thinks of himself as offering an exclusive and exhaustive disjunction from which to choose. True, the Buddha never endorses any of the positions offered—on this and other similar “unanswerable” questions. But a rationale commonly offered for this is that these matters are of no soteriological importance; they are just a waste of time.¹ Thus, in the *Cula-Malunkya Sutta*, we read (Thanissaro 1998):

It's just as if a man were wounded with an arrow thickly smeared with poison. His friends and companions, kinsmen and relatives would provide him with a surgeon, and the man would say, 'I won't have this arrow removed until I know whether the man who wounded me was a noble warrior, a priest, a merchant, or a worker.' He would say, 'I won't have this arrow removed until I know the given name and clan name of the man who wounded me... until I know whether he was tall, medium, or short... until I know whether he was dark, ruddy-brown, or golden-colored... until I know his home village, town, or city... .' The man would die and those things would still remain unknown to him.

In the same way, if anyone were to say, 'I won't live the holy life under the Blessed One as long as he does not declare to me that 'The cosmos is eternal,'... or that 'After death a Tathagata neither exists nor does not exist,' the man would die and those things would still remain undeclared by the Tathagata....

So, Malunkya, remember what is undeclared by me as undeclared, and what is declared by me as declared. And what is undeclared by me? 'The cosmos is eternal,' is undeclared by me. 'The cosmos is not eternal,' is undeclared by me. ... 'After death a Tathagata exists'... 'After death a Tathagata does not exist'... 'After death a Tathagata both exists and does not exist'... 'After death a Tathagata neither exists nor does not exist,' is undeclared by me.

And why are they undeclared by me? Because they are not connected with the goal, are not fundamental to the holy life. They do not lead to disenchantment, dispassion, cessation, calming, direct knowledge, self-awakening, unbinding. That's why they are undeclared by me.

However, in some of the sutras there is a hint of something else going on, in that the Buddha seems to explicitly reject all the options—perhaps on the ground that they have a common false presupposition. Thus, in the *Mijjhima-Nikaya*, the Buddha says that none of the four kotis 'fits the case' in such issues. When questioned how this is possible, he says (Radhakrishnan and Moore 1957, 290):

But Vacca, if the fire in front of you were to become extinct, would you be aware that the fire in front of you had become extinct?

Gotama, if the fire in front of me were to become extinct, I would be aware that the fire in front of me had become extinct.

But, Vacca, if someone were to ask you, 'In which direction has the fire gone,—east, or west, or north, or south?' what would you say O Vacca?

The question would not fit the case, Gotama. For the fire which depended on fuel of grass and wood, when all that fuel has gone, and it can get no other, being thus without nutriment, is said to be extinct.

¹See Ruegg 1977, 1-2.

Here lie the seeds of future complications. We will come to them in due course. For the moment, I just note that it appears to be the case that the orthodox view at the time was that the four options are mutually exclusive and exhaustive choices.¹

The choice is stated more tersely and explicitly by later thinkers. For example, Aryadeva, Nagarjuna's disciple writes (Tillemans 1999,189):

Being, non-being, [both] being and non-being, neither being [nor] non-being: such is the method that the wise should always use with regard to identity and all other [theses].

And in the *Mulamadhyamakakarika* (hereafter, MMK) Nagarjuna frequently addresses an issue by considering these four cases. Thus, in ch. XXV, he considers nirvana. First, he considers the possibility that it exists (vv. 4-6); then that it does not exist (vv. 7-8); then that it both exists and does not exist (vv. 11-14); and finally, that it neither exists nor does not (vv. 14-15). We will come back to this passage later as well.

For the moment, all we need to note is that in the beginning the *catuskoti* functioned as something like a Principle of the Excluded Fifth. Aristotle held a principle of the Excluded Third: any statement must be either true or false; there is no third possibility; moreover, the two are exclusive. In a similar but more generous way, the *catuskoti* gives us an exhaustive and mutually exclusive set of four possibilities.

2.2 THE *CATUSKOTI*: SOME DEAD ENDS

So much for the basic idea, which is clear enough. The question is how to transcribe it into the rigor of modern logic. The simple-minded thought is that for any claim, A , there are four possible cases:

- (a) A
- (b) $\neg A$
- (c) $A \wedge \neg A$
- (d) $\neg(A \vee \neg A)$

(c) will wave red flags to anyone wedded to the Principle of Non-Contradiction—but the texts seem pretty explicit that you might have to give this away. There are worse problems. Notably, assuming De Morgan's laws, (d) is equivalent to (c), and so the two kotis collapse. Possibly, one might reject the Principle of Double Negation, so that (d) would give us only $\neg A \wedge \neg\neg A$. But there are worse problems. The four cases are supposed to be exclusive; yet case (c) entails both cases (a) and (b). So the corners again collapse.

¹See Ruegg 1977, 1.

The obvious thought here is that we must understand (a) as saying that A is true and not false. Similarly, one must understand (b) as saying that A is false and not true. Corners (a) and (b) then become: $A \wedge \neg\neg A$ and $\neg A \wedge \neg\neg A$ (i.e., $\neg A$). Even leaving aside problems about double negation, case (c) still entails case (b). We are no better off.

Unsurprisingly, then, modern commentators have tried to find other ways of expressing the *catuskoti*. Robinson (1956, 102 f.) suggests understanding the four corners as:

- (a) $\forall xA$
- (b) $\forall x\neg A$
- (c) $\exists xA \wedge \exists x\neg A$
- (d) $\neg\exists xA \wedge \neg\exists x\neg A$

The artifice of using a quantifier is manifest. Claims such as ‘The Buddha exists after death’ and ‘The cosmos is infinite’ have no free variable. How, then, is a quantifier supposed to help? And why choose that particular combination of universal and particular quantifiers? Even supposing that one could smuggle a free variable into these claim somehow, case (d) entails case (b) (and absent a misbehaviour of double negation, it entails (a) as well).

Tillemans (1999, 200) enumerates the four corners, slightly more plausibly, as:

- (a) $\exists xA$
- (b) $\exists x\neg A$
- (c) $\exists x(A \wedge \neg A)$
- (d) $\exists x(\neg A \wedge \neg\neg A)$

But we still have the problem of an apparently spurious quantifier. And unless double negation fails, corners (c) and (d) collapse into each other. Even if not, case (c) entails cases (a) and (b). Moreover, Tillemans’ stated aim is to retain classical logic,¹ in which case, case (c) (and case (d)) are empty. This hardly seems to do justice to matters.

Some commentators have suggested using a non-classical logic. Thus, Staal (1975, 47) suggests using intuitionist logic, so the corners become:

- (a) A
- (b) $\neg A$

¹See Tillemans 1999, 200.

(c) $A \wedge \neg A$

(d) $\neg A \wedge \neg\neg A$

Moving to intuitionist logic at least motivates the failure of double negation. But case (c) still entails cases (a) and (b), and case (d) entails case (b). To add insult to injury, cases (c) and (d) are empty.¹

Westerhoff (2010, ch. 4) suggests using two kinds of negation. Let us use \times for a second kind of negation. The four corners are then formulated as:

(a) A

(b) $\neg A$

(c) $A \wedge \neg A$

(d) $\times(A \vee \neg A)$

We still have case (c) entailing cases (a) and (b). We can perhaps avoid this by formulating them as $A \wedge \times\neg A$ and $\neg A \wedge \times A$. So we have:

(a) $A \wedge \times\neg A$

(b) $\neg A \wedge \times A$

(c) $A \wedge \neg A$

(d) $\times(A \vee \neg A)$

What consequences this formulation has depends very much on how one thinks of \times as working, and how, in particular, it interacts with \neg . Westerhoff points to the standard distinction in Indian logic between *paryudasa* negation and *prasaja* negation, the former being, essentially, predicate negation; the latter, essentially, sentential negation. As he points out, the distinction will not be immediately applicable here, since both \neg and \times are obviously sentential. The important

¹This is not quite fair to Staal. His suggestion arises in connection with the possibility of rejecting all four kotis. We then have:

(a) $\neg A$

(b) $\neg\neg A$

(c) $\neg(A \wedge \neg A)$

(d) $\neg(\neg A \wedge \neg\neg A)$

Cases (c) and (d) at least now have truth on their side, but vacuously: they subsume every other case.

point, he takes it, is that *paryudasa* negation preserves various presuppositions of the sentence negated. Thus, it may be held, ‘the King of France is bald’ and ‘the King of France is not bald’, both presuppose that there is a King of France, and so may both fail to be true. Call this an *internal* negation. Whereas, ‘it is not the case that the King of France is bald’ holds simply if ‘the King of France is bald’ *fails* to hold; and one reason why it may fail to do so is that a presupposition fails. Call this an *external* negation. The thought, then, is that \neg is an internal negation and \times is an external negation.

On this account, $\neg A$ would seem to entail $\times A$: ‘The king of France is not bald’ entails ‘It is not the case that the King of France is bald’. If this is so, case (c) of the four kotis cannot hold: A cannot both hold and fail to hold. But even setting this aside, the move seems somewhat *ad hoc*, since there is no textual evidence that negation is functioning in two different ways in the *catuskoti*. And if it is, there would seem to be lots more cases to consider, since every negation in our original *catuskoti* is potentially ambiguous. Every way of disambiguating is going to be a separate case. (Though some of these may be logically interconnected.) Why choose just the ones Westerhoff lights on?¹

3 A FORMULATION OF THE *CATUSKOTI*

3.1 A SYNTACTIC FORMULATION

Doubtless there is more to be said about all these matters. However, with the help of some other non-classical logics, we will now see how one can do justice to the logic of the *catuskoti*.

A very natural way of expressing the thought that claims are true, false, both, or neither, is with a truth predicate. So let us use **T** and **F** for the predicates ‘is true’ and ‘is false’. Angle brackets will act as a name-forming operator. Thus, $\langle A \rangle$ is the name of A . In fact, it begs no question to define $\mathbf{F} \langle A \rangle$ as $\mathbf{T} \langle \neg A \rangle$; so we will do this. Given the context, it makes sense to assume that $\mathbf{T} \langle A \rangle$ and $\mathbf{F} \langle A \rangle$ are independent of each other—this is exactly how truth behaves in logics with truth value gaps and gluts; thus, from the fact that the one holds or fails follows nothing about whether the other does. We may then define four predicates as follows:

- $T \langle A \rangle$ is $\mathbf{T} \langle A \rangle \wedge \neg \mathbf{F} \langle A \rangle$

¹Westerhoff suggests interpreting the external negation as an illocutory negation (p. 78); that is, as the speech act of denial. (See Priest 2006b, ch. 6.) This, indeed, has a certain appeal. A problem with the approach, however, is that it makes no sense to put illocutory acts in propositional contexts. Thus, the first two of the four kotis (at least as I reformulated them) make no sense. Worse: once the possibility of denying all four kotis is on the table, the rejection of the fourth koti would have to be expressed as $\times \times (A \vee \neg A)$. This makes no sense, since \times does not iterate.

- $F \langle A \rangle$ is $\neg \mathbf{T} \langle A \rangle \wedge \mathbf{F} \langle A \rangle$
- $B \langle A \rangle$ is $\mathbf{T} \langle A \rangle \wedge \mathbf{F} \langle A \rangle$
- $N \langle A \rangle$ is $\neg \mathbf{T} \langle A \rangle \wedge \neg \mathbf{F} \langle A \rangle$

I will call these four *status predicates*. The *catuskoti* can be formulated simply as the schema:

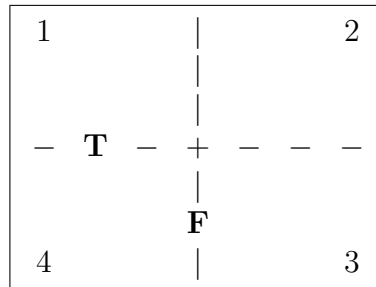
$$\mathbf{C1: } T \langle A \rangle \vee F \langle A \rangle \vee B \langle A \rangle \vee N \langle A \rangle$$

plus claims to the effect that the disjuncts are pairwise exclusive, that is:

$$\mathbf{C2: } \neg(S_1 \langle A \rangle \wedge S_2 \langle A \rangle)$$

where S_1 and S_2 are any distinct status predicates.

Given that there is no logical relationship between \mathbf{T} and \mathbf{F} , there is no threat that any of the cases are vacuous, or that they collapse into each other. Thus, for example, as we have observed $\neg(A \vee \neg A)$ plausibly collapses into $A \wedge \neg A$; but $\neg(T \langle A \rangle \vee F \langle A \rangle)$, though it entails $\neg T \langle A \rangle \wedge \neg F \langle A \rangle$ does not collapse into $T \langle A \rangle \wedge F \langle A \rangle$. To see this, just consider the following picture. I number the quadrants for reference:



The truths are in the left-hand side; the falsehoods are in the bottom half. To say $T \langle A \rangle$ is to say that A is in quadrant 1; to say that $F \langle A \rangle$ is to say that A is in quadrant 3. Thus, to say that $\neg(T \langle A \rangle \vee F \langle A \rangle)$ is to say that A is in quadrants 2 or 4. By contrast, to say that $T \langle A \rangle \wedge F \langle A \rangle$ is to say that A is in quadrants 1 and 3, which is impossible.

There is, however, presumably more to be said about truth. The most obvious thing is the T -schema: $\mathbf{T} \langle A \rangle \leftrightarrow A$, for some appropriate biconditional (and its mate the F -schema: $\mathbf{F} \langle A \rangle \leftrightarrow \neg A$, which is just a special case, given our definition of \mathbf{F}). I do not know of any Indian textual sources that endorse this, but it seems so natural and obvious that it is plausible that it was taken for granted. In Western philosophy it has been problematised by paradoxes such as the Liar. But, again as far as I know, there is no awareness of these in early Indian philosophy. A little

care must be taken with the biconditional in question. One may be tempted to reason as follows:

$$\begin{array}{ll}
 \mathbf{T}\langle A \rangle \leftrightarrow A & T\text{-schema} \\
 \neg A \leftrightarrow \neg \mathbf{T}\langle A \rangle & \text{Contraposition} \\
 \mathbf{T}\langle \neg A \rangle \leftrightarrow \neg A & T\text{-schema} \\
 \mathbf{T}\langle \neg A \rangle \leftrightarrow \neg \mathbf{T}\langle A \rangle & \text{Transitivity}
 \end{array}$$

(And similarly, $\mathbf{F}\langle \neg A \rangle \leftrightarrow \neg \mathbf{F}\langle A \rangle$.) If this reasoning is successful, we suffer collapse of the kotis. $T\langle A \rangle$, that is, $\mathbf{T}\langle A \rangle \wedge \neg \mathbf{F}\langle A \rangle$, collapses into $\mathbf{T}\langle A \rangle \wedge \mathbf{T}\langle \neg \neg A \rangle$, that is, $\mathbf{T}\langle A \rangle$ (assuming double negation); and $F\langle A \rangle$, that is, $\mathbf{F}\langle A \rangle \wedge \neg \mathbf{T}\langle A \rangle$, collapses into $\mathbf{T}\langle \neg A \rangle \wedge \mathbf{T}\langle \neg A \rangle$, that is, $\mathbf{F}\langle A \rangle$. So $\neg(T\langle A \rangle \vee F\langle A \rangle)$ is equivalent to $\neg T\langle A \rangle \wedge \neg F\langle A \rangle$, that is, $\neg \mathbf{T}\langle A \rangle \wedge \neg \mathbf{F}\langle A \rangle$, that is, $\mathbf{F}\langle A \rangle \wedge \mathbf{T}\langle A \rangle$, which is equivalent to $T\langle A \rangle \wedge F\langle A \rangle$.

Fortunately, then, we do not have to take the appropriate biconditional to be contraposible.¹ And neither should we if we take the four corners seriously. To say that $\mathbf{T}\langle \neg A \rangle$ is to say that A is in quadrants 3 or 4 of our diagram; whilst to say that $\neg \mathbf{T}\langle A \rangle$ is to say that A is quadrants 2 or 3. Quite different things.

The T -schema certainly does have ramifications, however. For if quadrant 4 of our diagram is not vacuous, there are some A s such that $\mathbf{T}\langle A \rangle \wedge \mathbf{F}\langle A \rangle$, and so that $A \wedge \neg A$. We have, then, the possibility of dialetheism. As we have already noted, however, the recognition of the possibility of this is quite explicit in canonical statements of the *catuskoti*.

3.2 FIRST DEGREE ENTAILMENT

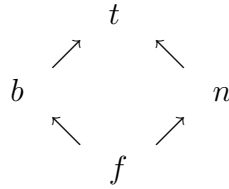
What, however, of the semantics of the language used to formulate the *catuskoti*, and the notion of validity which goes with it?² Given the final observation of the previous section, the logic must be paraconsistent, but nothing much else seems forced on us.

Still, there is an answer that will jump out at anyone with a passing acquaintance with the foundations of relevant logic. First Degree Entailment (FDE) is a system of logic that can be set up in many ways, but one of these is as a four-valued logic whose values are t (true only), f (false only), b (both), and n (neither). The

¹See Priest 1987, chs 4 and 5.

²Let me be precise about the language in question. Its formulas are defined by a joint recursion. Any propositional parameter is an atomic formula; if A is any formula, $\mathbf{T}\langle A \rangle$ is an atomic formula; if A and B are formulas, so are $\neg A$, $A \vee B$, and $A \wedge B$. Given this syntax, the specifications of the extension of \mathbf{T} and of truth in an interpretation may proceed by a similar joint recursion.

values are standardly depicted by the following Hasse diagram:



Negation maps t to f , vice versa, n to itself, and b to itself. Conjunction is greatest lower bound, and disjunction is least upper bound. The set of designated values, D , is $\{t, b\}$.¹ The four corners of truth and the Hasse diagram seem like a marriage made for each other in a Buddhist heaven.² So let us take FDE to provide the semantics and logic of the language.

FDE can be characterised by the following rule system. (A double line indicates a two-way rule, and overlining indicates discharging an assumption.)³

$$\begin{array}{c}
 \frac{A, B}{A \wedge B} \quad \frac{A \wedge B}{A (B)} \\
 \\
 \frac{A (B)}{A \vee B} \quad \frac{\overline{A} \quad \overline{B}}{A \vee B \quad C \quad C} \\
 \\
 \frac{\overline{\overline{\neg(A \wedge B)}}}{\neg A \vee \neg B} \quad \frac{\overline{\overline{\neg(A \vee B)}}}{\neg A \vee \neg B} \quad \frac{\overline{\overline{\neg\neg A}}}{A}
 \end{array}$$

FDE does not come furnished with the predicates \mathbf{T} and \mathbf{F} , so we need to say how these are to be taken to work in the context of the semantics. We are taking $\mathbf{F}\langle A \rangle$ to be defined as $\mathbf{T}\langle \neg A \rangle$. So we need only concern ourselves with $\mathbf{T}\langle A \rangle$. A thought that suggests itself is to take the value of $\mathbf{T}\langle A \rangle$ to be the same as that of A . But that will not do, since it will validate the contraposed T -schema. Another plausible suggestion is to let $\mathbf{T}\langle A \rangle$ be t if A is t or b , and f if A is n or f . That would do the trick (for the moment). However, for reasons that will become clearer later, I will weaken the condition slightly. Let us require that:

- If the value of A is in D , so is that of $\mathbf{T}\langle A \rangle$

¹See Priest 2008, ch. 8.

²As observed in Garfield and Priest 2009.

³See Priest 2002, 4.6.

- If the value of A is not in D , the value of $\mathbf{T}\langle A \rangle$ is f

These conditions generate the values illustrated in the following table for T , F , B , and N , as may easily be checked:

A	$T\langle A \rangle$	$B\langle A \rangle$	$F\langle A \rangle$	$N\langle A \rangle$
t	t or b	f	f	f or b
b	b or f	t or b	b or f	f or b
f	f	f	t or b	f or b
n	f	f	f	t

As can be seen, if A takes some value, the statement to the effect that it takes that value is designated. (Look at the diagonal, top left to bottom right.)

These truth conditions validate the formal statements of the *catuskoti*. Thus, consider **C1**: $T\langle A \rangle \vee F\langle A \rangle \vee B\langle A \rangle \vee N\langle A \rangle$. Whatever value a sentence takes, the limb of the disjunction stating that it takes that value will be designated, as, then, will be the disjunction. For **C2**: any statement of the form $S_1\langle A \rangle \wedge S_2\langle A \rangle$ will contain a sub-conjunction of the form $\mathbf{T}\langle A \rangle \wedge \neg\mathbf{T}\langle A \rangle$ or $\mathbf{F}\langle A \rangle \wedge \neg\mathbf{F}\langle A \rangle$. (Given the definition of \mathbf{F} , the second is just a special case of the first, so just consider this.) Then $\neg(S_1\langle A \rangle \wedge S_2\langle A \rangle)$ will be equivalent to a disjunction which has a part of the form $\mathbf{T}\langle A \rangle \vee \neg\mathbf{T}\langle A \rangle$. If A is designated, so is the first disjunct; if it is not, the second one is. Hence, the whole disjunction is designated.

As for the T -schema, FDE contains no real conditional connective. To keep things simple, we can take the biconditional in the Schema to be bi-entailment. That is, $A \leftrightarrow B$ is: $A \vDash B$ and $B \vDash A$.¹ The truth conditions for \mathbf{T} clearly now deliver the validity of the Schema, though not its contraposed form, since we may have $\mathbf{T}\langle A \rangle$ being t while A is b . In this case, $\neg A$ will be b when $\neg\mathbf{T}\langle A \rangle$ is f , so $\neg A \not\vDash \neg\mathbf{T}\langle A \rangle$.

The rule system for FDE can be made sound and complete with respect to \mathbf{T} by adding the following rules:

$$\frac{A}{\mathbf{T}\langle A \rangle} \quad \frac{\cdot}{\mathbf{T}\langle A \rangle \vee \neg\mathbf{T}\langle A \rangle}$$

Call these the T rules. And call the rule system obtained by adding these to FDE, *FDES*. ('S' or status.) *FDES* is sound and complete with respect to the semantics. The proof of this may be found in the technical appendix to this essay.

¹FDE can be extended to contain an appropriate conditional operator, as can all the logics we will meet in this paper. I ignore this topic, since it is irrelevant for the matter at hand.

4 REJECTING ALL THE KOTIS

4.1 BUT THINGS ARE MORE COMPLICATED

So far, so good. Things get more complicated when we look at the way that the *catuskoti* is deployed in later developments in Buddhist philosophy—especially in the way it appears to be deployed in the writings of Nagarjuna and his Madhyamaka successors.

We have taken the four corners of truth to be exhaustive and mutually exclusive. The trouble is that we find Nagarjuna appearing to say that sometimes none of the four corners may hold. For example, he says, MMK XXII: 11, 12:¹

‘Empty’ should not be asserted.

‘Non-empty; should not be asserted.

Neither both nor neither should be asserted.

These are used only nominally.

How can the tetralemma of permanent and impermanent, etc.

Be true of the peaceful?

How can the tetralemma of finite, infinite, etc.

Be true of the peaceful?

and at MMK XXV: 17, we have:²

Having passed into nirvana, the Victorious Conqueror

Is neither said to be existent

Nor said to be nonexistent.

Neither both nor neither are said.

(We have already noted that there are hints of this sort of thought in some early Buddhist statements.) Rejecting all four kotis is sometimes called the ‘fourfold negation’. And just to confuse matters, the word ‘*catuskoti*’ is sometimes taken to refer to this.³

To make things even more confusing, Nagarjuna sometimes seems to say that *more* than one of the kotis can hold, even all of them. So MMK XVIII: 8 tells us that:

¹Translations of the MMK are taken from Garfield 1995.

²See also, MMK XXVII: 13-14.

³The Buddhist tradition was not alone in sometimes appearing to reject all of the kotis. See Raju 1953.

Everything is real and is not real.

Both real and not real,

Neither real nor not real.

This is Lord Buddha's teaching.

How are we to understand these things?—and what does it do to the logic of our picture? The matter is far from straightforward, and cannot be divorced from interpreting Nagarjuna. But he is a cryptic writer, and in the various commentarial traditions that grew up around the MMK in India, Tibet, China, and Japan, one can find various different interpretations. When Western philosophers got their hands on Nagarjuna, matters become even more complex.¹ But let me do what I can to paint a plausible picture.

Let us set aside for the moment the possibility of endorsing more than one *koti*—we will come to this in due course—and start with rejecting all of them. The thought that all four *kotis* may fail for some statement suggests that something *else* is to be said about it. But nothing in Nagarjuna interpretation is straightforward, and even this has been denied. It is possible to interpret Nagarjuna as a mystic who simply thinks that ultimate reality is ineffable, and hence that any statement about the ultimate is to be rejected. The fourfold negation is just to be understood as an illocutory rejection of each possibility. The text, indeed, does lend some support to this view. Thus, MMK XXVII: 30 says:

I prostrate to Gautama
 Who through compassion
 Taught the true doctrine
 Which leads to the relinquishing of all view.

However, one should be careful about the word that is being translated as 'view' here. Two Sanskrit words standardly get translated in this way, *drsti* and *darsana*. The latter simply means 'teaching'; the former means something like a doctrine about the objects of ultimate reality. The word in the passage I have just quoted is *drsti*: Nagarjuna thinks that everything is empty of self-being (*svabhava*). There are no objects with ultimate reality in this sense. Hence, any theory of such objects is mistaken, and so should be given up. But Nagarjuna does not think that all teachings are to be given up. Indeed, the MMK and the writings of most of Nagarjuna's Madhyamaka successors, contain many positive teachings: that everything, including emptiness, is empty, is one such. Thus, MMK XXIV: 18 tells us, famously:

¹See Hayes 1994, 325 ff.

Whatever is dependently co-arisen
 That is explained to be emptiness.
 That, being a dependent designation,
 Is itself the middle way.

You do not have to understand exactly what this means to see that a positive view about emptiness is being advocated here. It is not a mere rejection.

Let us assume, then, that something positive can be said about claims for which all the kotis are rejected. They have some other status, namely, (e): none of the above. The obvious thing is then to add a new predicate to our language, E , to express this, and add it to our status predicates. The extended *catuskoti* then becomes:

E1: $T \langle A \rangle \vee F \langle A \rangle \vee B \langle A \rangle \vee N \langle A \rangle \vee E \langle A \rangle$

together with all statements of the form

E2: $\neg(S_1 \langle A \rangle \wedge S_2 \langle A \rangle)$

for our new set of status predicates.

4.2 A 5-VALUED LOGIC

What to say about the semantics of the extended language, and the corresponding notion of validity is less obvious. Perhaps the most obvious thought is to add a new value, e , to our existing four (t , f , b , and n), expressing the new status.¹ Since it is the status of claims such that neither they nor their negations should be accepted, it should obviously not be designated. Thus, we still have that $D = \{t, b\}$. How are the connectives to behave with respect to e ? Both e and n are the values of things that are neither true nor false, but they had better behave differently if the two are to represent distinct alternatives. The simplest suggestion is to take e to be such that whenever any input has the value e , so does the output: e -in/ e -out.²

The logic that results by modifying FDE in this way is obviously a sub-logic of it. It is a proper sub-logic. It is not difficult to check that all the rules of FDE are designation-preserving except the rule for disjunction-introduction, which is not, as an obvious counter-model shows. However, replace this with the rules:

$$\frac{\varphi(A) \quad C}{A \vee C} \quad \frac{\varphi(A) \quad C}{\neg A \vee C} \quad \frac{\varphi(A) \quad \psi(B) \quad C}{(A \wedge B) \vee C}$$

¹As in Garfield and Priest 2009. Happily, e , there, gets interpreted as emptiness.

²We will see that this behaviour of e falls out of a different semantics for the language in section 10.

where $\varphi(A)$ and $\psi(B)$ are any sentences containing A and B , not within the scope of angle brackets.¹ Call these the φ Rules, and call this system FDE_φ . FDE_φ is sound and complete with respect to the semantics. Details may be found in the appendix to the paper.

As for the formal conditions of the *catuskoti*, we may augment the truth conditions for status predicates with the following for E :

- If the value of A is e , then the value of $E \langle A \rangle$ is t .
- If the value of A is not e , the value of $E \langle A \rangle$ is f of b .

There is one extra wrinkle. $N \langle A \rangle$, as defined before, was $\neg \mathbf{T} \langle A \rangle \wedge \neg \mathbf{T} \langle \neg A \rangle$. The trouble is that this condition is also satisfied when A has the value e . Hence, $N \langle A \rangle$ needs to be redefined as $\neg \mathbf{T} \langle A \rangle \wedge \neg \mathbf{T} \langle \neg A \rangle \wedge \neg E \langle A \rangle$. As may be checked, the truth table for the status predicates now becomes:

A	$T \langle A \rangle$	$B \langle A \rangle$	$F \langle A \rangle$	$N \langle A \rangle$	$E \langle A \rangle$
t	t or b	f	f	f or b	f or b
b	b or f	t or b	b or f	f or b	f or b
f	f	f	t or b	f or b	f or b
n	f	f	f	t or b	f or b
e	f	f	f	f	t

It is easy to see that $T \langle A \rangle \vee F \langle A \rangle \vee B \langle A \rangle \vee N \langle A \rangle$, may fail to be designated (and its negation designated), as one would expect, but that **E1** is designated. Moreover, so is every instance of **E2**. The arguments for the old cases are much the same as before (though we need to bear in mind that the N has been redefined). The four new cases are:

- $\neg(T \langle A \rangle \wedge E \langle A \rangle)$
- $\neg(F \langle A \rangle \wedge E \langle A \rangle)$
- $\neg(B \langle A \rangle \wedge E \langle A \rangle)$
- $\neg(N \langle A \rangle \wedge E \langle A \rangle)$

For the first: when this is cashed out and expanded, it becomes $\neg \mathbf{T} \langle A \rangle \vee \mathbf{T} \langle \neg A \rangle \vee \neg E \langle A \rangle$. If the value of A is not e , the last disjunct is designated. If it is e , the first is. Similar arguments show that the second and third are valid too. The last, when expanded, comes to $T \langle A \rangle \vee F \langle A \rangle \vee E \langle A \rangle \vee \neg E \langle A \rangle$, which is designated because of the last pair of disjuncts.

¹Instead of $\varphi(A)$ (etc.), one could have, instead, any sentence that contained all the propositional parameters in A .

To extend the proof theory to E , add the new rules:

$$\frac{\varphi(A)}{\neg E \langle A \rangle} \quad \frac{\neg E \langle A \rangle \quad B}{A \vee B} \quad \frac{}{E \langle A \rangle \vee \neg E \langle A \rangle} .$$

Call these the E rules. And call FDE_φ augmented by the T rules and the E rules $FDE_\varphi S$. $FDE_\varphi S$ is sound and complete with respect to the semantics. Details of the proof can be found in the appendix to this paper.

So much, for the moment, for formal matters. It is time to return to philosophical issues.

4.3 AS YOU WERE

The previous section notwithstanding, I think that it is wrong to take Nagarjuna to reject instances of our original *catuskoti*. For a start, authoritative exegetes of Madhyamaka, such as Candrakirti and Tsong kha pa are quite explicit to the effect that there is no fifth possibility.¹ Moreover, there are important reasons why this should be so. The central concern of the MMK is to establish that everything is empty of self-existence (*svabhava*), and the ramifications of this fact. The main part of the work consists of a series of chapters which aim to establish, of all the things which one might plausibly take to have *svabhava* (causes, the self, suffering, etc.), that they do not do so. The method of argument is not always exactly the same, but there is a general pattern. Cases of the *catuskoti* are enumerated, and each one is then rejected. We have, thus, some kind of *reductio* argument. This much is generally agreed by most commentators.

Now, let us come back to the argument concerning nirvana that we met briefly in section 2 (MMK XXV). Verse 3 tells us that nirvana is empty:

(3) Unrelinquished, unattained,
Unannihilated, not permanent,
Unarisen, unceased:
This is how nirvana is described.

There then follow the arguments for this, based on the four kotis. (Each of the cases has a number of different reasons. I quote only one for each.)

(5) If nirvana were existent,
Nirvana would be compounded
A non-compounded existent
Does not exist anywhere.

¹See Candrakirti 2003, IIa-b, and Tsong kha pa 2006, 50-54.

(8) If nirvana were not existent,
How could nirvana be nondependent?
Whatever is nondependent
Is not nonexistent.

(13) How could nirvana
Be both existent and non-existent?
Nirvana is noncompounded.
Both existents and nonexistents are compounded.

(16) If nirvana is
Neither existent nor nonexistent,
Then by whom is it expounded
'Neither existent nor non-existent'?

We then get the four-cornered negation:

(17) Having passed into nirvana, the Victorious Conqueror
Is neither said to be existent
Nor said to be non-existent.
Neither both nor neither are said.

Now, how, exactly, is this argument supposed to work? If it's a *reductio*, it's a *reductio* of something. Presumably, the claim that nirvana has *svabhava*. This assumption must be appealed to somewhere in the cases for the *reductio* to work. And typically it is. Thus in (13) above we have the claim that nirvana is non-compounded. Why is this? It follows from the fact that nirvana has *svabhava*: entities with *svabhava* entities are not compounded. Since the four cases are impossible on the assumption that nirvana has *svabhava*, we are entitled to conclude at the end of the argument that it is not. Looked at in this way, it is clear that if the four cases of the *catuskoti* do not exhaust all the relevant possibilities, the argument does not work. There is a fifth case to be considered, and maybe that's the relevant one. Of course, Nagarjuna was capable of producing bad arguments, like all great philosophers. But to repeat such a screamer as this, time and time again, just doesn't seem very plausible.

Much more plausible, it would seem, is this. When we get a statement of the fourfold negation, it is not a categorical assertion. Rather, it is a consequence of the assumption that something has *svabhava*. Since these are the only four cases, we apply a perfectly standard *reductio*, and conclude that the thing in question does not have *svabhava*.

While we are on the subject of *reductio*, and since we are taking advantage of a paraconsistent logic—indeed, the possibility of dialetheism—let me add an extra word about this. Some commentators have argued that Nagarjuna subscribed to the Principle of Non-Contradiction. Thus, for example, Robinson endorses this view. In support of it, he quotes MMK VII: 30 and VIII: 7.¹ These passages occur in the midst of rejecting one of the kotis of the *catuskoti* for the subject being discussed (conditioned objects, and agents/actions, respectively), and read, respectively:

Moreover, for an existent thing

Cessation is not tenable.

A single thing being an entity and

A nonentity is not tenable.

An existent and nonexistent agent

Does not perform an existent and nonexistent action.

Existence and non-existence cannot pertain to the same thing.

For how could they exist together?

Now, these quotations hardly prove the point, for a couple of reasons. The first is that each is an *instance* of the Principle of Non-Contradiction. Notoriously, one cannot prove a universal generalisation from a couple of examples. It is quite possible that Nagarjuna simply thought that one of the other kotis was applicable in these particular cases. Secondly, if I am right about how to analyse the structure of the *reductio* arguments in the relevant chapters of the MMK, the rejection of the contradictions here is subject to an assumption: that conditioned objects (VII) and agents/actions (VIII) have *svabhava*. This tells us nothing about the (true) situation when they are not.

However, there is a more substantial worry.² How can a *reductio* argument possibly be taken to be valid if some contradictions are true? How can a conclusion be used to rule out the assumption of an argument if that conclusion might be true? Several points are pertinent here. The first is that *reductio* is *reductio ad absurdum*, not *reductio ad contradictionem*. The argument is taken to rule out its assumption because the conclusion is taken to be unacceptable. The unacceptability does not have to be a contradiction.³ Thus, look at the first of the horns of the *reductio* about nirvana, quoted above (MMK XXV: 8). The unacceptable conclusion is simply that something is uncompounded. The unacceptability of this is grounded, presumably, on other considerations. Conversely, not all contradictions are absurd. That I am a frog and not a frog, clearly is, since it entails

¹Robinson 1956, 295, though I use Garfield's translation.

²Articulated, for example, by Siderits 2008.

³See, further, Ganeri 2001, 155-158.

that I am a frog—which should certainly be rejected. But that the liar sentence is both true and not true is not clearly absurd. Contemporary dialetheists about the semantic paradoxes hold it to be true. Many simple claims, such as that I am a frog, are much more absurd than this.¹

The second point concerns the following question. We have been talking about acceptability—but acceptability to whom? The MMK is a highly polemical work. Though he never cites them, Nagarjuna clearly has certain opponents in his sights. These were, presumably, denizens of the other schools of Indian thought, both Buddhist and non-Buddhist, who were active in this turbulent intellectual period. Now, in a dialectical context of that kind, for an argument to work, it is not necessary that Nagarjuna himself takes the conclusion in question, be it a contradiction or something else, to be unacceptable: he may or he may not. The argument will work if the opponent takes it to be so. (This is exactly how the arguments of a Pyrrhonian skeptic are supposed to get their bite.) And certainly, a number of the schools around at the time, such as the Nyaya, would have subscribed firmly to the Principle of Non-Contradiction. Hence, nothing about Nagarjuna’s own view about the possibility of something satisfying the third koti of the *catuskoti* can be inferred from his use of *reductio* arguments.

Doubtless there is more to be said about these matters. But it is time to return from the digression.

5 ACCEPTING MORE THAN ONE KOTI

5.1 APPLYING THE *CATUSKOTI* TO ITSELF

Let us now set aside *e*, *E*, and their machinations, and revert to the familiar four values of the *catuskoti* for the time being. We still have to consider the even more vexed issue flagged earlier: Nagarjuna sometimes appears to say that more than one of the kotis may obtain. What is one to make of this? The assertion seems to fly in the face of the exclusiveness of the kotis.

First, when contradictions occur in Buddhist writings there is always the option of interpreting them in such a way as to render them consistent. In particular, there is a standard distinction in later Buddhism between conventional and ultimate truth, and one can use this to disambiguate apparently contradictory statements. Thus, for example, in the Diamond Sutra we read things such as:²

The very same perfection of insight, Subhuti, which the Realized One has preached is indeed perfectionless.

One plausible way to interpret this is as saying that ‘insight is a perfection’ is conventionally true, but ultimately false. However, this is a strategy that does

¹See Priest 1998.

²*Vajracchedika* 13b. Translation from Harrison 2006.

not work on all occasions.¹ Following Tsong kha pa, one might, nonetheless, try to employ it with the example from the MMK cited in 4.1,² to obtain:

Everything is real [conventionally] and is not real [ultimately].

Both real [conventionally] and not real [ultimately],

Neither real [ultimately] nor not real [conventionally].

This is Lord Buddha's teaching.

But, though one may certainly interpret the text this way, there is nothing in the text, either in the use of the Sanskrit or the context in which the remark appears, that *forces* this interpretation; and it certainly is not clearly the optimal strategy. As Tillemans says (1999, 197):

Indisputably, Tsong kha pa's interpretation offers advantages in terms of its logical clarity, but as an exegesis of Madhyamaka, his approach may seem somewhat inelegant, since it obliges us to add words almost everywhere in *Madhyamaka* texts. Remarkably, Tsong kha pa himself accomplishes this project down to its most minute details in his commentary on the *Madhyamakakarikas*—perhaps at the price of sacrificing the simplicity of Nagarjuna's language. Hence, is there a more elegant interpretation of the tetralemma... ?³

Let us see if we can find one. Suppose that we take the endorsement of more than one koti at face value. How may we understand it?

One possibility, which has an undeniable self-referential charm is this. At issue is the question of whether the four kotis are mutually exclusive. Apply the *catuskoti* to this claim itself. There are four possibilities: They are, they are not, they both are and are not, or they neither are or are not. The correct option in this case is the third: they are and are not. We can endorse the claim that they are exclusive, and that they are not.

Indeed, exactly this outcome is delivered by the semantics of section 5! As we observed there, these semantics verify every statement of the form **C2**. But now, consider any statement to the effect that *A* satisfies more than one of the kotis—to illustrate with the extreme case, all of them. This is equivalent to a conjunction of the form $\mathbf{T}\langle A \rangle \wedge \neg\mathbf{T}\langle A \rangle \wedge \mathbf{F}\langle A \rangle \wedge \neg\mathbf{F}\langle A \rangle$. Let *A* have the value *b*. Then $\mathbf{T}\langle A \rangle$ and $\mathbf{F}\langle A \rangle$ are both designated. Let them take the value *b*. Then $\neg\mathbf{T}\langle A \rangle$ and $\neg\mathbf{F}\langle A \rangle$ both take the value *b* as well. Hence the whole conjunction takes the value *b*, and so is true—and false as well. Just what we need. I note, moreover,

¹See Deguchi, Garfield, and Priest 2008.

²As suggested in Garfield 1995, 250, and Garfield and Priest 2003, 13-14.

³Tillemans' sentiments are endorsed by Westerhoff 2010, 90. Westerhoff opts for invoking the doctrine of *upaya* (skillful means). Each of the four kotis is appropriately taught to someone on the Buddhist path at different stages of their development, though only the last is (perhaps) ultimately true. I can only say that the verse of the MMK in question would seem to be a most misleading way of saying that!

that, under the same conditions, the sentence $\neg(T \langle A \rangle \vee F \langle A \rangle \vee B \langle A \rangle \vee N \langle A \rangle)$ is also true (and false). Hence, we have another way of accommodating the claim that none of the kotis may hold—even though one of them does.

These moves work only because it is possible for $\mathbf{T} \langle A \rangle$ to take the value b when A takes the value b (something I was careful to make possible). But this is not special pleading: there are independent reasons to suppose that this can happen—when, for example, A is a paradoxical sentence of the form $\neg\mathbf{T} \langle A \rangle$.¹

5.2 RELATIONAL SEMANTICS

It might be thought that this is not taking the non-exclusive nature of the kotis seriously. At the semantic level, there are, after all, four values, t , f , b , and n ; and every statement takes exactly one of these. Can we build the thought that these values are not exclusive into the picture?

We can. In classical logic, evaluations of formulas are functions which map sentences to one of the values 1 and 0. In one semantics for FDE, evaluations are thought of, not as functions, but as relations, which relate sentences to some number of these values. This gives the four possibilities represented by the four values of our many-valued logic.²

We may do exactly the same with the values t , b , n , and f themselves. So if P is the set of propositional parameters, and $V = \{t, b, n, f\}$, an evaluation is a relation, ρ , between P and V . In the case at hand, we want to insist that every formula has at least one of these values, that is, the values are exhaustive:

Exh: for all $p \in P$, there is some $v \in V$, such that $p\rho v$.

If we denote the many-valued truth functions corresponding to the connectives \neg , \vee , and \wedge in FDE, by f_{\neg} , f_{\vee} , and f_{\wedge} , then the most obvious extension of ρ to all formulas is given by the clauses:

- $\neg A\rho v$ iff for some x such that $A\rho x$, $v = f_{\neg}(x)$
- $A \vee B\rho v$ iff for some x, y , such that $A\rho x$ and $B\rho y$, $v = f_{\vee}(x, y)$
- $A \wedge B\rho v$ iff for some x, y , such that $A\rho x$ and $B\rho y$, $v = f_{\wedge}(x, y)$

One can show, by a simple induction, that for every A there is some $v \in V$ such that $A\rho v$. I leave the details as an exercise.

Where, as before, $D = \{t, b\}$, we may simply define validity as follows: $\Sigma \models A$ iff for all ρ :

¹See Priest 2006, 5.4.

²See Priest 2008, 8.2.

- if for every $B \in \Sigma$, there is a $v \in D$ such that $B\rho v$, then there is a $v \in D$ such that $A\rho v$

That is, an inference is valid if it preserves the property of relating to *some* designated value. A is a logical truth iff is a consequence of the empty set. That is, for every ρ , there is some $v \in D$ such that $A\rho v$.

Perhaps surprisingly, validity on this definition coincides with validity in FDE.¹ This is proved by showing that the rules of FDE are sound and complete with respect to the semantics, as done in the technical appendix to the paper.

As for the truth predicate, a simple generalisation of its truth conditions to the present context is:

- $A\rho t$ or $A\rho b$ iff $\mathbf{T}\langle A \rangle \rho t$ or $\mathbf{T}\langle A \rangle \rho b$
- $A\rho f$ or $A\rho n$ iff $\mathbf{T}\langle A \rangle \rho f$

(So any sentence of the form $\mathbf{T}\langle A \rangle$ relates to at least one value as well.) The table in 3.2 can now be interpreted as showing a value that $S\langle A \rangle$ relates to, given what A relates to, where S is any status predicate.

It is easy to see that these conditions validate the T -schema—but not its contraposited form. As for the formal *catuskoti* conditions, the semantics still validate **C1**. Every sentence, A , relates to at least some value. Whatever value that is, the limb of the disjunction stating that it takes that value will be designated, as, then, will be the disjunction.

Perhaps more surprisingly, every statement of **C2** is also valid. Each of these is the negation of a conjunction, and two of the conjuncts will be of the form $\mathbf{T}\langle A \rangle \wedge \neg\mathbf{T}\langle A \rangle$ or $\mathbf{F}\langle A \rangle \wedge \neg\mathbf{F}\langle A \rangle$. Suppose it is the first. (Given the definition of \mathbf{F} , the second is just a special case of the first.) Then the sentence will be equivalent to a disjunction which has a part of the form $\mathbf{T}\langle A \rangle \vee \neg\mathbf{T}\langle A \rangle$. A relates to at least one value. If this is designated, the first disjunct relates to a designated value; if it is not, the second one does. Hence, the disjunction relates to a designated value.

Notwithstanding this, a sentence stating that A has more than one koti can also be true. Thus, suppose that on some evaluation A relates to t , b , and n . Consider $T\langle A \rangle \wedge B\langle A \rangle \wedge N\langle A \rangle$. Each conjunct relates to a designated value. Hence the conjunction relates to designated values. The argument clearly generalises to any set of the four values. And as in the many-valued case, $\neg(T\langle A \rangle \vee F\langle A \rangle \vee B\langle A \rangle \vee N\langle A \rangle)$ may be true. (Let $\mathbf{T}\langle A \rangle$ and $\mathbf{T}\langle A \rangle$ both relate to b .)

FDES is, in fact, sound and complete with respect to these semantics. This is shown in the technical appendix to the paper.

¹Perhaps not. See Priest 1984.

5.3 NONE OF THE KOTIS, AGAIN

Finally, let us return to the possibility that none of the kotis may hold. In 4.2, we handled this possibility by adding a fifth value, e . The relational semantics suggests a different way of proceeding. We simply drop the exhaustivity condition, **Exh**, so allowing the possibility that an evaluation may relate a parameter to none of the four values. The logic this gives is exactly FDE_φ . A proof of this fact can be found in the technical appendix to the paper. (In fact, if we require that every formula relates to *at most* one value, then it is easy to see that we simply have a reformulation of the 5-valued semantics, since taking the value e in the many-valued semantics behaves in exactly the same way as not relating to any value does in the relational semantics.)

Of course, the conditions **C1** and **C2** will now fail to be valid, since their validity depended essentially on **Exh**. If A relates to nothing, then where S is any status predicate, $S \langle A \rangle$ may also relate to nothing—as, therefore, may any truth functional combination of such sentences. We may restore their extended versions by introducing the new predicate, E , and making the truth conditions of **T** and E as follows (and redefining N , as we did in 4.2). For **T**:

- $A\rho t$ or $A\rho b$ iff $\mathbf{T} \langle A \rangle \rho t$ or $\mathbf{T} \langle A \rangle \rho b$
- $(A\rho f$ or $A\rho n$ or for no v , $A\rho v$) iff $\mathbf{T} \langle A \rangle \rho f$

For E :

- $(A\rho t$ or $A\rho f$ or $A\rho b$ or $A\rho n$) iff $E \langle A \rangle \rho f$ or $E \langle A \rangle \rho b$
- for no v , $A\rho v$ iff $E \langle A \rangle \rho t$

Unlike the case of the relational semantics, these conditions force the semantics to be anti-monotonic, in that *increasing* the relations for atomic formulas may well require *decreasing* the relations of other formulas. For suppose that p relates to nothing. Then $E \langle A \rangle \rho t$. If we now add a relation for p , so that $p\rho t$, we cannot simply let $E \langle A \rangle \rho f$ or $E \langle A \rangle \rho b$ as well; $E \langle A \rangle \rho t$ has to be taken back.

Notwithstanding, the conditions now verify the extended *catuskoti* conditions, **E1** and **E2**. For **E1**, $T \langle A \rangle \vee F \langle A \rangle \vee B \langle A \rangle \vee N \langle A \rangle \vee E \langle A \rangle$. If ρ relates A to nothing, then $E \langle A \rangle$ relates to a designated value, and each other value relates to something. Hence the disjunction relates to a designated value. The other cases are similar. For **E2**, one can show that $\neg(S_1(A) \wedge S_2(A))$ is valid, where S_1 and S_2 are any distinct status predicates, as in the many-valued case. As in the many-valued case, one can also show that $\neg(T \langle A \rangle \vee F \langle A \rangle \vee B \langle A \rangle \vee N \langle A \rangle)$ and $T \langle A \rangle \wedge F \langle A \rangle \wedge B \langle A \rangle \wedge N \langle A \rangle$ may be designated. (Let A relate to nothing, or all four values, respectively.)

The system $\text{FDE}_\varphi\text{S}$ is, in fact, sound and complete with respect to these semantics. A proof of this can be found in the technical appendix of the paper.

5.4 SOME FINAL COMMENTS ON TRUTH

Let me end with a few final philosophical comments. As observed in 5.1, in later Buddhism there are two notions of truth in play: conventional and ultimate. In our discussions of Nagarjuna, how does our predicate \mathbf{T} relate to these? The answer is not a simple one. Let us write \mathbf{T}_c for conventional truth, and \mathbf{T}_u for ultimate truth (with similar subscripts for their associated family of status predicates). One common view is that the only kind of truth that language can express is conventional truth; ultimate truth—that is the truth about ultimate reality—is ineffable. In this case, \mathbf{T} is conventional truth, \mathbf{T}_c , and \mathbf{T}_u is just out of the picture. Another possibility is a bit more subtle. We can have a predicate \mathbf{T}_u as well, but it can be used to say nothing true or false. So nothing of the form $T_u \langle A \rangle$, $F_u \langle A \rangle$, or $B_u \langle A \rangle$ can hold; only things of the form $N_u \langle A \rangle$ —or perhaps more appropriately, $E_u \langle A \rangle$. The first three (or four) kotis of the *catuskoti* are then empty in the case of \mathbf{T}_u . There is a more radical position however. Madhyamikas often say that there are no ultimate truths, but then go on to enunciate some of them!—that there are no ultimate truths being a most important one such.¹ This suggests that we may indeed have things of the form $T_u \langle A \rangle \wedge N_u \langle A \rangle$, or $B_u \langle A \rangle \wedge E_u \langle A \rangle$. As we have seen, our constructions accommodate this possibility.

There is also another way to proceed in the matter. On standard accounts, some things, such as that the Buddha exists, B , are conventionally true and ultimately false (or vice versa). If both notions of truth satisfy the T -schema, we then end up with B and $\neg B$; and this is a contradiction of the kind that Buddhists do not seem prepared to tolerate. There are many ways one try to handle the matter.² One can, for example, modify the T -schemas with appropriate qualifiers:

$\mathbf{T}_u \langle A \rangle$ iff ultimately, A

$\mathbf{T}_c \langle A \rangle$ iff conventionally, A

so that the contradiction is defused. The plain A itself is simply ambiguous, the sense of its utterance being determined by the context. Alternatively, one can employ a sentential modifier, a philosophical term of art, REALLY. Any sentence of the form REALLY(A) is taken to express an ultimate truth. A sentence not containing the term is taken to express a conventional truth. If one takes this line, then one needs only one, univocal, notion of truth, since the conventional/ultimate distinction is expressed by the use of the REALLY operator, and the contradiction disappears, since it takes the form REALLY(A) but $\neg A$, or A but REALLY($\neg A$).³

¹See Garfield and Priest, 2003.

²They are discussed in Priest, Siderits, and Tillemans (2011).

³The strategy does not, note, avoid the apparent contradiction concerning the claim that there are no ultimate truths, since we still have that for no A , REALLY(A), and where this is itself C , REALLY(C).

Which, if any, of these strategies is most appropriate, depends on doctrinal matters that are beyond the scope of this essay. The discussion, at least, serves to illustrate how doctrinal issues may feed into the deployment of the technical machinery developed here. We have already, of course, seen an example of the converse: if the four values of the *catuskoti* are not exhaustive, this will undercut Nagarjuna's deployment of it in the *Mulamadhymakakarika*, and so have doctrinal implications. Again, it is not appropriate to take up this issue here. It is enough that the paper has provided technical tools which interact with doctrinal issues in important ways.

6 CONCLUSION

The *catuskoti* and its ramifications are a central part of logic in both the original and the later Madhyamaka Buddhist traditions.¹ How to understand it has, as we have seen, been a deeply puzzling matter for most Western commentators, trained, as they are, only in traditional (Aristotelian) or classical (Frege-Russell) logic. We have seen how the tools of non-classical logic, and particularly of some paraconsistent logics, can be used to explicate the ideas involved in a precise and rigorous fashion.

Justice to the ideas can be done simply with FDES: four kotis; the conditions C1 and C2; and even statements to the effect that none, or more than one, of the kotis holds may be true. We saw that FDES has both a many-valued and a relational semantics. If one wants to take the failure of the four kotis more seriously, then $FDE_{\varphi}S$ will do the job: five "kotis"; the conditions E1 and E2; and statements to the effect that none, or more than one, of the kotis holds may be true. We also saw that $FDE_{\varphi}S$ has both a many-valued and a relational semantics.

So much from a modern perspective. I suspect, however, that had one asked the Buddha whether any of the formulations is correct, incorrect, both, or neither, he would probably have declined to answer.

7 TECHNICAL APPENDIX (PROOFS OF THEOREMS)

In this appendix, I establish the technical results mentioned in sections 3.2, 4.2, 5.2, and 5.3, and in particular, the soundness and completeness of the various rule systems we have met.

¹Though, it is worth noting that it plays no role in the Dignaga and Dharmakirti school of Buddhist logic. Like the Nyaya, this school of logic endorsed both the Principles of Non-Contradiction and Excluded Middle. See Scherbatsky 1993, pt. 4, ch. 2.

7.1 FDE AND FDES: MANY-VALUED SEMANTICS

Let us start with FDE, and its many-valued semantics. The soundness of the rules is established by checking that every rule is designation-preserving. This is straightforward. Completeness is established by the canonical model construction. Suppose that $\Sigma \not\vdash S$. First we extend Σ to a prime, deductively closed set, Δ , such that $\Delta \not\vdash S$. The canonical evaluation, ν , is then defined as follows:

- $\nu(A) = t$ iff $A \in \Delta$ and $\neg A \notin \Delta$
- $\nu(A) = f$ iff $A \notin \Delta$ and $\neg A \in \Delta$
- $\nu(A) = b$ iff $A \in \Delta$ and $\neg A \in \Delta$
- $\nu(A) = n$ iff $A \notin \Delta$ and $\neg A \notin \Delta$

One can check on a case-by-case basis that these conditions make the truth values behave appropriately. The result then follows.¹

To extend the results to FDES, we check that the T rules are designation-preserving, and hence that the system is sound. For completeness, in the canonical model we read off the values of $\mathbf{T}\langle A \rangle$ from the above regime, and establish that the definition delivers the semantic conditions for \mathbf{T} as follows.

- If $\nu(A) \in D$, then $A \in \Delta$. By the T rules, $\mathbf{T}\langle A \rangle \in \Delta$, and so $\nu(\mathbf{T}\langle A \rangle) \in D$.
- If $\nu(A) \notin D$ then $A \notin \Delta$ and so $\mathbf{T}\langle A \rangle \notin \Delta$. By the T rules and primeness, $\neg\mathbf{T}\langle A \rangle \in \Delta$. Hence $\nu(\mathbf{T}\langle A \rangle) = f$.

7.2 FDE_φ AND $FDE_\varphi S$: MANY-VALUED SEMANTICS

We turn now to FDE_φ and the many-valued semantics. Soundness is established by checking that all the rules are designation-preserving. This is easy if one remembers that if any premise of the form $\varphi(A)$ is designated, A cannot take the value e .

The canonical model in this case is constructed as in 7.1, except that we modify the condition for n , and add an extra condition for e as follows:²

- $\nu(A) = n$ iff $A \notin \Delta$ and $\neg A \notin \Delta$ and for some C , $A \vee C \in \Delta$
- $\nu(A) = e$ iff $A \notin \Delta$ and $\neg A \notin \Delta$ and for no C , $A \vee C \in \Delta$

¹For the details, see Priest 2002, 4.3 and 4.6.

²The construction of the canonical model in Priest 2002, 4.3 and 4.6, uses disjunction-introduction. However, if one is just constructing a prime deductively closed set containing the premises, and keeping the conclusion out (which is all we need in this case), disjunction-introduction is not required.

One can then check that these deliver the correct truth conditions. This is done on a case-by-case basis. It suffices to check \neg and \wedge , since $A \vee B$ has the same truth table as $\neg(\neg A \wedge \neg B)$ and so may be taken as defined. There are a number of cases to check. Here I give only a few of the less obvious ones.

One preliminary observation. The following inference is valid in the logic:

$$\frac{(A \wedge B) \vee C}{A \vee C}$$

If one writes down the proof of this in FDE, one will see that it uses disjunction-introduction twice, once where the introduced disjunct is A , and once where it is C . Since we have a premise of the form $\varphi(A)$ and $\varphi(C)$ this derivation can also be made in the new system.

Now, for negation:

- $\nu(A) = e$. Then $A, \neg A \notin \Delta$, and for no $A, A \vee C \in \Delta$. We need to show that $\nu(\neg A) = e$, i.e., $\neg A, \neg\neg A \notin \Delta$, and for no $C, \neg A \vee C \in \Delta$. The first is immediate by double negation and deductive closure. For the second, suppose that $\neg A \vee C \in \Delta$, then $C \in \Delta$ by primeness, so $A \vee C \in \Delta$ by the φ Rules, which is impossible.

And for conjunction:

- $\nu(A) = n$ and $\nu(B) = n$. Then $A, \neg A, B, \neg B \notin \Delta$ and for some $C, D, A \vee C \in \Delta, B \vee D \in \Delta$. We need to show that $\nu(A \wedge B) = n$, i.e., $A \wedge B \notin \Delta, \neg(A \wedge B) \notin \Delta$, and for some $C, (A \wedge B) \vee C \in \Delta$. The first of these follows by deductive closure. For the second, suppose that $\neg(A \wedge B) \in \Delta$, then $\neg A \vee \neg B \in \Delta$, which is impossible by primeness. For the third, since $A \vee C \in \Delta, C \in \Delta$, by primeness. Since we have a $\varphi(A)$ and a $\psi(B)$, it follows that $(A \wedge B) \vee C \in \Delta$ by deductive closure and the φ Rules.
- $\nu(A) = e$ and $\nu(B) = f$. Then $A, \neg A, B \notin \Delta, \neg B \in \Delta$ and for no $C, A \vee C \in \Delta$. We need to show that $\nu(A \wedge B) = e$, i.e., $A \wedge B \notin \Delta, \neg(A \wedge B) \notin \Delta$, and for no $C, (A \wedge B) \vee C \in \Delta$. The first of these follows by deductive closure. For the second, suppose that $\neg(A \wedge B) \in \Delta$; then $\neg A \vee \neg B \in \Delta$. Let this be $\varphi(A)$. Then $A \vee (\neg A \vee \neg B) \in \Delta$, which is impossible. For the third, suppose that $(A \wedge B) \vee C \in \Delta$. Then $A \vee C \in \Delta$, by deductive closure and our observation above, which is impossible.

To extend the results to $\text{FDE}_\varphi\text{S}$, we have to check that the T rules and E rules are designation-preserving. This is straightforward. For completeness, in the canonical model, we read off the values of $\mathbf{T}\langle A \rangle$ and $E\langle A \rangle$ according to the new regime, and check that the semantic conditions on them are satisfied. For \mathbf{T} the argument is the same as the 4-valued case. For E , we have:

- (Contrapositive) Because of the E rules, one of $E\langle A \rangle$ and $\neg E\langle A \rangle$ is in D . Hence, if $\nu(E\langle A \rangle) \neq t$, $\neg E\langle A \rangle \in \Delta$. Since $(E\langle A \rangle \vee \neg E\langle A \rangle) \in \Delta$, $A \vee (E\langle A \rangle \vee \neg E\langle A \rangle) \in \Delta$ (by the φ rules); so $\nu(A) \neq e$.
- If $\nu(A) \neq e$ then for some φ , $\varphi(A) \in \Delta$. Hence $\neg E\langle A \rangle \in \Delta$ (by the φ rules); so $E\langle A \rangle$ has the value f or b .

7.3 FDE AND FDES: RELATIONAL SEMANTICS

Next we turn to the relational semantics with the Exhaustivity condition, **Exh**. FDE is sound and complete with respect to these. To show soundness, we establish that all the rules preserve the property of relating to some designated value. This is straightforward. To prove completeness, we use the canonical model construction. A prime deductively closed theory is constructed in the usual way. We then read off an evaluation as follows:

- $A\rho t$ iff $A \in \Delta$ and $\neg A \notin \Delta$
- $A\rho f$ iff $A \notin \Delta$ and $\neg A \in \Delta$
- $A\rho b$ iff $A \in \Delta$ and $\neg A \in \Delta$
- $A\rho n$ iff $A \notin \Delta$ and $\neg A \notin \Delta$

Notice that exactly one of these possibilities holds (and so, in particular, that **Exh** holds). Using this fact, it is straightforward to show that ρ satisfies the appropriate truth conditions.

To extend the result to FDES, we show that the T rules are sound with respect to the semantics. This is straightforward. In the canonical model, the evaluation for $\mathbf{T}\langle A \rangle$ is read off of the above regime. We show that it satisfies the semantic conditions of \mathbf{T} as follows:

- If A relates to t or b then $A \in \Delta$. Hence $\mathbf{T}\langle A \rangle \in \Delta$, so $\mathbf{T}\langle A \rangle$ relates to t or b .
- Conversely, if $\mathbf{T}\langle A \rangle$ relates to t or b then $\mathbf{T}\langle A \rangle \in \Delta$. Hence, $A \in \Delta$, and so A relates to t or b .
- If A relates to f or n , then $A \notin \Delta$. Consequently, $\mathbf{T}\langle A \rangle \notin \Delta$, and so $\neg\mathbf{T}\langle A \rangle \in \Delta$. Hence, $\mathbf{T}\langle A \rangle$ relates to f .
- Conversely, if $\mathbf{T}\langle A \rangle$ relates to f , then $\mathbf{T}\langle A \rangle \notin \Delta$, so $A \notin \Delta$. So A relates to f or n .

7.4 FDE_φ AND FDE_φS: RELATIONAL SEMANTICS

Finally, we turn to the relational semantics of 5.3 without **Exh**. FDE_φ is sound and complete with respect to these semantics. Soundness is established by checking that the rules are designation-preserving. This is straightforward, bearing in mind that if any sub-formula of a formula relates to nothing, so does the whole formula; and hence that if some formula relates to a designated value, every sub-formula must relate to something. Completeness is shown by the canonical model construction. Given the prime deductively closed set, we define the canonical evaluation as follows:

- $A\rho t$ iff $A \in \Delta$ and $\neg A \notin \Delta$
- $A\rho f$ iff $A \notin \Delta$ and $\neg A \in \Delta$
- $A\rho b$ iff $A \in \Delta$ and $\neg A \in \Delta$
- $A\rho n$ iff $A \notin \Delta$ and $\neg A \notin \Delta$ and for some C , $A \vee C \in \Delta$

Consequently, A relates to nothing if:

- $A \notin \Delta$ and $\neg A \notin \Delta$ and for no C , $A \vee C \in \Delta$

Again, note that exactly one of these five possibilities must hold. Using this fact, it is easy to check that this definition respects the relational truth conditions, exactly as in 7.2.

In extending the results to FDE_φS, we establish soundness by checking that the T rules and E rules are designation-preserving. For completeness, in the canonical model, we read off the values of $\mathbf{T}\langle A \rangle$ and $E\langle A \rangle$ according to the new regime, and check that the semantic conditions on them are satisfied. The argument for \mathbf{T} is much as in 7.3. For E , we have:

- If A relates to t , b , f , or n , then for some φ , $\varphi(A) \in \Delta$. Hence $\neg E\langle A \rangle \in \Delta$ (by the φ rules); so $E\langle A \rangle$ relates to f or b .
- Conversely, if $E\langle A \rangle$ relates to f or b , then $\neg E\langle A \rangle \in \Delta$. Hence, $A \vee (E\langle A \rangle \vee \neg E\langle A \rangle) \in \Delta$ (by the φ rules), so A relates to t , b , f , or n .
- (Contrapositive). If A relates to something then, for some φ , $\varphi(A) \in \Delta$. Hence $\neg E\langle A \rangle \in \Delta$ (by the φ rules); so $E\langle A \rangle$ does not relate to t .
- Conversely (contrapositive), if $E\langle A \rangle$ does not relate to t , then $E\langle A \rangle \notin \Delta$. Hence $\neg E\langle A \rangle \in \Delta$, and $A \vee (E\langle A \rangle \vee \neg E\langle A \rangle) \in \Delta$. Thus, A relates to something.

ACKNOWLEDGEMENTS

Versions of this paper were given at the University of St Andrews and at the conference *Modern Formalisms for Pre-Modern Indian Logic and Epistemology*, University of Hamburg, June 2010. Many thanks go to the audiences there for their comments, and especially to Josh Dever and Stephen Read. Thanks for written comments also go to Jay Garfield, Bo Mou, Richard Tieszen, and some anonymous referees.

REFERENCES

- Candrakīrti (2003), *Prasannapadā*, Gelugpa Student Welfare Committee (ed.) (Sarnath: Central Institute of Higher Tibetan Studies).
- Deguchi, Y., Garfield, J., and Priest, G. (2008), ‘The Way of the Dialetheist: Contradictions in Buddhism’, *Philosophy East and West* 58: 395-402.
- Ganeri, J. (2001), *Philosophy in Classical India* (London: Routledge).
- Garfield, J. (1995), *The Fundamental Principles of the Middle Way: Nāgārjuna’s Mūlamadhyamikakārikā* (New York, NY: Oxford University Press).
- Garfield, J., and Priest, G. (2003), “Nāgārjuna and the Limits of Thought”, *Philosophy East and West* 53: 1-21; reprinted as ch. 16 of G. Priest, *Beyond the Limits of Thought*, second (extended) edition (Oxford: Oxford University Press, 2002).
- Garfield, J., and Priest, G. (2009), “Mountains are Just Mountains”, ch. 7 of M. D’Amato, J. Garfield, and T. Tillemans (eds), *Pointing at the Moon: Buddhism, Logic, Analytic Philosophy* (New York: NY: Oxford University Press).
- Harrison, P. (2006), “Vajraccedikā Prajñāpāramitā: a New English Translation of the Sanskrit Text Based on Two Manuscripts from Greater Gandhāra” in J. Braarvig (ed.), *Manuscripts in the Schøyen Collection VII: Buddhist Manuscripts*, Vol. 3 (Oslo: Hermes Publishing).
- Hayes, P. (1994), “Nāgārjuna’s Appeal”, *Journal of Indian Philosophy* 22: 299-378.
- Priest, G. (1984), “Hypercontradictions”, *Logique et Analyse* 107: 237-43.
- Priest, G. (1987), *In Contradiction* (Dordrecht: Martinus Nijhoff); second (extended) edition (Oxford: Oxford University Press, 2006).
- Priest, G. (1998), “What’s so Bad about Contradictions?”, *Journal of Philosophy* 95: 410-26; reprinted as ch. 1 of G. Priest, J. Beall, and B. Armour-Garb (eds), *The Law of Non-Contradiction: New Philosophical Essays* (Oxford: Oxford University Press, 2006).
- Priest, G. (2002), “Paraconsistent Logic”, pp. 287-393 of D. Gabbay and D. Guenther (eds), *Handbook of Philosophical Logic* (second edition), Vol. 6 (Dordrecht; Kluwer Academic Publishers).
- Priest, G. (2006), *Doubt Truth to be a Liar* (Oxford: Oxford University Press).
- Priest, G., Siderits, M., and Tillemans, T. (2011), “The (Two) Truths about Truth”, ch.8 of the Cowherds, *Moonshadows* (New York, NY: Oxford University Press).

- Radhakrishnan, S., and Moore, C. (eds.) (1957), *A Source Book in Indian Philosophy* (Princeton, NJ: Princeton University Press).
- Raju, P. (1953), "The Principle of Four-Cornered Negation in Indian Philosophy", *Review of Metaphysics* 7: 694-713.
- Robinson, R. (1956), "Some Logical Aspects of Nāgārjuna's System" *Philosophy East and West* 6: 291-308.
- Ruegg, D. (1977), "The Uses of the Four Positions of the Catuskoṭi and the Problem of the Description of Reality in Mahāyāna Buddhism", *Journal of Indian Philosophy* 5: 1-71.
- Scherbatsky, Th. (1993), *Buddhist Logic*, Vol. 1 (Delhi: Matilal Banarsidass).
- Siderits, M. (2008), "Contradictions in Buddhist Argumentation", *Argumentation* 22: 125-133.
- Staal, F. (1975), *Exploring Mysticism* (London: Penguin Books).
- Thanissaro Bhikkhu (1998; accessed March 2010), "Cula-Malunkyovada Sutta: The Shorter Instructions to Malunkya", <http://www.accesstoinsight.org/tipitaka/mn/mn.063.than.html>.
- Tillemans, T. (1999), "Is Buddhist Logic Non-classical or Deviant?", ch. 9 of *Scripture, Logic, Language: Essays on Dharmakīrti and his Tibetan Successors* (Boston, MA: Wisdom Publications).
- Tsong ka pa (2006), *Oceans of Reasoning: a Great Commentary on Nāgārjuna's Mūlamadhyamakārikā*, trans. N. Samten and J. Garfield (New York, NY: Oxford University Press).
- Westerhoff, J. (2010), *Nāgārjuna's Metaphysics: a Philosophical Introduction* (Oxford: Oxford University Press).

RECENT WORK

CONFUCIANISM AND VIRTUE ETHICS: STILL A FLEDGLING IN CHINESE AND COMPARATIVE PHILOSOPHY

JUSTIN TIWALD

The past couple of decades have witnessed a remarkable burst of philosophical energy and talent devoted to virtue ethical approaches to Confucianism, including several books, articles, and even high-profile workshops and conferences that make connections between Confucianism and either virtue ethics as such or moral philosophers widely regarded as virtue ethicists (Angle 2009, Chong 2007, Ivanhoe 2002, Sim 2007, Van Norden 2007, Yearley 1990, Yu 2007). Those who do not work in the combination of Chinese philosophy and ethics may wonder what all of the fuss is about. Others may be more familiar with the issues but have doubts about the fruitfulness of this line of inquiry. All of us, however, are in the enviable position of setting the stage for what looks likely to be a much larger, future generation of philosophers working across Western and non-Western traditions. It is therefore worth asking whether a constructive engagement between Confucianism and virtue ethics is worth turning into a significant, multi-generational research agenda.

Most answers to this question will fall somewhere between two poles. At one end is the view that the line of inquiry has run its course, if ever there were a course to run in the first place; at the opposite end is the view that we're only just getting started. And then there is a wide range of more moderate views falling between these two positions. Normally I would be among the moderates, but on this issue I am an extremist. Far from having exhausted the potential of virtue ethical approaches to Confucianism, I think we are standing on a philosophical gold mine that we've only just begun to tap. In what follows I would like to explain briefly why I take this to be the case.

1. VIRTUE ETHICS IN THE PRESENT DAY

I will start with a brief description of virtue ethics as understood in contemporary

TIWALD, JUSTIN: Assistant Professor of Philosophy, San Francisco State University, USA.
Email: jtiwald@sfsu.edu

moral philosophy. To be sure, several scholars have already found that this literature can be used to enrich their understanding of Confucianism, and this is reason enough to undertake comparative analysis. But in my view we can make a stronger case than this. If there are areas of contemporary philosophy to which Chinese thought could give more than it takes, virtue ethics must be among the most promising, so it is worth saying a bit more about the state of the subfield of virtue ethics at present.

If a philosopher calls herself a virtue ethicist today, it is likely because she believes her moral theory competes (favorably) with rule-deontology and consequentialism. Virtue ethics in this sense has to do with the way that ethical norms are derived or explained. It presupposes that virtue (or perhaps approximate notions like flourishing) is more basic than rules of action and the maximization of good states of affairs. Whereas a consequentialist might say that keeping a promise to a friend is right because it gives rise to the greatest possible amount of happiness or well-being, a virtue ethicist might say it is right because it is honest or trustworthy, or simply because it is what a person of admirable character would do. With only a few exceptions, most contemporary ethicists take the explanatory primacy of virtue to be definitive of virtue ethics. Philosophers who work extensively on virtue but do not think it more basic than the right or the good often reject the label ‘virtue ethicist’ for this very reason, no matter how prominent a role they think virtue analysis should play in ethics (Hurka 2000).

As a theoretical rival to consequentialism and rule-deontology, virtue ethics is still in its earliest stages. The sort of fine-tuning that has been going on for decades in the contemporary literature on consequentialism and rule-deontology (e.g., on the difference between act and rule consequentialism, or how best to cut the distinction between acts and omissions) does not dominate the contemporary literature on virtue ethics. Much of the work is still at the ground level, so to speak. Three dimensions of this work stand out as needing considerably more enrichment. First, the current literature tends to prioritize a relatively narrow range of virtues. Probably the largest group of virtue ethicists tends to draw from updated lists of Aristotelian virtues, which—relative to the Chinese tradition—are particularly concerned with self-control, reason, and respect for persons. The other major approach draws on the sentimentalist tradition and treats care or empathy as the most important or basic of virtues (Slote 2001). Second, there is little consensus in the current literature about the nature of virtue. Michael Slote has argued that traits are virtuous if they are “fundamentally admirable” (2001). Others, influenced by the ancient Greek tradition, think that character traits are virtues only if they contribute directly to the trait-holder’s flourishing, understood as the development and exercise of morally significant natural dispositions and capacities (Hursthouse 1999). Finally, only a handful of contemporary virtue ethicists have begun to articulate truly systematic accounts of how right action and other moral notions can be derived from virtue (Hursthouse 1999, Slote 2001, Swanton 2003). Others declare themselves virtue ethicists but have yet to spell out in detail the relation between virtue and other moral

notions, and show how their accounts might answer some of the strongest objections to them. Indeed, some scholars (including this author) think virtue ethics remains something of a catch-all category, where a theory qualifies as a species of virtue ethics so long as it holds that assessments of character have at least *some* independent explanatory power, which is not derived entirely from right action or the maximization of good states.¹ To this extent ‘virtue ethics’ has become something of a convenient label for any character-oriented position that stands outside purer forms of consequentialism and rule-deontology.

For each of the dimensions in which contemporary virtue ethics needs ground level work, the Confucian thinkers can expand considerably the range of concepts and arguments that virtue ethicists entertain. Consider the first dimension, which has to do with the prioritization of virtues. Bryan Van Norden has noted how different principles of organization lead Confucians to emphasize benevolence, wisdom, the kind of moral integrity that is motivated by a sense of shame, and the complex array of stylistic sensibilities that constitute ritual propriety (2007: 350-54). Western virtue ethicists have much to say about sensitivities to role-dependent responsibilities (as parent to child, friend to friend, supervisor to subordinate, etc.), but lack much of the subtlety of Confucian analyses. To my knowledge, none have made much of the parallels between deference to one’s older brother (*ti* 悌) and deference to one’s elders more generally. Famously, and perhaps most perplexingly for Western virtue ethicists, the Confucian thinkers put tremendous emphasis on the developmental role of filial piety, from which the sensibilities and dispositions of so many other virtues are cultivated (Ivanhoe 2007). *Neo-Confucianism* holds out the prospect of developing virtue ethical theories that have yet to be imagined in the recent Western literature, particularly those that consist in developing some sense of unity or oneness with others, most famously expressed in the neo-Confucian refrain, “forming one body with Heaven, Earth, and the myriad things” (*tian di wan wu wei yi ti* 天地萬物為一體). In his recent work, Philip J. Ivanhoe has begun to develop the several ways in which this feeling of connectedness can be distinguished from mere empathy and other forms of fellow feeling (Ivanhoe *ms*). Stephen Angle has explored at length the importance of appreciating how one fits into a coherent or harmonious whole (2009). On nearly all of the virtues which the tradition touches, the Confucians show their characteristic attention to the potential trade-offs between love and a sense of obligation, natural spontaneity and reverence, and unselfconsciousness and self-control.

Turning to the second respect in which present day virtue ethics stands to be enriched, Confucian thinkers also help to expand dramatically considerations about how virtues should be distinguished from other dispositions or states of character.

¹ For example, the virtue ethicist Philippa Foot thinks the wrongness of some horrific acts, on a par with atrocities of Hitler and Pol Pot, are largely or entirely a matter of their intrinsic properties, independently of their relationship to character (2001: 99-115). David Copp and David Sobel suggest that this picture of moral explanation will work only if her theory of virtue is “married with an independent free standing theory of right and wrong” (2004: 544).

Earlier we saw that Aristotelian virtue ethicists tend to say a virtue must have some close relationship to the possessor's flourishing. Van Norden argues that Confucius and Meng Zi also see virtues as having a necessary relationship to flourishing, although he observes that they distinguish *between* virtues differently, seeing the distinctions "almost exclusively in terms of spheres of experience" rather than (partially or entirely) in terms of specific psychological faculties (2007: 350-51). Rosalind Hursthouse believes that virtues have some sort of non-accidental relationship to the moral agent's well-being, such that she is generally better off when she has the virtues and worse off when she doesn't (1999: 167). This too is an issue about which classical Confucians like Meng Zi have considered views (*Meng-Zi* 2A6). And once again, the neo-Confucians are especially useful in expanding the range of possibilities into territory only barely imagined in the Western literature. They are distinctive in stressing that the most important virtues must either model or contribute to the world's life-producing processes (*sheng sheng* 生生), which arises out of a textured conception of life-production that they develop in opposition to the Buddhists.² Finally, Dai Zhen insists that human virtues are necessarily outgrowths of the natural, interpersonal dispositions that regulate the five basic Confucian relationships (*wu lun* 五倫), which are characterized by the ability to both give and receive in a reciprocal manner.³

So much for the first and second dimensions in which Confucianism could enrich contemporary virtue ethics. Let us now turn to the third, which contemporary moral philosophers often take to be a definitive feature of virtue ethics: the logical or explanatory primacy of virtue over right action and the maximization of goods. Several authors of recent works on Confucianism and virtue ethics have argued that the Confucians do indeed regard virtue as logically primary. Ivanhoe has long argued that the classical Confucians prefer to explain right action in terms of the expression and cultivation of "distinctively human excellences" rather than moral maxims or principles (2002: 1-11). Angle maintains that the neo-Confucians regard stable dispositions of moral perception as more basic than moral rules (2009: 51-59). Van Norden holds that notions of flourishing and good character have a more central role in the ethics of Confucius and Meng Zi, although he rejects the view that these or any other characteristically virtue ethical notions have absolute explanatory primacy (2007, 2009: 306-07).

It would not be a healthy field if there were not detractors. In a recent talk, Lee Minghuei has insisted that Confucian ethics falls decisively on the side of deontology. His argument in brief is that teleology and deontology exhaust the range of possible moral theories, and that deontology is distinguished from teleology by the fact that it ultimately grounds ethical claims in moral as opposed to non-moral goods, an

² See Zhu 1986: v. 1, p. 108, section 10.

³ See Dai 1996: chapters 32-33, pp. 309-13. The "Five Relationships" are father and son, husband and wife, elder brother and younger brother, ruler and ruled, and friend and friend. Confucians traditionally see these as playing the most important role in maintaining social harmony and cultivating moral virtue.

assumption that the Confucians share (2010). Henry Rosemont and Roger Ames maintain that the conceptual apparatus of Confucianism is fundamentally incompatible with an array of Western moral theories, virtue ethics among them. On the Confucian view, they suggest, human beings are constituted entirely by their roles, which they find incompatible with the position that virtues are necessarily drawn from universally shared features of human nature that are “developed by rationality.”⁴ Manyul Im and Dan Robins have defended consequentialist readings of specific Confucian philosophers. Im observes that Meng Zi often rebuts the Mohists by arguing that they will better succeed at obtaining their desired good or benefits (利 *li*) by aiming at them indirectly, suggesting that Meng Zi rejects subjective consequentialism (consequentialism as a decision procedure for individual agents) in favor of objective consequentialism (consequentialism as an objective criterion of rightness) (2010). Robins argues that Xun Zi prefers (his own version of) the Way because it is “uniquely capable of promoting order in human societies” (2007: section 7).

These criticisms are important and should be taken into account, but I do not think they close the book on virtue ethical approaches to Confucianism (not that all of these critics mean to suggest such). For one thing, they focus on just one of the dimensions in which contemporary work on virtue ethics stands in need of more ground level contributions: namely, ways in which virtue can be construed as having explanatory primacy over other ethical notions. So long as Confucianism still offers abundant resources to the other dimensions of virtue ethics it can still make tremendous contributions. For this purpose, the Confucian tradition simply needs to meet the standard of offering a wide array of competing, nuanced accounts of the nature of virtue and the psychological structure of various individual virtues, a standard that Confucianism well exceeds. Furthermore, some of the criticisms—such as Rosemont and Ames’s—seem primarily concerned with Aristotelian ways of explaining ethical norms. Aristotelian theories are just one among several viable species of virtue ethics, most of which have yet to be filled out. As noted earlier, in fact, I think that virtue ethics is typically treated as a catch-all category, used to describe any theory that emphasizes characterological norms and does not conform neatly to theories that treat either right action or the good as the sole or primary basic moral notions. Construed so broadly, there must surely be many species of virtue ethics under the sun, and it would be shocking if Confucianism did not have something to offer.

Furthermore, more conceptual and interpretive work needs to be done before we can truly test the hypothesis that any one thinker has views about explanatory primacy that are consistent with any one of the three major moral theories. It might help to see a more rigorous attempt to distinguish Confucian justification from explanation: just because a philosopher justifies a practice or virtue in terms of its consequences, it does not follow that she believes we can provide a proper explanation or account by appealing to its consequences. (To be sure, this poses a challenge to defenders of consequentialist and virtue ethical readings alike.) A more

⁴ 2009: 45. Here Rosemont and Ames appear to focus on Aristotelian variants of virtue ethics.

pressing issue is whether Confucians, when they appeal to consequences to justify (or explain) the rightness of an act, assume that the value of those consequences is agent-neutral. If a theory holds that the value of a particular person's health fundamentally depends on the point of view from which it is being considered, then most (but not all) consequentialists say this theory collapses into non-consequentialism (Pettit 1997, Portmore 2003). Settling the matter of agent-neutrality would require a close look at so-called "hard cases" like Meng Zi's hypothetical about King Shun and his father (*Meng-Zi* 7A35). If Meng Zi thinks—as he appears to think—that a sage-king like Shun should give up the empire for the sake of his father's safety, even at the risk of depriving the people of their peace and prosperity, it would take some philosophical acrobatics to show that this view is consistent with consequentialism as it is usually understood today.

2. VIRTUE ETHICS IN AS A WAY OF "DOING ETHICS"

So far we have been taking virtue ethics on the terms of present day moral theorists, according to which the explanatory primacy of virtue (or closely related notions) is its definitive feature. But there are other ways of giving virtue primacy over right action and the maximization of goods, some of which might have been embraced more readily by the great Confucian philosophers. One form of primacy that strikes me as particularly promising concerns not how ethical values are derived, but rather how ethics is done. On this construal, a thinker is a virtue ethicist if she believes that in engaging in higher-order moral reflection, the first or primary task should be to understand things like the nature, psychological structure and ways of cultivating good character, rather than the principles of right action or their relationship to various goods. A person can be a virtue ethicist in this sense without being a virtue ethicist in the sense invoked by present day virtue ethicists. One might think that a virtuous state of character is whatever state that maximizes social harmony, but think that those who properly engage in higher order ethical reflection (call this "ethics proper") should be more concerned with the relevant states of character than with the good to which they conduce. On this account, an essential feature of virtue ethics is the conviction that ethics, when done rightly, attends to character first.

There are a variety of possible reasons to hold this view. Maybe we think that reflection about character has a more intimate relationship to making oneself a good person, which should be the first order of business in ethics proper. Perhaps we believe that in the vast majority of everyday cases the right course of action is relatively uncontroversial, whereas there is considerably more room for debate about the feelings, attitudes, and responses that one should have when faced with the demands of the world. Some might hold that we cannot fully settle questions about good states or right action without cultivating the virtues necessary for good judgment in the first place. Or maybe we just find higher order reflection on virtue to have more intrinsic ethical value than higher order reflection on moral rules or the like.

This offers a way of characterizing virtue ethics that most present day scholars of Chinese thought will happily ascribe to the Confucian thinkers. If we were to

compare the Confucians to their Western counterparts on this conception of ethics, it would touch upon some weighty meta-philosophical issues that seem to have fallen out of favor in the past few centuries.

To take just one example, the Stoics insist that philosophy should be regarded as something like the practice of medicine, but applied to diseases of the soul rather than diseases of the body. For them, the aim of higher order moral reflection (and philosophy more generally) is to uproot what many describe as flaws of character, such as wrongheaded desires and predispositions to affirm—reflexively or unthinkingly—false beliefs that inflict suffering on the self (such as the belief that death is harmful to the dead). This way of understanding ethics proper, which Martha Nussbaum calls the “medical conception of ethical inquiry,” runs through the Hellenistic tradition (Nussbaum 1994: 13-47).

If we were to look for ways in which Confucians can enrich this conception of ethical inquiry, it would be hard to decide where to begin. Cicero insists that philosophy should be a way of doctoring *ourselves* (Nussbaum 1994: 14). It would be well worthwhile to ask what Xun Zi might say about the idea that higher order moral reflection should provide us with that sort of autonomy so readily. Wang Yangming adopts (from the Buddhists) a medical conception of his own to describe the learning of sages and worthies (Ivanhoe 2009: 122-23, 131-32). The neo-Confucians—especially Lu Xiangshan—share with some of the Hellenists the view that a person should find ethical arguments and ideas engaging and easy to grasp in order to have the right transformative effect on her (Ivanhoe 2009: 39, 96, Nussbaum 1994: 15-16). But compared to the Hellenists, the neo-Confucians have considerably more to say about the preferred relationship between newly acquired knowledge and the beliefs and dispositions of judgment that a person already has, which is a central concern in the debate about the “extension of knowledge” (*zhi zhi* 致知).⁵ The Confucians also have a remarkable array of considered views about the ways in which ethical inquiry depends on ethical practice, and it would be a shame to neglect the rich conceptual resources that Chinese philosophy offers in thinking about how to internalize (and eventually act spontaneously on) the fruits of our ethical inquiries.

Constructive work on Confucianism and virtue ethics has only just gotten off the ground. As we have seen, debates about the viability of this work have focused largely on the explanatory role of virtue and flourishing. I hope I have shown that this is only one dimension of virtue ethics to which Confucianism could make a substantial contribution, and that contemporary virtue ethics—still a fledgling itself—stands in need of the very philosophical resources that are at the heart of Confucian and neo-Confucian thought.⁶

⁵ For example, see Zhu and Lü 1992: volume 3, and Chan 1967: 88-122.

⁶ I am indebted to Kim-chong Chong, Philip J. Ivanhoe, Bo Mou, and William H. Shaw for helpful comments on an earlier draft of this essay.

REFERENCES

- Angle, Stephen C. (2009), *Sagehood: The Contemporary Significance of Neo-Confucian Philosophy* (Oxford: Oxford University Press).
- Chan, Wing-tsit 陳榮捷 (1967) (annotator), *Reflections on Things at Hand: The Neo-Confucian Anthology*, compiled by Chu Hsi [Zhu Xi] and Lü Tsu-Ch'ien [Lü Zuqian] (New York: Columbia University Press).
- (1992), *Jin-Si-Lu-Xiang-Zhu-Ji-Ping* 《近思錄詳註集評》 [*Collected Discussions of the Detailed Commentaries on Reflections on Things at Hand*] (Taipei: Xue-Sheng-Shu-Ju 學生書局).
- Chong, Kim-chong (2007), *Early Confucian Ethics: Concepts and Arguments* (Chicago: Open Court).
- Copp, David, and Sobel, David (2004), "Morality and Virtue: An Assessment of Some Recent Work in Virtue Ethics." *Ethics* 114: 514-54.
- Dai, Zhen 戴震 (1996), "Meng-Zi-Zi-Yi-Shu-Zheng" 〈孟子字義疏證〉 ["Evidential Analysis of the Meaning of Terms of the Mencius"], in *Dai-Dong-Yuan-De-Zhe-Xue* 《戴東原的哲學》 [*The Philosophy of Dai Dongyuan*] Hu Shi 胡適 (ed.) (Taipei: Shang-Wu-Yin-Shu-Guan 商務印書館).
- Foot, Philippa (2001), *Natural Goodness* (Oxford: Oxford University Press).
- Hurka, Thomas (2000), *Virtue, Vice, and Value* (Oxford: Oxford University Press).
- Im, Manyul (2010), "Mencius as Consequentialist", In *Ethics in Early China*, Chris Fraser, Timothy O'Leary, and Dan Robins (eds.) (Hong Kong University Press).
- Ivanhoe, Philip J. (2002), *Ethics in the Confucian Tradition: The Thought of Meng Zi and Wang Yangming* (Indianapolis: Hackett).
- (2007), "Filial Piety as a Virtue", In *Working Virtue: Virtue Ethics and Contemporary Moral Problems*, Rebecca Walker and Philip J. Ivanhoe (eds.) (Oxford: Oxford University Press), pp. 297-312.
- (2009), *Readings from the Lu-Wang School of Neo-Confucianism* (Indianapolis: Hackett).
- Manuscript, "Senses and Values of Oneness", May 3, 2010 version.
- Lee, Minghui 李明輝 (2010) (May 15), "Ru-Jia-Kang-De-Yu-De-Xing-Lun-Li-Xue" 〈儒家、康德與德行倫理學〉 ["Confucianism, Kant and Virtue Ethics"], at the International Conference on Confucianism and Virtue Ethics, Beijing University, Beijing, People's Republic of China.
- Nussbaum, Martha C. (1994), *Therapy of Desire: Theory and Practice in Hellenistic Ethics* (Princeton: Princeton University Press).
- Pettit, Philip (1997), "The Consequentialist Perspective", in *Three Methods of Ethics*, Marcia Baron, Philip Pettit, Michael Slote (eds.) (Oxford: Blackwell).
- Portmore, Douglas W. (2003), "Position-Relative Consequentialism, Agent-Centered Options, and Supererogation", *Ethics* 113: 303-32.
- Robins, Dan (2007), "Xun Zi", *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (ed.) Winter 2007 edition: < http://plato.stanford.edu/entries/Xun_Zi/>.

- Rosemont, Henry, and Ames, Roger T. (2009), *The Classic of Family Reverence: A Philosophical Translation of the Xiaojing* (Honolulu, HI: Hawai'i University Press).
- Sim, May (2007), *Remastering Morals with Aristotle and Confucius* (New York: Cambridge University Press).
- Slote, Michael (2001), *Morals from Motives* (Oxford: Oxford University Press).
- (2009), "Comments on Bryan Van Norden's Virtue Ethics and Consequentialism in Early Chinese Philosophy", *Dao* 8: 289-95.
- Swanton, Christine (2003), *Virtue Ethics: A Pluralistic View* (Oxford: Oxford University Press).
- Van Norden, Bryan W. (2007), *Virtue Ethics and Consequentialism in Early Chinese Philosophy* (New York: Cambridge University Press).
- (2009), "Response to Angle and Slote," *Dao* 8: 305-09.
- Yearley, Lee H. (1990), *Mencius and Aquinas: Theories of Virtue and Conceptions of Courage* (Albany: State University of New York Press).
- Yu, Jiyuan (2007), *The Ethics of Confucius and Aristotle: Mirrors of Virtue* (New York: Routledge).
- Zhu, Xi 朱熹 (1986), *Zhu-Zi-Yu-Lei* 《朱子語類》 [*Topically Arranged Conversations of Master Zhu*], Li Jingde 黎靖德 (ed.) (Beijing: Zhong-Hua-Shu-Ju 中華書局).
- Zhu, Xi 朱熹, and Lü Zuqian 呂祖謙 (1992), *Jin-Si-Lu* 《近思錄》 [*Reflections on Things at Hand*]. See Chan (1992).