# PROPOSING A NEW APPROACH TO MIND, CONSCIOUSNESS AND REASON ROBERT E. WATSON, B.A. (OXON), MSC

#### **Abstract:**

This paper hypothesizes a new approach to reason, consciousness and Mind: It starts by taking a deconstructionist approach to root assumptions in Western philosophy and explores linguistic philosophy's limited recognition of the 'Perceiver' and consciousness. Having established this point, it proposes an alternative way forward based on Hume's Empiricism and Pascal's Wager combined with the paradox of the Chinese Room. This results in a philosophical approach compatible with both Eastern intuitional philosophies and Western rationalism, however, results derived under this hypothesis with respect to the philosophy of Mind and consciousness are challenging.

Proposition pour une Approche Nouvelle au Mental, la Conscience, et la Raison Robert Watson B.A. (Oxon), MSc.

#### Abstrait:

Cette étude fait l'hypothèse d'une nouvelle approche de la raison, la conscience et le Mental : elle démarre par une approche de de-construction des hypothèses de base de la philosophie occidentale et explore la reconnaissance limitée des concepts de 'l'observateur' et de conscience dans la philosophie linguistique. Apres avoir établit ce fait nous proposons une voie alternative permettant l'avancement, basée sur L'Empirisme de Hume et Le Pari de Pascal en combinaison avec le paradoxe de La Chambre Chinoise. Ceci résulte en une approche philosophique qui est compatible à la fois avec les philosophies intuitives de l'Orient et la rationalité de l'Ouest; néanmoins les conclusions dérivées de cette hypothèse au regard de la philosophie du Mental et de la conscience sont incertaines.

Proponiendo Una Nueva Forma de Encarar la Mente, el Consciente y la Razón Robert Watson B.A. (Oxon), MSc.

## Extracto:

Este escrito presenta suposiciones sobre una nueva forma de encarar la razón, el consciente y la Mente. Principia haciendo una presentación deconstrucionista hacia las premisas radicales en la filosofía Occidental, y explora el limitado reconocimiento de la filosofía lingüística del "Observador" y del consciente. Habiendo establecido este punto, se propone un camino alternativo hacia adelante basado en el Empirismo de Hume y la Apuesta de Pascal, combinados con la paradoja de la Habitación China. Esto resulta en un estudio filosófico compatible, ambos, con las filosofías intuitivas Orientales y el racionalismo Occidental. Sin embargo los resultados derivados bajo esta hipótesis con respecto a la filosofía de la Mente y el consciente son provocativos.

Proposta de uma Nova Aproximação para a Mente, Consciência e Razão Robert Watson B.A. (Oxon), MSc.

#### Sumário:

Este artigo é uma teoria de uma nova aproximação para a razão, consciência e Mente: Começa através de um exame para desraizar as suposições na filosofia ocidental e explora o reconhecimento limitado da filosofia lingüística ' do observante ' e da consciência. Tendo chegado a este ponto, este artigo propõe uma maneira alternativa a seguir baseada no Empiricismo de Hume e na Aposta de Pascal combinados com o paradoxo do Quarto Chinês. Isto resulta em uma aproximação filosófica compatível com as filosofias intuicionais orientais e o racionalismo ocidental, mas os resultados derivados sob esta hipótese são desafiados com respeito à filosofia da Mente e da consciência.

Entwurf einer neuen Anschauung von Verstand, Bewusstsein und Vernunft Robert E. Watson, B.A. (Oxon), MSc

## **Zusammenfassung:**

Die Schrift erwaegt eine neue Anschauung der Begriffe Vernunft, Bewusstsein und Verstand und baut dabei gewisse, bisher in westlicher Philosophie als selbstverstaendlich betrachtete Voraussetzungen ab. Weiterhin wird die begrenzte Anerkennung des "Wahrnehmenden" und des Bewusstseins in der sprachlichen Philosophie untersucht. Daraufhin wird eine Alternative geboten die gleichzeitig auf Humes Empirismus und Pascals Wette zusammen mit dem Paradox des chinesischen Raumes begruendet ist. Auf diese Weise entsteht eine philosophische Richtung, die sowohl mit oestlichen intuitionellen Philosophien, als auch mit westlichem Rationalismus vereinbar ist. Jedoch bleiben Ergebnisse, die durch Anwendung dieser Hypothese und mit Respekt auf die Philosophie des Verstandes und des Bewusstseins erreicht sind, problematisch.

#### PROPOSING A NEW APPROACH TO MIND, CONSCIOUSNESS AND REASON

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#### 1. Introduction

From a Western perspective the nature of reasoning is bound-up with the nature of assumptions and axioms. No reasoning, it seems, can take place without assumption. Take, for example, Hume's analysis of Induction<sup>1</sup>, he argued that conclusions about future events based on past observation have no rational foundation; in effect at the heart of all attempts to apply reasoning to the physical world lie assumptions that we call 'Empiricism' the philosophy that physical

observations are the basis for rational belief. Before Hume it had been assumed that Induction (the philosophical term used to define a reasoning step based on observation) had been proven to work by virtue of its results. Hume showed this reasoning to be false, since the 'proof' required Induction as an assumption in the first place; a circular argument. Nevertheless he goes on to argue that we need Induction to operate in the world. Hume's version of Empiricism is practically the same as before except that it is justified not because it is rational but because it is built into our natures, and because we can take no other course in order to act in the world. Take also the linguistic philosophical school known as Logical Positivism<sup>2</sup>, with proponents such as A.J. Ayer, who reduce philosophy to an analysis of language (in the broadest sense of symbolic mental representations) and attempt to achieve clarity by so doing. They rely on one (apparently reasonable) assumption known as the verification principle (which states that a statement is meaningful only if an empirical procedure, that is an experimental procedure, can verify it).

Similarly, many scientific principles such as Occam's razor (the principle where all unobservable phenomena are assumed to be outside the scope of enquiry altogether) are, in the final analysis, no more than useful working assumptions. Mathematicians speak about axioms and definitions, but they lead to 'incompleteness' or 'inconsistency' under the scrutiny of Gödel's Theorems (see section 3 below) and philosophers struggle to define certain key words such as 'Mind' and 'consciousness' and find that they can supply no satisfactory definition that consistently embraces all our conceptions of subjectivity, nor the consciousness that perceives it; the 'Perceiver'.

It is reasonable to challenge Western philosophy's root assumptions in order to seek further understanding of these matters.

Mischievously, for a moment, we can turn Hume's argument on its head. Imagine a thought demon, inside our Minds, that whenever we applied a deductive or logical technique interfered with the process and gave us consistently the wrong answer. Now imagine everybody, everywhere, suffering from a similar demon, causing identical errors. How would we tell our world from the demon-plagued world except by our failure to apply reasoning successfully to it? That is, by observation and Induction. Since, as Hume showed, there is no rational foundation for Induction where does this leave us? It seems we are left with no rational foundation for reasoning itself; there are, in the final analysis, always assumptions.

By identifying the assumptions, however obscure, we can deconstruct reasoning in all its forms until it slips like sand between our fingers, like St.

Augustine seeking a First Cause, a beginning of time <sup>3</sup>; in the end we grasp onto those assumptions that seem to work for us, and for our age, whether that is the verification principle, rationality, Empiricism, faith, common sense or other 'a priori' principles. For philosophy perhaps a well-practised acceptance of reasoning itself is the final assumption: does it not appear unreasonable even self-contradictory to question reasoning itself? The case for doing just that follows – recalling Socrates saying that he was the wisest because at least he knew that he did not know<sup>4</sup> and also the Buddhist conception of ideas as illusion<sup>5</sup>.

The case for deconstructing reason, however, also leads to a reconstruction. So in the final analysis reasoning is saved, as would be hoped in a philosophy paper (and as common sense demands); but not before a need to go beyond the purely rational is included in the argument. This 'going beyond' indicates a reality beyond the actualities of the phenomenal world of objective observation and definitions, and it is shown that the limitations of modern Western philosophy are sourced in this omission. The argument is essentially one of *reductio ad absurdum*, the thought demon argument above deconstructing reasoning only because of this omission.

#### 2. THE ARGUMENT

There is a long history to Western philosophy's development of axioms and assumptions, from the Greeks' Platonic Forms (see notes in references) <sup>6</sup> through to the 20<sup>th</sup> Century with linguistic philosophy. The position today is so strong that in American and British universities the word 'philosophy' often seems to be restricted to deductive, logical methods. This is not true for all philosophy particularly in the East as Zen koans <sup>7</sup> and other Eastern approaches to philosophy demonstrate. Koans are paradoxical sayings on which to meditate, for example "What is the sound of one hand clapping?" In Western terms they can be hard to interpret. This cultural difference seems immutable, at least until we question the foundations of the West's philosophical approach more closely.

We can do this by identifying the most accepted assumptions and questioning even them, by questioning the nature of reasoning itself. By doing so, however, we raise the objection that we undermine our own argument, since, without any accepted grounds from which to reason how can we proceed through reasoning to deconstruct or question anything at all? This is a fair point and as a result we are seemingly forced to choose between (i) 'ideas as illusion' and (ii) a generally accepted basis for reasoning (which could be detailed and discovered later). That is, between an Eastern intuitional philosophy and Western rationalism. It is likely if the reader instinctively chooses the latter that this choice seems superfluous, that there is no choice – but this is to miss the distinction. In any case the purpose of this paper is to suggest that there is a way forward that does not come from making the above choice, that by accepting the criticisms of deconstruction and by demanding a way to proceed anyway, as Hume did with Empiricism, that we can in fact find an alternative way forward. Thus enabling us to remain bound to, what we could call with an Eastern flavour, the 'wheel of reason', whilst recognising and questioning reasoning itself by deconstruction. This results in a philosophy that is compatible with both the intuitional aspects of certain Eastern philosophies and the logic of Western rationalism, an over-arching approach, the assumptions for which are minimal in a way not previously envisaged.

We can proceed as follows: Having identified and deconstructed our assumptions (whatever they may be), if we wish to continue philosophising, we need to find a new way to proceed. It is this *proceeding* itself (or that reasoning must enable us to proceed) that I hypothesise to be the most reasonable assumption (starting point) for philosophy; if we cannot proceed we cannot reason further and philosophising becomes futile. If we question even this need to proceed we have implicitly made our choice – ideas as illusions – and Western philosophy and its 'wheel of reason' has been discarded. *Therefore we shall proceed*.

This *proceeding* is an assumption that is in some sense minimal, it is also a variant of Pascal's Wager <sup>8</sup>; that is, a *Philosophical Pascal's Wager*. For Pascal his wager was an argument in favour of a belief in God on the basis of self-interest: if you fail to believe in God you take the risk of being wrong and going to Hell, whereas the downside for believing in God when he doesn't exist isn't too bad, so belief is the wisest course. Here the wager is not applied to the existence of God but a better-defined and minimal choice relating to the foundations of reason and without the obvious flaws of the original. To demonstrate: take Hume's argument against a rational foundation for Induction. He effectively goes on to invoke a variant of Pascal's Wager when he says that Induction is what we do because we couldn't operate in the world without it. A similar argument applies to our thought demon above: equally Deduction is what we do because we couldn't operate in the world without that either.

The two arguments are related, analogously, and are essentially the same. We have *proceeded* in both cases by using variants of Pascal's Wager, in Hume's case with respect to Induction, in the thought demon's case with respect to Deduction. Hume found this way to proceed long ago with respect to Empiricism. Philosophers, being rational beings, probably never thought to apply Hume's deconstruction fully to their own reasoning, for the very reason that it threatens the basis of it. However, applying both sides of Hume's approach to Empiricism (both the deconstruction and the consequent reconstruction) to Deduction, resolves this. Similar to Hume's analysis of Induction we can philosophise only if we apply Deduction: A Philosophical Pascal's Wager.

What other instances might exist to support the case, to support the application of a Philosophical Pascal's Wager?

Observe that any argument in favour of the application of a Philosophical Pascal's Wager in any particular circumstance becomes ultimately circular (analogous to pre-Hume arguments in favour of a rational basis for Empiricism): since there is no rational reason to justify its use except another Philosophical Pascal's Wager (due to deconstruction). Nevertheless (analogous to Hume's version of Empiricism) it is the only way to proceed.

#### 3. APPLYING THE ARGUMENT TO MATHEMATICS AND SCIENCE

Let's take it further: Mathematics and Science. For this we will make reference to Gödel's Theorems, two distinct mathematical theorems that prove that attempts to encode mathematics into a well-defined list of axioms and procedures necessarily lead to either self-contradiction or incompleteness. That is, the incompleteness of the system to cover every possible theorem or property of the mathematics in question. For further details and discussion see Hofstadter <sup>9</sup> and Penrose <sup>10</sup>.

Assume, for the sake of argument, that mathematics in its entirety is reducible to a set of axioms. By Gödel's Theorems we would have 'incompleteness' and/or 'inconsistency' in such a system. If we can choose our axioms such that they are consistent, we are left with incompleteness. Yet we can apply a Philosophical

Pascal's Wager to this incompleteness – the only way to proceed being completeness in mathematics as a whole, so the incompleteness of the system implies that some form of mathematics must exist outside of the hypothesised axiom system after all (regardless of our ability to identify it). In other words a Philosophical Pascal's Wager implies that mathematics is 'bigger' than any system of axioms. We are left with a taste, though no more, of Platonic Forms.

Similarly, as has been discussed in other forums, any hypothesised 'theory of everything' (in physics) axiomatically constructed must remain like St Augustine's First Cause *never reached*. If it could be reached it would be incomplete, which would prevent us proceeding and contradict its 'theory of everything'-ness.

The Philosophical Pascal's Wager gives Gödel's Theorems a philosophical interpretation. Proceeding then has something to do with going beyond axioms and assumptions, beyond definitions and beyond language. Our very use of axioms and assumptions, I have argued, via deconstruction, requires it. The point being that in order to question any axioms or assumptions we must go beyond those axioms or assumptions, and that we cannot accept those axioms or assumptions until we have done this.

# 4. APPLYING THE ARGUMENT TO MIND AND CONSCIOUSNESS

Let's apply this to something more philosophically challenging (but ultimately related): the Mind and consciousness. What is it? And how can we get a philosophical handle on it? Perhaps a great deal of philosophy boils down to this question, though linguistic philosophical schools would have the question branded meaningless until 'Mind' and consciousness are defined; this problem I argue can also be resolved by another Philosophical Pascal's Wager.

In his 'Tractatus' Wittgenstein <sup>11</sup> defines the pronoun 'I' to be nothing more than a reference point for language. His reasoning is that however we describe ourselves we always refer to 'I' in the description and that this always remains undefined. Buddhism uses essentially the same argument, from a much earlier date <sup>12</sup>, and refers to the impermanence of those qualities that we associate with the Self: the Illusion of Self. It is interesting that Wittgenstein, a 20<sup>th</sup> century Western philosopher, is not as we might expect at the opposite pole to Eastern philosophy. The difference in interpretation lies in what amounts to a significant truncation of linguistic philosophy: the equating of indefinable with non-existence (or irrelevance), a corollary also of the main premise of Logical Positivism: the verification principle.

The subjective aspect of Mind, that is, the Perceiver and consciousness, however indefinable, is in my opinion a central issue for philosophy. To make useful this opinion we need a way to proceed. The philosophical handle that I will use is the famous Chinese room <sup>13</sup> and with it I will again use a Philosophical Pascal's Wager. The Chinese room is a thought experiment that leads to a paradox, and in so doing demonstrates its analogy with the other situations where a Philosophical Pascal's Wager has been applied above. It also highlights the paradox created in philosophy whenever the issue of the Perceiver is raised.

To generate the paradox we start with a hypothesis: that the entirety of the inputs and outputs and states of a human being (for our purposes Chinese speaking) could, neuron by neuron, be swapped for a set of instructions kept inside a 'Chinese room.' Note that the paradox uses 'Chinese' to represent a generic foreign language. The Chinese room is a large room, large enough to contain a filing system containing instructions for providing all the possible responses to all the possible sensory inputs, and storing all the possible states and memories of a human being. We can, for example, provide inputs on pieces of card upon which Chinese text is written. Upon the correct operation of the filing system the output or response in the form of similar Chinese flashcards is generated. To make the system work, inside the room is an operator, who, whilst being very efficient at his job knows no Chinese. All the operator needs to do is look-up the responses and make the necessary actions according to the contents of the various files in the room. By the operator's selection, but without his understanding, the correct output is generated.

The paradox lies here – does the Chinese room inherit the consciousness or 'subjective existence' from the original (Chinese speaking) person? It is a paradox because the only Mind present appears to be the operator, yet we have assumed that the entire mental process of the original person has been coded into the filing system; the system producing the intelligence appears to have no Mind of its own, it's just a manually operated computer.

To resolve this paradox one could argue that our consciousness is no more than mechanism and therefore fully replicable by the Chinese room. In this way the paradox is removed by arguing that the Subjective, the Perceiver, not being defined, in some sense does not exist and is illusory, or at least by not being defined is misunderstood. And thus the cause of the apparent paradox lies in inadequate definitions. However, the only way in which we can *proceed*, that is, to permit enquiry into the Subjective, the Perceiver and consciousness, is by applying a version of the Philosophical Pascal's Wager that chooses the other resolution to the paradox – that the Chinese room *cannot* inherit the consciousness of the original Chinese speaker. This is a version of the Philosophical Pascal's Wager because there is a choice, either the Subjective is illusory (as it is undefined) or it is meaningful (even though it is undefined). The latter (allowing the 'Subjective' to have meaning) is proceeding. The former (denying the 'Perceiver' on the grounds that it is not well-defined and denying also the paradox) is not. There are two outcomes and a Philosophical Pascal's Wager; *the choice constituting proceeding is clear*.

By proceeding, however, by choosing to allow the paradox and the 'Subjective' to have meaning, such that the outcome of the wager opposes the construction of the 'Subjective' within the Chinese room, we seem to raise more questions than answers:

- 1. What is this 'Subjective' that has not been defined? Or alternatively what is the 'stuff' of the Subjective; what is consciousness and Mind?
- 2. Can the Subjective be defined, and if so in terms of what?
- 3. How does Mind operate in, emerge from, or interact with the Universe, and who is the 'Perceiver'?

- 4. What are the implications for artificial and biological intelligence and how does Mind and consciousness relate to mechanism?
- 5. How can Mind as other than pure mechanism be consistent with current science being based upon objective observation rather than subjective notions?

And so on...

# 5. CONSEQUENCES: EAST AND WEST – TWO SIDES OF THE SAME COIN

We remain limited by having no definition of Mind or consciousness, which limits our attempts to reason clearly about it just as the logical positivists would argue. How can we philosophise about something undefined or even indefinable? And in any case where can we proceed to once we have proceeded? It is not surprising that for the sake of simplicity some philosophies truncate this path by demanding precise definitions, Logical Positivism for one. Buddhist philosophy also appears, in a sense, to curtail this path since 'ideas are illusions.' However, whereas Logical Positivism denies the Subjective due to a lack of definition, Buddhist philosophy appears to deny the objective due to the meaninglessness of definitions, but even that idea in Buddhist thought is surely an illusion, so from a Western perspective we are little the wiser – this is because to bind Buddhist philosophy to such reasoning is to misunderstand it. Nevertheless the lack of definition and the choice to proceed remains a consequence of the Philosophical Pascal's Wager (as applied to the Chinese Room) so that a thorough deconstruction of philosophy necessarily leads to this dilemma.

As said before in section 2,

"In any case the purpose of this paper is to suggest that there is a way forward that does not come from making the above choice, that by accepting the criticisms of deconstruction and by demanding a way to *proceed anyway*, as Hume did with Empiricism, that we can in fact find an alternative way forward."

And so we have done, with the inevitable consequence *that reasoning must be transcended*. Though rationally we can offer no method for so doing <sup>14</sup>!

This conclusion at once looks like a dead end, though by construction it is the only way to proceed. It is instead a Western rational approach that encompasses Eastern intuitive philosophy. It allows such philosophy to exist without defining what it must be.

This brings Eastern and Western philosophies together!

The hypothesis leads to interesting arguments that yield insight into the comparative study of Eastern and Western philosophies: these arguments are an extension of those used by Hume and Pascal and therefore possess a Western heritage, yet comparisons and compatibility with Eastern philosophies are possible, even necessary. If the hypothesis is accepted, then some particular conclusions can be drawn about the nature of consciousness and Mind that in current thinking are

challenging and controversial. For example, mechanism (even probabilistic or quantum) would be inadequate to define or embrace consciousness, making artificial consciousness via digital computer impossible. Whether or not there is scope within quantum mechanics for events dependent on a link or connection with consciousness beyond its strict mathematical construct, or whether subjective notions like consciousness can be built into scientific models is a discussion best detailed elsewhere, see for example Penrose <sup>15</sup> and also Mindell <sup>16</sup>.

Nevertheless, under the hypothesis the brain becomes (or represents) more than a mere biological mechanism and takes on even greater unknowns: the Subjective, the Perceiver and consciousness. This in turn the Universe as a whole – and perhaps future physics <sup>17</sup>, or something else, necessarily inherits. But these side effects, or the potential for them, however pregnant with ambiguities, still do not constitute counter-arguments to the hypothesis, unless we impose unjustly conservative assumptions. Nor does the undefined status of Mind, as already mentioned, being a problem only if we assume the verification principle or similar constraint. In any case as already argued all these counter-assumptions are susceptible to deconstruction. On the contrary there is some evidence of internal consistency and elegance in *proceeding* as has been hypothesised here, for example, we can now hypothesise that a potential 'theory of everything' is necessarily incomplete because it does not fully encompass that other loose end: the Mind. We might also relate this to the existence of anthropic arguments <sup>18</sup> as likely standing outside the immediate construct of a hypothesised 'theory of everything.' Anthropic arguments are a collection of philosophical and scientific arguments that seek to find explanation for certain observations in science in terms of our own existence. For example, if certain fundamental constants of physics are altered by even a small amount life becomes impossible, linking the observer with the observed. Under this hypothesis, this could link the 'Subjective' with the objective in as yet unimagined ways.

#### 6. CONCLUSION

Whatever the conclusion to these issues and the other open questions raised in this paper the hypothesis of the Philosophical Pascal's Wager provides a constructive framework for resolving the Chinese Room paradox albeit with a controversial outcome. The hypothesis also sheds light on the nature of Mind and consciousness and is of interest in the comparative study of Eastern and Western philosophies. In particular the philosophical approaches of East and West are shown in this paper to be compatible and are brought together in a new and insightful way.

This is done by:

- 1. Deconstructing the assumptions of reasoning in Western philosophy.
- 2. Showing that this leads to a choice between the Philosophical Pascal's Wager hypothesis and a purely Eastern intuitional philosophy where 'ideas are illusions.'

- 3. Observing that this leads to the inevitable consequence that reasoning must be transcended (remembering that rationally we can offer no method for so doing).
- 4. But noting that by construction this is compatible with Eastern intuitive philosophies.

The point being that in order to question any axioms or assumptions we must go beyond those axioms or assumptions, and that we cannot accept those axioms or assumptions until we have done this. What is more, we can apply this to all systems of reasoning, rational constructs and assumptions within Western philosophy. Necessarily bringing Eastern and Western approaches of philosophy together.

By way of a postscript the idea of transcending rational constructs also has a Western cultural point of contact. In poetry it is said (by Keats) that: "Beauty is Truth, Truth Beauty." If truth is to be ascribed to this it is not the same truth as that of the Logical Positivists, but that does not deny it meaning.

"Truth may seem, but cannot be: Beauty brag, but 'tis not she; Truth and beauty buried be." <sup>20</sup>

#### 7. REFERENCES

<sup>&</sup>lt;sup>1</sup> Hume, David. *An Enquiry Concerning Human Understanding*. Oxford: Oxford Philosophical Texts, Oxford Press, 1999.

<sup>&</sup>lt;sup>2</sup> Ayer, A. J. Language, Truth and Logic. New York: Dover Publications, 1952.

<sup>&</sup>lt;sup>3</sup> Hawking, Stephen. *A Brief History of Time*. New York: Bantam Press, 1988, pp. 7, 8 and 166.

<sup>&</sup>lt;sup>4</sup> Taylor, C.C.W. *Greek Philosophers: Socrates, Plato, Aristotle*. Oxford: Oxford University Press, 1999, pp. 44-51.

<sup>&</sup>lt;sup>5</sup> Humphreys, C. *Buddhism*. London: Penguin Books, 3rd Ed, 1967, pp. 180-185. See in particular the conversation between Master and pupil on p. 181 'throw away that idea of yours'

<sup>&</sup>lt;sup>6</sup> Taylor, C.C.W. *Greek Philosophers: Socrates, Plato, Aristotle*. Oxford: Oxford University Press, 2001, pp. 35, 39-41, 220, 249-50. Platonic Forms being the idea that idealised abstractions such as 'a perfect circle', 'morality', 'truth' have an existence in their own right, and further that less well-defined ideas such as 'a table' or 'man' have similar counterparts in the world of forms; Penrose, R. *The Emperor's New Mind*. Oxford: Oxford University Press, 1989, pp. 127, 146, 205-6, 555 for relevant discussion.

<sup>&</sup>lt;sup>7</sup> Heine, S. and Wright, D. *The Koan: Texts and Contexts in Zen Buddhism*. Oxford: Oxford University Press, 2000. See Introduction

<sup>8</sup> Jordan, J. *Gambling On God: Essays On Pascal's Wager*. New York: Lanham, 1994.

- <sup>10</sup> Penrose, R. *Shadows of the Mind: A Search for the Missing Science of Consciousness*. Oxford: Oxford University Press, 1994, pp. 49, 64, 65, 72, 75, 90-94, 190, 418; Penrose, R. *The Emperor's New Mind*. Oxford: Oxford University Press, 1989, pp. 45, 132-3, 138-41, 539.
- <sup>11</sup> Wittgenstein, L. *Tractatus Logico Philosophicus*, 2<sup>nd</sup> Ed. Oxford: Routledge Classics, Routledge, Taylor and Francis, 2001, originally published in 1921, an early 20<sup>th</sup> century (linguistic) philosophy classic.
- <sup>12</sup> Humphreys, C. *Buddhism*, 3<sup>rd</sup> Ed. London: Penguin Books, 1967, pp. 20-21, also 35.
- <sup>13</sup> Preston, J. *Views into the Chinese Room: New Essays on Searle and Artificial Intelligence*, Oxford: Oxford Press, 2002; Penrose, R. *Shadows of the Mind: A Search for the Missing Science of Consciousness*. Oxford: Oxford University Press, 1994, pp. 40-41, 52.
- <sup>14</sup> Humphreys, C. *Buddhism*, 3<sup>rd</sup> Ed. London: Penguin Books, 1967, p. 180 for a similar perspective.
- <sup>15</sup> Penrose, R. Shadows of the Mind: A Search for the Missing Science of Consciousness. Oxford: Oxford University Press, 1994; Penrose, R. The Emperor's New Mind. Oxford: Oxford University Press, 1989.
- <sup>16</sup> Mindell, A. *Quantum Mind: The Edge Between Physics and Psychology*. Portland: Lao Tse Press, 2000.
- <sup>17</sup> See above: Penrose, R. *Shadows of the Mind;* Penrose, R. *The Emperor's New Mind*; Mindell, A. *Quantum Mind*.
- <sup>18</sup> Barrow, J. Tipler, F. *The Anthropic Cosmological Principle*. Oxford: Oxford University Press, 1988.
- <sup>19</sup> Keats, J. "Ode On A Grecian Urn," in *The Complete Poems of John Keats*, New York: Random House, Modern Library, 1994.
- <sup>20</sup> Shakespeare, W. "The Phoenix and the Turtle," in *The Complete Works Of William Shakespeare*, Oxford: Oxford University Press, 2005.

<sup>&</sup>lt;sup>9</sup> Hofstadter, D.R. *Gödel, Escher, Bach: An Eternal Golden Braid*. New York: Basic Books, 1979.