

# **AGAINST PHILOSOPHY: WHY PHILOSOPHY GETS NO RESPECT; A TAXONOMY of philosophy & A REVIEW of the successes and failures of 20th Century academic philosophy & RECOMMENDATIONS for the educational re-engineering of academic philosophy departments.**

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## **abstract**

**A. Many world class scientists make disparaging comments about academic philosophical output (e.g. Richard Feynman, Nobel Prize in Physics 1965; Steven Weinberg, Nobel Prize in Physics 1979; Edward O. Wilson, one of the most eminent evolutionary biologists of the 20th Century) and give academic philosophy little or no respect. When we understand why we gain insight into the methodology and works of philosophers. To understand why we need a taxonomy of philosophy. We also need a taxonomy to be able to map out what might be a viable future for aspects of academic "philosophy". This paper provides such a taxonomy.**

**B. All academic and non-academic philosophy can be classified into the following 5 categories:**

**b.1 Philosophy as SPECULATIVE ANALYSIS (including; Philosophy as ALMOST SCIENTIFIC and philosophy as NORMATIVE)**

**b.2 Philosophy as SPECULATIVE COMMENTARY (including philosophy as NORMATIVE)**

**b.3 Philosophy as SPECULATIVE TRUTH GUIDING**

**b.4 Philosophy as CONSILIENCE**

**b.5 Philosophy as MYTHS, LEGENDS or APHORISMS which are NON-RATIONAL or RATIONAL**

**C. With the practical TAXONOMY in hand we can evaluate the methodology and subject matter output of 20th Century philosophy in the five taxons into two classes;**

**c.1 PHILOSOPHIES NOT WORTH DOING BY ACADEMIC PHILOSOPHERS in universities.**

**c.2 "PHILOSOPHY" WHICH IS VALUABLE, BUT WHICH CANNOT BE PROPERLY**

## **DONE BY ACADEMIC PHILOSOPHERS.**

In this taxon are; TRUTH GUIDING; CONSILIENCE; NORMATIVE; RATIONAL MYTHS, LEGENDS or APHORISMS.

**D. I make some recommendations for the educational re-engineering of academic philosophy departments in considering** the successor subjects to "old style" 20th Century PHILOSOPHY.

I recommend that all major teaching and research universities set up new FACULTIES of CONSILIENCE. In the Faculty of CONSILIENCE there should be five kinds of subject matter taught. One is CONSILIENCE; a second is TRUTH GUIDING; a third is THE PUBLIC UNDERSTANDING OF SCIENCE; a fourth is THE HISTORY OF SCIENCE, and the fifth is the PUBLIC UNDERSTANDING of the HUMANITIES.

Each of the successor subjects to "old style" PHILOSOPHY can more effectively do some of the work which philosophy departments used to attempt to do in the 20th Century.

The new Faculties of CONSILIENCE and departments of HUMAN EVOLUTIONARY BIOLOGY should be responsible for the task of educating each new generation of students to prevent cultural amnesia, and in so doing be part of the ongoing CONVERSATION of MANKIND. The new faculties and departments will be home to a class of intellectual capital creators and knowledge custodians who will produce works like those of E. O. Wilson (*Consilience*) David Deutsch (*The fabric of Reality*), Steven Pinker (*The Blank Slate*), Daniel C. Dennett (*Darwin's Dangerous Idea*), Michael Ghiselin (*Metaphysics and the Origin of species*), Lee Smolin (*The Trouble with Physics*), R. L. Trivers, George C. Williams, John Maynard Smith, Richard Dawkins, Stuart Kauffman and Michael Ruse, to name just a few.

In conclusion I indicate how philosophers could regain respect for their intellectual output from the scientific community.

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## **PREAMBLE**

**(1)** I think Ernest Gellner was right about the political and social context of modern philosophy when he said in a B.B.C. interview in 1978 that;

*"..First...modern philosophy is basically, though not always consciously, a kind of commentary on the social and intellectual change which has taken place since the sixteenth and seventeenth centuries, and can be understood only in this light.*

*Second, people are not clearly enough aware of this."*

(pp. 252-253 of *Men of Ideas* (ed.) Bryan Magee, O.U.P. 1982)

According to Gellner **modern philosophy** has two main themes:

*The first theme is;*

*"the preoccupation with the theory of knowledge as providing a touchstone of what is good knowledge and what is not"*

*and*

*"The second main theme of modern philosophy - exemplified, for instance, by Marxism - is a search for some new kind of metaphysic which is not an account of transcendent reality but rather what might be called a human-social metaphysic, namely a specification of the general features of the human or the social-historic situation."*

(pp. 254-255 of *Men of Ideas* (ed.) Bryan Magee, O.U.P. 1982)

**(2)** If the time scale of your historical perspective is long enough you can see major changes in the development of academic subjects in the 20th century.

**(2a)** Social Anthropology, for example, had subject matters and methodologies in the last two decades of the 20th Century that were different in several major respects from what was called "social anthropology" in the first six decades of the Century.

**(2b)** The "proof theory" and "model theory" sub-components of "mathematical logic" in 1910 were relatively thin compared to the rich and vibrant subject matter and methodologies in Mathematical Logic in the late 1960's and 1970's when Raymond Smullyan published *First Order Logic* (1968); Robert Solovay published *Provability Interpretations of Modal Logic* (1976); and Jon Barwise published the 1,165 page *Handbook of Mathematical Logic*(1975). In 1910 there was the work of Boole, Peano, Hilbert, Whitehead and Russell. But in 1970 the subject had been enriched by the works of Godel, Tarski, Haskell Curry, Turing, Church, Gentzen, Kleene, Henkin, Rosser, Hintikka, Kripke, M. H. Lob, Beth, Smullyan, Craig, Dummett, Kreisler, Mendelson, Quine and at least a 31 other world class logicians.

**(2c)** In the first 50 years of the of the 20th century Freudianism as a psychology was very much

alive. But by the 1980's it was very much dead. Girls were found not to have penis envy. Boys didn't want to sleep with their mothers. The psychological terrain wasn't profitably divisible into ego, superego and id. A seven year talking cure on a couch didn't seem to change anything except the therapist's bank balance. Patients were successfully suing their therapists in the USA.

**(2d)** In the first 50 years of the 20th century Marxism (in one or other version) was very much alive. After the fall of the Soviet Union and its puppet states, Marxism was very much dead. In China even though political Marxism rules the economic model is no longer Marxist.

**(3)** High profile professional philosophers became skeptical about the health of philosophy as an academic subject.

**(3a)** The Wittgenstein of the *Tractatus Logico Philosophicus* proclaimed that philosophy had ended and became a primary schoolteacher and a monk's gardener.

**(3b)** Karl Jaspers reported on the prevailing view in Switzerland in the 1950's.

Writing in 1958 Karl Jaspers recounted the arguments then heard in Switzerland and Germany against philosophy:

"What is the task of philosophy today? We hear this answer: It has none, for it lacks reality, constituting merely the out-of-the-way occupation of a group of specialists. Incumbents of chairs of philosophy, the origin of which dates back to the Middle Ages, meet in vain in conventions which represent the modern method of seeking recognition. A comprehensive literature testifies to their monologues, seldom read and rarely purchased, except in a few faddist periodicals for snobs. True, the press, as the organ of public opinion, takes some notice of these publications gathering dust on library shelves; but it does so without genuine interest. In short, **philosophy might be considered superfluous, a petrified relic of time gone by, awaiting dissolution; it no longer has a task to fulfill.**" (Philosopher in Defense of Philosophy; Karl Jaspers in *This is my Philosophy*, (ed.) Whit Burnett, George Allen and Unwin, London 1958)

**(3c)** In 1980 Richard Rorty writing in *Philosophy and the Mirror of Nature* argued that **philosophy as a grand enterprise, which could compete with the sciences to give definitive answers about the nature of the human condition, free-will, truth, epistemology, ontology etc. had come to an end.** Successor subjects, he suggested, to old style unreconstructed philosophy, would continue to take part in the "conversation of mankind" - who are we? how ought we to live? what sort of large scale orientation to life should we adopt? etc. - but this would not be a conversation contributed to in any significant way by philosophers.

**(3d)** In 1987 the M.I.T. Press published *After Philosophy: End or Transformation?* edited by

Kenneth Baynes, James Bohman and Thomas McCarthy, in which **leading Anglo American Analytic (Davidson, Dummett, MacIntyre, Putnam, Rorty & Taylor) and European philosophers (Apel, Blumenberfg, Derrida, Foucault, Gadamer, Habermas and Lyotard) addressed the question whether philosophy had ended.** Some suggested it had ended others that it needed to be transformed into a different kind of enterprise.

**(3e)** John Horgan's 1996 book, *The End of Science* included a section titled "The End of Philosophy" in which various views about the end of philosophy were expressed, including **the view of Colin McGinn**,(an ex-Oxford philosophy don) first expressed in his 1993 book *Problems in Philosophy*,(Blackwell) **that philosophy was dead.** McGinn claimed that "the great problems of philosophy are real, but they are beyond our cognitive ability. We can pose them, but we cannot solve them - any more than a rat can solve a differential equation." ( *The End of Science*; John Horgan, Abacus, London, 1996)

**(4)** In 1988 the celebrated French Anthropologist Claude Levi-Strauss in *De pres de loin* (English Translation; *Conversations with Claude Levi-Strauss* Univ. of Chicago, 1988) asked himself: **"Do you think there is a place for philosophy in today's world?"**

His answer to this question was:

**"Of course but only if it is based on the current state of scientific knowledge and achievement...science has...enlarged and transformed our views of life and the universe enormously; it has also revolutionised the rules by which the intellect operates."**

**(5)** Philosophy in the 20th Century saw a period of inflation in the 1960's and 1970's when every State university in the U.S.A. had to have at least 8 members of staff in a recently founded philosophy department. In the 1970's the American Philosophical Association reported a membership of more than 10,000 professional philosophy teachers. They were all subject to the "publish or perish" academic (Darwinian) imperative. Publish they did as the number of philosophy journals mushroomed to cope with the expanding publishing volumes. Similar expansion happened in Europe.

**(6)** In the 20th Century the scientific "*river of discovery*" to use John Maddox's term, became a flood. In physics, materials science, rock mechanics, biology, socio-biology, evolutionary biology, bio-geography, evolutionary genetics, behavioural genetics, neuroscience, cognitive neuroscience, evolutionary psychology, the earth sciences, chemistry, genetics, code mathematics, recursive function theory and first order logic (to mention just some subjects) **FUNDAMENTAL and REVOLUTIONARY** discoveries were made which transformed our views of life as well as re-made, re-ordered, and re-revolutionised the rules by which the intellect operates.

During the 20th Century there was the decline of formal religion in some advanced European democracies, coupled with the the rise and re-invention of individualism and the birth and flourishing of many different psychologies.

(7) It turned out that **modes of thought other than those of the sciences and maths** and **modes of action other than those of the sciences and maths** were all forced to come to terms with the methodologies of the sciences and the discovered facts of the sciences. These (non-scientific) modes of thought or action included jurisprudence, architecture, education, sociology, anthropology, academic psychology, clinical psychology, academic philosophy, and history. In history for example there were the many attempts at grand versions of history using the modes of thought of the humanities (such as those of Toynbee) and then came a markedly different kind of history, a history from the point of view of an evolutionary bio-geographer, Jared Diamond's *Guns, Germs and Steel*. This is a way of doing history which the professional historians admire but are struggling to come to terms with.

(8) John Brockman has drawn our attention to the merits of what he calls the THIRD CULTURE. He says;

"The third culture consists of those scientists and other thinkers in the empirical world who, through their work and expository writing, are taking the place of the traditional intellectual in rendering visible the deeper meanings of our lives, redefining who and what we are."

Some of the thinkers Brockman has in mind are:

"Paul Davies, J. Doyne Farmer, Murray Gell-Mann, Alan Guth, Roger Penrose, Martin Rees, and Lee Smolin; the evolutionary biologists Richard Dawkins, Niles Eldredge, Stephen Jay Gould, Steve Jones, and George C. Williams; the philosopher Daniel C. Dennett; the biologists Brian Goodwin, Stuart Kauffman, Lynn Margulis, and Francisco J. Varela; the computer scientists W. Daniel Hillis, Christopher G. Langton, Marvin Minsky, and Roger Schank; the psychologists Nicholas Humphrey and Steven Pinker."

(9) The Humanities have to come to terms with the ONE overarching narrative coming out of this 3rd Culture. And Philosophy must also come to terms with the ONE integrated story which the 3rd Culture puts on the shelves of bookstores in the Science section; and with the integrated story which is presented on television by the above thinkers. This is a challenge to philosophers.

{Steven Pinker's hairstyle is also a challenge to philosophers; - he looks the part of a 3rd Culture prophet, making A.C. Grayling, Timothy Williamson and Colin McGinn look petit bourgeois and un-philosophical! }

In the light of the above observations and questions it is useful to ask questions about the "progress" of "philosophy" in the 20th Century. Did the various methodologies operating at the start of the Century slim down and converge on one methodology, or maybe a much smaller number of methodologies ? If not, why not ? Did 20th Century philosophers manage to find an error correcting mechanism (such as there is in the sciences) so that different philosophers could agree on what had been established in the past, and build on that for the future ? If not, why not ? Has philosophy made "progress" in the 20th Century or was it in the same state of disarray at the end of 1999 that it was at the end of 1899 ?

These above observations and questions prompt a REVIEW and a TAXONOMY of 20th Century philosophy. They also prompt an EVALUATION of the present state of the subject and some RECOMMENDATIONS for future growth and progress. This is what I do in this paper.

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### **The Structure of this paper**

This paper is structured into four sections.

**Section A** deals with the disparaging, dismissive and negative evaluations, which world class scientists make of academic philosophy.

In **Section B** I present and discuss a practical, workable TAXONOMY of 20th Century philosophy.

**Section C** is concerned with evaluating the philosophies in the 5 taxonomy categories.

In **Section D** I make recommendations about how to educationally re-engineer academic philosophy departments so that the non-viable categories of philosophy can be closed down and the viable ones transferred to Faculties of business, commerce, law, medicine or to new faculties of CONSILIENCE.

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## SECTION A.

### WHY PHILOSOPHY GETS NO RESPECT. WHY WORLD CLASS SCIENTISTS LIKE FEYNMAN, WEINBERG or EDWARD O. WILSON, DISPARAGE, DISMISS or DEBUNK PHILOSOPHY

Some categories of academic philosophy get no respect from the public domain. Son says to his mother-" **I'm going to become a doctor of philosophy.**"

Mother says: "**Oh, what kind of disease is philosophy?**" (from Steven Pinker's, *The Blank Slate*)

In the film *Lost in Translation* (2003) the Scarlett Johansson character tells the Bill Murray character **that she's a student in college studying philosophy.**

The Bill Murray character replies;

**Its a racket, but I'm sure you'll figure out all the angles.**

Some categories of Academic Philosophy get no respect from distinguished scientists. But some world class scientists go further, they disparage or dismiss it. Three names come to mind immediately, Richard Feynman (Nobel Prize in Physics 1965, Steven Weinberg (Nobel Prize in Physics 1979), and Edward O. Wilson, one of the the most eminent evolutionary biologists and sociobiologists of the 20th Century. We have to ask ourselves why three world class scientists would be so dismissive and disparaging of academic philosophy.

#### *AI. RICHARD FEYNMAN'S NEGATIVE VIEW of PHILOSOPHY*

##### **What were some of Feynman's complaints against philosophy?**

- (i) He accuses Spinoza of "meaningless chewing around." You could invert each of Spinoza's claims and not be able to tell which was true.
- (ii) Philosophers are ignorant of science. When philosophers describe science it is not science as Feynman knows it.
- (iii) When he was asked whether an electron was "an essential object" at a seminar in Princeton he decided to seek clarity about "essential", and in reply asked whether a brick was an "essential object". In trying to answer the question no two philosophy students could agree with one another. The meeting broke up in complete chaos.
- (iv) Philosophy asks "pre-decided questions". Science won't answer a philosopher's pre-decided deep philosophical questions. By contextual implication, neither will philosophy answer its own



pre-decided deep philosophical questions.

(v) Leonard Mlodinow in a memoir of his time at Caltech says Feynman was suspicious of philosophy.

Feynman's anti-philosophy quotations are in **APPENDIX 2** below.

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## *A2. STEVEN WEINBERG'S NEGATIVE VIEW of PHILOSOPHY*

### **What are Steven Weinberg's complaints against philosophy?**

(i) Philosophy has little or no value for physics.

"The value today of philosophy to physics seems to me to be something like the value of early nation-states to their peoples. It is only a small exaggeration to say that, until the introduction of the post office, the chief service of nation-states was to protect their peoples from other nation-states."

(ii) "...philosophy of science, which at its best seems to me a pleasing gloss on the history and discoveries of science.....we should not expect it to provide today's scientists with any useful guidance about how to go about their work or what they are likely to find."

(iii) "After surveying three decades of professional writings in the philosophy of science, the philosopher George Gale concludes that 'these almost arcane discussions, verging on the scholastic, could have interested only the smallest number of practicing scientists.' [This reminds me that; "Wittgenstein remarked that 'nothing seems to me less likely than that a scientist or mathematician who reads me should be seriously influenced in the way he works."]

(iv) The insights of the philosophers I studied seemed murky and inconsequential compared with the dazzling successes of physics and mathematics.

(v) "From time to time since then (his undergraduate years) I have tried to read current work on the philosophy of science. Some of it I found to be written in a jargon so impenetrable that I can only think that it is aimed at impressing those who confound obscurity with profundity. Some of it was good reading and even witty, like the writings of Wittgenstein and Paul Feyerabend. But only rarely did it seem to me to have anything to do with the work of science as I knew it."

(vi) "...a knowledge of philosophy does not seem to be of use to physicists – always with the exception that the work of some philosophers helps us to avoid the errors of other philosophers.

Weinberg's anti-philosophy quotations are in **APPENDIX 3** below.

### *A3. EDWARD O. WILSON'S NEGATIVE VIEW of CARNAP'S PHILOSOPHY*

What do scientists make of philosophy's bravest 20th Century attempt at grand truth establishing construction ? Here is what the father of socio-biology (of whom Tom Wolfe remarked in *Sorry but your soul just died* [1996] " There's a new Darwin. His name is Edward O. Wilson") has to say on the subject of Carnap's best works:

"...the last stand (of Carnap's Logical Empiricism ) may have been a seldom-read 1956 monograph by Carnap in *Minnesota Studies in the Philosophy of Science*. The fatal flaw was in the semantic linchpin of the whole system:

The founders and their followers could not agree on the basic distinctions between fact and concept, between empirical generalisation and mathematical truth, between theory and speculation, and from a collation of all these fog-shrouded dichotomies, the differences between scientific and nonscientific statements."

Wilson has much more to say about the poverty of the philosophers' understanding of how to go about seeking knowledge and the poverty of the philosophers' subject matter output in his book *CONSILIENCE*. It makes for sobering reading.

### *A4. SOME REASONS TO BE AGAINST ACADEMIC PHILOSOPHY*

(i) Philosophers wield an inadequate methodology

The methodology of philosophy relies on "insights" or "knowledge" from "intuitions"; "thought experiments"; appeals to the philosophical literature instead of to the facts produced by the "hypothesize-model-and-test RATIONALITY." The methodology relies on chains of "reasons" which are not subject to the same constraints mathematicians put on their logical chains. The methodology has no built in, commonly agreed upon, error correcting method.

(ii) The "knowledge" which philosophers produce is untrustworthy.

(iii) After a hundred years of academic philosophy in the 20th Century philosophers still cannot agree on what would count as "progress" in philosophy.

(iv) Philosophers don't define their concepts clearly enough like scientists and mathematicians do.

(v) By the end of the 20th Century academic philosophy could not agree on one methodology; one error correcting mechanism; one model of reaching agreement ...etc. So by the standards which Thomas Kuhn laid down in *The Structure of Scientific Revolutions* for something to be an established academic subject "philosophy" in the 20th Century was **not an academic subject**, it was many different subjects in many different academic communities.

(vi) "Anglo American Analytic" philosophy in the 20th Century did not have within it progressive,

healthy and growing research programmes as defined by Imre Lakatos in his *Falsification and the Methodology of Scientific Research Programmes*. So therefore by the the Lakatos definitions "philosophy" Research Programmes in the 20th Century were unhealthy and degenerative or non-existent.

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## SECTION B.

### The TAXONOMY of PHILOSOPHY: THE 5 CATEGORIES OF PHILOSOPHY

I wish to remind the reader of the content of the first paragraph of the PREAMBLE where I started with what Ernest Gellner called the two main themes of modern philosophy. His is a large scale view of the political, social and ideological context of "modern philosophy" since the sixteenth and seventeenth centuries.

In the light of Gellner's assessment of "philosophy" I start with a remark about the institutionalization of philosophy.

Next I look at some definitions of what has been counted as "philosophy" in the past; and then, list the 20th Century philosophical output DATA I wish to classify.

I then put my taxonomy categories on the table and classify the data from the 20th Century into the chosen categories.

**The institutionalization of philosophy happened in the 20th century.** The 20th century was the first century in which all the leading philosophers were academics with salaries paid by universities or other institutions. As a result there was an "exponential growth of concern with analysis" which had not been evident in previous centuries. (Magee: *The Story of Philosophy* p. 193)

"the biggest advances were on two fronts" ..."one was a response to 20th century science, which compelled a radical reappraisal of the nature of human knowledge as such."

..."the other was an attempt to understand the human condition in a universe no longer created by God, or as having any meaning or purpose of its own." (Magee: *The Story of Philosophy* p. 193)

#### *BI. DEFINITIONS OF "PHILOSOPHY"*

In the 14th C. "philosophy" was the name for a cluster of subjects which were customarily defined by what they were not. The medieval universities had three "HIGHER" faculties teaching the 3 "noble" subjects; which were quaintly considered to be theology, medicine and law. The fourth,

non-higher, non-noble faculty was called the "faculty of philosophy." The lowly faculty of philosophy (also sometimes called the faculty of arts) was home to all the subjects which were **NOT** in the higher faculties, among these subjects were "philosophy" and "natural philosophy". This explains why Ph.D's were awarded in the 14th and 15th Centuries to advanced students who had never studied "philosophy", and presumably, why most Ph.D's awarded today to scientists are awarded to advanced students who have never studied philosophy.

"Philosophy" is usually defined in terms of a method, subject matter or purpose.

Sometimes "philosophy" is defined as a pure, disinterested quest for enlightenment. When this is the case (e.g. as in Zen Buddhism) there is no apparent ulterior purpose.

In universities and academe "philosophy" is often defined as being about a highly prized special class of (philosophical) necessities. Alternatively, it is defined as being about (philosophical) insights into a special class of (philosophical) necessities. What philosophers do is go on a certain kind of hunt for the members of this special class of insights into (philosophical) necessities. In this case the problem of saying what the correct 'method' is, or 'what the nature of the subject matter is' takes center stage.

### **What are some of the typical definitions of "philosophy" ?**

Here are nine accounts, in no particular order.

(i) The subject matter of "**philosophy**" is the concepts and principles pre-supposed in thought and action.

(ii) "**Philosophy**" is a second order intellectual activity whose subject matter is the concepts, theories and assumptions present in various academic disciplines. (*this is the Grand 'Queen of the Sciences' view*)

The subject matter of this species of "philosophy" is the concepts, theories and assumptions present in the various sciences, humanities, engineering, the visual arts....etc. On this view "philosophy" is a parasitic subject; it is always "Philosophy of ...(x)..." In this usage "philosophy" is ambiguous. It refers to EITHER *a field of enquiry* OR *a definite theory*. For example, "philosophy of logic" refers to philosophical speculation over the whole field of concepts, theories and assumptions present in mathematical logic (which consists of;- proof theory; model theory; set theory; and recursive function theory) OR to a definite theory; so that "Hintikka's philosophy of logic" refers to Hintikka's theory of "Independence Friendly Logic." (see Jaakko Hintikka; *The Principles of Mathematics Revisited*, Cambridge Univ. Press 1996)

(iii) "**Philosophy**" is a second order intellectual activity whose subject matter is the concepts,

theories and assumptions present in ordinary life. (Wittgenstein said; "philosophy is talk about talk.")

(iv) "**Philosophy**" is concerned with establishing a comprehensive view of reality and humanity's place in it.

(v) "**Philosophy**" is the search for wisdom or virtue or happiness.

(vi) A view of "philosophy" from the women and men on the *Clapham Omnibus*;

"**Philosophy** is not meant to be a source of facts or truth; it's meant to be an invitation for people to think. And the fact that there are word games, and playful banter and such things, provides the environment in which people can feel free to begin thinking deeply and critically about life."

A user named 'otterplay' on [www.reddit.com](http://www.reddit.com) ; April 2008

(vii) "**Philosophy**" is an intellectual activity which asks if the world has properties such as "facts", "universals", "values", "beauty", "relations" etc. because it wishes to enquire into the nature of these general properties.

(viii) "**Philosophy**" is concerned with the activity of high level intellectual orientation.

"Orientation" with respect to "minds", "values", "purpose", "religion", "selfishness", "the meaning of it all" etc.

(ix) "**Philosophy**" is concerned with asking questions and removing some of the rubbish that lies in the way of knowledge.

Daniel Dennett wrote recently (2006) "*We philosophers are better at asking questions than at answering them, and this may strike some people as a comical admission of futility - "He says his speciality is just asking questions, not answering them. What a puny job! And they pay him for this?" But anyone who has ever tackled a truly tough problem knows that one of the most difficult tasks is finding the right questions to ask and the right order to ask them in. You have to figure out not only what you don't know, but what you need to know and don't need to know, and what what you need to know in order to figure out what you need to know, and so forth...philosophers can sometimes help in this endeavor, but of course they have often gotten in the way, too. Then some other philosopher has to come in and try to clean up the mess.*"

Dennett then goes on to quote, with approval, John Locke's "Epistle to the Reader" at the beginning of the *Essay Concerning Human Understanding* 1690:

"...it is ambition enough to be employed as an under-labourer in clearing the ground a little, and

*removing some of the rubbish that lies in the way of knowledge..."*

(*Breaking the Spell: Religion as a Natural Phenomenon*, Daniel Dennett, Allen Lane, London, 2006)

## *B2. The DATA; 20th CENTURY PHILOSOPHICAL OUTPUT*

What do I want to classify? The short answer is all 20th Century academic philosophy. There were various schools of philosophy or philosophical movements or philosophical traditions. There were also lone wolf philosophers, not belonging to any school. We want to classify the philosophical SUBJECT MATTER OUTPUT of them all. I wish to capture all of them in my taxonomy. The list is fairly long so I have put it into an appendix. What I call the DATA is in APPENDIX 1.

## *B3. Taxonomy Categories*

### **The purpose of my taxonomy**

My taxonomy tries to classify philosophy into easily manageable categories. These taxonomy categories will enable us to evaluate the successes or failures of academic philosophy.

We do not want to have too few categories in our classification. If we did some philosophers or schools of philosophy would complain that what they do is unique and does not fit into any of our categories.

For reasons that William of Ockham would appreciate we do not want to have a single category more than we need to do the job in hand.

The output of a single philosopher such as Kant can range over more than one category. So some of his work is *truth establishing* and some is *normative*. One often leads to the other. This is because to be concerned with exclusively *normative* matters, you sometimes also have to engage in some *truth establishing* or some *speculative analysis*. And often a philosophical enterprise which starts off as an exercise in purely *speculative analysis*, with no intent to be *normative*, ends up suggesting that if the given conclusions drawn by pure reason from the *speculative analysis* activities are correct, then certain *normative* implications follow.

The usual classification activities by professional academic philosophers are not helpful. The reason is that philosophers like to classify what other philosophers do with labels like realist or anti-realist, empiricist or rationalist, Continental philosophy vs Anglo American Analytic philosophy, Marxist vs Capitalist, nominalist vs realist etc.

This subject matter classification of academic philosophical output sheds no light on whether the work in question is scientific or unscientific; rational or non-rational; regarded with respect by the scientific community or disparaged, and so on. Its a purely internal classification which helps professional academic philosophers to sort the laundry they are taking in from other philosophers.

The taxonomy categories I use are shown in the diagram below:



**Figure 1.**

#### *B4. The Taxonomy of Philosophy*

**All academic philosophy (and non-academic philosophy) can be classified into the 7 categories listed below:**

*taxon 1. Philosophy as SPECULATIVE ANALYSIS; including philosophy as NORMATIVE and philosophy as ALMOST SCIENTIFIC*

*The category of "speculative analysis" includes the activity of "truth tracking" by following the links between necessities or insights into necessities, in a specially prized realm of philosophical necessities.*

*"Speculative Analysis" includes conceptual analysis; linguistic analysis; the search for meanings in the style of Michael Dummett or Donald Davidson; the search for clarity through Socratic irony, and what Richard Rorty called carrying on 'the conversation of mankind'; that is transmitting the philosophical cultural capital to the next generation.*

*The condition of inclusion: The main focus is speculative analysis or the tracking of insights into necessities found in common experience, folk psychology, academic literature, language and introspection.*

Speculative Analysis does not attempt to go head to head against the sciences because it is not bold enough to see itself as "almost scientific truth establishing". So what it does is to pursue insights into necessities and to try to infer philosophical truths from common experience unaided by the use of hypothesize-model-and-test rationality.

The difference between ALMOST SCIENTIFIC TRUTH ESTABLISHING philosophy and SPECULATIVE ANALYSIS philosophy is the difference between the work of Carnap or Quine

(whose philosophical output allegedly (according to Quine) differs only in degree from the sciences) on the one hand, and on the other the vast majority of papers in e.g. *The Journal of Philosophy* (one of the leading journals in North America) or *Mind* (one of the leading journals in the United Kingdom) where the authors have just taken in some other philosopher's laundry and are wending their way through a web of connections (alleged to be of philosophical interest) between sets of insights into necessities.

There is an important ambiguity here. The SPECULATIVE ANALYSIS philosophers hunt for two different kinds of necessities (or insights into necessities). The one class of necessities is exactly the same as those which the ALMOST SCIENTIFIC TRUTH ESTABLISHING philosophers try to establish. The other class of necessities is one which **differs in kind** from the necessities which the *hypothesize-model-and-test* thinkers and the almost scientific truth establishing philosophers value, i.e. they are necessities which exist in a parallel world to the world of science.

A basic feature of the SPECULATIVE ANALYSIS philosophers is that their work is always in a permanent state of being **PRELIMINARY**. Their analysis and their speculations are works which are carried out prior to the establishment of a philosophical theory or result or paradigm. The main act, - the production of facts, - is always deferred to the future.

*Almost scientific truth establishing* might be something which the speculative analysis philosophers will attempt in the future, but for the present their concern is just "philosophical analysis"; what Feynman calls "meaningless chewing around". And what others have called "excessive recursive self introspection". The various authors are just tracking insights into necessities without really believing that anyone in the scientific community will read, or take him/her seriously, or ever use his/her insights into necessities in their scientific work.

*An important point is that you can build a world of **philosophical necessities and philosophical insights into necessities** around your "thought experiment", but unless your "thought experiment" is directly related to the observational DATA and the agreed knowledge derived from the totality of experiments in the relevant field, your constructed philosophical world will be a world parallel and cognate to the world of science. It will be a world outside scientific rationality, - the rationality of hypothesize-model-and-test. It will therefore also be outside the error correcting mechanisms of science, and outside the takeaway of global scientific agreement.*

And so you will never get proper institution wide error correction, or agreement on what has been achieved or agreement on what counts as progress.



The speculative analysis philosophers are **explanation givers** who are often, but not exclusively, Anglo American Analytic philosophers, extremely respectful of science and the output of John Brockman's Third Culture thinkers. These philosophers see their task as one whose output is "explanation, understanding, insight". (Bryan Magee, *Confessions of a Philosopher* p. 536).

Richard Rorty saw the debate inside the Anglo American Analytic tent as follows:

"...most of the history of 20th Century analytic philosophy is a sort of battlefield opposing various "realist" and "anti-realist" conceptions of truth.....the battlefield has been trampled into a quagmire."

(p. 66 *Whats the Use of truth ?*" Richard Rorty and Pascal Engel Columbia Univ. Press, 2007 - first published as *A quoi bon la verite ?* ; Grasset et Fasquelle, Paris, 2005).

### **The professional spider web builders and the philosophical cats**

*I introduce my analogy of the scientific spider web builders and the philosophical cats. The philosophical cats have never built a scientific spider web, but they try to give the scientific web builders unsolicited advice on spider web construction. The spider web constructors (both in theory and technology) are out to catch real flies and other assorted goodies, in much the same way that scientists are in the business of managing, controlling and predicting nature, using facts derived from experiments.*

*This species of philosophical cat does not try to build spider webs but talks about building cognate spider webs. And they talk about their talk. As Wittgenstein said, "philosophy is talk about talk." Like their "almost scientific, truth establishing" colleagues they resort to discussing the possible building of spider webs in a parallel world of "philosophical necessities" or insights into such necessities". Since they are not actually going to build a real scientific spider web these philosophical cats think they are justified in spurning the tools and techniques of the professional spider web builders. They commit to analysing but not to modelling and testing.*

Examples of SPECULATIVE ANALYSIS are: Much of the output from the Anglo American Analytic philosophy tradition; Prominent examples are much of the work of Wittgenstein (earlier and later), J.L. Austin, Gilbert Ryle, Thomas Nagel, John Searle, Gareth Evans, Donald Davidson, Charles Taylor, Colin McGinn and Timothy Williamson. The major Anglo American Analytic philosophy tradition journals are filled with speculative analysis papers; - The Journal of Philosophy, Mind, The Philosophical Review, Proceedings of the Aristotelian Society, Review of Metaphysics etc.

In the 20th Century there were at least two main "turns" in speculative philosophy - dominant paradigms for managing and controlling how philosophy was done; the one was the **linguistic turn**

and the other was the **meanings turn**.

### **The Linguistic Turn**

The linguistic turn arose with Wittgenstein and so called "ordinary language philosophy". There is a very readable book devoted to a logical and sociological analysis of "Linguistic Philosophy" or "Ordinary Language Philosophy" by **Ernest Gellner** called *WORDS and THINGS*, Victor Gollancz, London 1959 and Penguin Books, London 1968.

Below are some quotations from Gellner:

- \* "...Linguistic Philosophy is a certain cluster of views about the world, language and philosophy. This cluster has a considerable measure of unity and inner coherence. It merits treatment as "a philosophy," that is, a distinctive outlook, a way of looking at things, with its associated style of reasoning and setting about solving problems, of recognising problems and solutions." (p.17)
- \* earlier -pre-ordinary language philosophy..."is somehow the pathology of language" (p.19)
- \* "Philosophic problems... arise from' the use of words; and especially 'from the *ordinary* use of words", or from deviations from it." (p.19)
- \* "philosophical theories are misuses of language." (p.20)
- \* "the philosopher has no positive function" "the proper job of the philosopher is to be the diagnostician and therapist of a certain type of error, namely error arising from misunderstanding of language." (p.20)
- \* "past philosophy has been mainly abuse of language, future good philosophy will be the diagnosis and elimination of such abuse." (p.20)
- \* "Linguistic philosophy can conceive of its own activities as the euthanasia of philosophy." (p. 20)
- \* "Linguistic philosophy is conceived not merely as a therapy or euthanasia, but also as prophylaxis, and as a prophylaxis against a necessarily ever-present danger." (p.21)
- \* "Linguistic philosophy is not a theory of the world *and* of language *and* of philosophy *and* of mind; they mutually entail or insinuate each other." (p27)
- \* Linguistic philosophy .."provided some of what religion was meant to provide - a sense of Unity, a foundation for morals, a solace, and so on." (p. 276)

Gellner's analysis of linguistic philosophy produced the data which allowed him to give the following sociological account of how linguistic philosophy established an economic, social and educational niche for itself, first at Oxford and Cambridge Universities and then at other British

universities, and then in other countries.

\*

I give a summary of his position below:

Before 1948 Oxford university turned out large quantities of graduates who had read Greats (Greek and Roman language, literature and culture). All of these were swallowed up in gainful employment by the Foreign and Commonwealth Office as an army of administrators in the far flung Empire. But after the independence of India in 1948 there was an army of administrators without occupations. Linguistic Philosophy aided and abetted by the later Wittgenstein (The Blue and Brown Books and the Philosophical Investigations) came to the rescue. All you needed to be a philosopher was to be able to analyse language, and if you were already a whiz at Latin and Greek you could cope with English grammar in your sleep.

The next step was to create the degrees of P.P.E. and P.P.P. so that the greater majority of 3000 undergraduates who form the intake at Oxford each year, had to take some philosophy and suddenly all 26 Oxford Colleges needed lots of philosophy dons and lecturers to keep pace with demand. The unemployment problem was solved and Linguistic philosophy was in business at least until the Americans came in the 1960's and laughed at what they did. Suddenly "linguistic philosophy" was no longer in vogue and was replaced by "conceptual analysis" or "Anglo American Analytic Philosophy."

\*

### **The Meanings Turn**

The works of Davidson and Dummett.

(to be added by the web typist)

The first sub-class of taxon 1 is:

*taxon 1.1. Philosophy as NORMATIVE.*

*Condition of inclusion: The philosophical output is primarily concerned with how an individual ought to behave, or how the members of a community, tribe, society or nation ought to behave.*

Normative philosophy is individual or social ethics or political or social philosophy for a tribe, society or nation or indeed the whole world etc.

Classical examples are Aristotle, Kant and John Rawls.

## **The professional spider web builders and the philosophical cats**

*This species of philosophical cat makes (first order) suggestions about how the individual spider web builders ought to behave, or how communities of spider web builders ought to behave. Others prefer to operate at a higher (more "philosophical" ?) level and make (meta) suggestions about "how one ought to talk about moral talk". Some like John Rawls give guidance about how to build morally acceptable webs, and the professional web builders are suitably grateful to him.*

Philosophical approaches to faith and philosophical underpinnings of religious works fit into this category; - those that try to tell us how to live. Typical examples are the philosophical fragments, such as the numerous PARABLES from Christian, Moslem, Jewish.....etc holy books.

The second sub-class of taxon 1 is:

### *taxon 1.2 Philosophy as an ALMOST SCIENTIFIC ENTERPRISE*

It is a sub-class of taxon 1 because there is no fundamental difference between philosophy as SPECULATIVE ANALYSIS and philosophy as an ALMOST SCIENTIFIC ENTERPRISE.

#### *Philosophy as an ALMOST SCIENTIFIC ENTERPRISE (in the style of Carnap and Quine)*

*concerned with the TRUTH ESTABLISHING of necessities or insights into necessities through pure, educated reason without explicitly using the rationality of science (i.e. hypothesize-model-and-test Rationality).*

*The necessities or insights into necessities are said (by Quine and Carnap) to differ only in degree, not in kind, from the theoretical truths which the hypothesize-model-and-test thinkers use.*

*The condition of inclusion: The focus is to establish theoretical, interpretive truths which may be single (philosophical) necessities, ensembles of (philosophical) necessities or (philosophical) insights into these kinds of necessities. This kind of philosophy differs allegedly (according to Quine) only in degree from the sciences, not in kind.*

The truth establishing philosophers (in their ALMOST SCIENTIFIC ENTERPRISE) try to operate from office desks, seminar rooms, or armchairs, without explicitly using the *hypothesize-model-and-test Rationality* which is linked to the various sciences. Armed only with pens and notebooks, outside of the EXPLICIT methodological rationality of science they attempt to establish truths in, for example, epistemology, metaphysics or ontology, and in so doing compete with scientists. This kind of philosophy tries to take into account, and make its results consistent with the experimental

results of the various sciences. It definitely resorts to the falsification of conjectures, theories or research programmes as characterized by Popper or Lakatos. Often "truth establishing philosophers" merely try to falsify the philosophical output of other "truth establishing" or "speculative analysis" philosophers. As Steven Weinberg points out this is sometimes useful, since it saves time. You do not have to read the works of philosophers which other philosophers have already falsified.

"ALMOST SCIENTIFIC ENTERPRISE" philosophy is mostly concerned with subject matter material which is cognate to the worlds of scientific necessities and insights into scientific necessities. So although papers in the major journals (like the JOURNAL of PHILOSOPHY) make it appear as though science is being done, in fact no science is being done; the philosophical subject matter is dissimilar in most respects and cognate in other respects to the subject matter of the various sciences.

### **The professional spider web builders and the philosophical cats.**

*The "almost scientific enterprise, - truth establishing" philosopher cats are academic cats who try to build spider webs alongside the professional spider web builders. But they resort to building in a parallel world of "philosophy of science necessities" and "philosophical insights into these necessities". The philosophical cats also spurn the tools and techniques (experiments, instrumentation and maths) which the professional spider web builders use to gain agreement about the facts in the science and technology community, so that progress can be made.*

Four truth establishing, ALMOST SCIENTIFIC ENTERPRISE, philosophers in the 20th Century are Carnap, Quine, Nelson Goodman and M.R. Ayres. The paradigm case of the subject matter content of "almost scientific truth establishing philosophy" was the work of Rudolf Carnap. He was one of the central players in a grand foundationalist programme linked to the published output in the journal ERKENTNISS and the ENCYCLOPEDIA of UNIFIED SCIENCE. His books *Der Logische Aufbau der Welt* (1928) and *Logische Syntax der Sprache* (1934) were very fundamental to the foundation building activity whose blueprints were going to be published in *Erkenntnis* and *the Encyclopedia*.

This grand structure was never built. The grand structure never rose above the foundations because the foundations were never built. Carl G. Hempel in the Encyclopedia Britannica (1981) wrote that: "The notion of analytic truth is inherently obscure, and the attempt to delimit a class of statements that are true a priori should be abandoned as misguided." He was summarizing the position of W.V. Quine. (This quote is from the entry on Carnap, Rudolf (which is positioned just before the entry on Carnivora !)

If this view is correct then the grand ideals, ideas and hopes of Carnap's grand foundationalist programme, a paradigm case of "truth establishing" philosophy, would have to implode. First Godel's fatal mortar attack; Godel showed that even arithmetic doesn't have proper foundations !; now even science cannot have proper foundations. So the grand foundationalist philosophical enterprise was doomed to failure.

Carnap's work inspired Quine to write *Word and Object* and inspired Nelson Goodman to write *The Structure of Appearance* truth establishing works to be sure, but not on quite the same grand scale as Carnap.

Sometimes the ALMOST SCIENTIFIC, TRUTH ESTABLISHING philosophers attempt to bring down an inconvenient truth producing scientific subject like evolutionary biology or socio-biology (population biology) when this is applied to human nature. (e.g. Hilary Putnam in his anti-Darwinism work or Philip Kitcher's attempt to falsify sociobiology in his book *Vaulting Ambition: Sociobiology and the Quest for Human Nature*).

M.R. Ayres in his book *The Refutation of Determinism* misguidedly thought he could demonstrate (with only the tools and techniques which philosophers prize) that determinism (for humans) was completely refuted. The evolutionary biologists have shown in volumes, in detail, how wrong he was.

Other examples of almost scientific enterprise truth establishing philosophers in the 20th Century were: Russell and Sellars. Pre-20th Century truth establishing philosophers include; Plato, Aristotle, Descartes, Leibniz and Kant.

*taxon 2. Philosophy as SPECULATIVE COMMENTARY; including philosophy as NORMATIVE.*

*European philosophers in the 20th Century took a different turn from Anglo American Analytic philosophers. European philosophers saw philosophy as speculative commentary. They were "speculative commentators" on the human condition; on psychology; on literature; on Marxism; on politics; and on aesthetics. These philosophers were not as enamoured with the various sciences as their Anglo American Analytic counterparts.*

*Bryan Magee says;*

*"Their approach is rhetorical and partisan, more interested in comment than in understanding."*

*"...they are interested in Freudian and post-Freudian psychology and in literature and politics." (Magee, Confessions of a Philosopher, pp. 546 - 548)*

*The condition of inclusion: The main focus is speculative commentary on the human condition; especially (but not restricted to ) psychology, literature and politics.*

Some of the big names include Husserl, Heidegger, Sartre, Albert Camus, Maurice Merleau-Ponty, Jacques Lacan, Louis Althusser, Michel Foucault, Hans-Georg Gadamer, Jurgen Habermas, Jaques Derrida, Umberto Eco and Alain Badiou.

In France much of the 20th Century was taken up by philosophical commentators who tried to reconcile the philosophical positions of Marx and Freud.

### **The professional spider web builders and the philosophical cats**

*This species of philosophical cat does not try to build spider webs but gives commentary on literature, psychology, Marxism and the human condition.*

*Since they are not actually going to build a real spider web these philosophical cats think they are justified in spurning the tools and techniques of the professional spider web builders. They talk about building cognate spider webs. Wittgenstein's banner was "philosophy is talk about talk" whereas the banner of these philosophers is "philosophy is commentary on commentary".*

At the College de France Pascal Engel is working to bring the two camps in France - the **explanation givers** and the **commentators** together. His debate with Rorty was part of this programme. The basis for possible integration was this summary by Pascal Engel of Rorty's position:

(a) The concept of "truth" has no explanatory use. It does not cover any essence or substance or designate any profound metaphysical property.

- (b) In particular, the Traditional Realist notion of "truth as correspondence" is devoid of meaning.
  - (c) Consequently, debates between Realism and anti-Realism (in Anglo American Analytic philosophy) are hollow.
  - (d) The problem for "philosophy" is not to make our statements true but to justify them. "Justification" is agreement, and there is no final, ideal agreement.
  - (e) The concept of Truth being empty, "truth" cannot be a norm of scientific or philosophical enquiry or the ultimate goal of the philosophical search.
  - (f) Hence, it would be vain to hope to obtain a naturalistic, reductionist theory of representation and intentionality.
  - (g) The fact that the "objectivity of truth" does not matter does not mean that there are not certain values to defend.
- (pp. 6 & 7 *Whats the Use of truth ?*" Richard Rorty and Pascal Engel Columbia Univ. Press, 2007 - first published as *A quoi bon la verite ?* ; Grasset et Fasquelle, Paris, 2005).

A sub-class of taxon 2 is:

*taxon 2.1. Philosophy as NORMATIVE.*

*Condition of inclusion: The philosophical output is primarily concerned with how an individual ought to behave, or how the members of a community, tribe, society or nation ought to behave.*

Normative philosophy is individual or social ethics or political or social philosophy for a tribe, society or nation or indeed the whole world etc.

Classical examples are Aristotle, Kant, Marx and Sartre.



*taxon 3. Philosophy as SPECULATIVE TRUTH GUIDING or educated truth guessing, at the leading edge of scientific research.*

*The condition of inclusion: The output of a thinker who has wrestled with a real, live, philosophical issue at the leading edge of scientific research, who in his/her output defends the conjecture or hypothesis and the web of reasons and evidence and experimental results which are alleged to support it.*

*Here, thinkers who are fully apprised of what is happening at the leading edge of current scientific research, makes a truth guessing or truth guiding suggestion. These thinkers are usually scientists.*

### **The professional spider web builders and the philosophical cats**

*This species of philosophical cat is first and foremost a professional spider web builder. S/he gives good (interpretive theoretical) spider web building suggestions to the professional spider web builders. The professional spider web builders, usually with hindsight, appreciate the value of the suggestions and are suitably grateful.*

An example of "truth guiding" is astronomer and mathematician John Barrow, who in discussing the evidence or lack of evidence for superstring theories, says... "the philosophy of scientists who believe that the appearance of an actual infinity in a physical theory is a signal that it is being stretched beyond its domain of applicability." ...."The solution is to upgrade the theory until the infinities are smoothed into large, but finite, quantities. Engineers, for example, know this well, exorcising the appearance of infinities in simple models of rapid aerodynamic flows by simply including more realism in the description of the air." Barrow notes that "...the general adoption of if you get "infinities-mean-you-must-try-harder"...."(p. 348 COSMIC IMAGES) is a philosophical orientation which is "truth guiding" and which is not derived from experiment. It is a very useful kind of philosophical orientation.

Truth guiding is wrestling with a philosophical issue at the forefront of your subject (usually a science) when there are often at least two ways to proceed - both compatible with all the evidence but incompatible with each other. This is what Einstein did when he was struggling with the construction of a framework for physics to replace Newton's framework. Recently Lee Smolin has done some truth guiding in *The Trouble with Physics*. In this entertaining work Smolin is a scientist grappling with philosophical issues in an attempt to see the Physics wood for the String Theory trees.

The work of Michael Ghiselin on the nature of species in biology is important and much quoted by

experts. See his *Metaphysics and the Origin of Species* for some truth guiding on the interpretation of 'species'.

The problem is that usually only scientists know enough of what is happening at the very forefront of a science to be able to make a meaningful contribution in wrestling with a real live philosophical issue. Richard Feynman is credited on the www with saying; "Philosophers say a great deal about what is absolutely necessary for science, and it is always, so far as one can see, rather naive, and probably wrong."

Scientists can and do tackle philosophical problems and make philosophical choices at the very cutting edge of research. Other historical examples are Turing, Godel, Wilson. G. C. Williams, Alexander, Mandelbrot...etc.

#### *taxon 4. Philosophy as work in CONSILIENCE.*

*Condition of inclusion: This is work which pursues the implications of the belief in the unity of science. The belief is that the world is orderly and can be explained by a small set of scientific theories. The belief in the unity of science is connected to the idea of the unification of knowledge. This knowledge may be in the sciences or the humanities and include other fields like jurisprudence, education, engineering etc.*

*Consilience is the umbrella under which facts and fact based theories are united to give a common platform of explanation.*

*Consilience includes the output of a thinker who gives an overview of many scientific or humanities subjects (often new, growing and progressing ones) and shows how they fit together or threaten each other. Work in consilience makes suggestions for the pruning and educational re-engineering of academic subjects and sometimes makes recommendations for their future direction and development.*

#### **The professional spider web builders and the philosophical cats**

*This species of professional spider web builder wears two hats, a spider web builder hat and a philosophical cat hat. They have an excellent overview of real web building by different classes of spiders in different faculties. So they are able to make insightful comments on the complementarity and value of the different types of web built by the professional spider web builders. They also talk about how one set of web builders can learn from a different set of builders in a different field. Their remarks help to cross fertilize concepts in spider building communities, and they are regarded as polymaths and generally useful philosophical cats.*

Edward Wilson's (the father of socio-biology) does consilience in his eponymously named book *Consilience; The Unity of Knowledge* (1998). Wilson's own original earlier consilient synthesis was presented in *Sociobiology: The New Synthesis* (1975). Both books are paradigms of how consilience ought to be done and of consilience in action.

Steven Pinker's *The Blank Slate* is also a work of consilience. It shows how the one explanatory narrative coming out of evolutionary psychology, cognitive neuroscience, neuroscience, behavioural genetics and sociobiology effectively addresses issues basic to anthropology, sociology, philosophy, political science etc. and gives answers where there were only wild speculations.

David Deutsch's book *The Fabric of Reality*, (Penguin 1997) ties Popperian methodology of science and an interpretation of computation and a version of quantum physics and a selfish gene interpretation of evolutionary biology together. Usually only scientists have enough working knowledge of the various sciences to be able to do interesting things and say something true or useful in work on consilience.

It is therefore no accident that Wilson's *Consilience; The Unity of Knowledge* Deutsch's *The Fabric of Reality* and Pinker's *The Blank Slate* were all three written by scientists and not by speculative analysis or speculative commentary philosophers.

An attempt by a philosopher to do work in consilience is Rudolph Carnap in his work on the foundations of knowledge for publication in *Erkenntnis* and the *Encyclopedia of Unified Science*. But as we saw above the programme was unmasked by Wilson.

#### *taxon 5. Philosophy as MYTHS, LEGENDS or APHORISMS.*

*Condition of inclusion: The philosophical output is a moral or precept presented in the form of a myth, legend, story or aphorism which is rational or non-rational when judged by the standards of hypothesize-model-and-test rationality.*

Taxon 5 divides into two sub-classes; (a) RATIONAL OR (b) NON-RATIONAL.

#### *(a) RATIONAL*

Examples are the works of Borges, Sartre, Umberto Eco and Russian stories unearthed by Isaiah Berlin about why we are here and what it is to be human. Hundreds of novels, films and videos, video arcade games etc fit into this category. A small number of philosophical approaches to, and under-pinnings of, faith and religious works, also fit into this category.

## **The professional spider web builders and the philosophical cats**

*This species of philosophical cat tells believable (rational) web building stories.*

### *(b) NON-RATIONAL*

Condition of inclusion: The philosophical output is a moral or precept presented in the form of a myth, legend, story or aphorism which is *non-rational* when judged by the standards of hypothesize-model-and-test scientific rationality.

In these myths and legends the usual logical strictures which forbid inconsistency and contradiction are ignored, hence my use of "Non-rational" as a classifier.

## **The professional spider web builders and the philosophical cats**

*This species of philosophical cat tells unbelievable (non-rational or irrational) spider web building stories.*

Examples include: Most religious philosophies which underpin faith, creationism, intelligent design philosophy, various forms of mysticism; Buddhist myths and legends, Hindu myths and legends, New Age beliefs; the Secular Californian belief in guardian angels; etc...

+ + +

## **SECTION C.**

### **AN EVALUATION OF THE FIVE SPECIES of PHILOSOPHY**

*The RATIONALITY of SCIENCES versus the RATIONALITY of PHILOSOPHY*

#### *C1. The RATIONALITY of the SCIENCES*

The **Rationality of the Sciences** is largely the rationality of **hypothesize-model-and-test**.

Scientists use a combination of method, models, instrumentation, experiment, testing, probability, maths, and theory. In an established scientific discipline the outcome is AGREEMENT IN THE SCIENTIFIC COMMUNITY on all the results thus far achieved, and how the results fit into the overall picture. As E.O. Wilson concisely puts it; "science is the organised, systematic enterprise that gathers knowledge about the world and condenses the knowledge into testable laws and principles. (Consilience: The Unity of Knowledge p. 57) The Rationality of the sciences involves **repeatability, economy, mensuration, heuristics** (*the best science provokes more discovery in new unsuspected directions. The new knowledge provides additional tests of the original theories which*

led to its discovery) and **consilience** (the different explanations of new phenomena which are likely to survive are the explanations which are connected to each other and consistent with one another).

## C2. The RATIONALITY of PHILOSOPHY

### How rational were 20th Century philosophers about the rationality of academic philosophers?

One can cogently summarise the methodology of the speculative analysis or speculative commentary academic communities as that of **hypothesize, provide arguments, seek agreement in discussions and publish**. Philosophers typically use **arguments, intuitions, thought experiment, folk psychology, untested assumptions, interpretive theory construction and informal logic**.

Academic philosophers ask grand questions which they cannot answer. This is because they cannot, with the methodological and analytical tools mentioned above, solve the problems they pose. There were no adequate tools and no method or methodology in the 20th Century to answer any of the big questions which truth establishing or truth tracking philosophy asked and attempted to answer.

Some of these big or really big questions are:

(i) Free will and determinism.

Philosophical determinism can be summed up by the proposition that “there is at any instant exactly one physical possible future.” (Peter Van Inwagen in *An Essay on Free Will*, 1983 Oxford, The Clarendon Press)

Is all human behaviour determined ? Does determinism imply inevitability?

Are there any real options in a deterministic world?

Daniel Dennett in his witty and instructive *Freedom Evolves* shows exactly how the knowledge which science has put on the table of how we are a product of evolution, and the knowledge of what kind of product we are, has completely reshaped all the outdated philosophical debates about freedom. There is a limit to how much you can discover about these matters from outside the rationality of the sciences or from inside a philosophy seminar room.

(ii) How is knowledge possible? How is pure natural science possible ?

In the *Critique of Pure Reason*, Kant (1724 – 1804) tried to answer these questions.

He valiantly tried to show in his grand construction that the knowledge (according to him undoubtedly true knowledge) which Newton presented in his *Principia* was possible because the human mind prescriptively imposes its laws, concepts, categories, - including space and time –on Nature. As part of this grand philosophical view we are supposed to accept that there is only one kind of geometry (Euclidean), not the minimum of Thurston's 8 types of geometry which were

routinely accepted in the last quarter of the 20th Century.

Hume (1711 – 1776) woke Kant from his dogmatic slumbers. Showing little respect for Kant's grand transcendental concepts Hume demonstrated that Newtonian knowledge ultimately depended on reasoning by induction, and that reasoning by induction could not produce the genuine, objective, reliable knowledge which Kant was seeking to establish.

Later Riemann and Einstein and many others were able to show that there were geometries undreamed of by Newton and Kant and that there were other physical theories better suited to explaining the fundamental data of physics and they also explained how the fundamental forces work together. So Kant's grand answer to his own grand enterprise was shown as fatally flawed by a philosopher and many scientists. In particular Kant's view of geometry and of space and of the mind and of arithmetic were shown to be fatally flawed. Philosophers, however, still put his work on the curriculum, as a kind of "paradigm case" of how truth establishing philosophy ought to be done. If you tackle some professional philosophers about Kant's place in the curriculum (You say, "It is provably false transcendental nonsense so why give this diet to the impressionable final year students ?") they retreat and admit that most of Kant is false, but go on to claim that since he was a historically important link in the intellectual chain which starts with Plato and goes through many links, including Aristotle, Descartes, Leibniz, till it gets to him, he must be taught to final year students.

### *C3. HOW do ACADEMIC PHILOSOPHERS of the SPECULATIVE ANALYSIS kind do PHILOSOPHY ? WHAT is the METHOD used to establish PHILOSOPHICAL KNOWLEDGE ?*

Here is a sketch of the way ACADEMIC PHILOSOPHERS do PHILOSOPHY.

(a) In a seminar (in Speculative Analysis in the Anglo American Analytic tradition) you will find that an idea, thesis, conjecture or insight (intuition) is presented. (b) Next arguments are provided for the truth of the idea, thesis, conjecture or insight. (c) Then counterarguments to the idea, thesis, conjecture or insight are examined and usually found wanting.

(d) Often those present are asked to entertain a "thought experiment" which is the brain child of the philosopher addressing the seminar or the brainchild of some noteworthy philosopher and which is usually known to those present and has been much discussed in the professional literature.

Dennett writes; "The most influential thought experiments in recent philosophy of mind have all involved inviting the audience to imagine some specially contrived or stipulated state of affairs, and then – without properly checking to see if this feat of the imagination has actually been

accomplished – inviting the audience to “notice” various consequences in the fantasy. These “intuition pumps,” as I call them, are often fiendishly clever devices. They deserve their fame if only for their seductiveness. “(Consciousness Explained, Daniel Dennett, p. 282 Penguin, 1993)

The truth of the thesis or conjecture or the importance and worthiness of the idea or insight is claimed and then seminar leader/presenter stops.

(e) Various arguments are then brought to bear from the members of the seminar.

Those who think the thesis (conjecture, idea, insight, intuition etc) might be true or worthy, provide more arguments for the thesis. Those who think the thesis (conjecture, idea) is probably false set about destroying the arguments and the thought experiment which supports the philosophical claim.

(f) In the various arguments there is often appeal to what is called "intuition". Someone may say “my intuition is that .....” and then tries to articulate what seems to him/her to be some sort of a priori universal truth.

(g) Sometimes someone may point out that an experimental result from one of the sciences shows that x is the case, which impacts directly on the thesis or conjecture being entertained, and hence the arguments will have to be adjusted to fit in with the truth of x.

Dennett says ;

”...the philosophers, as we all know, just take in each other’s laundry, warning about confusions they themselves have created, in an arena bereft of both data and empirically testable theories.”

(Consciousness Explained, Daniel Dennett, p. 255 Penguin, 1993)

#### *CA. THE CULTURE OF PHILOSOPHERS*

This is how Wilfrid Hodges experienced the culture of the philosophers when he used to be a philosophy lecturer and when he was an editor for the *Journal of Symbolic Logic*;

”There is a point of culture here. Several of the authors said that they had trained as philosophers, and I suspect that in fact most of them had. In English-speaking philosophy (and much European philosophy too) you are taught not to take anything on trust, particularly if it seems obvious and undeniable. You are also taught to criticize anything said by earlier philosophers. Mathematics is not like that; one has to accept some facts as given and not up for argument. Nobody should be surprised when philosophers who move into another area take their habits with them. (In the days when I taught philosophy, I remember one student who was told he had failed his course badly. He duly produced a reasoned argument to prove that he hadn’t.)”

An Editor Recalls Some Hopeless Papers, Wilfrid Hodges in *The Bulletin of Symbolic Logic*, Vol. 4, No. 1 (Mar., 1998), p. 3

Relying only on arguments, thought experiments and “intuitions” often leads to “excessive recursive self introspection”. This means that at next week’s staff seminar you cannot take for granted anything established by argument, thought experiment, intuition, or pure reason, from last week’s staff seminar. Nor can you take for granted anything established in last year's Journal of Philosophy.

After some of these seminars one couldn’t help recalling the verse of Omar Khayyam’s Rubaiyat:

Myself when young did eagerly frequent  
Doctor and Saint, and heard great Argument  
About it and about: but evermore  
Came out by the same Door as in I went.

(Verse 27 of the 2nd edition of **The Rubaiyat of Omar Khayyam** by Edward FitzGerald)

#### *C5. IN THE SCIENCES THE ARGUMENT IS CLOSED OFF BY APPEAL TO EXPERIMENTS, FACTS OR MATHS.*

Relying only on arguments, thought experiments and “intuitions” can also lead to what Daniel Dennett calls **the Philosopher’s Syndrome**: mistaking a failure of the imagination for an insight into necessity.

**Consciousness Explained**, Daniel Dennett, p. 401 Penguin, 1993)

For hundreds of years after Descartes gave his famous argument in which he concluded that it was clear and distinct to him that his mind is distinct from his brain, philosophers have believed that their mental stuff (mind) was distinct from their physical stuff (matter).

They used the methodological apparatus of arguments, thought experiments and intuitions to validate this. The majority of philosophers I met or listened to delivering papers in the 1970’s and 1980’s in South Africa, the United Kingdom (at the universities of Oxford or Cambridge) the U.S.A. (various universities in the New York or Chicago area including the Univ. of Northern Illinois, (where I taught) The University of Illinois at Chicago Circle, and the University of Chicago and at meetings of the American Philosophical Association – both Mid-Western and Pacific Divisions) either in the Anglo American Analytic tradition or in the European tradition were convinced (or talked as if they were) that they had "minds". And some talked as if they also believed they had an internal Cartesian theatre in their "mind".



The experimental results from part of the New Synthesis has showed that Descartes' conclusion was false. There are no Cartesian "minds" inside humans. The part of the new synthesis I refer to is that laid out by Steven Pinker in his book *The Blank Slate*:

The New Synthesis is a synthesis of the following (relatively new subjects);

**\* evolutionary biology:**

**together with the following, in a supplementary role ;**

**\*evolutionary psychology (linking biology to culture)**

**\*cognitive science ( linking biology to culture)**

**\*cognitive neuroscience (linking the social or tribal mind through the individual mind to matter)**

**\*behavioural genetics (linking group behaviour to individuals to genes)**

**\*genetics (linking the individual to her genes)**

The supplementary theories are used in a hierarchical and reductive explanation of the data. So when one explains sexual behaviour, or aggression, or altruism, or parental investment (or whatever), one backs up the explanation from sociobiology with supplementary explanations from the New Synthesis subjects. What happens is you start with: 1. an explanation of the the selected DATA in primate & hunter gatherer societies & in modern humans; followed by,

(2) how it is physically operated in real time in a phenotype through memory lookup and the application of rules or precedents;

followed by (3) what happens at the neuroscience level in the left cerebral hemisphere that coordinates the chosen brain activity, which helps produce the behaviours in the DATA. This is

followed by (4) how this aspect is developed in pre-teenagers & teenagers;

followed by (5) an explication of the modifications of brain circuitry in our ancestors, which allowed them to benefit from the chosen behaviours in the DATA.

If you set the evolutionary biological explanations, supported by specialised sub-explanations from, cognitive science, cognitive neuro-science, behavioural genetics and genetics for your chosen, hard won DATA, side by side with an explanation from sociology under standard social science model (SSSM) or some standard theory of psychology under (SSSM) there can be very little contest from the old paradigm. Furthermore there would be very little common ground. The explanations under the evolutionary rubric, (with specialised sub-explanations from, cognitive science, cognitive neuro-science, behavioural genetics and genetics) are incomparably richer than those from the old SSSM paradigm. And they are scientific, whereas the standard SSSM paradigm is not.

An explanation of, for example, what HUMAN NATURE is, using evolutionary biology and the New Synthesis, is scientific. It puts to rest 2,500 years of philosophical speculation on HUMAN NATURE. It is easy to compare what philosophers said about "human nature" with what sociobiology and the New Synthesis says about HUMAN NATURE. Take a sheet of A3 paper and draw a line down the middle. Put the New Synthesis explanation on the left. Write out the main philosophical findings on the right. Now compare the two sets of answers. Which one comes from pure reasoning and which one comes from known facts based on experiment and observation? This reminds one of the recent quote on [www.Edge.com](http://www.Edge.com):

*When thinking changes your mind, that's philosophy. When God changes your mind, that's faith. When facts change your mind, that's science.*

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## ***C6. EVALUATION OF THE PHILOSOPHICAL SUBJECT MATTER OF THE 5 TAXONS.***

**For evaluation purposes the categories in this taxonomy of philosophy can be grouped into two distinct classes.**

### ***C6.1 FIRST CLASS; Philosophies not worth doing by philosophers; - or by anyone else in the humanities.***

In this class are 3 taxons : SPECULATIVE ANALYSIS of insights into necessities; - including the ALMOST SCIENTIFIC ENTERPRISE of trying to TRUTH ESTABLISH insights into necessities through pure (educated) reason; SPECULATIVE COMMENTARY on literature, politics, psychology and the human condition; and NON-RATIONAL MYTHS, LEGENDS or APHORISMS.

**The philosophy in these categories of categories is not worth doing by philosophers, or by**

**anyone else in the humanities.**

It has been attempts at doing philosophy in these taxons, as academic subjects, which has earned the disparagement and scorn of many scientists and mathematicians including Richard Feynman, Steven Weinberg and Edward O. Wilson.

Academic philosophers of the SPECULATIVE ANALYSIS kind, the ALMOST SCIENTIFIC, TRUTH ESTABLISHING kind or the SPECULATIVE COMMENTARY kind ask grand questions which they cannot answer. This is because they only hypothesize, they don't also model and test. Because of this poverty in their rationality they cannot with the methodological and analytical tools at their disposal solve the problems they pose. There is no method or methodology to answer most of the big questions truth which these kinds of philosophy or put on the table.

SPECULATIVE ANALYSIS philosophers cannot go head to head with the natural sciences or evolutionary biology or evolutionary psychology or behavioural genetics or neuroscience or cognitive neuroscience and hope to win if they do not use the RATIONALITY OF SCIENCE (hypothesize-model-and-test rationality). If they did use the RATIONALITY OF SCIENCE to reach conclusions they wouldn't be doing philosophy, they would be doing science. So there is a big question mark against speculative analysis or truth tracking philosophies. Can they deliver results (truths about the world) outside the best model of RATIONALITY we know, which is the RATIONALITY of SCIENCE. In other words is there a limit to what you can know if you are confined to your favourite armchair without experiments and instrumentation? And is there a parallel world populated with philosophical necessities and philosophical insights into necessities to which only philosophers have privileged access? You can create such a parallel world but if it is not linked to the natural, biological or New Synthesis sciences it has no value.

Timothy Williamson, the current holder of the Wykeham Chair of Logic at Oxford, admits in his book *The Philosophy of Philosophy* that there are limits to what philosophers can know from just sitting and thinking in their armchairs. (*The Philosophy of Philosophy* p.2 Blackwell, Oxford, 2007)

*C6.2 SECOND CLASS; Philosophy which is valuable and worth doing, but cannot be properly done by academic philosophers.*

In this class are; TRUTH GUIDING; CONSILIENCE; Philosophy as NORMATIVE; and Philosophy as LITERATURE in the form of RATIONAL MYTHS, LEGENDS or APHORISMS.

Philosophy as TRUTH GUIDING at the leading edge of scientific research and Philosophy as work in CONSILIENCE is best left to scientists who have the tools, instrumentation, techniques and experimental methods and mathematics to get the job done properly. Historically it is scientists who

have done this kind of thinking.

Philosophy as **NORMATIVE**; ethics or political or social philosophy which currently straddles philosophy departments, political science departments and departments whose work and vision are informed by the cluster of subjects which support socio-biology. Subjects like

\* evolutionary psychology (linking biology to culture)

\*cognitive science (linking biology to culture)

\*cognitive neuroscience (linking the social or tribal mind through the individual mind to matter)

\*behavioural genetics (linking individual behaviour to genes)

\*genetics (linking the individual to genes)

One can learn a great deal about *the realm of the normative* from reading Steven Pinker's *Blank Slate* or Daniel Dennett's **Breaking the Spell** and come to learn facts about morality and religion and political arrangements which are based on fact but are undreamed of by philosophers using only philosophical rationality.

In future there will be a great deal more from this quarter. When that time comes it will be found that the Normative Realm is too important and valuable to be left in the care of philosophers.

Philosophy as **LITERATURE** in the form of **RATIONAL MYTHS**, **LEGENDS** or **APHORISMS** is best left to novelists, playwrights, poets, village elders, village wise men, and after dinner speakers etc.

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## **SECTION D**

### **RECOMMENDATIONS FOR RE-ENGINEERING PHILOSOPHY DEPARTMENTS.**

#### **SUCCESSOR SUBJECTS TO 20th Century PHILOSOPHY**

**There are at least six successor subjects to 20th Century Philosophy:**

They are **CONSILIENCE**, **SPECULATIVE TRUTH GUIDING**, **HUMAN EVOLUTIONARY BIOLOGY**, **NORMATIVE STUDIES**, the **PUBLIC UNDERSTANDING** of **SCIENCE** and the **PUBLIC UNDERSTANDING** of the **HUMANITIES**.

I make some recommendations below for the educational re-engineering of academic philosophy departments.

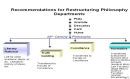
*D1. I recommend that all major universities set up FACULTIES of CONSILIENCE.*

If that is not possible because of university politics or finance then instead of a faculty there could be an INTER-FACULTY DEPARTMENT of CONSILIENCE.

In the Faculties or Departments of CONSILIENCE there are five kinds of subject matter which should be taught. They are CONSILIENCE; the HISTORY of SPECULATIVE TRUTH GUIDING; THE PUBLIC UNDERSTANDING OF SCIENCE; THE HISTORY OF SCIENCE and the THE PUBLIC UNDERSTANDING of the HUMANITIES.

Each of the successor subjects to "old style and subject matter" PHILOSOPHY can more effectively do some of the work which philosophy departments used to attempt do in the 20th Century.

One set of recommendations for restructuring departments of philosophy is captured in figure 2 below:



**Figure 2.**

*D2. A prominent successor subject to philosophy is "HUMAN SOCIO-BIOLOGY" (or Human population biology).*

Every major teaching and research university which does not yet have a department of *HUMAN SOCIO-BIOLOGY* should set one up.

*Enough is known about the discipline and its implications for human society from the works of E.O. Wilson (The New Darwin); Richard Dawkins; Daniel Dennett; Matt Ridley; Michael Ruse; Nigel Nicholson, to name only a few of the exponents of the results from this field, for me not to have to say anything here about what it is and what it entails.*

Some of the subject matter of 20th Century academic philosophy should be discontinued as academic teaching subjects. The non-viable philosophical subject matter, and how to deal with it is shown in figure 3 below.



**Figure 3.**

*D3. Each of the successor subjects can more effectively do some of the work which 20th Century philosophy used to do, and be responsible for the task of educating each new generation of students.*

In doing so they will be part of the ongoing CONVERSATION OF MANKIND, which has to happen in every society, and every nation for each new generation of students. If this CONVERSATION OF MANKIND is not actively managed by the educational institutions for each new generation of students the result is "cultural amnesia", and the consequences of that are usually all bad. Before you are aware of what has happened enlightenment has vanished and the dark ages are upon you.

The new faculties (or departments) will be home to a class of intellectual capital creators and academic custodians who will produce works like those of Richard Dawkins, Steven Pinker, Matt Ridley, Dan Dennett, and Nigel Nicholson...etc.

The new academic homes for the viable parts of 20th Century philosophy are shown in figure 4.



**Figure 4.**

#### *D4. THE FUTURE of PHILOSOPHY*

How can philosophers regain respect for the philosophy they do from the scientific community ?

How can philosophers and philosophy move forward ?

The way forward is sketched out in the various recommendations above.

**D4.1.** If you are an academic philosopher currently doing either **CONSILIENCE, TRUTH GUIDING, The PUBLIC UNDERSTANDING of SCIENCE, or The PUBLIC UNDERSTANDING of the HUMANITIES** a more appropriate academic home would be in a new Faculty of Consilience.

**D4.2.** If you are an academic philosopher currently doing work in **NORMATIVE STUDIES** a more appropriate (and more respectable) academic home would be in EITHER a Dept. of HUMAN EVOLUTIONARY BIOLOGY or a BUSINESS SCHOOL (to do business ethics) or a MEDICAL SCHOOL (to do medical ethics) or a LAW SCHOOL (to do legal ethics) or a Dept. of POLITICAL SCIENCE (to do normative studies ) or in a Dept. of EVOLUTIONARY PSYCHOLOGY ( to follow in the new field of virtue ethics mapped out by Jonathan Haidt.

**D4.3.** If you are an academic philosopher currently doing work in **LITERATURE in the form of**

**RATIONAL MYTHS, LEGENDS, STORIES or APHORISMS** a more appropriate academic home would be in a dept. of literature.

**D4.4.**If you are an academic philosopher currently doing work in **ALMOST SCIENTIFIC TRUTH ESTABLISHING or SPECULATIVE ANALYSIS or SPECULATIVE COMMENTARY or LITERATURE in the form of NON-RATIONAL MYTHS, LEGENDS, STORIES or APHORISMS** you could usefully employ yourself by re-tooling and upgrading your skill set (like millions of knowledge workers are doing in Europe, the Americas and Asia every day in the **new knowledge economy**) so that you could apply for, and take up, a new position compatible with your skill set.

In *CULTURAL AMNESIA* Clive James says:

**"Like literary theory at a later time, however, analytical philosophy was a game hard to get out of after you had started drawing the salary." (p.806)**

And as the talk on about.com has it:

**"A philosophy major who is gainfully employed.  
One of the most elusive urban myths."**

from about.com (May 2008)

One could always take cover with a philosophical consolation or two.

Since "truth" is so important to **ALMOST SCIENTIFIC TRUTH ESTABLISHING** philosophers and to those philosophers doing what Feynman calls "meaningless chewing around" in **SPECULATIVE ANALYSIS or SPECULATIVE COMMENTARY** they might take intellectual consolation in the following thought;

**Honest intellectual toil, in one of the academic fields where the 3rd Culture thinkers are working, is a better adaptation to the 21st Century knowledge economy (and evolutionary epistemology) than to be trapped in the olde miasmatic mist of disparaged and marginalised "speculative analysis" or "speculative commentary".**

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**further sections of this paper will be added by the web typist in the near future**

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# APPENDIX 1

## The DATA: 20th CENTURY PHILOSOPHICAL OUTPUT

What do we want to classify? The short answer is all 20th Century academic philosophy. There were various schools of philosophy or philosophical movements or philosophical traditions. There were also lone wolf philosophers, not belonging to any school. We want to classify the philosophical SUBJECT MATTER OUTPUT of them all. We want to categorize:

### *I. LOGICAL ATOMISM*

Bertrand Russell: Introduction to Mathematical Philosophy.

Ludwig Wittgenstein: Tractatus Logicus Philosophicus.

### *II. PRAGMATISM*

John Dewey: The Quest for Certainty.

Richard Rorty: Philosophy and the Mirror of Nature

### *III. PROCESS PHILOSOPHY*

Alfred North Whitehead: Process and Reality

### *IV. THE LOGICAL POSITIVISTS*

Rudolf Carnap: The Logical Structure of the World; Hahn, Carnap and Neurath, 'The Scientific Conception of the World: The Vienna Circle.'

A.J. Ayer: Language, Truth and Logic.

### *V. ALL THE BIG "ISMS" (most of which date from earlier centuries but were still very much alive in the 20th Century).*

Dialectical Materialism, Communism, all the many forms and varieties of Marxism, Maoism, Anarchism, Democracy, Autocracy, Socialism, Liberalism,....etc.

### *VI. ORDINARY LANGUAGE PHILOSOPHY or LINGUISTIC PHILOSOPHY*

Gilbert Ryle: The Concept of Mind ; Ludwig Wittgenstein: Philosophical Investigations. John Austin: How to do things with words; and Peter Strawson: Individuals: An essay in Descriptive



Metaphysis.

"Common sense" amateur philosophy (engaged in by non-professional persons with a philosophical bent) which seeks manifestations in experience for the propositions (sometimes quite abstract ones) that people make. This is harmless, not very exhaustive logico-linguistico-empirical, but also semi-a priori activity, which Socrates and post-Wittgensteinian "disputatious" word wranglers love to indulge in.

## *VII. ANGLO AMERICAN ANALYTIC PHILOSOPHY (A.A.A.)*

### **SUBJECT MATTER in (A.A.A.)**

#### **Epistemology**

Plato's Cave (91,700 hits on Google.com - June 2008)/ The Veil of Perception / Cogito ergo sum (1,640,000 hits on Google.com - June 2008)/ Reason and experience / the Brain in the Vat (40,900 hits on Google.com - June 2008)

#### **the philosophy "Mind"**

Dualism / Behaviourism / Eliminativism / Idealism / Personal identity / Other minds or the mind body problem / the Turing test / Functionalism / The views of Dennett in Consciousness Explained/ What is it like to be a bat? (19,300 hits on Google.com - June 2008) / The Chinese room (John Searle's thought experiment) (50,000 hits on Google.com - June 2008)

#### **Ethics and Normative studies**

The categorical imperative / The golden rule / Hume's guillotine / Ethical egoism / The divine command hypothesis / The boo/hoorah hypothesis / Acts and omissions / Slippery slopes / Beyond the call of duty / Is it bad to be unlucky? / work of John Rawls /

#### **The philosophy of Logic**

Logic and entailment / Relevance logics / Presuppositions in logical languages / Quantifiers - substitutional and objectual / de re vs de dicto / Demonstratives and Indexicals / Propositional attitude statements / essentialism / Existence / Identity / Indicative conditionals / Counter-factual conditionals / Vagueness / Modal operators / Existence presuppositions in 2nd Order Logics

#### **The philosophy of science**

Realist stances in the philosophy of science. Realism versus Instrumentalism. Kinds of relativism. Causal realism. Realism and ontology. Realism and epistemology.  
Anti-Realist positions in the philosophy of science, such as; phenomenalism, operationism, conventionalism, fictionalism, and constructive empiricism.

The anti-realism of Hartry Field's *Science without Numbers*

The Rationalist positions of Popper and Lakatos.

Critical Rationalism. Evolutionary Epistemology.

The Anti-Rationalist positions of Kuhn and Feyerabend.

Inductivism. The varieties of Fallibilism. Explanations of scientific change.

Incommensurability of theories. The goals of science. The methodologies of science.

### **Some major authors in A.A.A.**

W.V.O. Quine: Word and Object; From a Logical Point of View, and Ontological Relativity and Other Essays. Donald Davidson: 'Truth and Meaning,' from *Inquiries into Truth and Interpretation*; 'Mental Events,' from *Essays on Actions and Events*.

Thomas Kuhn: *The Structure of Scientific Revolutions*.

Nelson Goodman: *The Structure of Appearance and Fact, Fiction and Forecast*.

John Rawls, *A Theory of Justice*.

Hilary Putnam: *Realism and Reason*.

Russell: *The Principles of Mathematics*

Wilfrid Sellars: A paper titled "Empiricism and the philosophy of Mind". *Science, Perception and Reality*, 1963. *Science and Metaphysics*, 1967.

Popper: *Conjectures and Refutations*

Lakatos: *The Methodology of Scientific Research Programmes*

Kuhn: *The Structure of Scientific Revolutions*

Feyerabend: *Against Method*

Rorty: *Philosophy and the Mirror of Nature*

### ***VIII. PHENOMENOLOGY AND EXISTENTIALISM***

Edmund Husserl: *Ideas: General Introduction to Pure Phenomenology*.

Martin Heidegger: *Being and Time and The Question Concerning Technology*.

Jean-Paul Sartre: *Being and Nothingness, An Essay on Phenomenological Ontology*.

Simone DeBeauvoir: *The Second Sex*.

Maurice Merleau-Ponty: *Phenomenology of Perception*.

Philosophies from French philosophers who believed that to understand wo/man and her/his nature you first had to understand MEANING. Understanding "meaning" required a study of the inter-relationships among signifying elements of the TEXT. Simultaneously one had to either park or reject the intentions of the author of the TEXT. The READER became the new philosopher King

since s/he determined ALL MEANING emanating from the TEXT. A veritable 20th Century French Revolution! Needless to say it was regarded with deep intellectual suspicion by members of the Anglo American Analytic school.

### *IX. HERMENEUTICS AND POST-MODERNISM*

Philosophies from the German Hermeneutic school which followed Heidegger. For them any TEXT was seen as a general *model of understanding* for a variety of human activities. These included the sciences.

Hans Georg Gadamer: Truth and Method.

Jurgen Habermas: Moral Consciousness and Communicative Action.

Michel Foucault: Power and Knowledge & 'Technologies of the Self,' from Ethics, Subjectivity and Truth.

Jacques Derrida: Positions.

Luce Irigay: This Sex Which Is Not One.

The works of Derrida, Marcuse, Horkheimer, Althusser, etc.

### *X. NON-RATIONAL PHILOSOPHIES*

The myths and legends of creationism, Zen Buddhism, Buddhism, Hinduism, intelligent design, and the many forms and manifestations of mysticism etc.

### *XI. PHILOSOPHICAL INSIGHTS PRODUCED BY WORLD CLASS SCIENTISTS*

Einstein, Godel, Wilson, Dawkins, Dennett. (Note that Dennett started off his professional career as a card carrying philosopher, but abandoned philosophy and became a cognitive neuro-scientist. )

### *XII. LITERARY PHILOSOPHERS*

Sartre, Camus, fragments of the later Wittgenstein, Borges and works of literature which carry a philosophical moral as perhaps their main feature.

## **APPENDIX 2**

### **RICHARD FEYNMAN'S NEGATIVE VIEW OF PHILOSOPHY**

a 1.1 In *The Pleasure of Finding Things Out*, Richard Feynman recounts an incident with his son,

who at the time was taking a course in philosophy. They were both reading Spinoza, and burst out laughing at some of his writing. Feynman says that you could invert each of Spinoza's claims, and not be able to tell which version was true. He says that there is "no excuse" for this "meaningless chewing around". He compares Spinoza to contemporaries such as Newton, and concludes that while Spinoza was brave to tackle big questions, it wasn't much use if you don't get anywhere with those questions.

(The Pleasure of Finding Things Out p. 195)

a 1.2 In a talk Feynman recounts the poem about the centipede who is questioned about which leg goes first, and becomes unable to walk as a result; relating this to his unease about examining his own workings as a scientist too closely. He felt that becoming self-conscious about his own thought processes could damage them.

a 1.3 A common theme in multiple places is that he doesn't feel that what (unnamed) philosophers describe as the scientific process, describes science as he knows it, or what he does.

(The Pleasure of Finding Things Out p. 173)

Widely quoted on the www is; "Philosophers say a great deal about what is absolutely necessary for science, and it is always, so far as one can see, rather naive, and probably wrong." --Richard Feynman

a 1.4 In the Graduate College dining room at Princeton everybody used to sit with his own group. I sat with the physicists, but after a bit I thought: It would be nice to see what the rest of the world is doing, so I'll sit for a week or two in each of the other groups.

When I sat with the philosophers I listened to them discuss very seriously a book called Process and Reality by Whitehead. They were using words in a funny way, and I couldn't quite understand what they were saying. Now I didn't want to interrupt them in their own conversation and keep asking them to explain something, and on the few occasions that I did, they'd try to explain it to me, but I still didn't get it. Finally they invited me to come to their seminar.

They had a seminar that was like, a class. It had been meeting once a week to discuss a new chapter out of Process and Reality - some guy would give a report on it and then there would be a discussion. I went to this seminar promising myself to keep my mouth shut, reminding myself that I didn't know anything about the subject, and I was going there just to watch.

What happened there was typical - so typical that it was unbelievable, but true. First of all, I sat there without saying anything, which is almost unbelievable, but also true. A student gave a report on the chapter to be studied that week. In it Whitehead kept using the words "essential object" in a particular technical way that presumably he had defined, but that I didn't understand.

After some discussion as to what "essential object" meant, the professor leading the seminar said something meant to clarify things and drew something that looked like lightning bolts on the blackboard. "Mr. Feynman," he said, "would you say an electron is an 'essential object'?"

Well, now I was in trouble. I admitted that I hadn't read the book, so I had no idea of what Whitehead meant by the phrase; I had only come to watch. "But," I said, "I'll try to answer the professor's question if you will first answer a question from me, so I can have a better idea of what 'essential object' means.

What I had intended to do was to find out whether they thought theoretical constructs were essential objects. The electron is a theory that we use; it is so useful in understanding the way nature works that we can almost call it real. I wanted to make the idea of a theory clear by analogy. In the case of the brick, my next question was going to be, "What about the inside of the brick?" - and I would then point out that no one has ever seen the inside of a brick. Every time you break the brick, you only see the surface. That the brick has an inside is a simple theory which helps us understand things better. The theory of electrons is analogous. So I began by asking, "Is a brick an essential object?"

Then the answers came out. One man stood up and said, "A brick as an individual, specific brick. That is what Whitehead means by an essential object."

Another man said, "No, it isn't the individual brick that is an essential object; it's the general character that all bricks have in common - their 'brickiness' - that is the essential object."

Another guy got up and said, "No, it's not in the bricks themselves. 'Essential object' means the idea in the mind that you get when you think of bricks."

Another guy got up, and another, and I tell you I have never heard such ingenious different ways of looking at a brick before.

**And, just like it should in all stories about philosophers, it ended up in complete chaos.**

In all their previous discussions they hadn't even asked themselves whether such a simple object as a brick, much less an electron, is an "essential object."

a 1.5 The following picture of Feynman's views on the value of Philosophy emerges from "Some Time with Feynman" by Leonard Mlodinow Penguin Books, London 2004 (Mlodinow is the author of Euclid's Window ).

Mlodinow says: Feynman was suspicious of philosophy.

When Mlodinow had disturbed Feynman in his office at work at Cal Tech and there was an "almost altercation" where Feynman raised his voice and told Mlodinow to leave his office and let him work. The secretary of the dept. Helen (astronomy, maths & physics were in one dept.) came scurrying

down the corridor to protect Feynman.

According to Mlodinow the interchange went like this:

(Helen) "What did you say to piss off Professor Feynman?"

(Mlodinow) Shrugs.

(Helen) "You know you shouldn't interrupt him when he is working."

(Mlodinow) "I guess I just tried to engage him on the wrong topic."

(Helen) "Philosophy ?"

(Mlodinow) "No, string theory"

(Helen)"Oh God, that's just as bad".

( Some Time with Feynman, Leonard Mlodinow p. 102)

a 1.6 Science won't answer your predecided deep philosophical questions.

Feynman says he does science in order to find out what can be found out about the world, and the more he finds out, the better.

(The Pleasure of Finding Things Out p. 23)

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## APPENDIX 3

### STEVEN WEINBERG'S NEGATIVE VIEW OF PHILOSOPHY

In *AGAINST PHILOSOPHY* which is chapter 7 of his book Dreams of a Final Theory Steven Weinberg asks...

"Can philosophy give us any guidance towards a final theory?"

The gist of his answer is as follows:

a. 2.1 "The value today of philosophy to physics seems to me to be something like the value of early nation-states to their peoples. It is only a small exaggeration to say that, until the introduction of the post office, the chief service of nation-states was to protect their peoples from other nation-states. The insights of philosophers have occasionally benefited physicists, but generally in a negative fashion – by protecting them from the preconceptions of other philosophers."

....."It is just that philosophical principles have not generally provided us with the right preconceptions." ..... "In our hunt for the final theory, physicists

are more like hounds than hawks; we have become good at sniffing around on the ground for traces of the beauty we expect in the laws of nature, but we do not seem to be able to see the path to the truth from the heights of philosophy.” (p. 132)

a. 2.2 “This is not to deny all value to philosophy, **much of which has nothing to do with science.** I do not even deny all value to the philosophy of science, which at its best seems to me a pleasing gloss on the history and discoveries of science. But we should not expect it to provide today’s scientists with any useful guidance about how to go about their work or what they are likely to find.” (p.133)

a. 2.3 “After surveying three decades of professional writings in the philosophy of science, the philosopher George Gale concludes that ‘these almost arcane discussions, verging on the scholastic, could have interested only the smallest number of practicing scientists.’ ”

Wittgenstein remarked that ‘nothing seems to me less likely than that a scientist or mathematician who reads me should be seriously in the way he works.’” (p. 133)

a. 2.4 “ ...a knowledge of philosophy does not seem to be of use to physicists – always with the exception that the work of some philosophers helps us to avoid the errors of other philosophers. It is only fair to admit my limitations and biases in making this judgment. After a few years’ infatuation with philosophy as an undergraduate I became disenchanted. The insights of the philosophers I studied seemed murky and inconsequential compared with the dazzling successes of physics and mathematics.” (p. 133)

a. 2.5 “From time to time since then (his undergraduate years) I have tried to read current work on the philosophy of science. Some of it I found to be written in a jargon so impenetrable that I can only think that it is aimed at impressing those who confound obscurity with profundity. Some of it was good reading and even witty, like the writings of Wittgenstein and Paul Feyerabend. But only rarely did it seem to me to have anything to do with the work of science as I knew it.” (p. 134)