

#### Introduction

The modern mode of thought separating Man from Nature and Mind from Matter, relying on 'passive-object' and 'static, isolated' understandings of the universe and nature have led to tremendous advances since the Industrial Revolution. It is rooted in the distinction between primary and secondary qualities, explicitly mentioned first by Galilei, and later, among others, by Newton, Locke and Descartes. The English Mathematician and Harvard Philosopher Alfred North Whitehead called this bias the 'bifurcation of nature'. Despite its usefulness, the modern mode of thought that is biased in this way also generates serious negative consequences, perhaps foremost of which is the ecological crisis.

To overcome the bias, Whitehead conceived of nature as 'a theatre for interrelations of activities' (MT 191)<sup>2</sup>. He places the traditionally taken-for-granted stark distinctions of a) active subject vs. passive object, and b) external relations *between* vs. internal relations *among*, all within what he calls 'the actual entity', the unifying elementary moment-of-now in process thought: In process philosophy, it is important to note that "the concrescence of each individual actual entity is internally determined and is externally free." [PR 27]<sup>3</sup>; the active subject is now somewhat less obscure. Advances in all sciences (Physics, Biology, etc.) at the very least increasingly appreciate the dynamic, relational and ever changing character of nature that Whitehead sought to describe.

Despite this growing appreciation, Western thought is still trapped to a large extent in the bifurcation concept of reality. Little in primary, secondary or indeed tertiary education looks to overcome it. Science as taught (as opposed perhaps to as researched in specialist areas) relies on the pursuit of 'disinterested objectivity', uncovering new facts in the advance of knowledge. Almost no room is given within this approach to the exploration of truths rendered through values, or more fundamentally the pursuit of an inter-connected knowing that coheres with our lived experience of becoming, and with new advances in all sciences.

A significant and sustained shift in thinking is called for.

<sup>&</sup>lt;sup>1</sup> © International Process Network, June 2016. The authors are grateful to John B. Cobb Jr., Helmut Maaßen and Vesselin Petrov for their comments on earlier drafts of the document. This paper and the syllabus contained within it were each approved by the IPN Board at its 2<sup>nd</sup> June 2016 meeting.

<sup>&</sup>lt;sup>2</sup> Whitehead, A.N. (1938) Modes of Thought. Cambridge: Cambridge University Press

<sup>&</sup>lt;sup>3</sup> Whitehead, A. N. (1978) Process and Reality, Corrected Edition. D.R. Griffin and D.W. Sherburne (Eds) New York: The Free Press

This short paper sets out a suite of educational offerings in process-relational philosophy that provides a mode of thought allowing students to comprehend fully the dynamic, relational and ever changing character of existence as experiencing subject, and then provides them with the opportunity to apply this understanding to a range of different subject areas within the Sciences, Social Sciences and the Arts. It begins with free offerings through the International Process Network website and then proceeds through Postgraduate Certificate, Diploma and MPhil. In so doing it builds upon the premise that process thought is a legitimate field of inquiry in its own right. The purpose of this is to provide an 'ideal type' as a guide to support IPN members and others in potentially developing taught courses in process philosophy in their own universities.

An undergraduate unit of study within a Major or degree would most likely focus in on using the open educational resources to supplement 'A General Introduction to Process Thought.' Additional components could then be taken from any of the relevant 'Process Applications', and supplemented with readings from particular process philosophers as required in support. If Whitehead's thought is to be the focus then judicious selection of elements from 'The Philosophy of Alfred North Whitehead' and 'Process and Reality' would seem apposite.

# **Open Educational Resources**

The IPN has secured permission from Jay McDaniel to link to his YouTube Course on Process Philosophy. This provides a sound introduction to Process Thought, and could form the basis of a Massive Open Online Course offering through a university. Completion of this could be used as a waiver to the first introductory course of the PG Diploma below. The course can be found at: <a href="http://internationalprocessnetwork.com/education/">http://internationalprocessnetwork.com/education/</a>

### Postgraduate Degrees

The main component of the proposed offering comprises a 7 course, staged degree with 'exit points' at Certificate (3 compulsory courses), Diploma (Certificate + 1 compulsory advanced course and a further choice of 2 courses from a range of elec others) and Masters (Diploma + thesis). Depending on the requirements of the awarding university the exact number of courses required can vary. The principle is outlined here, with each course listed in order of delivery and their intended learning outcomes (ie. after this course the student will be able to...) bullet-pointed [with occasional notes for comment].

#### PG Certificate in Process Thought

- 1. A General Introduction to Process Thought
  - a. Explain the problems of 'Modernism' and its metaphysical premises
  - b. Articulate a general process alternative to Modernism
  - c. Explain the basic differences between 'hard' (pure process) and 'soft' (changeful substance) process views
- 2. Introduction to Process Philosophies and Philosophers
  - a. Outline in broad terms the philosophies of a number of thinkers, thus explaining the origins of Process Thought.

This would at minimum include Heraclitus, Plato, Bergson, Locke and Whitehead. However it might also usefully include but not necessarily be limited to a selection from the following: Heraclitus, Socrates, Plotinus; Pseudo-Dionysius and Eriugena; Spinoza and Leibniz; Deleuze and Jankélévitch; James and Peirce; Sri Aurobindo and Kitaro Nishida; Schelling, Fichte, Hegel, Nietzsche and Heidegger; Samuel Alexander, George Mead, John Dewey. These thinkers have paved the way for contemporary Process Philosophy in different ways; many of them are themselves process philosophers. An emphasis on living philsophers would include John Cobb, David Griffin, Nicholas Rescher, Johanna Seibt, Michel Weber etc. In relation to Philosophy of

Science one might usefully consider: Euclid, Newton, Poincaré, Louis de Broglie, Heisenberg and Schrödinger.

- b. Critically compare and contrast the philosophies of the process thinkers discussed
- c. Articulate a coherent argument regarding the student's own perspective on process thought in relation to the philosophies covered in the course.
- 3. The Philosophy of Alfred North Whitehead

Beginning with *A Treatise on Universal Algebra* and encompassing his other mathematical work as well as The Organization of Thought Educational and Scientific (1917), but focusing especially on: *Concept of Nature, Science and the Modern World, Process and Reality, Adventures of Ideas* and *Modes of Thought*:

- a. Outline the development of ANW's thought from 1898 (Universal Algebra) to 1927 (Symbolism: Its Meaning and Effect).
- b. Explain the basic tenets of Process and Reality and how this relates to the earlier work.
- c. Outline the development of ANW's thought from 1929 (Aims of Education) to 1941 (Immortality) and explain the connections to Process and Reality and earlier work

# PG Diploma in Applied Process Thought

# 4. Process and Reality (Compulsory) NOTE: It is not generally recommended students attempt to read PR on their own, i.e. without other texts from Whitehead's secondary literature in support of it.<sup>4</sup>

- a. Explain Whitehead's Philosophy of Organism in terms of a comprehensive understanding of:
  - i. The Actual Entity and Societies of Occasions of Experience
  - ii. The Phases of Concrescence
  - iii. Nexus and the Macrocosmic
  - iv. Perception and Consciousness
  - v. The Extensive Continuum
  - vi. Past, Present and Future
  - vii. The Categoreal Scheme
  - viii. Fact and Form
  - ix. The Order of Nature
  - x. The Bifurcation of Nature
  - xi. Organisms
  - xii. Symbolic reference
  - xiii. Propositions
  - xiv. Theory of Prehension
  - xv. Theory of Extension and Co-ordinate Division
  - xvi. Epochal Theory of Time
  - xvii. Opposites. God and the World.
- b. Make reasoned arguments concerning the Philosophy of Organism in comparison with established principles in Modern Science, and more broadly or Process Philosophy and Contemporary Science

<sup>&</sup>lt;sup>4</sup> This is because, as John Cobb notes in the Introduction to his *Whitehead Word Book* (2015: 7-8), it "is a serious error ... to think that all that is necessary is to translate [Whitehead's]... difficult technical language... into one they already understand. [... His] deeply original thought leads to a different way of seeing the world. It has to work against the implications of the existing language. It has to draw the readers or the hearers into noticing features of experience that have heretofore eluded them. It has to evoke to consciousness dim intuitions that have been suppressed by the existing conceptuality and socialization. One cannot translate the new vision into the vocabulary of the old ... This is why Whitehead is so alien to the dominant form of philosophy in the English language world. This philosophy takes ordinary language as its object. It undertakes to clarify that language but to use nothing else. In other words it assumes that meaningful communication can occur only in ordinary language. Whitehead, on the other hand, believed that reality is quite different from the way it was understood during the period that ordinary English developed. There is much wisdom embodied in that language but there is truth that cannot be directly expressed in it... [So] it has been generally recognised that very few can fruitfully study *Process and Reality* on their own. Coming to an understanding of this book has been the collective task of students over two generations. One needs to study it first with a guide who [or that] has benefited from this collective work."

- 5. Process Applications in the Sciences (Elective)
  - a. Explain and evaluate uses of process philosophy as a comparative study of process philosophers and with regard to the thought of e.g. Euclid, Newton, Poincaré, Louis de Broglie, Heisenberg and Schrödinger (see also 2a above):
    - i. Mathematics, extending from Universal Algebra and including Principia Mathematica
    - ii. Physics, including the question of Relativity (ie. Whitehead's *The Principle of Relativity* and Bergson's *Duration and Simultaneity*)
    - iii. Biology and Chemistry, including the way in which process philosophy develops and extends our understanding of the nature of evolution, including Bergson's *Creative Evolution*, and Whitehead and Aurobindo's theories on evolution, and including the work of e.g. John Dupre.
- 6. Process Applications in Ecology (Elective)
  - a. Explain and evaluate the uses of process philosophy in:
    - i. Metaphysical and axiological approaches to Ecology (e.g. deep ecology and voluntary simplicity)
    - ii. Sustainability, ecological economics and de-growth
    - iii. Landscape and Architecture
- 7. Process Applications in the Social Sciences (Elective)
  - a. Explain and evaluate the uses of the process philosophy in:
    - i. Psychology
      - ii. Sociology
      - iii. Economics and Management
      - iv. Other areas of application such as History, Law and Political Science
- 8. Process Philosophy and Music (Elective)
  - a. Explain and evaluate inter alia:
    - i. Music in Bergson and Jankélévitch's philosophies
    - ii. Music, Language and Philosophy
    - iii. Educational musical applications having a processual premise
- 9. Contemporary Process Philosophers (Elective)
  - i. Henri Bergson, Vladimir Jankélévitch, Gilles Deleuze
  - ii. William James
  - iii. Charles Sanders Peirce
  - iv. Sri Aurobindo, Kitaro Nishida
  - v. Samuel Alexander, George Mead, John Dewey
- 10. Process Philosophies of Education (Elective)
  - a. Explain Whitehead's Philosophy of Education
  - b. Critically evaluate John Dewey's Philosophy of Education
  - c. Articulate a reasoned argument for the use of process-relational understandings of education in contemporary teaching
- 11. Process Theology (Elective)
  - a. Explain Whitehead's Concept of God, as contrasted with the same notion in Process Theology
  - b. Critically evaluate the process theological view of God as developed by Charles Hartshorne, in contrast with those found in traditional Christian, Jewish, Islamic Buddhist and other indigenous world faiths and religions.
  - c. Incorporate recent work in process theology (e.g. by Bracken, Clayton, Cobb, Faber, Griffin, Keller, McDaniel and M.E. Moore), to articulate a coherent personal position on the nature of God.

#### MPhil in Process Thought

12. Thesis in Process Thought

Students complete at least a 30,000 word thesis on a topic of their choice, founded in further study of a topic or topics covered in at least one of the Diploma courses and at the same time related to general themes and principles covered in the Certificate courses.

# Implementation and Conclusion

While making no attempt to be prescriptive, we suggest the foregoing suite of offerings with a view to being reasonably comprehensive and at the same time sufficiently focused, to allow the level of in-depth study necessary to achieve a coherent grasp of process thought – one that is not founded on misconceptions that arise when there is an unconscious 'bifurcation bias'. Neither do we wish to suggest particular introductory or advanced books from within the process philosophy canon, but nevertheless do strongly recommend that the study of process thought takes place using literature from within the process philosophy canon. A list is available from the Centre for Process Studies <u>www.ctr4process.org</u>.

That said, one book that we have found of great help in respect of Whitehead's thought in particular, and which is not an introduction but rather more a richly explained glossary of terms in his philosophy, is John Cobb's 'Whitehead Word Book' (2015; *Process Century Press*). What remains clear to us is that attempting to grasp fundamental principles through literature that is outside the process philosophy canon will lead the student to be prone to any errors inherent in that other literature. It is such errors that we are seeking to obviate in rendering explicit an ideal type curriculum founded exclusively in process philosophy, precisely because – once acquired – those errors are difficult to overcome. Worse, they persist and are perpetually promulgated!

The degrees themselves could be studied by distance with local tutorial support in the home country with local tutors paid sessionally (e.g. part time on an hourly rate) by the awarding institution, coupled with occasional residential weekends; the latter ensure the development of strong cohorts of students and future academics and practitioners. Completion of each of the three degrees would ordinarily be one year part-time, ie. one course per trimester (Winter, Spring, Summer). Full time study would enable completion in 18-24 months, i.e. two courses per trimester, with the thesis completed in the Winter and if necessary Spring trimesters of the second year.

The degrees in Process Thought as outlined here are intended to offer a pedagogically coherent suite of offerings, developing the student's understanding from basic ideas to advanced applications. We wish to point out in conclusion that the Masters syllabus purposefully locates Process Theology in an elective course of study. This is because we are cognisant of contemporary sensitivities relating to the question of God; the syllabus does not trespass on individual beliefs by making the study of Process Theology compulsory. Finally, we also look to ensure that the degree program adopts a structure best encapsulated in the phrase 'from general to specific' so that basic ideas are reinforced and built upon.

Of course it is for designers and teachers to flesh out the details of the particular courses comprising the degrees, to suit the requirements of their institutions and their students. However, we are confident students completing degrees shaped around the syllabus we have outlined should have a thoroughgoing understanding of the principles of process thought and the wide variety of its applications, sufficient to allow both their accurate practical implementation and advanced research in a variety of fields.