Enlightenment of "In Dialogue with Nature" on the Intellectual Pursuit in My Major Subject

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1. Introduction

Definitions and Paraphrasing

When deliberating this topic, first, I find the need to scrutinise the meanings of specific wordings used in the question and grant them some clear definitions.

The word "enlightenment" is worth our investigation. "Enlightenment" can be defined as the obtainment of brand-new perspectives on a specific issue that liberates one's mind from original viewpoints to innovative insights (Hawker 302). An element of "change" is involved.

The meaning of the word "intellectual pursuit" is also obscure and ambiguous. I shall define this word as the continuous process of pursuing truth and genuine knowledge in philosophy. Yet, the process consists of many stages and "the ends [truth and genuine knowledge in philosophy] too are many" (Aristotle 2). It is so lengthy that it is impossible to dwell on all of them in this essay.

There is nevertheless a hierarchy of relative significance among these various stages[1]. I think two specific stages: (a) realising the relations between philosophy and other disciplines[2] within the whole intellectual system, and (b) justifying the use of philosophy, are of most significance among the different stages. It is because only by understanding them, further discovery of philosophical truth can be carried out properly[3]. Also, the above two stages are simple and recurring[4], i.e. ideas that have been used throughout the whole process of intellectual pursuit (Poincaré 162–163). Our first care must be to prioritise them in the hierarchy of significance.

To be specific, the question can be paraphrased into "how the scientific spirits and methods I learnt in 'In Dialogue with Nature' change my former perspectives on the two stages of intellectual pursuit in philosophy mentioned above and help develop new ones".

1 By the words "these various stages" I refer to the common tasks to be done during the intellectual pursuit in all disciplines. Reading reference books, attending lectures, writing papers and thinking are typical examples of these tasks.

2 By the words "other disciplines" I refer to academic subjects that possess significant differences with philosophy. Their divergence lies in the fact that they are pursuing after knowledge, which is of different nature. "Other disciplines" seek formal and empirical truths while philosophy pursues philosophical truth (see below for classification). It is noticed that some disciplines, for example theology, is a discipline other than philosophy literally. However, they are not classified into the category of "other disciplines" in the sense that they seek philosophical truths. "All disciplines" is then a collection of subjects, which denies the above classification.

3 It is inspired by Aristotle in Book 1 of his work *Nicomachean Ethics*. According to Aristotle, ends are many. However, some ends fall under one capacity (method of studying in this case). Only understanding the essence of the capacity that we can pursue the ends properly, or else we may be misguided (1–2).

4 In my point of view, it is important to keep reminding oneself of the ideas that these two special stages bring about before and during the whole journey of intellectual pursuit, i.e. they are the most fundamental ideas and recurring, for the reason that they are the necessary ideas which show that one's intellectual pursuit is meaningful, thus encouraging one to carry on with it. Without them, intellectual pursuit is frustrating and discontinuous.

2. Intellectual Relations between Philosophy and Other Disciplines

Distinctness and Separability of Philosophy

It has been quite a long time that I conceive philosophy as a distinctive discipline. It is the nature of the intellectual truths it pursues that makes philosophy distinctive.

Intellectual truths can be classified into three categories according to the methods by which they are reached, namely formal truth, empirical truth and philosophical truth (Berlin 1–4). Formal truth refers to knowledge that is reached based on pure mathematical calculations (2), while empirical truth refers to knowledge that we obtain from the data of observation (2).

According to Berlin, these two types of intellectual truths have some significance. First, formal and empirical truths are relatively easier to be discovered and applied (2).[5] Second, as a consequence to the first significance, humans are classifying all knowledge as hard as they can into these two categories and it is therefore necessary that most disciplines in the intellectual system are aiming at finding out these truths (2).

Logically, the category of philosophical truth becomes the last resort to men while they fail to put the knowledge into either one of the former categories (3). The answers to questions like "what is good?" cannot be reached based on empirical observations or mathematical calculations. These philosophical truths thus fall into the realm of philosophy, and only

5 We have ways to prove it at least. Berlin used a simple example to illustrate the relative ease of proving these truths. When asked empirical questions like "what time is it?", we only have to check the clock. However when asked philosophical questions like "can time stand still?", it seems more difficult to get the answer (Berlin 3).

through philosophising[6] that the insights on these harder[7] problems can be developed.

Due to the difference in intellectual nature, philosophy becomes a distinctive discipline in terms of methodology and intellectual expectations. This consequently results in a special position for philosophy in the intellectual system: a separability between philosophy and other disciplines. It has few similarities with them and there is mere interaction with other disciplines[8]. Perhaps it is also true that scholars are obliged to be detached from human conceptions and the usual intellectual system to view philosophical questions from an innovative and solely rational perspective[9].

Separability of Philosophy: A Critique

Though that being the case, I gradually shape a new conception of philosophy's relations with other disciplines during "In Dialogue with Nature".

In *The Beginnings of Western Science*, Aristotle treated the rules of nature as philosophical truths, using his "Theory of Nature" to explain phenomena in the natural environment (Lindberg 23). He distributed different natures to disparate substances based on common sense and philosophising, for example "[e]arth and water are heavy" while "[a]ir and fire are light" (28), and then applied them into the realm of cosmology and physics of objects (29–32).

6 Philosophising, as known as philosophical method, is "the study of how to do philosophy". Philosophers use methodic doubt, argument and dialectic to do philosophy ("Philosophical Method").

7 Please refer to note 2 for comparative difficulty.

8 This assertion will be easier to comprehend when you examine the relations between mathematics and physics and those of philosophy with other disciplines.

9 This is inspired by Peter Singer's work *Animal Liberation.*

In the *Principia: Mathematical Principles of Natural Philosophy* by contrast, Newton treated the rules of nature he was pursuing as empirical and formal truths (Newton 63–69) as Newton's laws of physics are represented in mathematical terms[10] and can be proved by observations.

Methods are distinctive, but philosophy and other disciplines are by no means separated: there are intimate interactions. For Aristotle, he possessed huge curiosity about the nature and wanted to explain explicitly all things happened around him. Unfortunately, science was not advanced enough then for him to apply in the discourse of explanation. He could not but philosophise the most possible explanations in his era according to his understanding in order to fulfill his curiosity. Newton, on the contrary, understood the complexity of these problems as they have been bothering and triggering the curiosity of mankind for centuries. His era allowed him to have sufficient scientific knowledge and special insights to explain them with higher accuracy. Philosophical truths thus turn into empirical or formal truths through times.

A new perspective on the role of philosophy is thus developed. More philosophical truths will be turning into empirical or formal truths due to the advancement of science and technology as civilisations prosper. It is nevertheless philosophy's role to continuously lead issues that trigger mankind's curiosity into the area of intellectual system, unearth questions that bother men most and then to hand them into the hands of scientists[11]. It is viable for a truth to "[cease] to be philosophical and becomes part of

10 Example is "[q]uantity of matter is a measure of matter that arises from its density and volume jointly" (Newton 63).

11 Cosmology and physics, for example, had been turning into sciences from philosophy. Moreover, some social disciplines like politics and sociology too are developing into sciences, as more and more theories are available. This may boost the search of truth in these realms.

a recognised science" (Berlin 4). It could be disastrous if philosophical truths are separated from the rest of the truths: sources of knowledge will be dried out; mankind will soon become satisfied with what they have done; there will eventually be no radical changes and revolutions in terms of knowledge.

Different in the methods of investigation though, there is still a linkage between philosophy and other disciplines. This is a new insight that I developed during the course of "In Dialogue with Nature".

3. The Use of Philosophy

Impracticality of Philosophy

Some criticises philosophy as being impractical. As a student studying philosophy, confusion is brought forth when such kind of animadversions exist. They sometimes even waver in my faith that philosophy is a meaningful discipline worth studying. Such criticisms are twofold.

First, philosophy is impractical because it asks questions, though of significant importance, that are unlikely to be answered at first sight. For example, questions like "can we be certain that the external world really exists?" and "what is morally right?" sound bizarre and impossible to give responses to when we first encounter them.

Failing to provide reasonable answers, some may resort to excuses like "these questions do not have a definite answer" or "everyone has his own answer to and perception of the question". These comments are indeed frustrating, causing me to reflect on why I should bother solving these "impractical and meaningless" questions that have no answers available.

Second, the impracticality of philosophy is arisen also from its great stress on the importance of thought experiments. Thought experiments refer

to "the considerations of some imaginary scenarios, which may or may not be possible to be actually performed, for the purpose of thinking through its consequences" ("Thought Experiment"). Thought experiments are widely applied in philosophy. In moral philosophy for instance, a thought experiment called the "Trolley Problem"[12] is frequently employed to test the moral rightness of utilitarianism.

However, thought experiments are criticised as useless as they seldom, if not never, reflect the reality. It is difficult to imagine the situation described in the "Trolley Problem" actually taken place in the reality, forcing us to make some dilemmatic decisions. "Imaginations are mere fancy" (Baggini ix): theories derived from fancy imaginations are by no means compatible with the practical reality. Again, why should I bother with philosophy if this is really the case?

Questions without Answers: A Critique

"[T]ruth is [the first virtue] of systems of thought" (Rawls 3). Rawls's words can sum up my enlightenment during this course on this criticism.

In *Republic,* Plato used the prisoners as a metaphor of people without formal education and refusing to face the real world. These prisoners who

12 The trolley problem is a thought experiment introduced by Philippa Foot in 1967. "Suppose that a judge or magistrate is faced with rioters demanding that a culprit be found for a certain crime and threatening otherwise to take their own bloody revenge on a particular section of the community. The real culprit being unknown, the judge sees himself as able to prevent the bloodshed only by framing some innocent person and having him executed. Beside this example is placed another in which a pilot whose aeroplane is about to crash is deciding whether to steer from a more to a less inhabited area. To make the parallel as close as possible it may rather be supposed that he is the driver of a runaway tram which he can only steer from one narrow track on to another; five men are working on one track and one man on the other; anyone on the track he enters is bound to be killed. In the case of the riots the mob have five hostages, so that in both the exchange is supposed to be one man's life for the lives of five" (23). Most important thing to note is that it is an imaginary scenario. For more, please refer to Chapter II of Foot's work *Virtues and Vices and Other Essays in Moral Philosophy*.

are fettered and only able to distinguish between shadows of artifacts only believe what they see is most real (Plato 6). They are similar to people who raise criticisms to philosophy. Critics seem to be bound by their very limited knowledge, believing that it is impossible to find out the rules that "[control] and [provide] truth and understanding" (9). But we, as intellectuals, must believe that there are underlying truths behind every phenomenon, including those recognised as of higher difficulty like ethics and social rules, as if there is always a sun outside the cave (7).

Successful intellects like James Watson and John Rawls seem to uphold this as their motto. Despite Darwin's assertion of the cause of "varieties" as "[m]ere chance" (Darwin 85), Watson in *DNA: The Secret of Life* uses DNA to explain the rule of heredity. DNA is the key of varieties (Watson 115–141). Rawls, a political philosopher, similarly holds the view that "[j]ustice is the first virtue of social institutions" (Rawls 3) in his landmark book *A Theory of Justice,* showing that he too believes that there could be an undisputed criterion to analyse and solve recondite social problems[13].

From this course, I gradually learn that truth does exist. In my own opinion, we are obliged to believe that beneath every question, however hard it is, there is a truth. This should be, I think, the basic responsibility of every scholar. If there is no underlying truth, why should many a learned person

13 Rawls holds that human are not economic beings but moral beings, and justice is a moral judgment. Therefore, while it is not necessary for us to analyse the basic structure of a society based on criteria like efficiency, stability and so on from an economic point of view, it is inevitable that we must take the concept of justice into account. Justice is thus uncompromising and is the first virtue of social institutions, as Rawls writes "laws and institutions no matter how efficient and well-arranged must be reformed or abolished if they are unjust" (3). The logical development presented here links the first clause and the second clause of this sentence.

still continue to "take any interest in [philosophy], moral [and] otherwise" (Rawls 514)?

Use of Thought Experiments: A Critique

Thought experiment is of paramount importance in all disciplines, ranging from those pursuing formal truths to those pursing philosophical truths.

In *Elements*, Euclid lists out some definitions in the very beginning of his work *Elements* for the purpose of convenient discussion and clear understanding. Giving them a closer examination, these definitions share same features with thought experiments in my opinion. Definitions like "[a] *point* is that which has no part" and "[a] *line* is breadthless length" (Euclid 275) describe geometric properties that are difficult, if not impossible, to replicate in the reality. It takes our imaginations to formulate them.

However, it is only with these thought-experiment-like definitions that we can push our imaginations to limit, as Dunham in *The Mathematical Universe* says "[w]hat makes the *Elements* so important is its logical development from basic principles [definitions mentioned above] to sophisticated consequences" (261).

Sophisticated knowledge is reached only with the aid of imaginations.

This conclusion can also be used to justify the use of thought experiments. In the case of the "Trolley Problem", although it is fictitious, it helps to develop our understanding on our moral decisions: what are we to do when facing similar situations? Can the larger sum of advantages enjoyed by many be outweighed by the sacrifices imposed on a few (Rawls 3)?

In this sense, imagination is no longer mere fancy.

4. Conclusion

In brief, "In Dialogue with Nature" enlightens me a lot on the two most important stages of my intellectual pursuit in philosophy. It purges my doubts caused by the criticisms of the separability and impracticality of philosophy. It enhances my confidence in continuous pursuit in the discipline.

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Teacher's comment:

How does the subject of philosophy connect to other disciplines in the pursuit of knowledge, or does it? Does a philosophical question like "what is morally right?" have an ultimate answer? Are the widely applied but impractical thought experiments actually meaningful? These are the three questions Yan Ming had in mind when writing this paper. During the voyage of meeting the scientists and philosophers in the course "In Dialogue with Nature", Yan Ming has reached his conclusions towards these puzzling questions. He has made a wise and impressive use of the different texts in forming his arguments in this well-structured essay. This essay should not only let us, as readers, follow how Yan Ming reflects on these questions, but provoke us to have our personal thoughts! (Andy Ng Ka Leung)