Interpretations of a Common World: from Antiquity to Modernity
Essays in honour of Jure Zovko
Evandro Agazzi, Andreas Arndt and Hans-Peter Grosshans (Hg./Ed.)
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Philosophy as a Cognitive Enterprise[1]

Abstract

Philosophy is a cognitive enterprise. In multiple senses, it is continuous with other sciences (including natural sciences, social sciences, and Humanities). (1) As far as its subject matter is concerned, like other sciences, philosophy is also a part of the overall efforts of human beings to understand the world in which we live. (2) In terms of their methodologies, there is no substantive difference between philosophy, common sense, and science. Just as scientific methodology is the refinement of common-sense methodology, philosophical methodology is also the refinement and summary of common sense and scientific methodologies. (3) In terms of their utilities, philosophy and science are both designed to help people live better in the world, and to lead a decent and dignified life, especially a meaningful and valuable life. (4) It is the correct attitude and practice of dealing with the relationship between philosophy and the history of philosophy to study and enter philosophy through the history of philosophy, to critically reflect on the previous philosophical theories, to open up new fields, to use new methods, and to put forward new theories to develop philosophy. (5) The following two assertions about philosophy and science are just taken for granted, and specious: science relies on observation and experiment, and philosophy resorts to interpretation and understanding, while science focuses on "what is" and philosophy focuses on "what it should be".

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Zusammenfassung

Philosophie ist ein kognitives Unternehmen. In mehrfacher Hinsicht steht sie in Kontinuität zu anderen Wissenschaften (einschließlich Natur-, Sozial- und Geisteswissenschaften). (1) Was ihren Gegenstand betrifft, so ist die Philosophie, wie andere Wissenschaften auch, ein Teil der allgemeinen Bemühungen des Menschen, die Welt, in der wir leben, zu verstehen. (2) In Bezug auf ihre Methodik gibt es keinen wesentlichen Unterschied zwischen Philosophie, gesundem Menschenverstand und Wissenschaft. So wie die wissenschaftliche Methodologie die Verfeinerung der Methodologie des gesunden Menschenverstandes ist, so ist die philosophische Methodologie die Verfeinerung und Zusammenfassung der Methodologie des gesunden Menschenverstandes und der Wissenschaft. (3) Von ihrem Nutzen her sind Philosophie und Wissenschaft beide darauf ausgerichtet, den Menschen zu helfen, besser in der Welt zu leben und ein anständiges und würdiges Leben zu führen, insbesondere ein sinnvolles und wertvolles Leben. (4) Die richtige Einstellung und Praxis im Umgang mit der Beziehung zwischen Philosophie und Philosophiegeschichte ist es, die Philosophie über die Philosophiegeschichte zu studieren und auf diese Weise in sie einzutreten, die bisherigen philosophischen Theorien kritisch zu reflektieren, neue Felder zu erschließen, neue Methoden anzuwenden und neue Theorien zur Entwicklung der Philosophie aufzustellen. (5) Die beiden folgenden Behauptungen über Philosophie und Wissenschaft sind selbstverständlich und fadenscheinig: Die Wissenschaft stützt sich auf Beobachtung und Experiment, während die Philosophie auf Interpretation und Verständnis zurückgreift; die Wissenschaft konzentriert sich auf das, "was ist", die Philosophie auf das, "was sein sollte".

Introduction

As Quine once asserted: science is continuous with common sense, just as philosophy is, in turn, also continuous with science. “Scientific neologism is itself just linguistic evolution gone self-conscious, as science is self-conscious common sense. And philosophy in turn, as an effort to get clearer on things, is not to be distinguished in essential points of purpose and method from good and bad science.” (Quine 2013: 3) In Quine’s view, the word “science” has got two different meanings: in the narrow sense, it refers mainly to natural sciences, while in a broader sense it refers to our knowledge of this world as a whole. If we derive from the above

conclusions drawn by Quine, then, speaking about its objectives and purpose, akin to common sense and science, philosophy represents an integral part of humanity's endeavour to understand this world as a whole and, thus, ought to assist humans to become more cognisant about this world. Speaking about its methodology, in the same way the scientific methods are an elaboration of the methods of common sense, the philosophical methods also represent a refinement and summarisation of the methods of common sense and science. There is no unique and unmatched philosophical method.

The above-mentioned thoughts by Quine were further elaborated on and expanded by Timothy Williamson. Deriving from two main aspects, Williamson advanced a strict critique of philosophical exceptionalism such as the following ones: the claim that philosophical research is an undertaking which philosophers can accomplish by sitting in their armchairs, or that its methodology and standards of evaluation differ substantially from those used in other branches of science. Firstly, he posited that philosophy is continuous with science with regard to the object of their research. In this sense, the so-called "linguistic turn" and "conceptual turn" that took place in 20th-century philosophy are both wrong and already outdated. Philosophers' interests are not limited solely to the characteristics and structure of language, neither do their interests rest only with concepts, thoughts, or the mind, which some believe to have priority over language. It is rather the reverse: akin to other scientists, when metaphysicians study "time" and "space", what they focus on is the temporal and spatial characteristics and structure of reality in this world. When epistemologists study "knowledge" and "truth", they are in fact inquiring into the following immensely important substantive questions: What is knowledge? How do we obtain knowledge? In what way is this knowledge justified? By which social factors is knowledge influenced? In what way is the function of knowledge exhibited in the context of social communities? And so on. Secondly, philosophy is also methodologically continuous with science, it is just that each of their methodologies has its own characteristics. Philosophy is more like mathematics since they are both enterprises that can, for the most part, be accomplished from armchairs. In the first place, their methodologies do not consist of experiments, but rather of abduction and deductive reasoning. This fact, however, does not at all hinder philosophy and mathematics from being a part of science. Philosophy, for instance, must also make use of the results of natural science, while, similar to natural science, the progress of philosophy depends mainly on better models, on more superior structures and explanatory power, and not on offering more informative and nonexceptional generalisations. We must not spend too much time reflecting and thinking about

whether philosophy is an a priori or a posteriori endeavour because epistemologically, this difference is superficial and shallow. (Cf. Williamson 2007; 2018; 2019)

I concur, in general, with the overall philosophical tendencies and standpoints advocated by Quine, Williamson, and others. I also agree with their criticism of philosophical exceptionalism, which is why, on the basis of their works, in this article, I shall propose and justify the following core thesis: *philosophy is a cognitive enterprise*. This statement aims to emphasise that: philosophy is continuous with other scientific disciplines; it is a part of humanity's collective efforts to understand this world. As such, philosophy must assist mankind to better understand the natural world, the human being as such, society composed of individuals, as well as the very nature of our perception and understanding of this world. Furthermore, this thesis is evidently aimed against other views on philosophy, such as for example, the view which regards philosophical comprehension merely as a collection of the teachings expounded by the sages of the past, or an undertaking of deciphering classical texts, a continuity of intellectual traditions, a discipline introducing foreign ideas, or an undertaking devoted exclusively to composing philosophical textbooks, and so on. All these activities do, of course, form inner segments and even necessary parts of philosophy as such, but absolutely do not represent the entirety of philosophical research. At least some Chinese philosophers must orientate themselves in the reality of contemporary life and – on the basis of the intellectual achievements of their venerable predecessors, focusing on philosophical problems, with argument, dialogue, questioning, and dispute as their main forms – set out to bring down the already existing intellectual boundaries, and start to break up new grounds for new fields and create new theories. In short, they have to participate in the contemporary construction of philosophy, and thereby to confirm Chinese philosophers' identity and gain some honour and dignity as Chinese philosophers. (Cf. Chen 2010; 2017a)

In this paper, I will provide a detailed exposition of the above-stated core thesis from the following three perspectives: with regard to the subject matter and goals of its research, akin to other branches of science, the mission of philosophy also consists of assisting humans to gain a better understanding of this world; as its methodology is concerned, between philosophy and science there exist no considerable differences; between philosophy and history of philosophy, there exist both continuities as well as discontinuities, while philosophy's special interest in the history of philosophy does not at all constitute a serious challenge to the central thesis of this paper. Ultimately, this paper will also try to provide responses to two additional challenges to the central thesis, by taking them as instances of reasoning which are generally taken for granted and which appear to be right yet are actually wrong: the first claims that science depends on observation and experiment, while philosophy

resorts to interpretation and understanding; and the other claims that while science focuses on the "descriptive" (how things really are), philosophy focuses on the "prescriptive" (how things ought to be).

1. The Mission of Philosophy: Assisting Humans to Gain a Better Understanding of This World

1.1. Humans' Benefits and Requirements Are the Motivation of Humanity's Cognition

In my opinion, the greatest contribution of American pragmatism resides in its advocacy of the position that *we should observe the world from the perspective of human beings or humanity as a whole*. We exist in this world, which is boundless in all directions, which is infinite not only in its spatial but also in its temporal dimension. As the ancient Chinese philosopher Zhuangzi once noted: "There is a limit to my life, but to knowledge there is no limit. To pursue after what is unlimited with what is limited is a perilous undertaking!" (*Zhuangzi*, "Nourishing the Lord of Life") For this reason, we are unable to create a comprehensive cognition that would thoroughly mirror this world. Yet we can still strive to understand what we have to understand and what we are able to understand. Our desires, requirements, and interests profoundly determine which part of this world we want to become cognisant about. Concurrently, our capacities to cognize and to act as well as our cognitive resources determine the way in which we will come to cognize. These two combined demarcate the boundary of our cognition, for they divide this world into two entirely different parts: the "humanized reality", that is the part of the real world that can be reached by human cognition and agency; and the "brute reality", that is the part of the real world that still cannot be immediately attained by human cognition and agency, a form of existence equal to the Kantian concept of "things in themselves".

In this place, it is necessary to point out emphatically that assuming the existence of a world of "things in themselves" is both sufficiently reasonable as well as absolutely necessary. It is, first of all, an inductive summarisation and a rational extrapolation of humanity's past cognitive experiences. At the stage when "the human waved goodbye to the ape-man", humanity's cognitive and operative scopes were still rather narrow, having been confined to their current habitat, the mountains and streams in their proximity. Consequently, the focus of their activities revolved around questions like where and how to obtain resources needed for survival. Occasionally, however, these early humans also raised their heads towards the starry heavens, to observe the things which were visible to them with their naked eyes.

All these constituted humankind's most elementary awareness of this world. Subsequently, human capacities to cognize and human beings' ability to survive were gradually increased, causing the scope of their life to become ever larger. With interactions between different groups of people becoming more frequent, their experiences, information, and knowledge were able to spread at an ever-greater speed, which in turn caused their cognitive space to undergo a significant expansion, from pre-scientific cognition to ancient science, to modern science, and to contemporary scientific thought, our ancestors accumulated knowledge about a great number of previously unknown things in this world. What they also came to know is that these things were not created by their cognition, but were here from the start. It was only that these things had previously existed hidden from their eyes. As these kinds of experiences accumulated, humankind was able to conduct an inductive summarisation of these experiences, from which it then rationally extrapolated the following conclusion: there is a brute, originally existing world, which exists independently from and beyond our current cognition, yet still constitutes the object of our cognition. Secondly, the recognition that there exists a world of "things in themselves" had also left sufficient space for the future expansion of humanity's awareness and understanding of this world. The cognitive capacities of human beings have, evidently, increased at a very high pace: ultimately, humans were able to travel to outer space, dive to the deepest parts of the ocean, or investigate the subatomic structures of matter. Such strange yet also miraculous "books of nature" are opened in front of our eyes one by one at this very moment. We have to admit that all these things were always there, but were unknown to us only because of our former cognitive and operational limitations. They always existed there as "things in themselves".

Although both philosophy and all branches of science (including natural sciences, social sciences and humanities) regard this world as the subject matter of cognition, between individual sciences there also exist instances of both division of labour as well as cooperation. (Cf. Zovko 2014) Each concrete science usually regards certain parts, aspects or dimensions of this world as the focus of their cognition, striving to inquire into the structure, order, and laws underpinning the domain of their interest. Philosophy, on the other hand, must strive to draw a whole picture of this world, based on the results given by all other branches of science, and in turn investigate the general structure, order, and laws of this world. For this same reason, philosophy exceeds all concrete sciences by far in its level of abstractness, generality, and universality. In addition to that, philosophy is also tasked with justifying or falsifying the elementary hypotheses and value dimensions of individual scientific disciplines, or with either striking down or propagating the already existing cognitive boundaries. In these undertakings, however, philosophy still has to operate in the framework of

common sense and scientific theories, that is, by making use of scientific discoveries and scientific methods, by unearthing and questioning the fundamental presuppositions hidden underneath the surface of scientific theories, and by conceiving the possibilities of other kinds of alternatives. Nonetheless, according to this, we cannot simply conclude that philosophy stands in discontinuity with common sense and science, just as we cannot say that modern science is in complete discontinuity with ancient science, or that contemporary science is discontinuous with modern science. Despite the fact that the former negated or renounced numerous theories and assertions by the latter, between them there still exist some crucial constituents that connect one to the other, such as, pursuing truth as the ultimate goal, resorting to scientific evidence, employing scientific methods, conducting scientific experiments, and in the last instance the necessity to obtain the approval of the scientific community.

1.2. In What Way Do Philosophy and Philosophers Regard the World?

It is our mission to pursue the truth. This is so because truth is the fundamental means of our survival in this world. If an individual or a species would frequently generate untrue cognition about this world and their surrounding environment, they would also frequently make wrong decisions and responses, as a result of which nature would eventually eliminate their genes from its gene bank, by means of either natural selection or other mechanisms. In short, in the end, this species would die out. If we want to make correct cognitions about this world, we must first clarify "What is there?". Such endeavour falls into the domain of ontology and metaphysics. (Cf. Zovko, Zovko 2012)

Quite clearly, in this world there exist a wide variety of different physical entities, such as, for example, astronomical objects, geological entities, or plants, all of which occupy a specific time and space, have their own temporal and spatial boundaries, and can be perceived by our sense organs. At the same time, however, these entities do not have bare existence but possess different properties and have complex relations with each other. Owing to these properties and relations, different physical entities form different natural classes or kinds and are thus subordinated to different structures, orders, and laws. Between them, they mutually give rise to causal effects, because of which they bring about change and growth. When natural classes or kinds are subjected to further abstraction, they change into sets. Sets have elements, and, like physical entities, all elements of sets can be counted: one, two, three, and so on, which generates numbers. Consequently, physical entities, properties and relations, natural kinds, time and space, classes, structures, causal relations, natural laws, sets and numbers all have a sort of existence in this world. But because all these things

take or appear in different forms, between them there also exists the relationship of dependence: some of them are fundamental, while others are derivates.

Apart from the above-mentioned objects, in this world there also exist a great number of artificial, man-made objects. Humans are the most capable of all species that produced a wide array of new objects in this world; from small gadgets such as the clock, cell phone or furniture, down to larger objects, such as the high-speed rail, skyscrapers, seafloor cables, bay bridges or space shuttles. These things are the same as natural objects in that they all have a state of matter, exist in space and time, and can be perceived by humans. The difference between them and natural objects lies in: the property of having human thoughts, ideas, designs, and manufacture, or even emotions, inculcated into them. Without human design and making, they would not even exist, and they would neither be able to exhibit their particular functions.

In this world, there also exist several kinds of "social realities", also referred to as "institutional facts". Such as, for example, states, governments, armies, the police, money, banks, universities, academic research societies, marriage, etc. John Searle maintained that such institutional facts are constructed by society and involve the following five key constitutive factors: assigned functions, collective intentionality, constitutive rules, language, and background, of which collective intentionality is the crucial one. In the constitutive rule "in the situation C, X counts as Y", X represents the original and brute fact, while Y is an institutional fact. This "counting" X as Y is brought about by means of linguistic assignment in order to ensure that Y has got a definite identity and function for the collective interests of society. This can be explained by taking a hundred-yuan banknote: if we only consider its physical form, it is merely a piece of paper. But despite it being a piece of specially manufactured paper, it was completely possible for it to become so important in contemporary society. The reason for that obviously does not reside in its state of matter, but in the entire set of social institutions behind it. It is namely these social institutions that assigned and guarantee the mystical function such banknotes can display. (Cf. Searle 2008)

Lastly, there also exist a wide variety of cultural constructions, such as, for example, characters in myths and fairy tales, folk legends, literary works, movies, plays, cartoons, and games like "Nüwa", "dragons", "Monkey King" (Sun Wuking), "Lin Daiyu" or "Hamlet". These constructions also include human-made ideas, propositions, theories, and doctrines, such as "blockchain", the idea that "the human is a yardstick of the entire existence", "pragmatism", and so on. By and large, these things were all created in the real world by humans using various kinds of material means (e.g. ink and paper, computers and other equipment), while at the same time they also exist in some kind of physical form (e.g. books, images, internet documents,

etc.). We can make true assertions about cultural constructs in two different senses: "Sun Wukong is a great disciple of Xuanzang," is a true assertion made from the inner perspective of the novel *The Journey to the West*; the assertion "Sun Wukong is a fictional character created by Wu Cheng'en", on the other hand, is a true assertion from the standpoint of the real world. All the above-mentioned cultural constructs play some very important roles in our rational and emotional lives.

What is even more important is that in this world, there also exist a high number of people as well as various groups, organisations, societies, nations or states formed by people. Each of these social organisms has got their own and even mutually contesting interests, needs, desires, views and modes of acting. With regard to the well being of "I", they form relationships of cooperation and competition, they constitute a part, or possibly even its most important part, of the external world "I" must be cognizant of.

Because all "realities", like the ones listed above, are extremely significant for the survival of an individual and its entire kind, they all constitute objects of our cognition and thus also the objects that must be studied by philosophy. If within the "real", we include elements and categories as different as that, then what, after all, is "real"? How should we explain, portray, and even define "reality"? For the philosopher, this question represents one of the most serious challenges. It is usually taken for granted that "reality is being independent of human consciousness and mind." If we also consider the existence of human-made objects, social realities, cultural constructions or human society, then this statement is clearly untenable, because all these things basically would not be able to exist were it not for the participation and involvement of human consciousness and mind. It is perhaps as C. S. Peirce remarked: "...reality is independent, not necessarily of thought in general, but only of what you or I or any finite number of men may think about it". (Peirce 1992: 139)

1.3. How Can Philosophy Help Advance or Improve Human Cognition About This World?

This question can be answered from many different perspectives. To avoid engaging in a lengthy discussion, below I shall only list two perspectives.

1) Philosophy can expand new spheres of cognition, open up new space for thinking, and attain unprecedented cognitive depths.

For the most part, the former metaphysicians were only concerned with what existed in the natural world, whereas John Searle provoked us into paying more attention to the questions: what else is there in our social lives apart from natural objects? Which things are essential for social lives as humans? As an answer, he points

out the existence of so-called "social realities", such as governments, armies, police, money, marriage, and universities, and investigated questions such as: How are these social realities formed? What functions do they exhibit? How do they exhibit their functions? Etc. Evidently, these investigations conducted by Searle were not only quite new and original but also of great theoretical importance. Eventually, Searle's investigations gave rise to "social ontology" as a new field of research, which in turn also greatly influenced other scientific disciplines such as political science, ethics, management studies, etc. (Cf. Epstein 2018)

Hume separately proposed two significant problems. The first concerns inductive reasoning and causal relations, while the second concerns "is" and "ought", that is the relationship between facts and values. Scientists undertaking concrete scientific research for the most part also employ inductive reasoning and assume the existence of causal relations, on the grounds of which they then derive generalisations of regularities and in turn also produce predictions about the future. Hume subsequently also closely questioned what the grounds and justification are for doing so? Does inductive reasoning enable us to induce universally necessary true conclusions from true premises? Why do we conclude that causal relations exist among objects and phenomena? All these instances of scepticism put forward by Hume are extremely profound, which is why, so far, they still have not been satisfactorily answered. In this regard, there even exists the following assertion: "induction is the triumph of science and disgrace of philosophy." (Stegmüller 1977: 68; see also Hong 1989: 257) Hume also noticed that based on assertions about "what or how something is", several authors drew inferences about "what or how something ought to be done". In these instances, the former represented descriptive statements, while the latter represents stipulative or normative statements, the difference between the two being immense. How does the latter follow from the former, or maybe, how do we advance from "facts" towards "value" or "norms"? This constitutes the "is-ought" problem (cf. Hume 1969: 521), a problem which revived the form of "normative research" and especially the form of "the sources of normativity" in contemporary philosophy. What is normativity? What kind of norms are there? Are there norms such as, for example, cognitive norms, ethical norms, legal norms, and all kinds of other norms? All these questions constitute elementary research on normativity. Which things make it compulsory for us to abide by these norms? Or say, why is it that we "must" or "ought to"? In a detailed examination of the sources of normativity, these foundations and bases that concern the very conception of norms have to do with the metaphysical research of norms. How do we obtain and prove our normative conceptions? This constitutes the heart of epistemological research of norms. How do norms give rise to their functions? How do we ensure that the

norms will get implemented? Implementing which norms will have favourable or unfavourable consequences? All these questions represent, in the manner of sociology and political science, the research of norms. Normativity and its related problem of rationality both represent special points of interest in contemporary philosophy.

2) In its essence, philosophy is critical and revolutionary, which provides us with an inexhaustive source of motivation for our cognitive development.

As Marx pointed out: "Dialectics does not worship anything. According to its essence, it is critical and revolutionary." (Marx 2009: 22) This assertion can in fact be extended to general philosophy. A special characteristic of philosophy is its attempt to carry out an exhaustive and incessant investigation, questioning and disputing from several different aspects, by virtue of which it creates new possibilities. It is exactly this trait which brings about the extremely dense critical colouration of philosophy. Philosophical critique can usually adopt two kinds of form: internal criticism and external criticism. The former takes form in internal consultations and questioning within a certain philosophical faction, the purpose of which is to reveal or expose the internal conflicts and theoretical predicaments within its theory. External criticism, on the other hand, is two schools holding different views, refuting the basic assumptions and main thesis of each other's theories, and trying to defeat the opposing theory. Of these two theories, the most effective is usually the internal criticism, which can thus lead this theory to evolve and develop. For example, the early analytic philosophy represented by the Vienna Circle possessed a very narrow and rigid position, according to which "verifiability" (in sense-experience) was considered the standard for distinguishing (cognitively) between "sense" and "nonsense". For this reason, metaphysics and ethics became affiliated with "nonsense". Under internal pressures, the standard of "verifiability" was further divided into "direct verifiability" and "indirect verifiability". Karl Popper, for instance, proposed the notion of "falsifiability" as the demarcation standard of science versus non-science. Quine later criticised the "two dogmas of empiricism", expressing scepticism about the tenability of the distinction between analytical and synthetic propositions, and proposed a holistic view of knowledge as a solution to these theoretical inadequacies. Strawson, Quine, and others demonstrated that metaphysics is indispensable in scientific research, in which it merely assumes different forms (such as revisionary metaphysics and descriptive metaphysics, ontological commitment, etc.). MacIntyre, Rawls, Parfit, and others reintroduced research of ethics, theory of justice, and normativity into the domain of analytic philosophy. Putnam, Searle, Davidson, and others, subsequently, made philosophy of mind become one of the most popular areas of analytic philosophy. As a result of the developments relating to internal criticism, analytic philosophy grew from a group of early schools and a movement into

a research style, i.e. a style of doing philosophy without fixed boundaries or standpoints. (Cf. Chen 1997: 2018a) According to Joll's research, the same was true of the theory of social criticism of the Frankfurt School, whose members can be divided into at least four groups: the main representatives of the first group are Gadamer, Horkheimer, and Marcuse; the representatives of the second group are Habermas and Wellmer; the most famous representative of the third group was Axel Honneth; and then there is also a fourth group. Within the first group, we can further distinguish between four different sections (Cf. Joll 2010).

Through studying and doing philosophy, we can cultivate a spirit of doubt and criticism, the capacity for rational argumentation, the ability of clear expression and distinctive writing, all of which can evidently contribute to our endeavour to promote our cognitive capacities.

2. Methodological Continuity between Philosophy and Science

In philosophy, there exists a very rich collection of appliable methodological resources: akin to the conditions that exist in other scientific disciplines, philosophy also needs to seek assistance from observations and experiments, intuition and common sense, numerical data and evidence, reflection and reassessment, imagination and thought experiments, abduction – inference to the best explanation, model-building, conjectural hypothesis, logical inference, proof and refutation, and other forms and modes of investigating this world. Just as the scientific methods constitute a refinement of the methods of common sense, the philosophical methods represent a refinement and synthesis of the methods of science and common sense. Methodologically, between philosophy, on the one side, and common science and science, on the other, there is no substantial difference.

Below, I will only discuss the three most distinctive philosophical methods, which are nothing but extensions and generalisations of the relevant scientific methods.

2.1. Abduction – Inference to the Best Explanation

In addition to deduction and induction, Peirce also proposed a new form of inference – abduction. Let us say that we observe a wonder-inducing, puzzling fact C, then if A is true, then C should also be taken to follow as a matter of course. In this way, there exists a justification for conjecturing that A is true. Peirce maintained that "abduction is the process of forming an explanatory hypothesis. It is the only logical operation which introduces any new idea." (Peirce 1934: 171) In the 1960s, G. H. Harman coined the term "inference to the best explanation" (abbreviated IBE) and pointed out that it is a procedure and method for choosing a hypothesis that

would provide a better explanation for the abnormal evidence E from a selection of several possible hypotheses which might explain the same evidence (see Harman 1965). Later, Peter Lipton also conducted a comparatively systematic investigation into the IBE, the innovation of which resides in having proposed concepts such as "a potential reasonable explanation" and "favourite explanation" (Lipton 2004). I am personally inclined towards regarding abductive reasoning and IBE as a unified method, denoted by "abduction-IBE", portrayed by a quadruple model <E, B, {H_1, H_2, ..., H_n}, C>, wherein:

> *E is an abnormal phenomenon awaiting explanation;*
>
> *The background belief B plus any one amongst the possible hypotheses H_1, H_2, ..., Hn can reasonably explain E;*
>
> *Based on the selection standard C, H_n is not only an explanation better than any other possible explanation but also the favourite explanation;*
>
> *Consequently, there exist very strong grounds for accepting the hypothesis H_n.*

Further explanations are necessary at this point:

(i) *E* represents completely novel and puzzling evidence under observation, whereas *B* represents a group of background beliefs, which includes mainly already existing theories with a high degree of acceptability, or possibly still requires the addition of certain common-sense beliefs. Moreover, *E* and *B* are incompatible: it is only by deriving from *B* that we produce the negation of *E*, namely .

(ii) H_1, H_2, ..., H_n are used as some possible explanations of the evidence *E*. According to the Duhem-Quine holistic thesis, an explanation of *E* is not founded merely on one of the hypotheses H_1, H_2, ..., H_n, but also requires the addition of a set of background beliefs *B*.

(iii) C represents a set of selection standards for the most optimal hypothesis. I intend to adopt the standards given by Quine and Ullian: (a) Conservatism: under equal conditions, the less a hypothesis abandons the beforehand established beliefs, the more reasonable it is. (b) Modesty: unless necessary, one should not construct bizarre hypotheses. (c) Simplicity: the simpler in logical structure, the better a hypothesis is. (d) Generality: the more numerous the empirical evidence covered by a hypothesis, the broader its scope of application, and thus also its reasonableness. (e) Refutability: a reasonable hypothesis must have a certain kind of imaginable event, that would constitute its refutation. (Quine, Ullian 1978: 66–82) We could probably also add one

more condition: (f) Precision, which comes mainly from logical and quantitative means. The more precise a hypothesis is, the lower the probability that it will be coincidentally confirmed by unrelated causes, and the stronger the corroboration gained from the success of its predictions.

(iv) According to Lipton (2004), a hypothesis which has got the potential of explaining *E* and which is consistent with *B* is a "potential reasonable hypothesis"; the hypothesis with the highest degree of coincidence and identicalness with the already existing evidence constitutes the "explanation," which is not only able to explain the currently available evidence but also other already known phenomena. Apart from that, hypotheses that can predict similar future phenomena also constitute the "most favourable explanation".

(v) According to Lipton (2004), in the process of obtaining the "most favourable hypothesis" there exists a three-stage cognitive filtration: from "explainable" to "potential reasonable explanation" (not necessarily true); from "potential reasonable explanation" to "the most probable explanation" (most probably true); and from "most probable explanation" to "most favourable explanation" (optimal explanation). The latter is most possibly true as well as of greatest explanatory potential: most capable of explaining the greatest scope of similar phenomena.

Beyond any doubt, the abduction-IBE method has been extensively used in the research of natural sciences, it is just that previously such a method had been wrapped up under the umbrella term "hypothetico-deductive-method" and involved three important segments within the just mentioned method. These include aspects like: How to come up with a hypothesis? How to assess and select such hypotheses? Moreover, how to confirm or justify a hypothesis? Over the past few years, Timothy Williamson has energetically propagated the use of the abductive method in philosophical research. He emphatically noted that: "philosophy *should* use a broadly abductive methodology. Indeed, to some extent, it already does so. I propose that it should do so in a bolder, more systematic, more self-aware way" (Williamson 2016: 268). Taking my recent research on facts, evidence and truth as an example, I shall try to explain the use of abduction-IBE in my philosophical research.

"Fact" is a frequently used concept in philosophy, which acts as one of the fundamental concepts of the correspondence theory of truth. In the past, philosophers proposed, one after another, the ontological conception of fact and the identity theory of truth, etc. The former maintains that facts existing in the world are the items which make propositions true or false (truthmakers). The latter maintains that the facts equal propositions, especially true propositions: facts are true propositions, and true propositions are facts. This last instance, however, is facing a high number

of serious problems, such as: the extreme difficulty to clarify the actual relationship between propositions and facts, namely, the difficulty to answer questions about the priority, dependence, and explanatory relationship between propositions and facts. There exist other challenging questions, such as, "Do 'fact' and 'true' proposition define each other, a relationship which gives rise hereby to a vicious circle?", or "How can facts be individualised?", or for example, "Are there atomic facts or negative facts?", "Are the facts countable (one, two, three...)?", "Where are the boundary conditions of a fact?". There is also the question of whether or not all facts are mutually interrelated, thus forming "the unique great fact"? For this very reason, facts are often morphed into big words such as "reality", "world" or "truth", thus they have no substantial use in determining the truth and falsity of propositions. The identity theory of truth, on the other hand, equates "facts" with "true propositions", which can produce several serious problems. For this reason, I propose the epistemic conception of fact, which maintains that: "facts" are "torn out" part by part from the matrix of the world as a whole. What exactly we "tear out" from the world-matrix, hinges both upon what we "want" to tear out, i.e. our cognitive intentions and objectives, as well as upon what we "are able" to tear out, i.e. our cognitive capacities. It also hinges upon "how" we tear these out, that is, the cognitive means and methodologies we use. "Facts" depicted in this way are composites of "subjectivity and objectivity", that act as "evidence" in scientific research and judicial trial. (Cf. Chen 2017b; 2018b; 2019) When investigating the concept of "fact", my mode of operation is the following:

> *(a) Starting point: In philosophy, the concept of "fact" is very significant. However, because the already existing theories of fact encounter severe difficulties, a reinterpretation of this concept is required.*
>
> *(b) Process: The ontological concept of facts is confronted by several predicaments, which is why we can assert its untenability; the identity theory of a fact with a true proposition is confronted with even more severe predicaments, which is why we can assert its fundamental untenability.*
>
> *.....*
>
> *The epistemic concept of fact is a better explanation, which is even "the best or most favourable explanation."*
>
> *(c)Conclusion: The epistemic concept of fact is tenable.*

2.2. Imagination, Thought Experiment, and Model-Building

2.2.1. Imagination and Thought Experiments

Einstein pointed out: "Imagination is more important than knowledge. For knowledge is limited, whereas imagination embraces the entire world, stimulating progress, giving birth to evolution. It is, strictly speaking, a real factor in scientific research." (Einstein 2009: 49) Thus, for example, the planetary model of the structure of an atom (for the greater part atoms are empty in volume, and electrons revolve around a very small positively charged nucleus following fixed orbits) as proposed by Rutherford in 1911, conveys the major leaps forward and the magnificent miracles that can be prompted by imagination. Philosophy also requires imagination, for "imagining is the most basic way of learning about hypothetical possibilities" (Williamson 2018: 83). The function of imagination is mainly exhibited through thought experiments.

A thought experiment is conducted within the researcher's mind, without drawing support from any kind of material means, being merely a form of purely conceptual implication or logical operation. It is an "experiment" only in an analogical sense, and normally involves the following steps: (i) Fixing the objectives: In order to defeat or justify a certain philosophical judgment, it is possible to conceive some kind of new possibility; (ii) Unfolding our imagination: what if...?, that is to say, if something happens, what will consequently happen? Here we mainly use counterfactual conditionals and inferences; (iii) Designing the scene: This scene contains some essential constituents of the target philosophical judgments, yet at the same time it does not contain any other elements; (iv) Logical inference: we analyse and derive a series of conclusions from the afore-designed scene; (v) Drawing the final conclusions: determining whether this philosophical judgment can or cannot be established. These kinds of thought experiments are also referred to as "the laboratory of the mind". It has been correctly indicated by some scholars that:

> The 17th century saw some of the most brilliant practitioners of thought experimentation in Galileo, Descartes, Newton, and Leibniz, all of whom pursued the project of "natural philosophy." And in our own time, the creation of quantum mechanics and relativity are almost unthinkable without the crucial role played by thought experiments, most of which relate to important philosophical issues that arise from these scientific theories. Besides, much of ethics, philosophy of language, and philosophy of mind is based on the results of thought experiments in a way that seems very similar to scientific thought experiments (though some might contest this), including Searle's Chinese room, Putnam's twin earth, and Jackson's Mary the colour scientist. Philosophy,

> even more than the sciences, would be severely impoverished without thought experiments. (Brown, Fehige 2019)

The above excerpt must be supplemented by one more point: In Chinese philosophy of the Pre-Qin period, we can also discover a great abundance of thought experiments, such as Zhuangzi's butterfly dream or the Hao-Liang debate. In the documents of contemporary and modern Chinese philosophy, the traces of imagination and thought experiments are extremely hard to encounter, all of them focus on producing new texts from classic texts.

In philosophical research, thought experiments are mainly used as the means of refuting or confirming certain philosophical judgments or theories, its function being often destructive. For example, Searle's Chinese room was intended to refute the following viewpoints on strong artificial intelligence (AI): the human brain is merely an instance of a digital computer, the human mind is merely a computer program, the relationship between the human mind and brain is the same as the relationship between programs and computer hardware. Putnam's twin earth aims to elucidate that: sense and reference (of terms) do not reside in human brains but are instead decided by the states of affairs in the external world. Gettier counterexamples are intended to make clear that: knowledge is not merely justified true belief. Foot's Trolley Problem was used as a means of disputation against the consequentialist or utilitarianist view on morals. Zhuangzi's butterfly dream calls into question the reality of the external world and even raises a sceptical discussion about the way in which we chose to prove this kind of existence. Similarly, the Hao-Liang debate challenges the possibility of mutual understanding between people who hold different worldviews. Warren's "imaginary moral space traveller" attempts to illustrate that: an abortion might not be murder, because murder is only possible if it involves an already present human being, while a foetus does not yet possess a complete human personality. Conversely, Thompson's "ill violinist" further indicates that: whether a foetus already is a human or potential human being is essentially unrelated to women's right to abortion because even if an unborn foetus is a human being, the woman carrying this foetus still has the right to terminate gestation, just as that violinist whose dying body is forcibly connected to life-sustaining machines has the right to be disconnected. (Cf. Schick, Vaughn 2019, 44–47, 54)

Several questions relating to thought experiments are still to be investigated and answered. The most important amongst them include: Thought experiments contain which important characteristics? How do we classify thought experiments? Which significant categories of thought experiments are there? How is it possible to obtain new knowledge about the external world under consideration, in which

no new empirical data has been obtained and we only have to rely on imagination, reflection, and inference (thought experiment) conducted inside of our brains? Can thought experiments be divided into good and bad ones? Based on what standards do we criticise and differentiate between them? Can any thought experiment be refuted? From which aspects can it be refuted? And so on.

2.2.2. Model-Building

What we refer to as "models" are hypothetical constructions described or conceived in the hope of using them as an aid in our endeavours to correctly understand and grasp more complex systems of activities within the real world. The model method has an extremely broad use in natural sciences, technological engineering, mathematical sciences, and especially in logic. For instance, with the use of the terrain model of rivers and channels, we can create simulations of how rivers erode riverbanks; with multicolour structural models of cylinders and spheroids, we are able to simulate the composition of DNA molecules; and using military mission models, we can test several strategies used in combat and their possible outcomes. In theoretical science, and especially in logical science, models represent a more abstract form of designing theoretical structures. Hence, in modern logic, there also exists a special branch called "model theory". Moreover, in modern logic we first use meaningless symbolic language to construct formal systems, and only afterwards seek out models for these formal systems (the object domain satisfying fixed conditions), so as to provide an explanation for each internal constitution of this system within these models: assigning to its terms definite references, defining truth-value conditions for formulae, defining fixed validity conditions for its inferential forms, and, finally, to reconfirm the soundness (that all formulae which can be proved within the system are true) and completeness (that all true formulae within the relevant object domain are all provable) of this formal system, etc. Besides, we can also strive to identify "proper models" in which certain formulae are true, as well as "counter-models" which render certain formulae false.

Model-building is even more required in philosophy, due to the general structures and law of underlying complex phenomena in philosophical research. Due to the excessive complexity of the phenomena under research, we must also make necessary simplifications, which disregard other unrelated elements and magnify only the elements on which we focus. Moreover, in researching the relations which subsist between individual elements, it is most convenient to use simple structural models. Once a simple model yields success, we can also try gradually increasing the number of complex particulars to approach the abundancy and complexity which characterises actuality. We have to proceed in this way, even if by doing so the most

complex system is still much simpler than that of the actual situation. If, from the beginning on, everything is considered in an indiscriminate manner, our thinking process will be unable to take off in an effective manner, failing in each attempt to achieve something, so that we will be completely incapable of drawing any meaningful philosophical conclusions. Since the models reveal general structural relations and do not exhibit philosophical conclusions in the form of universal judgments, they can efficiently withstand testing by means of counterexamples, while at the same time, as pointed out by Popper, they are also easily falsifiable. Williamson once pointed out that: "Within the model-building methodology, what displaces a model is a better model. Part of its superiority may be that it deals more adequately with counterexamples to the old model, but it should also reproduce in its own way the old model's success." (Williamson 2018: 180) He subsequently used the model of a thousand-ticket lottery to explain the cognitive indeterminacy hidden inside of it on the basis of mathematical probability. (Cf. Williamson 2017: 163–164)

2.3 Epistemic Disagreement, Philosophical Debate, and Reflective Equilibrium

2.3.1. Epistemic Disagreement

Due to the influence of different factors, such as people's standpoints, background knowledge, cognitive methodology, cognitive abilities, and differences in quality and quantity of obtained information and evidence, and above all old-fashioned and biased views, and conflict of interests, in our mutual interactions with other members of our species, there easily occur various kinds of disagreements. Speaking about philosophy, however, the most important is epistemic disagreement. Now, what exactly is disagreement? What kinds of disagreements are there? How do epistemic disagreements occur? How do we resolve such disagreements? By means of which procedures and methods? What rules and regulations do we have to follow in resolving disagreements? Which positive or negative impacts do epistemic disagreements have on our cognitive as well as social-civilizational development? All these important questions have entered the perspective of philosophy only as late as the early 21st century, and soon after that came to represent one of the central tasks within philosophical research. (Cf. Frances, Matheson 2019)

In the past, research of the individual's cognitive actions was stressed in epistemological studies: the subject of cognition, or let us say an ideal subject of cognition, relies on what processes, methods, procedures, and rules to be able to obtain a true understanding of this world? The past studies in epistemology tended to gravely neglect the social dimensions of cognition. All kinds of interactions, dialogues, and

contentions between different subjects of cognition have an incredibly significant influence on the views ultimately espoused by these subjects. Amongst them, there even exist some kind of authority distribution structures: the opinions of cognitive authorities can be more highly valued and receive more attention, while the opinions of other cognitive peers occupy inferior positions and can easily be either neglected or underestimated. Theoretical undertakings that put emphasis on researching social dimensions of cognition are commonly referred to as "social epistemology". This field of studies is currently focused on two main subjects: the first one is trust, especially the notion of trust in other people's testimony; and the second is the epistemic disagreements that occur between cognitive peers. (Cf. Goldman, O'Connor 2019)

Relating to the question of how we should regard and treat epistemic disagreements, at present there exist two major standpoints: the first is the eclectic theory, which advocates that, when confronted with an epistemic disagreement, all parties should observe the positions in which they agree on the same things as well as the reasons for such agreements, thus taking one step back to significantly modify and adjust their own standpoints; and the second is persistence theory, which criticises the intellectual insincerity of the opposite party. Since one's own cognitive standpoints were obtained after careful consideration of the given evidence and conscientious reflection, even when facing disagreement, one should persist in holding one's own standpoint and try to persuade the other side to change theirs. The foundations for acting in this way reside in the view that there exist smaller or larger disparities between both sides' epistemic evidence, cognitive integrity, and cognitive capacities (cf. Machuca 2013: 1–7).

2.3.2. Philosophical Debate

The epistemic disagreements between philosophers can only be resolved through dialogue and discussion, which makes philosophy not in any way different from other scientific disciplines. Often, however, philosophical debate not only does not succeed at resolving such disagreements but also creates new ones. This being the case, what is then the value or meaning of such debates? Why do philosophers have to engage in them? I once argued that philosophical debate can contain the following kinds of positive meanings and values (cf. Chen 2018a):

Firstly, philosophical debates help to make the problems and flaws of already established philosophical theories known. In the time between the late 19th and early 20th centuries, for example, the anti-psychologism of philosophers like Frege, Husserl, and others had almost reached an overwhelming victory over psychologism in the domain of logic and philosophy. However, this trend was overturned when a

group of contemporary scholars managed to point out the numerous problems of such anti-psychologism, as follows: (i) Anti-psychologism was established on the basis of the immaturity of earlier psychology, maintaining, consequently, that as long as a theory even slightly touches upon psychological phenomena, its research results must be private, pertaining only to individuals, subjective, and unreliable. Akin to other natural scientists, contemporary psychologists have transformed psychology into a respect-worthy rigorous scientific discipline, in which the majority of results possess a considerable degree of objectivity. (ii) A considerable number of its key results are only assumed to be true, yet have not been the subject of rigorous proving, from which it follows that one must severely doubt the basis over which anti-psychologism is established. (iii) The validity of its inference and demonstration departs critically from the practical thinking process, and thus cannot obtain rational explanation and defence in line with the logical standards. (iv) Along with the development of cognitive science and AI, there emerged a need to research human practical cognitive processes, thinking processes and decision-making processes, so as to extract from therein the models, processes, methods, and rules of cognition.

Secondly, philosophical debates promote thinking activation and hence contribute to the development of new theoretical standpoints. For instance: in order to provide a response to Kripke's dispute against the philosophy of language and to protect the close relatedness between the three groups of philosophical concepts as follows: necessity and contingency (modality), apriority and aposteriority (reason), and analysis and synthesis (sense), certain contemporary philosophers developed two-dimensional semantics, whose central idea is

> that the extension of an expression depends on the world's possible states-of-affairs in two separate ways: the first being a cognitive dependency, which refers to the condition that those extensions of expressions depend on the real world's manner of appearance; the second being virtual dependency, which refers to the condition that, under the circumstances that the characteristics of the real world have already been fixed, the extensions of expressions must still depend on counterfactual states of the world. Corresponding to these two kinds of dependency, an expression can possess two distinct kinds of intentions, which connect possible states-of-affairs in the world with extensions of expressions in different ways. Within the framework of two-dimensional semantics, these two kinds of intentions are regarded as embodying two different dimensions of the expression's meaning or content. (Kui 2007: 52)

Thirdly, philosophical debates contribute to preventing the emergence of blind obedience, arbitrariness, and autocracy within the domain of philosophy. If one

were to say that, for the reason of highly efficient governmental institutions or for guaranteeing the victory of the army, one could still find some reason in arbitrariness and autocracy in the domain of politics or the military, on the other hand, in the academic domain, and especially in the domain of philosophy, such arbitrariness and autocracy are undoubtedly harmful and without any benefits. There exists a saying that the history of philosophy is nothing but a history of "academic and intellectual patricide", in which those who came later merely overthrew and surpassed their predecessors. If we remind ourselves how well received the Vienna Circle was at its peak, and how loud and clear its slogan "refutation of metaphysics" was, then how come Wittgenstein and Quine have occupied their leading positions for such a long time. Nowadays, when things have remained the same and people's viewpoints have changed, their influence has already obviously declined.

Fourthly, philosophical debates help give prominence to philosophy's inherent disposition towards pursuing wisdom and truth. In his dialogue with Bryan Magee, Sir Isaiah Berlin distinctly indicated that:

> If presuppositions are not examined, and left to lie fallow, societies may become ossified; beliefs harden into dogma, the imagination is warped, the intellect becomes sterile. Societies can decay as a result of going to sleep on some comfortable bed of unquestioned dogma. If the imagination is to be stirred, if the intellect is to work, if mental life is not to sing to a low ebb, and the pursuit of truth (or justice, or self-fulfillment) is not to cease, assumptions must be questioned, presuppositions must be challenged – sufficiently, at any rate, to keep society moving. (Magee 1978: 21)

2.3.3. Reflective Equilibrium

The concept of "reflective equilibrium" first appeared in the masterpiece *A Theory of Justice* by John Rawls. The core of this method resides in the pursuit of the highest degree of "coherence", on the one side, and providing explanations for the highest possible number of phenomena, on the other. This includes coherence of a person's own viewpoints, mutual coherence between one's standpoint and their grounds and evidence, and the mutual coherence between his views and reasonable standpoints maintained by other scholars. One must invest extremely arduous intellectual efforts in achieving these types of coherences, by thinking everything over back and forth, trying to ponder from different angles, and searching high and low for any vestiges of truth. Rawls further claims that human individuals possess the ability of rational thinking as early as at the most basic stage, but there still exist certain disparities between their thinking capacities. There are even greater disparities between real

individuals when it comes to their knowledge-formation, life experience, cognitive status, and other similar aspects. From this, different intuitions and various kinds of "considerate judgments" relating to fairness, justice, and morals can be formed, even bringing about mutual conflicts and contradictions between them, which include both those that come from within as well as those from without: if one's own moral intuition is not coherent with considerate judgments, if many considerate judgments held by a person are not coherent with each other, his intuitions and considerate judgments are not coherent with similar intuitions and judgments held by other people. All these non-coherences make it necessary for one to reassess their own conceptions in the following way: Do they all have adequate reasons? Are these reasons all tenable? Which conceptions of mine have been relatively well-justified, and which have received relatively weak justification? Which conceptions have to be abandoned or amended? How to do this? In this way, we can accomplish inner harmony and coherence of our conceptions, a cognitive state which is also called a "relative reflective equilibrium". To attain "general reflective equilibrium" we must still conduct an earnest and serious reflection on different moral notions held by others and their grounds: In which places do disagreements exist? How can these disagreements exist? What kind of reasons and grounds does the opposite party hold? Are they all tenable? To what degree do these fit into social life? In this way, one is to turn one's head back and reflect on one's own conceptions and their reasons by means of comparison. One has to carry out such cyclical operations, which include weighing and comparing, and constantly adjusting, amending and refining one's own views, until one has reached the following level: "this person has considered the leading conceptions of political justice found in our philosophical tradition..., and has weighed the force of the different philosophical and other reasons for them." His views are "wide, give the wide-ranging reflection and possibly many changes of view that have preceded it." (Rawls 2001: 31) This kind of reflective equilibrium highlights key values such as "plurality", "open-mindedness", "tolerance", "understanding", "dialogue", "prudence" etc., and moreover represents a dynamic process.

From a newspaper article reporting on Derek Parfit's (1942–2017) book *On What Matters,* we are able to recognise not only his conscientious practice of "reflective equilibrium" but also his highly commendable intellectual honesty, strict scholarly style and loyalty to his own academic views:

> Parfit wanted his book to be as close to perfect as it could possibly be. He wanted to have answered every conceivable objection. To this end, he sent his manuscript to practically every philosopher he knew, asking for criticisms, and more than two hundred and fifty sent him comments. He labored for years to

> fix every error. As he corrected his mistakes and clarified his arguments, the book grew longer. He had originally conceived of it as a short book; it became a long book, and then a very long book supplemented by an even longer book – fourteen hundred pages in all. People began to wonder if he would ever finish. (MacFarquhar 2011)

3. Continuities and Ruptures between Philosophy and the History of Philosophy

The most probable objection one can raise against the thesis that "philosophy is continuous with science" is the following: the history of philosophy has got a special status within philosophical research, even to the extent that one could claim that "philosophy is the history of philosophy" or "the history of philosophy is philosophy". The status of historical research in other scientific disciplines, however, is far from having the same importance as in philosophical research. Below, I will try to provide a response to such objections.

3.1. Continuity of Philosophy and History of Philosophy

3.1.1. History of Philosophy is Concerned with the Transmission of Culture and Civilisation

Even animals are aware of the survival skills and life experiences passed down to them from the previous generations: Where can they look for food and drink, which techniques they can use in hunting, how they can avoid dangerous things, and especially how to avoid predators, etc. Humanity attaches more importance to the transmission of skills, experiences, and knowledge, in which they are by far more superior than other animal species: we invented writing and printing, as a result of which we have books, in which we can record the former experience and wisdom acquired by humanity, making intra-generational transmission of knowledge possible. Since philosophy represents a part of humanity's complete knowledge of this world, philosophical reflection and wisdom of the past ages also need to be passed on as a "torch". With their serious scientific work, the historians of philosophy give us a clear, concise and systematic exposition of how the past generations of philosophers are to be reflected on, what the essential points of their theories are, how these essential points are linked together, and what kind of criticisms they received from their contemporaries and the members of later generations. In this way, they are building for us the steppingstones, over which we can enter the intellectual worlds

of philosophers of the past. Hence, they have made a very valuable contribution to us. Because philosophy is a core constituent of culture and civilisation, by passing on a nation's philosophical history, we are also passing on the culture and civilisation of this same nation, and moreover, modelling its national and cultural identity. For example, when we are studying the classics of Confucianism, at the same time, we are also trying to understand and comprehend who exactly the Chinese are as well as how to be Chinese. A nation without history is "rootless", a nation without any form of philosophy is "spiritless". Attentive study of the history of philosophy is the same as "seeking the roots" and "seeking the spirit" of our own nations or all of humanity.

3.1.2. History of Philosophy as a Medium for the Training of Intellect and Character

History is ruthless, filled with intense struggles and ordeals, a process in which many products and works are short-lived and abandoned by posterity. Only by undergoing the strict inspection of countless picky eyes of several generations can a minority of outstanding characters and their works be handed down and preserved for the next generations. These are "the great philosophers from the past" and the "classical works" they produced. They must have their own excellence, and have special items worthwhile studying, emulating, improving, and developing. When we attentively study the works of Confucius and Mencius, we realise, from practice, their manner of thinking such as "treat other people as you would yourself": first, we gain a clear realisation of ourselves and afterwards try to understand others by sympathising with them and touching their insides by projecting one's own mind: "honour old people as we do our own aged parents, and care for others' children as one's own." (*Mencius*, "Liang Hui wang I" 1) When we delve into Zhuangzi, through his vast writings and unbridled style of expression, we come to realise his wonderful and slightly odd imagination, his crafty and bizarre thinking, while becoming captivated by the way in which he describes the "genuine person's" (*zhenren* 真人) mental state:

> The genuine people of old, ..., their minds were intent, their countenance peaceful, their foreheads broad and plain. They were cool like Autumn, warm like Spring; their joy and anger were in line with the four seasons. In his dealing with things they were accommodating, and no one ever knew his utmost limits." (*Zhuangzi*, "Da zong shi" 6)
>
> There is a deity living in the Little Guye Mountains, whose skin is like ice and snow, gentle and yielding like a virgin. He does not eat five grains but inhales

> the wind and drinks the dew. He rides upon the mist and clouds, as if riding a chariot driven by the flying dragons, wandering beyond the four seas. He concentrates his spirit, making all things free of illness and the harvest grain mature. (*Zhuangzi*, "Xiaoyao you I")

When reading Descartes, we perceive his thorough doubts, his peculiar imagination, and his step-by-step advancing, philosophical reflection. When reading Kant, however, we can experience how he immerses himself deeply into the essence of human nature, we can observe his systematic and rigorous theoretical thinking, trace his rigorous examination of humanity's cognitive abilities, recognise his extreme reverence for the position of the human subject ("the Human Being's Legislation for Nature"), and finally also witness his captivating realisation that: "Two things fill the mind with ever new and increasing admiration and reverence, the more often and more steadily one reflects on them: *the starry heavens above me and the moral law within me*." (Kant 2015 [1788]: 129) When reading Wittgenstein, we experience his slightly prejudiced character, his astonishing ingenuity, his strange and profound style of thinking and writing, and his devotion to philosophy and devotion to his own life. When reading Plato and Aristotle, or Hegel and Marx, or Nietzsche and Schopenhauer, or Frege and Russell, Quine and Williamson, ... we have the chance to learn and experience different ways of doing philosophy, from their different perspectives. Afterwards, we can start learning how to do philosophy on our own. And, if we are fortunate and talented enough, then maybe we will also be able to become philosophers of some sort.

3.1.3. History of Philosophy is a Creativity-Activating Resource

Regarding the outstanding works of outstanding philosophers, two further points must be made: Firstly, the thoughts and ideas embodied in these works, their wisdom and manner of thinking have not completely died out yet. In a certain way, they are still living on, and can thus become an important source of reference and guidance for our new reflections. Because the philosopher's investigations are concerned with major problems of nature, society, and human life, it devotes its efforts to the general truth and major principles concealed behind and controlling everything in the world.. Consequently, his investigations are not so inseparably close to the currently existing circumstances, but instead possess a certain kind of universality. Thus, for example, the perplexity and difficult dilemma of Hamlet's life, "to be or not to be", could be encountered and experienced by anyone living in any period of human history, the main difference being in the manner in which this question was or is posed and encountered. Secondly, the former philosophers have not yet

said everything there was to say. Since we are still able to encounter new situations and problems, we must search for the method to explain these on our own. To paraphrase the words of Ralph Waldo Emerson: The world which emerges in front of our eyes is new, like an untouched virgin. Our duty is to gather new conceptions of the present reality through penetrative observation and meditation in solitude and reveal it to the world. But our thoughts cannot ascent from the level ground straight up to the tips of the skyscrapers, we have to stand on the shoulders of giants: through a critical examination of their thoughts and theories, we can gradually get to know in which places they were right and wrong, which parts of their philosophies, though correct, were still lacking... From here we can set out to improve their ideas, even to the extent that we completely surpass their thinking and give rise to our own new thinking and new theories. "We hear that we may speak." (Emerson 2012, 79) Only in this way will we deserve to be called the intellectual descendants of these great philosophers from the past.

3.2. Distinct Ruptures Between Philosophy and the History of Philosophy

In the past, scholars have often exaggerated the continuity between philosophy on the one side and the history of philosophy on the other. The idea of their continuity has often been overemphasised, even to the extent that some scholars have pointed out the somewhat strange assertion that "philosophy *is* the history of philosophy" and have been constantly reiterating this unfounded claim. If we wanted to provide a weak interpretation of this assertion, namely that by studying the history of philosophy we can study and make an introduction to philosophy and that by conducting critical research of former philosophers' thoughts we are researching and developing philosophy, then this assertion appears to be clearly rational. However, if we submit the above assertion to a strong interpretation, namely that in studying philosophy we must also study the history of philosophy, and that philosophical research is equal to research on the history of philosophy, then this assertion is evidently biased and even fallacious. On a related point, Williamson remarked: "I am sometimes asked which philosopher I work on, as though that is what any philosopher must do. I reply Oxford-style: I work on philosophical problems, not on philosophers." (Williamson 2018: 133) He also noted that, since the history of philosophy constitutes a part of philosophy, doing research on the history of philosophy is also researching philosophy. Philosophy, however, is not only its history. He continues to argue:

> The idea that philosophy can only be history of philosophy is self-defeating, for it is itself a controversial philosophical option, which we are under no obligation to accept. It is not sported by evidence. Hardly any of the philosophers

> studied in the history of philosophy, ..., themselves wrote on the history of philosophy. Their objective was not to interpret other philosophers' theories, or even their own, but to construct such theories in the first place, for instance about the mind and its place in nature, not radically different from scientific theories. The same applies to most of the theories being developed in philosophy today. Moreover, as already seen, there are ways of deciding rationally between such theories. Identifying philosophy with the history of philosophy is a deeply unhistorical attitude, because it is unfaithful to that history itself. Although studying the history of philosophical problem (such as free will) is one way of studying that problem, many ways of studying the problem are not ways of studying its history, just as studying a problem in mathematics of natural science is typically not studying its history. Fortunately, the history of philosophy can be and is studied with no imperialist ambition for it to take over the whole philosophy. (Williamson 2018: 133–134)

I would further supplement Williamson's viewpoints with another significant piece of evidence: the history of philosophy can be subdivided into several distinctly different stages, schools, and styles between which there existed evident ruptures. In their research, the later generations of philosophers advanced different theses using different methods and deriving from different philosophical positions. There exists, for example, a relatively widespread traditional hypothesis, which asserts that the Western philosophical tradition consists of at least three stages and two major turns. The ancient Greek philosophy places particular emphasis on researching ontological questions: What exists in this world? Which characteristics (essential properties and non-essential properties), relations, levels, structures, and laws do the things existing in this world possess? Modern Western philosophy made a shift towards epistemological research: Can humans understand this world? How do we know this world? Empiricism and rationalism are the main schools, as well as theoretical results, of this epistemic shift. Between the late 19th century and early 20th century, Western philosophy witnessed the occurrence of the "linguistic turn": that, in truth, we view this world through the prism of language, that we form our awareness of this world through language, and that our cognition of this world is significantly influenced by our language. As a result, it is necessary for us to first investigate the nature of languages as such carefully, and study their structures, meaning and relations: Do our languages have a shielding effect on the world? Do they distort and misguide our cognition? In the late 20th century and early 21st century, the endeavour of reassessing and correcting the 20th-century philosophy started an endeavour which returned the domains of metaphysics, philosophy of mind, ethics and political philosophy,

being demoted into complete shambles by the 20th-century analytic philosophers, back into the embrace of philosophy, in which they even re-emerged as hot issues. Without gradual changes of direction, rebellion, reassessment, and the correcting of errors, there is also no philosophical development, and there are also no chances to research the rich and colourful history of philosophy.

It thus follows that studying and familiarising oneself with philosophy through its history, developing philosophy by means of critical reassessments of previous philosophical theories, deriving from the philosophical heritage of the past, and advancing philosophy through opening up new fields of research, adopting new methods and proposing new theories, all these approaches combined constitute the correct attitude and method of handling the relationship between philosophy and its history. After all, not all philosophers must study the history of philosophy and only study the history of philosophy.

4. Replies to Two Further Objections

Objection 1: Science is concerned with knowledge and truth, while philosophy is concerned merely with understanding and wisdom. Science attaches greater importance to observation and experiment, while philosophy attaches importance merely to intuition and personal experience. And, while science is a result of cumulative progress, in philosophy, there is almost no real progress at all.

Su Dechao, for example, maintains that "philosophy depends more on external observation. And, because the external world exists independently from the observer, a certain kind of neutrality is preserved between observers. Although it is difficult to compare the observers' inner experiences, such descriptions do not only differ in quality but can also be true or false. In this way it is possible to attain cumulative progress." By comparison: "...the objective of philosophy is not at all to form a new science, but rather to satisfy the innate human curiosity and construct a unity of life and the world by providing answers to those questions, which cannot be answered by science. In this way philosophy constitutes the human beings' search for the meaning of life. ... This segment of philosophical problems can in no way be answered by external observation..., in truth, it depends primarily on our inner private experience." (Su 2019: 66–67)

Reply: To the above-mentioned statement by Su Dechao, I advance the following response:

Since "Science" spoken about by Su seems to refer only to natural sciences, one has to inquire what about mathematics? According to common sense, mathematics should naturally also be included therein. When I speak about science, following

Quine's usage, I understand the word in a broader, general sense, which includes natural sciences as well as social sciences and humanities, which is also why I call all these "science". The principal reason why I prefer to do so is that they are all concerned with this world in which we live, the main difference between them being that they focus on different parts and aspects of the same world. In addition, they all strive to discover and unveil the universal and general laws hiding underneath the surface of complex phenomena, so as to ultimately present these laws in the form of theory. Furthermore, they all strive to reveal and grasp the actual facts about this world, and they all take the pursuit of truth (true cognition of this world) as their ultimate objective. Another common point between them is that they all have to invest great efforts into attaining a better existence in this world, by means of grasping the actual facts and truth of this world. The theoretical achievements of all these sciences possess some form of objectiveness or involve at least a certain degree of intersubjectivity, as a result of which different subjects of cognition can have a common platform for mutual interaction, dialogue, understanding, and criticism. In this sense, all these scientific disciplines are cognitive enterprises about this world. Su Dechao also admitted that "the philosophical activities are principally a cognitive and not an aesthetic enterprise". (Su 2019: 71)

When we bring disciplines and theories like quantum mechanics, theory of relativity, astrophysics, molecular biology, ecology, macroeconomics, cultural anthropology, political science, and administrative science together into one "science", each of these disciplines emerges within a hierarchy of distinct degrees of complexity and abstractness. Do, in this case, the corresponding methodological boundaries between philosophy and science still exist? Namely, that natural sciences are based mainly on observation and experiment, data and evidence, while philosophy relies mainly on "speculation". Or, in other words, that sitting in their armchair, in proposing and refuting different philosophical theories, a philosopher relies merely on rational thought and not so much on evidence. This kind of argumentation has got an immense number of evident counterexamples: akin to philosophers, mathematicians also rarely engage in observation and experiment, and mainly work, so to say, sitting in armchairs. Is mathematics hence not science? Is it really the case that those scientists who work on concrete questions never use speculation? It is not! In designing experiments, reflecting on the accuracy of data and the use of evidence, generalising theoretical principles from data and evidence etc., these scientists also have to resort to imagination and thought experiments, the last of which also represents a certain form of "speculation". The more complex the object studied by a certain branch of science, the more abstract the science, and the smaller the distinction between the ways of work adopted by practitioners of this science and the

ones employed by philosophers. The methods employed, for example, by Newton, Einstein, and Hawking, were almost identical to those used by Kant, Quine, and Williamson. In the past, many scientists (such as Galileo, Newton, Einstein, Russell, and others) themselves were at some level also philosophers. How come that between these identities of scientists on the one side and of philosophers on the other there should exist a certain kind of schism? Is it the case that in thinking about scientific problems, they use one type of method, while in thinking about philosophical problems they use another type of method? It is not! Amongst them, the problems they study all constitute one continuous sequence of levels of abstraction, while the thinking methods they employ also stand in mutual continuity with each other. Moreover, it is not the case that philosophers do not require any evidence. Their evidence comes from common sense, intuition, thought experiments, as well as various other scientific disciplines. According to Williamson's claim that "knowledge equals evidence", everything that is proved to be true can be adopted by philosophers and treated as evidence, and in turn, used in proving or disproving certain philosophical propositions. A philosophical theory must, therefore, become a sharable, communal resource. It must further rely on increasingly more well-defined concepts and views, more reliable reasons or evidence, unequivocal and explicit arguments, and strict inferential chains, and less on privatised intuitions, private experience, impressions or even certain forms of "secret code", "cryptic language" or "instant enlightenment".

Furthermore, in philosophy, there is also progress. The progress of philosophy is reflected first of all methodologically: to exhaustively explain what can be explained while trying to explain that which, for the time being, cannot be explained as much as it can be clearly understood. Exactly under such spiritual guidance, in contemporary philosophy, there emerged many new branches, such as philosophy of language, philosophy of mind, philosophy of logic, political philosophy and so on. In comparison to the former branches of philosophy, these new branches were able to conduct a more meticulous and in-depth exploration of relevant issues, and hence also provide more reasonable insights or theories. This is a good example of progress in philosophy. As for the "truth", on which philosophers rarely reach complete consensus, this phenomenon appears as a result of the complexity and generality of the subject matter of philosophy. In other similar kinds of science (such as the theory of evolution of species, molecular biology, quantum mechanics, cosmology, theoretical economics, management studies, sociology, humanities, political science, etc.), the situations are similar. Even though the consensus in these fields and disciplines of science is scarce and divergence represents their normal state, we cannot claim that they are not sciences.

Objection 2: Science places emphasis on "what is", that is how things really are, while philosophy places emphasis only on how things ought to be, involving concepts such as norms, values, ideals, and visions of the world.

This objection was posed to me by Professor Yuan Zushe in a private conversation that took place in the framework of the discussion on "How to Do Philosophy – Meta-philosophy and Philosophical Methodology" conducted in November 2019 at Peking University.

Reply: This objection is based on the notion of the schism between facts on one side and values and norms on the other, as implicated by Hume's "is-ought" problem. However, I do not believe that such a schismatic gap exists. In my opinion, it is rather the outcome of misinterpretation, a sort of conceptional fabrication. Why do we "have to" and "ought to"? This constitutes the problem of "the source of normativity". Do our "ideals" or "visions" require any kind of factual foundation? Here, it is necessary for us to return to my aforementioned position: we are unable to create a comprehensive understanding that would completely mirror this world. We understand what we have to understand, and what we are able to understand. Our desires, requirements, and interests decide what we will set out to understand about this world. Our cognitive and operative capacities, as well as cognitive resources, predetermine the ways in which we set out to do so. As a major corollary to this argumentation, "facts" are fragments torn out and isolated from the matrix of the world in the process of a cognitive undertaking driven by our fixed cognitive intents and by means of fixed cognitive means. They involve evident traces of the cognitive subjects, and to a certain degree, represent a kind of cognitive construction. Moreover, there exists no such thing as purely objective facts. Then, why do we "must" and "ought to"? This is co-determined by three groups of major factors: the first group includes our requirements, desires, and goals, of which desires and goals generate our requirements, while the strength of our desires usually hinges on the intensity of our needs and these needs have an objective basis. The second group involves the currently existing practical conditions; because, frequently, there exist great disparities between our needs and the current situation, we often have the intention to change the situation into different circumstances (vision), which are more able to satisfy our needs and desires. And the third group consists of the pertinent scientific principles: confronted with the current situation, it is in accordance with relevant scientific principles that we can establish what and how we "must" or "ought to" do to satisfy our needs, reach our goals or realise our visions. There must, therefore, exist a common adhesive, namely our needs, interests, hopes and concerns, which are binding together "facts" with "values" and "norms", spanning as a bridge between them. Scientific theories can produce relevant norms, and also possess their

own pursuit of values, while philosophical theories, on the other hand, also require a factual basis from which they subsequently derive their "values", "norms", and "visions". In this regard, between philosophy and science, there exist no distinct ruptures.

To save some space, in this article I was only able to present a brief overview of my pertinent standpoints and arguments. I will give a more detailed account of my views on the matter in another paper, in which I shall provide systematic arguments for my positions and present the more essential replies to possible objections.

Finally, I would like to conclude this article with the following words from Timothy Williamson's book *Doing Philosophy*: "As a systematic, methodical form of inquiry, philosophy is a science, but not a natural science." (Williamson 2018: 121)

References

Brown, J. R., Fehige, Y. (2019) Thought Experiments, in: *The Stanford Encyclopedia of Philosophy* (Winter 2019 edition), ed. by Zalta, E. N., https://plato.stanford.edu/entries/thought-experiment/.

Chen, B. (1997) [In Chinese] The Value of Analytic Philosophy, *Social Science in China*, 4, 63–73.

Chen, B. (2010) [In Chinese] Focusing on Philosophical Problems and Taking Participation in Contemporary Construction of Philosophy, *Academic Journal of Jinyang*, 4, 12–20.

Chen, B. (2017a) [In Chinese] Two Ways of Conducting Philosophical Research: Interpretation and Innovation), *China Social Science Review*, 1, 58–68.

Chen, B. (2017b) [In Chinese] "Taking Fact as Basis" or "Taking Evidence as Basis": Philosophical Reflection on Scientific Research and Judicial Trial, *South China Quarterly,* 1, 22–38.

Chen, B. (2018a) [In Chinese] Eight Major Internal Debates in Analytic Philosophy, *Journal of Peking University (Philosophy and Social Science)*), 2, 72–83.

Chen, B. (2018b) [In Chinese] Objective Fact or Epistemic Construction: Russell and Jin Yuelin on Fact, *Academic Monthly*, 10, 17–29.

Chen, B. (2019) The New Correspondence Theory of Truth without the Concept of Fact, I – II), *Jianghuai Tribune*, 1(5), 5–12; 2(6), 120–126.

Einstein, A. (2009 [1931]) *Einstein on Cosmic Religion and Other Opinions and Aphorisms,* Mineola.

Emerson, R. W. (2012) *The Annotated Emerson*, ed. by Mikics, D.; foreword by Lopate, P., Cambridge MA.

Epstein, B. (2018) Social Ontology, *The Stanford Encyclopedia of Philosophy*, ed. by Zalta, E. N., https://plato.stanford.edu/archives/win2021/entries/social-ontology/.

Frances, B., Matheson, J. (2019) Disagreement, in: *The Stanford Encyclopedia of Philosophy* (Fall 2019 edition), ed. by Zalta, E. N., https://plato.stanford.edu/archives/fall2019/entries/disagreement/.

Goldman, A., O'Connor, C. (2019) Social Epistemology, *The Stanford Encyclopedia of Philosophy*, ed. by Zalta, E. N., https://plato.stanford.edu/archives/win2021/entries/epistemology-social/.

Harman, G. H. (1965) The Inference to the Best Explanation, *Philosophical Review,* 74(1), 88–95.

Hong, Q. (1989) [In Chinese] *Logical Positivism*, Beijing.

Hume, D. (1969) *A Treatise of Human Nature*, Harmondsworth.

Joll, N. (2010) Metaphilosophy, *Internet Encyclopedia of Philosophy*, https://www.iep.utm.edu/con-meta/.

Kant, I.. (2015 [1788]) *Critique of Practical Reason,* translated and edited by Gregor, M., revised introduction by Reath, A., Cambridge.

Kui, Y. (2007) [In Chinese] Two-Dimensional Semantics and Its Concept of Epistemic Intension, *Philosophical Trends*, 3, 52–59.

Lipton, P. (2004) *Inference to the Best Explanation,* 2nd edition*,* London/New York.

MacFarquhar, L. (2011) How to be Good, *The New Yorker,* August 29, 2011, https://www.newyorker.com/magazine/2011/09/05/how-to-be-good.

Machuca, D. E. ed. (2013) *Disagreement and Skepticism*, New York.

Magee, B. (1978) *Men of Ideas – Some Creators of Contemporary Philosophy*, London.

Marx, Karl (2009) [In Chinese] *Selected Works of Marx and Engels,* vol. 5, Beijing.

Peirce, C. S. (1934) *Collected Papers of Charles Sanders Peirce*, vol. V, ed. by Hartshorne, C., Weiss, P., Cambridge MA.

Peirce, C. S. (1992) *The Essential Peirce,* vol. 1, Bloomington.

Quine, W. V. O., Ullian, J. S. (1978) *The Web of Belief*, 2nd edition, New York.

Quine, W. V. O. (2013) *Word and Object,* new edition, Cambridge MA/London.

Rawls, J. (2001) *Justice and Fairness: A Restatement,* Cambridge MA.

Schick, T., Vaughn, L. (2019) *Doing Philosophy: An Introduction through Thought Experiments,* 6th edition, London/New York.

Searle, J. (2008) Language and Social Ontology, *Theory and Society*, 37(5), 443–459.

Stegmüller, W. (1977) The Problem of Induction: Hume's Challenge and the Contemporary Answers, in: Stegmüller, W., *Collected Papers on Epistemology, Philosophy of Science and History of Philosophy,* vol. II, Dordrecht, 68–136.

Su, D. (2019) [In Chinese] Problems, Classical Scriptures, and Life – On the Three Major Fulcrums of Philosophical Education, *Journal of Hubei University (Philosophy and Social Science)*, 6, 64–71.

Williamson, T. (2007) *The Philosophy of Philosophy*, New Jersey.

Williamson, T. (2016) Abductive Philosophy, *The Philosophical Forum*, 47(3–4), 263–280.

Williamson, T. (2017) Model-Building in Philosophy, in: Blackford, R., Broderick, D. (eds.) *Philosophy's Future: The Problem of Philosophical Progress*, New York, 159–173.

Williamson, T. (2018) *Doing Philosophy: From Common Curiosity to Logical Reasoning*, Oxford/New York.

Williamson, T. (2019) Armchair Philosophy, *Epistemology and Philosophy of Science,* 56(2), 19–25.

Zovko, M.-É., Zovko, J. (2012) Metaphysical Character of Philosophy, in: Pestana, M. (ed.): *Metaphysics*, Rijeka, 9–44.

Zovko, J. (2014) The Human Sciences and Moral Judgment, in: Floistad, G. (ed.): *Ethics or Moral Philosophy. Contemporary Philosophy,* vol. 11, Heidelberg/New York/London, 131–143.