

The Most Urgent Task of Philosophy Today¹

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1. Introduction

According to Michael Friedman,

one of the central facts of twentieth-century intellectual life has been a fundamental divergence or split between the “analytic” philosophical tradition that has dominated the English speaking world and the “continental” philosophical tradition that has dominated the European scene.²

This divergence has had very negative implications for philosophy, so the most urgent task of philosophy today is to start “a reconciliation of the analytic and continental traditions.”³

That this is the most urgent task of philosophy today is the opinion of several people. Thus, Michael Dummett says that “the gravest obstacle to communal progress in philosophy has been the gulf that has opened between different traditions.”⁴ Therefore, the most urgent task of philosophy today is to remove this obstacle. At present, “the prospects for a reconciliation between analytic philosophy and the hermeneutic and phenomenological traditions are better than they were forty years ago.”⁵ So, there is “some hope that, in the coming decades, the gulf between divergent philosophical traditions may gradually be bridged.”⁶

But to say that the most urgent task of philosophy today is to begin a reconciliation of the analytic and continental philosophical traditions appears problematic. For, such reconciliation would only bring together two weaknesses.

Indeed, on the one hand, analytic philosophy has limited philosophy’s field of investigation to ever more minute and insignificant issues. Then, it is implausible that, by concerning itself with ever more minute and insignificant issues, analytic philosophy could lead to any significant advancement in our understanding of the world.

On the other hand, continental philosophy has advanced the claim that philosophy has access to regions of being that are inaccessible to science. Thus, Heidegger says that, with its “insistence on what is demonstrable,” science blocks “the way to what-is.”⁷ Only philosophy opens the way to what-is, because “philosophy is

the knowledge of the essence of things.”⁸ But this claim is unrealistic, because there is no special source of knowledge which is available to philosophy but not to science. The claim also contrasts with the reality of continental philosophy, which is a mixture of verbal emptiness and confused rehashes of positions of philosophers of the past, from the Greeks to Hegel and Dilthey. Then, it is implausible that this kind of philosophy could lead to any significant advancement in our understanding of the world. For example, as regards the latter, Dilthey ends up asserting that in philosophy there is “an ever growing experience” of “the impossibility of combining objectively what is given in the various attitudes—hence resignation.”⁹

Because of the weaknesses of analytic and continental philosophy, philosophy today appears ever more irrelevant. By this, I mean that it deals with questions of interest only to academics who work in some little corner of philosophy, not to those who work in other corners of philosophy, nor to those who work in other fields or to educated people in general. Therefore, the most urgent task of philosophy today is not to bring together two weaknesses, those of analytic and continental philosophy, but to give an indication as to the direction in which to proceed in order to rescue philosophy from irrelevance. To give such an indication is itself relevant because, as Seneca says, “no wind is favourable for the sailor who does not know which port he wants to make for” (Seneca, *Ad Lucilium Epistulae morales*, LXXI, 3).

In my opinion, the direction in which to proceed is to bring back a view of philosophy which was formulated at the origins of philosophy as a discipline but that continental and analytic philosophy have both abandoned: the view that philosophy is acquisition of knowledge. Not only they have abandoned this view, but have also theorized that it must be abandoned.

Thus, Wittgenstein says that the word ‘philosophy’ is something “not beside the natural sciences,” for “philosophy gives no pictures of reality.”¹⁰ Indeed, in philosophy “there are no great essential problems in the sense of science.”¹¹ In it “we may not advance any kind of theory” and “must do away with all explanation,” indeed the “problems are solved, not by giving new information, but by arranging what we have already known.”¹² It is “essential to” philosophical “investigation that we do not seek to learn anything new by it.”¹³

Dummett says that philosophy “is indeed concerned with reality, but not to discover new facts about it,” it only “seeks to improve our understanding of what we already know. It does not seek to observe more, but to clarify our vision of what we see.”¹⁴ Thus “philosophy does not advance knowledge, it clarifies what we already know.”¹⁵

Heidegger says that

“philosophy” has been in the constant predicament of having to justify its existence before the “sciences.” It believes it can do that most effectively by elevating itself to the rank of a science.¹⁶

But this way of conceiving philosophy “is the abandonment of the essence of thinking.”¹⁷ For, in this way

thinking is judged by a standard that does not measure up to it. Such judgment may be compared to the procedure of trying to evaluate the essence and powers of a fish by seeing how long it can live on dry land.¹⁸

In fact, by assuming that philosophy must be like the sciences, “for a long time now, all too long, thinking has been stranded on dry land.”¹⁹

Gadamer says that “the independence of science from philosophy means at the same time” its incapacity “to give an account of what itself means within the totality of human existence.”²⁰ In order to give such an account, it is necessary to “go beyond the task of an immanent justification of the doing of science.”²¹ Therefore, philosophy is “concerned to seek the experience of truth that transcends the domain of scientific method,” that is, “experience in which a truth is communicated that cannot be verified by the methodological means proper to science,” as are “the experiences of philosophy, of art, and of history itself.”²²

On the contrary, philosophy must be acquisition of knowledge, in the same sense as science, if it wants to be neither the solution of artifactual puzzles of no enduring significance, like analytic philosophy, nor a mixture of verbal emptiness and confused rehashes of positions of philosophers of the past, like continental philosophy.

In this essay, first, I briefly describe the view that philosophy is acquisition of knowledge.²³ Then second, I answer some objections against it and examine the alternative view of philosophy as a search for understanding put forward by Peter Hacker in several books. Third and finally, I conclude that the view that philosophy is a search for understanding is inadequate, and not a viable alternative to the view that philosophy is knowledge acquisition.

The view that philosophy is acquisition of knowledge does not exclude other views of philosophy that might also rescue it from irrelevance. Such is the case with the

view of philosophy put forward by Robert Hanna.²⁴ The question is, however, to what extent these views of philosophy might answer the charges, raised by many contemporary scientists, that philosophy has lost any relevance it once had.²⁵

2. The View that Philosophy is Acquisition of Knowledge

The view that philosophy is acquisition of knowledge dates back to the beginning of philosophy as a discipline. Indeed, Plato explicitly said that “philosophy is acquisition of knowledge [*ktesis epistemes*].”²⁶

After Plato, many people have reaffirmed this view.

For example, Descartes says that “[t]his word ‘philosophy’ means the study of wisdom,” where

by ‘wisdom’ is meant not only prudence in everyday affairs, but also a perfect knowledge of all things that mankind is capable of knowing, both for the conduct of his life, and for the conservation of his health, and for the discovery of all the arts.²⁷

Indeed, “to try to acquire” this kind of knowledge “is properly termed philosophizing.”²⁸

Kant says that “[p]hilosophy” is “either cognition from pure reason or rational cognition from empirical principles.”²⁹ Therefore, “without cognitions one will never become a philosopher.”³⁰ In addition to cognition, philosophy requires that one “sees how all cognitions fit together in an edifice, in rule-governed ways, for such ends as are suited to humanity.”³¹ Thus philosophy requires wisdom, since “wisdom is the relation” of a cognition “to the essential ends of humanity.”³² Conversely, wisdom requires knowledge and science, because “wisdom without science is a silhouette of a perfection to which we will never attain.”³³

Of course, the supporters of the view that philosophy is acquisition of knowledge may have different views as to what “acquisition of knowledge” means. For example, elsewhere I have maintained that “acquisition of knowledge” means “acquiring knowledge by the analytic method.”³⁴ Such knowledge is *a priori* not in Kant’s sense that it occurs “absolutely independently of all experience.”³⁵ Rather, it is *a priori* in the sense that it is based on hypotheses that go beyond experience. Knowledge that is *a priori* in this sense is not certain, and yet it is indispensable for the possibility of

experience, because all sort of knowledge, including the perceptive one, is based on hypotheses.³⁶

In any case, that philosophy is acquisition of knowledge entails that philosophy is continuous with the sciences—both the natural and the human sciences—in the sense that it aims at a kind of knowledge which is not essentially different from scientific knowledge and is not limited to any area. Therefore, the aims of philosophy are not essentially different from those of the sciences, and philosophy is an activity which is not essentially different from the sciences.

The only difference between philosophy and the sciences is that philosophy is concerned with questions which go beyond the present sciences. The present sciences are what we already know, whereas philosophy aims at acquiring knowledge about what we do not yet know—not about open questions of the present sciences, but about questions that are open questions of none of the present sciences

Since philosophy is concerned with questions which go beyond the present sciences, in order to deal with them it must venture into unexplored paths. Therefore, philosophy moves on a magmatic ground, and is always exposed to the risk of failure. But, when successful, it is also capable of surprising developments. Just like those thanks to which, from the seventeenth century, through hazardous though sometimes fortunate moves, philosophy has given birth to new sciences.

3. Hacker's Objections

Against the view that philosophy is acquisition of knowledge, several objections have been raised. Most of them are implicit in Hacker's works.³⁷

Hacker observes that, "throughout its history philosophy has" been "held to be a participant in the quest for knowledge – a cognitive discipline."³⁸ But this contrasts with the fact that, as a cognitive discipline, philosophy is poor. For, "there is no general, agreed body of philosophical knowledge," and moreover, philosophy does not seem to have an object of study of its own, so "it appears to be a subject in search of a subject matter."³⁹ Indeed, "conceived as a part of our quest for knowledge, philosophy, unlike the sciences, has" very "little to show for more than two thousand years of endeavour."⁴⁰ Then, "how is the poverty of philosophy, construed as a cognitive discipline, to be explained?"⁴¹

One explanation of the poverty of philosophy is the one put forward by the view of “philosophy as the midwife of the sciences.”⁴² According to it, “once questions are sufficiently sharply formulated to be answerable, they are handed over to an independent science, which then contributes to the extension of human knowledge.”⁴³ Thus, “many questions that were opened by philosophers were subsequently handed over to scientists,” for example, physics “became independent of philosophy in the seventeenth” century, and “psychology broke free of philosophy at the end of the nineteenth century.”⁴⁴ According to this explanation, then, the poverty of philosophy as a cognitive discipline is only apparent.

Against this explanation, however, Hacker argues that it “is misleading, for four reasons.”⁴⁵

First,

[a]lthough independence was achieved by such sciences, new areas of philosophical investigation were thereby generated, e.g., philosophy of physics or philosophy of the psychological sciences.”⁴⁶

These new areas of philosophical investigation may contribute to enlighten the corresponding sciences, and “it would be misguided to suppose that questions in the philosophies of the special sciences remain philosophical only because they are insufficiently clearly understood to be handled by a new metascience.”⁴⁷ That is, it would be misguided to suppose that they remain philosophical only because they are insufficiently clearly understood to give rise to new sciences.

Second, “although these sciences achieved independence, it would be mistaken to suppose that” thereby “they achieved freedom from conceptual confusion.”⁴⁸ On the contrary, “the sciences (and to a lesser degree mathematics), in our times, are the primary source of misguided metaphysics—which it is the task of philosophy to curb, not to encourage.”⁴⁹ Philosophy “is a Tribunal of Reason, before which scientists and mathematicians may be arraigned for their transgressions.”⁵⁰ It “can contribute in a unique and distinctive way to understanding in the natural sciences and mathematics,” because “it can clarify their conceptual features, and restrain their tendency to transgress the bounds of sense.”⁵¹

Third,

[t]he birth of an independent science does not free philosophy from a host of questions which have always been on the philosophical agenda associated with the subject matter of that special science."⁵²

For example, it does not free philosophy from "such question as: What distinguishes substances from properties?"⁵³ For, between philosophy and science there is a categorial gulf that is "as deep as any categorial gulf."⁵⁴ Thus, on the one hand, "no philosophical question can be answered by scientific enquiry," and, on the other hand, "no scientific discovery can be made by philosophical investigation."⁵⁵

Fourth, "[t]he suggested explanation is implausible when we turn to practical philosophy (in Kant's sense of the term)—to ethics, political and legal philosophy."⁵⁶ For,

moral, legal, and political philosophy do not give birth to new sciences, but contribute to the emergence of new moral, legal, and political distinctions, principles and constitutional arrangements.⁵⁷

From this Hacker concludes that "the poverty of philosophy qua cognitive discipline cannot be explained as a consequence of the fact that once knowledge is achievable the subject becomes a science"⁵⁸.

Hacker presents the above four reasons as objections against the view that philosophy is the midwife of the sciences, not against the view that philosophy is acquisition of knowledge. But they are implicitly also objections against the view that philosophy is acquisition of knowledge.

Admittedly, the two views in question are not exactly the same. For, on the one hand, the view that philosophy is the midwife of the sciences considers the birth of new sciences from philosophy not as a process that philosophy promotes and to which it works, but as a loss it suffers. Thus, Austin says that, "in the history of human inquiry, philosophy has the place of the initial central sun, seminal and tumultuous," that from time to time "throws off some portion of itself to take station as a science, a planet, cool and well regulated."⁵⁹ This "happened long ago at the birth of mathematics, and again at the birth of physics," it has also happened in the last century "with the birth of the science of mathematical logic," and could happen once again in the next century with the birth of a "science of language," in which case we will throw out a further part of philosophy "by kicking it upstairs."⁶⁰

On the other hand, the view that philosophy is knowledge acquisition considers the birth of new sciences from philosophy as a process that philosophy promotes and at which it works. For, through it, philosophy carries out its task to be a tool for acquiring knowledge about everything—a task that will last as long as the human species.

Nevertheless, both the view that philosophy is acquisition of knowledge and the view that philosophy is the midwife of the sciences assume that the poverty of philosophy as a cognitive discipline is only apparent, and Hacker's objections are aimed at this assumption. Therefore, his objections may be considered to be also objections against the view that philosophy is acquisition of knowledge.

4. Replies to Hacker's Objections

Hacker's objections are unjustified in several respects. Before analysing them, I must preliminarily examine his assumption that philosophy as a cognitive discipline is poor.

The assumption is unwarranted. Admittedly, as Kant says, philosophers "seem, hitherto, to have accomplished scarcely anything at all with their endless rolling of their Sisyphean stones."⁶¹ For, "every philosopher erects his own building on the ruins of another."⁶² But this is because every philosopher tends to give an overall picture of the world, and the picture will be different as knowledge and events evolve in the course of history. Paraphrasing Heraclitus, it can be said that the world "is new each day."⁶³ Since philosophers tend to give an overall picture of the world and the world changes all the time, this gives the impression that the philosophical work is a Sisyphean enterprise.

Moreover, what is the point of saying that philosophy, conceived of as a part of our pursuit of knowledge, has very little to show for more than two thousand years of endeavour? To begin with, philosophy has to show all the sciences to which it has given rise.

In addition, the advancement of knowledge essentially depends on the advancement of the methods of knowledge. As Frege observes, "a development of method, too, furthers science," and "all great steps of scientific progress in recent times have had their origin in an improvement of method."⁶⁴ Now, philosophy has essentially contributed to the advancement of the methods of knowledge from its very origin. Thus, Plato first formulated the analytic method, a method of discovery which has been the main research method of Greek mathematicians and is used also today.⁶⁵ Aristotle first formulated the analytic-synthetic method, which has been the method behind the

new developments in mathematics in the early modern age, notably Viete's *Ars Analytica* and Descartes's *Géométrie*, and has also been the method Galileo and Newton adopted as the method of modern science.⁶⁶ Moreover, Aristotle first formulated the axiomatic method, which has been the method Euclid adopted as a basis for his *Elementa* and, since then, has been the main method of presentation of mathematics.

This shows that Hacker's assumption that philosophy as a cognitive discipline is poor is unwarranted.

I will now analyse Hacker's objections.

First, Hacker objects that, although the sciences that originated from philosophy became independent of it, new areas of philosophical investigation were thereby generated, such as the philosophy of physics and the philosophy of the psychological sciences. Moreover, the investigations in these areas have an independent philosophical value, not only because they are insufficiently clearly understood to be handled by a new science.

This objection is based on the assumption that the philosophy of physics and the philosophy of the psychological sciences are new philosophical disciplines that have originated in the modern age from the birth of physics and psychology as sciences. But this assumption is unfounded, because the philosophy of physics and the philosophy of the psychological sciences have been an integral part of philosophy since antiquity, as is clear from the fact that Aristotle devoted two of his most important works to them, that is, *Physica* and *De anima*, respectively.

However, for Aristotle, the philosophy of physics and the philosophy of the psychological sciences were not separate disciplines but part of a general philosophy. On the contrary, the philosophy of physics and the philosophy of the psychological sciences, as Hacker and analytic philosophy intend them, are separate autonomous disciplines, not parts of a general philosophy.

The philosophy of physics and the philosophy of the psychological sciences, intended as separate autonomous disciplines, have the typical defects of analytic philosophy. They concern themselves with ever more minute and insignificant issues, and are incapable of making any significant contribution to our knowledge of the world. This is apparent from the fact that many scientists consider them insignificant.

For example, as regards the philosophy of physics, the physicist Lawrence Krauss says: "Science progresses and philosophy doesn't," and "the worst part of

philosophy is the philosophy of science; the only people” who “read work by philosophers of science are other philosophers of science. It has no impact on physics whatsoever.”⁶⁷

That the philosophy of physics and the philosophy of the psychological sciences, intended as separate autonomous disciplines, are incapable of making any significant contribution to our knowledge of the world, depends on the fact that it is impossible to tackle philosophical problems sectorially, independently of a general approach to knowledge. Sectorial philosophical problems are part of the general problem of knowledge and depend strictly on it, therefore they are incomprehensible if treated independently of a general approach to knowledge.

Second, Hacker objects that, although the sciences that originated from philosophy became independent of it, it would be mistaken to suppose that thereby they achieved freedom from conceptual confusion. On the contrary, the sciences, and to a lesser degree mathematics, contain conceptual confusions, and it is a task of philosophy to help get rid of them. Even if, unlike the sciences, philosophy cannot contribute to our knowledge of the world, nevertheless, through disciplines such as the philosophy of physics, the philosophy of the psychological sciences, or the philosophy of mathematics, philosophy can eliminate conceptual confusions from the sciences and mathematics, thus removing obstacles to our understanding of the world.

This objection is based on a view that, by referring to Locke, may be called the conception of the philosopher as an under-labourer of the sciences.

Indeed, Locke says: “In an age that produces such masters as the great Huygenius and the incomparable Mr. Newton, with some others of that strain,” for the philosopher “it is ambition enough to be employed as an under-labourer in clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge,” which is “cumbered with the learned but frivolous use of uncouth, affected, or unintelligible terms, introduced into the sciences.”⁶⁸ Indeed, “vague and insignificant forms of speech, and abuse of language, have so long passed for mysteries of science” that to free science from them will be “some service to human understanding.”⁶⁹

The conception of the philosopher as an under-labourer of the sciences has been inherited by analytic philosophy. But the claim that the philosopher can eliminate conceptual confusions from the sciences and mathematics, so removing obstacles to our understanding of the world, is unwarranted. Scientists do not have to wait for philosophers to eliminate their conceptual confusions. This is an integral part of their work, and they are much more competent for the task than philosophers, who do not

have the necessary qualifications. This has been underlined by several scientists. For example, Weinberg says:

I know of no one who has participated actively in the advance of physics in the postwar period whose research has been significantly helped by the work of philosophers; [at most] the work of some philosophers helps us to avoid the errors of other philosophers.⁷⁰

Moreover, a philosopher conceived of as an under-labourer of the sciences could not give rise to new sciences. At best, if he had the necessary qualifications, he could try to clean the ground of the existing sciences, without formulating new ideas about questions that the existing science cannot deal with.

Third, Hacker objects that, although the sciences that originated from philosophy became independent of it, this has not freed philosophy from a host of questions which have always been on the philosophical agenda, associated with the subject matter of the special science in question. For example, although physics became independent of philosophy, this did not free philosophy from the question of establishing what distinguishes substances from properties. For, between philosophy and science there is a categorical gulf. Thus, on the one hand, no philosophical question can be answered by scientific enquiry, and, on the other hand, no scientific discovery can be made by philosophical investigation. This claim complements Wittgenstein's claim that, on the one hand, no scientific "discovery can advance" philosophy, and, on the other hand, philosophy cannot advance knowledge because philosophy "leaves everything as it is."⁷¹

This objection is unwarranted. On the one hand, the claim that no philosophical question can be answered by scientific enquiry is disproved by the fact that, since antiquity, many philosophical problems concerning the world or man have been answered by the sciences. On the other hand, the claim that no scientific discovery can be made by philosophical investigation is disproved by the fact that philosophy has given rise to several new sciences and, through them, to many scientific discoveries.

As concerns, in particular, the question of establishing what distinguishes substances from properties, such a distinction was introduced by Aristotle against Democritus' atomic hypothesis that reality "consists of small substances infinite in number."⁷² Such small substances "are unstable and travel about in the void," and, "as they travel about, they collide and entangle with one another."⁷³ Their properties are a result of these collisions and entanglements. Against Democritus's atomic hypothesis, Aristotle argues that "either there is no natural motion anywhere for anything, or, if

there is, there is no void."⁷⁴ So, if there are atoms and void, atoms cannot move in the void. As an alternative to Democritus's atomic hypothesis, Aristotle formulates the hypothesis that reality consists of substances, where "substance is that of which all other things are predicated, while it itself is predicated of no other thing."⁷⁵ While the atoms hypothesized by Democritus are elements of bodies—where an element is "what into which a thing is divided and that is present in the thing as its matter, for example, in the case of the syllable *ba*, *a* and *b*"—substance "is not an element but a principle."⁷⁶ Substances differ from properties because "substance is primary."⁷⁷ This means that substances "can exist without other things, while these other things cannot exist without them."⁷⁸ Therefore, what distinguishes substances from properties is that substances can exist without properties, while the converse does not hold.

This explanation of the distinction between substances and properties, however, is not plausible. For, it implies that, while properties, for example shape, colour and weight, can exist only as predicates of a substance, conversely sensible substances, as physical objects, can exist without having any property, for example, without having any shape, colour, or weight. But there is no evidence for this. The developments of science in the modern age have shown that Democritus's atomic hypothesis is plausible while Aristotle's substantialist hypothesis is not plausible, so even Aristotle's distinction between substances and properties is not plausible. The properties of a thing are determined by the atoms of which it is constituted, by their arrangements and interactions, therefore atoms cannot exist without having any property. Since this conclusion is a result of the developments of science in the modern age, this shows that the claim that no philosophical question can be answered by scientific enquiry is unwarranted.

Fourth, Hacker objects that the explanation according to which, once questions are sufficiently sharply formulated as to be answerable, they are handed over to an independent science, is not plausible when we turn to practical philosophy. Specifically, it is not plausible when we turn to ethics, political and legal philosophy, because the latter do not give birth to new sciences. Therefore, the view that philosophy is acquisition of knowledge does not account for moral, legal, and political philosophy.

This objection is based on the assumption that moral, legal, and political philosophy are about values, while knowledge is about facts, and values and facts have nothing to do with each other. But this assumption is unwarranted because, on the one hand, values depend on what we know about the world and may change when our knowledge about the world changes, so values depend on facts. On the other hand, the selection of the scientific problems to work on is guided by values, so the selection of facts depends on values. Therefore, it is unjustified to say that the view that philosophy

is acquisition of knowledge could not apply to moral, legal, and political philosophy since the latter are about values while knowledge is about facts, and values and facts have nothing to do with each other. Like science, also moral, legal, and political philosophy are acquisition of knowledge, although not of theoretical knowledge but of practical knowledge, that is, knowledge as a means to action.

5. The View that Philosophy is a Search for Understanding

As an alternative to the view that philosophy is knowledge acquisition, Hacker puts forward the view that philosophy is a search for understanding. This is “a conception of philosophy that is wholly inspired by Wittgenstein,” although it “is not quite the same as his.”⁷⁹ In particular, Hacker believes that “Wittgenstein’s suggestion that philosophical problems and conceptual confusions arise only when language ‘is idling’” is “incorrect and shown to be so in the sciences, in public affairs, and in the thoughts and reflections of Everyman.”⁸⁰

The view that philosophy is a search for understanding can be described as consisting of the following points.

First, “[p]hilosophy is not a contribution to human knowledge.”⁸¹ It does not provide any new knowledge, “indeed, one might say, with only a little exaggeration, that in philosophy, ‘If it’s news, it’s wrong’.”⁸² Philosophy makes no progress: “progress is the form of science, but not of philosophy.”⁸³ For, philosophy is not “engaged, like” the “sciences, in the pursuit of knowledge of the world.”⁸⁴ Unlike the sciences, philosophy is not a contribution to human knowledge, “but to human understanding.”⁸⁵ It achieves understanding by “conceptual analysis,” which “articulates connections of compatibility or incompatibility, implication or independence, between concepts.”⁸⁶ Conceptual analysis does not require new knowledge; in order to carry it out “one need only assemble and marshal what one already knows.”⁸⁷ By means of conceptual analysis, philosophy is able “to solve or dissolve conceptual unclarity or misunderstanding, and to answer conceptual questions.”⁸⁸ The concepts that philosophy is able to clarify consist first of all of the “ordinary ones, familiar to any mature speaker of the language.”⁸⁹ But they also consist of the concepts of the sciences and mathematics. Philosophy cannot

introduce novel concepts for the purposes of other disciplines (e.g., for mathematics, physics or biology) – for that is not its business, [but]... may show other disciplines what is awry with their concepts or with their use of their concepts.⁹⁰

For example, philosophy clarifies the nature of non-euclidean geometries showing that, contrary to a widespread opinion, they “are not alternative theories of space but alternative grammars for the description of spatial relationships.”⁹¹

Second, the conceptual analysis by which philosophy achieves understanding is an investigation into “the uses of words, phrases, and sentences.”⁹² For, “to possess a concept is to have mastered the use of a word or phrase.”⁹³ And

there is no way to characterize a concept other than by describing the relevant features of the uses of expressions that express that concept or belong to the category of concepts it subsumes.⁹⁴

The aim of an investigation into the uses of words, phrases, and sentences is to determine “their correct use,” not “their use in making true judgments” but “their use in making true or false judgements.”⁹⁵ However, “we do not need to engage in sociolinguistic surveys to establish how the expressions that concern us are used.”⁹⁶ What is needed to this purpose is only “one’s competence as a mature language-user (aided by the reminders of the *Oxford English Dictionary* and by the etymology and history of words it provides).”⁹⁷ For, an investigation into the uses of words, phrases, and sentences is an investigation into the rules for such uses, and the latter are “identical with rules for the uses of words in a dictionary (e.g. ‘A vixen is a female fox’),” although “they are not crafted for lexicographical purposes.”⁹⁸ Such an inquiry is independent of the “differences between languages,” because “a philosophical investigation into the use of a word is an investigation into the concept expressed.”⁹⁹ And a concept is independent of the differences between languages. For example, a conceptual analysis of the concept of knowledge is an “investigation into the use of ‘know’” and such an investigation “will yield much the same results as a philosophical investigation into the uses of ‘wissen’ and ‘kennen’.”¹⁰⁰ For, “the investigation, whether conducted in English or in German, is an investigation into those features of usage that determine the common concept of knowledge.”¹⁰¹

Third, although a conceptual analysis by means of which philosophy achieves understanding is an investigation into the uses of words, phrases, and sentences, what philosophy is “ultimately interested in is the nature of things! So it is this that we should be investigating”¹⁰². While “the study of the nature of things, in one sense, belongs to the empirical sciences,” such study, “in another sense, belongs to philosophy.”¹⁰³ The latter studies the nature of things by conceptual analysis, because “to give such a conceptual analysis is to describe the nature of what is signified.”¹⁰⁴ This nature “is surely independent of the forms of natural languages, the logical adequacy of

which is to be judged precisely by the extent to which they mirror the nature of the things they describe."¹⁰⁵ The independence of the nature of a thing of the forms of natural languages depends on the fact that "the nature of something (that has a nature) consists of those attributes without which the thing would not be what it is."¹⁰⁶ But, although the philosophical investigation aims at the study of the nature of a thing thus intended, nevertheless it concerns "rules for the use of the words signifying things."¹⁰⁷ The rules determine the meaning of these words. For example, the study of the nature of red concerns the "rules for the use of the word 'red' that determine its meaning."¹⁰⁸ To know what red is amounts "to know what the word 'red' means."¹⁰⁹ And, to know this amounts

to know[ing] that red is a colour, that if any object is red it is extended, that red is darker than pink, that nothing can simultaneously be red all over and green all over, that red is seen and not heard, and so forth.¹¹⁰

All these are rules for the use of the word 'red' that determine its meaning and hence its nature.

6. Objections to the View that Philosophy is a Search for Understanding

Hacker's view that philosophy is a search for understanding is inadequate in several respects.

First, it is unwarranted to claim that, by conceptual analysis, philosophy can solve or dissolve conceptual unclarity or misunderstanding, and answer conceptual questions concerning concepts of the sciences and mathematics. As already pointed out above and underlined by the quotations from Krauss and Weinberg, philosophers do not have the necessary qualifications to answer these questions.

In particular, it is unwarranted to claim that philosophy clarifies the nature of non-euclidean geometries by showing that, contrary to a widespread opinion, non-euclidean geometries are not alternative theories of space but alternative grammars for the description of spatial relationships. If non-euclidean geometries were merely alternative grammars for the description of spatial relationships, then there would have been no urge to formulate them. On the contrary, their creators, from Lobatchevsky to Riemann, came to formulate them because they felt that Euclidean geometry was totally inadequate to deal with the physical space and new geometries were required to that aim. For example, Riemann came to formulate his elliptic geometry because he felt that Euclidean geometry was totally inadequate to deal with the infinitely small, and a new

geometry was required to that purpose. He was moved by the conviction that, if we do not assume “that bodies exist independently of position,” and hence that “the curvature is everywhere constant,” we “cannot draw conclusions from metric relations of the great, to those of the infinitely small.”¹¹¹ We

are therefore quite at liberty to suppose that the metric relations of space in the infinitely small do not conform to the hypotheses of ‘euclidean’ geometry; and we ought in fact to suppose it, if we can thereby obtain a simpler explanation of phenomena.¹¹²

It is also unwarranted to claim that, by conceptual analysis, philosophy can solve or dissolve conceptual unclarity or misunderstanding, and answer conceptual questions concerning ordinary concepts, familiar to any mature speaker of the language. For, conceptual analysis can only articulate connections of compatibility or incompatibility, implication or independence, between concepts. But many unclaritys or misunderstandings and conceptual questions concerning ordinary concepts do not depend on such connections between concepts, but rather on prejudices or lack of knowledge. They cannot be solved or dissolved merely by conceptual analysis because, as Hacker himself admits, conceptual analysis permits only to assemble and marshal what one already knows. On the contrary, dealing with such questions requires new knowledge about the world.

These claims are based on Hacker’s assumption that philosophy is not a contribution to human knowledge but to human understanding, and that it can reach understanding by conceptual analysis, which can only articulate connections of compatibility or incompatibility, implication or independence, between concepts. It is by this assumption that Hacker claims that, by means of conceptual analysis, philosophy can solve or dissolve conceptual unclarity or misunderstanding, and answer conceptual questions concerning both ordinary concepts and concepts of the sciences and mathematics.

Hacker has inherited this assumption not only from Wittgenstein but also from Ryle, who claims that philosophy does not aim “to increase what we know,” but only “to rectify the logical geography of the knowledge which we already possess.”¹¹³ It can rectify such geography only by determining the logical geography of concepts, where

to determine the logical geography of concepts is to reveal the logic of the propositions in which they are wielded, that is to say, to show with what other propositions they are consistent and inconsistent, what propositions follow from them and from what propositions they follow.¹¹⁴

However, contrary to Ryle's claim, in order to correct the knowledge which we already possess, it is by no means sufficient to determine the logical geography of concepts; more than that, it is necessary to acquire new knowledge on the world and to introduce new concepts capable of dealing with it.

Second, it is unwarranted to claim that philosophy can achieve understanding by an investigation into the use of words, phrases, and sentences. This claim assumes that philosophy does not aim to understand the world but only to understand words, phrases, and sentences about the world. Contrary to this assumption, philosophy aims to understand the world, and it is impossible to understand it merely by an investigation into the use of words, phrases, and sentences. To assume that it would be possible to understand the world in this way reduces philosophy to a mere disputation of words.

This has been strongly emphasized by many philosophers, from Plato to Hume and Kant. Thus Plato says that "things are to be learned and sought for, not from names, but from things themselves much more than from names."¹¹⁵ Hume says that there is always the risk

for philosophers to encroach upon the province of grammarians; and to engage in disputes of words, while they imagine, that they are handling controversies of the deepest importance and concern.¹¹⁶

Kant says that,

in matters over which one has quarreled over a long period of time, especially in philosophy, there has never been at the basis a quarrel of words but always a true quarrel over things.¹¹⁷

And "it is to be feared that in artificially fathoming *logomachia*," namely verbal disputes, "everywhere," one "falls prey to *logodaedalia*," namely quibbling over words, "beyond which nothing more disadvantageous can happen to philosophy."¹¹⁸ Thus Kant strongly emphasizes that "the work to be done in philosophy is not exhausted at the linguistic level."¹¹⁹

Indeed, it is absurd to think that we may come to understand the world through an investigation of the ordinary use of words, phrases, and sentences. For, the sciences change our image of the world time and time again, and the ordinary use of words, phrases, and sentences may only chase these unceasing changes, but will always lag

behind. An investigation into the ordinary use of words, phrases, and sentences, either ends up reducing problems about the world to verbal trivialities, or bases the investigation into problems about the world upon prejudices or mistaken opinions.

An example of investigation into of words, phrases, and sentences that ends up reducing problems about the world to verbal trivialities, is the dispute between Russell and Ryle concerning questions in the philosophy of perception. According to Ryle, in order to investigate such questions, one need only consider the ordinary use of words such as 'seeing' and give a linguistic form to such questions. Therefore, to Russell who had charged Ryle with ignoring what the sciences have to say about visual perception, Ryle replies: "Russell thought one ought to know a lot about, say, the rods and cones in the eye," but "I don't pretend to know anything about them, and, if I may speak a bit rudely, I don't want to."¹²⁰ The questions with which philosophy is concerned

are not questions of the para-mechanical form "How do we see robins?," but questions of the form, "How do we use such descriptions as 'he saw a robin'?"¹²¹

Thereby, however, Ryle reduces questions in the philosophy of perception to verbal trivialities.

An example of investigation into the ordinary use of words, phrases, and statements that bases the investigation into problems about the world upon prejudices or mistaken opinions, is the claim that one can understand what knowledge is through an investigation into the ordinary use of the word 'knowledge'.

Hacker claims that, in order to arrive at understanding what knowledge is it suffices one's competence as a mature language-user (aided by the reminders of the *Oxford English Dictionary* and by the etymology and history of words it provides). Against this claim, already Plato warned that, when someone asks you to tell him "what you think knowledge is," he does not want to know what the word 'knowledge' means but "what knowledge in itself is."¹²² Anyway, suppose that, disregarding Plato's warning, you interpret the request to say "what you think knowledge is" as a request to explain what the word 'knowledge' means, and, in order to answer this request, you look up the *Oxford English Dictionary*. There you will find two different definitions: "Knowledge (*Philos.*) true, justified belief; certain understanding, as opp. to opinion." This will by no means let you know what knowledge is. For, on the one hand, the definition of knowledge as true, justified belief conflicts with the fact that already Plato pointed out that such definition is untenable, and Meinong and Russell gave counterexamples to it. Moreover, all subsequent attempts to introduce corrections to such definition have turned out to be subject to counterexamples.¹²³ On the other hand,

the definition of knowledge as certain understanding, as opposed to opinion, conflicts with the fact that certain understanding does not exist in any field, including mathematics. By Gödel's second incompleteness theorem, we cannot say to have certain understanding of any mathematical concept, not even of such basic concept as that of natural number. For, our understanding of the concept of natural number is given by the axioms of Peano's second order arithmetic because they are categorical, that is, they have exactly one model up to isomorphism. But, to begin with, by Gödel's first incompleteness theorem, there is a sentence of Peano's second order arithmetic which is true but is unprovable from the axioms of Peano's second order arithmetic. Therefore, although the axioms of Peano's second order arithmetic are categorical, they do not give us a full understanding of the concept of natural number, and, once again by Gödel's first incompleteness theorem, no other axiom system could give us such understanding. Moreover, even independently of this, by Gödel's second incompleteness theorem, it is impossible to demonstrate by absolutely reliable means (such as Hilbert's finitary means) that the axioms of Peano's second order arithmetic are consistent. Therefore, even the partial understanding of the concept of natural number which is given by the axioms of Peano's second order arithmetic cannot be said to be certain. *A fortiori*, we cannot say to have certain understanding of any concept in any other area, since all knowledge is uncertain.¹²⁴

In fact, to look up the *Oxford English Dictionary* does not tell us what knowledge is, but only gives us information about the opinions, or the prejudices, of the author of the dictionary entry under 'knowledge'. An investigation into the use of the word 'knowledge' is totally irrelevant to the philosophical problem of determining what knowledge is. What is required to answer this problem is an investigation into the role knowledge plays in human life.¹²⁵ But such an investigation is not an investigation into the ordinary use of the word 'knowledge'.

Hacker, and most of Oxford analytic philosophy in the second half of the 20th century, worshipped the ordinary use of words, phrases, and statements, claiming that it embodies "the inherited experience and acumen of many generations of men."¹²⁶ But the ordinary use of words, phrases, and sentences strongly depends, if not on prejudices or mistaken opinions, at least on current knowledge. And such ordinary use will become soon obsolete because of scientific, technological, or social development that are too fast for the ordinary use of words, phrases, and statements to keep pace with it.

By assuming that philosophy is not acquisition of knowledge and can achieve understanding by an investigation into the use of words, phrases, and sentences,

analytic philosophy has consigned philosophy to irrelevance. Even Hacker admits that, analytic philosophy

has split into numerous rivulets meandering aimlessly through the marshlands. It has ... [become] over-specialized. It is imbued with the spirit of scholasticism, conflating pedantry with precision, and confusing technicality with clarity.¹²⁷

Hacker says that,

whether all this represents the dying embers of a once great movement of thought, or whether this phase is merely a pause before the further development of something that can be deemed a continuation of the analytic tradition, only time can tell.¹²⁸

But time has already told: all this represents the dying embers of the analytic tradition.

Third, it is unwarranted to claim that philosophy can study the nature of things by an investigation into the uses of words, phrases, and sentences. For, Hacker explains that the nature of a thing consists of those attributes without which the thing would not be what it is. But the attributes without which a thing would not be what it is define the essence of the thing. Therefore, by claiming that philosophy can study the nature of things by an investigation into the uses of words, phrases, and sentences, Hacker affirms that, by such an investigation, philosophy can study the essence of things.

This means that Hacker asserts that, by an investigation into the uses of words, phrases, and sentences, philosophy can study what modern science does not pretend to study, that is, the essence of things.

Indeed, modern science was born when it abandoned the pretension to study the essence of things by Galileo's famous declaration: "Either, by speculating," like Aristotle, "we seek to penetrate the true and intrinsic essence of natural substances, or we content ourselves with coming to know some of their" phenomenal "properties [*affezioni*]." ¹²⁹ Now, to try to penetrate the essence is "a not less impossible and vain undertaking with regard to the closest elemental substances than with the remotest celestial things."¹³⁰ Therefore, we will content ourselves with dealing with "some" phenomenal "properties of them, such as their location, motion, shape, size, opacity, mutability, generation, and dissolution."¹³¹ For, although it would be vain to try to penetrate the essence of natural substances, it does not follow that such phenomenal properties "cannot be learned by us."¹³²

Modern science choose to follow Galileo rather than Aristotle in pursuing phenomenal properties rather than essences, and this permitted its rise and development. Kant based his theory of knowledge upon this choice when he argued that phenomena “are the only thing that can be given to us for cognition,” while “how things in themselves may be” is “entirely beyond our cognitive sphere.”¹³³

On the contrary, Hacker claims that, unlike modern science, philosophy can penetrate the essence, that is, it can perform the task that Galileo maintained to be an impossible and vain undertaking. Moreover, Hacker claims that philosophy can perform this task by the poor means of the investigation into the ordinary use of words, phrases, and sentences afforded by our competence as mature language-users (aided by the reminders of the *Oxford English Dictionary* and by the etymology and history of words it provides). In view of the disproportion between penetrating the essence and the poverty of the means envisaged by Hacker, his claim that philosophy can study the nature of things is not plausible.

For example, Hacker asserts that the essence of red is given by the rules of use of the word ‘red’, such as: red is a colour; if any object is red it is extended; red is darker than pink; nothing can simultaneously be red all over and green all over; red is seen and not heard; and so forth. But this does not give the essence of red, because entirely similar rules could be stated for any other colour. They simply state some phenomenal properties of red, not its essence. The same can be said of any colour. If we want to know what red is, or what colour itself is, we must abandon the pretension to know their essence and content ourselves with coming to know some of their phenomenal properties—such as those investigated by physics and the physiology of human visual perception.

7. Knowledge and Understanding

Hacker claims that philosophy is not engaged in the pursuit of knowledge of the world, like the sciences, because philosophy is not a contribution to human knowledge but to human understanding. But this claim is based on the assumption that it is possible to achieve understanding without achieving knowledge.

Admittedly, achieving knowledge is not sufficient for achieving understanding, if the distinction between knowledge and understanding is not meant in Hacker’s sense, but instead in the sense of a distinction between “knowing that” and “knowing why—a sense that can be traced back to Aristotle, who says that “knowing that [*to oti*] is different from knowing why [*to dioti*].”¹³⁴

For example, Poincaré pointed out that “to understand the demonstration of a theorem” we need “to know not merely whether all the syllogisms” of the demonstration “are correct, but why they link together in this order rather than another,” and, if we do not know this, we do not think we “understand.”¹³⁵ All demonstrations, by establishing new results, achieve knowledge, but many demonstrations do not permit to know why all the steps in the demonstration link together. So they achieve knowledge but not understanding.¹³⁶

However, that achieving knowledge is not sufficient for achieving understanding, does not mean that achieving knowledge is not required for achieving understanding. As the demonstrations mentioned above show, while it is possible to achieve knowledge without achieving understanding, it is impossible to achieve understanding without achieving knowledge. To achieve understanding without achieving knowledge is not to achieve understanding at all. For understanding is a superior form of knowledge, since it does not merely tell you that something is so and so, but also why it is so and so. Therefore, to achieve understanding is a fortiori to achieve knowledge.

8. Conclusion

From the above arguments it seems fair to conclude, on the one hand, that Hacker’s objections against the view that philosophy is midwife of science, and implicitly against the view that philosophy is knowledge acquisition, are unfounded; and, on the other hand, that the view that philosophy is a search for understanding, that Hacker puts forward as an alternative, is inadequate. Therefore, the view that philosophy is a search for understanding is not a viable alternative to the view that philosophy is knowledge acquisition.

NOTES

¹ This essay is closely related to my earlier essay, "Philosophy at a Crossroads: Escaping From Irrelevance," *Syzetesis* 5 (2018): 13–53; also available online at <https://againstprofphil.org/2018/09/10/philosophy-at-a-crossroads-escaping-from-irrelevance/>. This essay, however, is also self-contained.

² M. Friedman, *A Parting of the Ways: Carnap, Cassirer, and Heidegger* (Chicago, IL: Open Court, 2000), p. ix.

³ *Ibid.*, p. 159.

⁴ M. Dummett, *The Nature and Future of philosophy* (New York: Columbia Univ. Press, 2010), p. 149.

⁵ *Ibid.*, pp. 149–150.

⁶ *Ibid.*, p. 150.

⁷ M. Heidegger, *On Time and Being* (Chicago, IL: Univ. of Chicago Press, 1972), p. 72.

⁸ M. Heidegger, *Basic Questions of Philosophy: Selected "Problems" of "logic"* (Bloomington, IN: Indiana University Press, 1994), p. 29.

⁹ W. Dilthey, *The Essence of Philosophy* (Chapel Hill, NC: Univ. of North Carolina Press, 1954), p. 47.

¹⁰ L. Wittgenstein, *Notebooks 1914–1916* (Oxford: Blackwell, 1998), p. 106.

¹¹ L. Wittgenstein, *The Big Typescript TS 213* (Oxford: Blackwell, 2005), p. 301.

¹² L. Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe (Oxford: Blackwell, Oxford 1958), I, §109.

¹³ *Ibid.*, I, § 89. Note that, although these statements are from different phases of Wittgenstein's thought, nevertheless, as Kenny argues, "the most striking feature of Wittgenstein's work is the permanence," throughout all phases, "of his general conception of philosophy." See A. Kenny, *Wittgenstein* (Oxford: Blackwell, 2006), p. 181.

¹⁴ M. Dummett, *The Nature and Future of Philosophy*, p. 10.

¹⁵ *Ibid.*, p. 21.

¹⁶ M. Heidegger, "Letter on Humanism," in M. Heidegger, *Basic Writings* (New York: Harper, 1993), pp. 217–265, at p. 218.

¹⁷ *Ibid.*, pp. 218–219.

¹⁸ *Ibid.*, p. 219.

¹⁹ Ibid.

²⁰ H.-G. Gadamer, *Reason in the Age of Science* (Cambridge, MA: MIT Press, 1981), p. 161.

²¹ Ibid.

²² H.-G. Gadamer, *Truth and Method* (London: Continuum, 2004), p. xxi.

²³ For more on this view, see Cellucci, "Philosophy at a Crossroads: Escaping From Irrelevance."

²⁴ See R. Hanna, "How To Escape Irrelevance: Performance philosophy, Public Philosophy, and Borderless Philosophy," *Journal of Philosophical Investigations* 12 (2018): 55–82.

²⁵ See, e.g., the scientists' citations in C. Cellucci, "Philosophy at a Crossroads: Escaping From Irrelevance."

²⁶ Plato, *Euthydemus*, 288 d 8.

²⁷ R. Descartes, *Oeuvres* (Paris: Vrin, 1996), vol. IX–2, p. 2.

²⁸ Ibid.

²⁹ I. Kant, *Critique of Pure Reason*, trans. P. Guyer and A. Wood (Cambridge: Cambridge Univ. Press, 1998), A 840/B 868.

³⁰ I. Kant, *Lectures on Logic*, trans. J.M. Young (Cambridge: Cambridge Univ. Press, 1992), p. 538.

³¹ Ibid., p. 261.

³² I. Kant, *Gesammelte Schriften* (Berlin: de Gruyter, 1900–), vol. 16, Reflexion 1652, p. 66.

³³ Kant, *Lectures on Logic*, p. 539.

³⁴ See C. Cellucci, *Rethinking Knowledge: The Heuristic View* (Cham, CH: Springer, 2017), chs. 9–14.

³⁵ Kant, *Critique of Pure Reason*, B3.

³⁶ See C. Cellucci, *Rethinking Logic: Logic in Relation to Mathematics, Evolution, and Method* (Cham, CH: Springer, 2013), pp. 291–294.

³⁷ In what follows, for brevity's sake I will refer to Hacker's works actually cited using the following abbreviations:

HN *Human Nature: The Categorical Framework* (Oxford: Blackwell, 2007).

WCC *Wittgenstein: Comparisons and Context* (Oxford: Oxford Univ. 2013).

IP *The Intellectual Powers: A Study of Human Nature* (Chichester, UK: Wiley-Blackwell, 2013).

³⁸ WCC, p. 3.

³⁹ Ibid., p. 4.

⁴⁰ Ibid., p. x.

⁴¹ Ibid., p. 5.

⁴² Ibid., p. 6.

⁴³ Ibid., p. 6.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid., p. 10.

⁵⁰ Ibid.

⁵¹ Ibid.

⁵² Ibid., p. 6.

⁵³ Ibid., p. 7.

⁵⁴ Ibid., p. 16.

⁵⁵ Ibid.

⁵⁶ Ibid., p. 7.

⁵⁷ Ibid.

⁵⁸ Ibid.

⁵⁹ J. L. Austin, *Philosophical Papers* (Oxford: Oxford Univ. Press, 1979), p. 232.

⁶⁰ Ibid.

⁶¹ I. Kant, *Theoretical Philosophy 1755–1770*, trans. D. Walford and R. Meerbote (Cambridge: Cambridge Univ. Press, 1992), p. 407.

⁶² Kant, *Lectures on Logic*, p. 260.

⁶³ Diels 1934, 22 B 6 (Heraclitus).

⁶⁴ G. Frege, "Begriffsschrift, A Formula Language, Modeled Upon That of Arithmetic, For Pure Thought," in J. van Heijenoort (ed.), *From Frege to Gödel: A Source Book in Mathematical Logic, 1879–1931* (Cambridge, MA: Harvard Univ. Press, 1967), pp. 5–82, at p. 6.

⁶⁵ See C. Cellucci, *Rethinking Logic*, ch. 4.

⁶⁶ C. Cellucci, "On the Analytic-Synthetic Method, and On It As the Method of Modern Science," in Cellucci, *Rethinking Logic*, chs. 4 and 8.

⁶⁷ R. Andersen, "Has Physics Made Philosophy and Religion Obsolete? Interview with Lawrence Krauss," *The Atlantic* (23 April 2012).

⁶⁸ J. Locke, *An Essay Concerning Human Understanding* (Oxford: Oxford Univ. Press, 1975), p. 10.

⁶⁹ *Ibid.*

⁷⁰ S. Weinberg, *Dreams of a Final Theory* (New York: Vintage, 1993), pp. 168–169.

⁷¹ L. Wittgenstein, *Philosophical Investigations*, I, § 124.

⁷² Diels, *Die Fragmente der Vorsokratiker*, 68 A 37.

⁷³ *Ibid.*

⁷⁴ Aristotle, *Physica*, Δ8, 215 a 12–14.

⁷⁵ Aristotle, *Metaphysica*, Z 3, 1028 b 36–37.

⁷⁶ *Ibid.*, Z 17, 1041b 31–33.

⁷⁷ *Ibid.*, Z 1, 1028a 32.

⁷⁸ *Ibid.*, Δ 11, 1019a 3–4.

⁷⁹ WCC, p. x.

⁸⁰ *Ibid.*, p. xi.

⁸¹ *Ibid.*, p. 9.

⁸² *Ibid.*, p. 19.

⁸³ *Ibid.*, p. x.

⁸⁴ *Ibid.*, p. xx.

⁸⁵ *Ibid.*, p. 9.

⁸⁶ IP, p. 446.

⁸⁷ Ibid., p. 454.

⁸⁸ Ibid., p. 462.

⁸⁹ WCC, p. 17.

⁹⁰ IP, p. 463.

⁹¹ WCC, p. 11.

⁹² Ibid., p. 17.

⁹³ HN, p. 16.

⁹⁴ WCC, p. 13,

⁹⁵ IP, p. 460.

⁹⁶ HN, p. 14.

⁹⁷ IP, p. 451.

⁹⁸ WCC, p. xiv.

⁹⁹ Ibid., p. 12.

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

¹⁰² IP, p. 442.

¹⁰³ HN, p. 7.

¹⁰⁴ IP, p. 452.

¹⁰⁵ IP, p. 442

¹⁰⁶ Ibid., p. 452.

¹⁰⁷ Ibid., p. 446.

¹⁰⁸ IP, p. 143.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ B. Riemann, *On the Hypotheses Which Lie at the Bases of Geometry* (Cham, CH: Birkhäuser, 2016), pp. 39–40.

¹¹² Ibid., p. 40.

¹¹³ G. Ryle, *The concept of mind*, Hutchinson, London 1949, p. 7.

¹¹⁴ Ibid., p. 8.

¹¹⁵ Plato, *Cratylus*, 439 b 6–8.

¹¹⁶ D. Hume, *An Enquiry Concerning the Principles of Morals* (Indianapolis IN: Hackett, 1983), p. 98.

¹¹⁷ I. Kant, *Anthropology, History, and Education*, trans. M. Gregor et al. (Cambridge: Cambridge Univ. Press, 2007), p. 179.

¹¹⁸ Ibid., p. 180.

¹¹⁹ M. Capozzi, “Philosophy and Writing: The Philosophical Book According to Kant,” *Quaestio 11* (2011): pp. 307–350, at pp. 334–335.

¹²⁰ B. Magee, “Conversation with Gilbert Ryle,” in B. Magee (ed.), *Modern British Philosophy* (New York: St. Martin’s Press, 1971), pp. 100–114, at p. 103.

¹²¹ G. Ryle, *The Concept of Mind*, p. 225.

¹²² Plato, *Theaetetus*, 146 c 3–146 e 10.

¹²³ See Cellucci, *Rethinking Knowledge*, ch. 6.

¹²⁴ For more on this, see Cellucci, *Rethinking Knowledge*, chs. 10, 20, 21.

¹²⁵ On such role, see Cellucci, *Rethinking Knowledge*, ch. 6.

¹²⁶ Austin, *Philosophical Papers*, p. 185.

¹²⁷ WCC, pp. xxi–xxii.

¹²⁸ Ibid., p. xxii.

¹²⁹ G. Galilei, *Opere* (Florence, IT: Barbera, 1968), vol. V, p. 187.

¹³⁰ Ibid.

¹³¹ Ibid., vol. V, p. 188.

¹³² Ibid.

¹³³ Kant, *Critique of Pure Reason*, A190/B235.

¹³⁴ Aristotle, *Analytica Posteriora*, A 13, 78 a 22.

¹³⁵ H. Poincaré, *The Foundations of Science: Science and Hypothesis – The Value of Science – Science and Method* (Cambridge: Cambridge Univ. Press, 2013), pp. 430–431.

¹³⁶ See Cellucci, *Rethinking Knowledge*, ch. 22.