## Philosophy Term Paper

Can there be 'progress' in philosophy, as compared to the natural sciences?

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In this paper, I shall demonstrate the statement to be false by showing that the aforementioned progress in the natural sciences relies on assumed axioms: contingents taken as fundamental truths in their fields, which is contradictory to the critical impulse of reason that is central to the subject of philosophy. The argument shall explore the (self) critical nature of philosophy and contrast it with the natural sciences before elaborating on the idea of an axiomatic basis not having hold in the subject. Following this I shall highlight some instances from a historical perspective that vie for a completeness argument (both in math and philosophy) and their failings.

The absence of discernible 'progress' in philosophy is often compared to the leaps and bounds modern science makes on an almost daily basis. Such contrast has led to many doubting the value of the field of philosophical pondering. Where scientific progress has a direct influence on several aspects of human life, there is no obvious physical gain to be gotten by pondering on the same questions in the 21st century that Socrates and his peers had argued at length on back in the 4th Century BCE. But this essay is not on the value of philosophy. Rather, we examine the apparent lack of progress. Is it infeasible to assume that arguments made two millennia ago should have some form of resolution today? The scientific backdrop provides a reasonable platform for contrast -- for after all, several branches of scientific study (astronomy¹, for instance) rose from philosophical pondering, and an examination of the divergence should provide to us an answer as to the necessity of the field's purported stagnancy.

Progress in science can seen as a progressive accumulation of knowledge, with (increasingly) accurate theories replacing former beliefs and new questions answered on the basis of older resolutions. Taken inductively backwards far enough, we *must* arrive at a set of axiomatic knowledge that has no analytic basis. This knowledge comes from observing the world. The propositions are synthetic. Further inference can be made on the basis of these axioms because it suffices for the explanatory model that scientific study proposes; we are essentially building on the obvious aspects of physical nature that can be taken at the level of description for the moment while progress made along those assumptions coincides with our physical reality. But philosophy as a subject asks why. For everything. Criticism is at the heart of philosophical argumentation, and no experience, observation, or

<sup>&</sup>lt;sup>1</sup> "The Problems of Philosophy by Bertrand Russell - Free Ebook." 1 Jun. 2004, <a href="http://www.gutenberg.org/ebooks/5827">http://www.gutenberg.org/ebooks/5827</a>. Accessed 21 Jan. 2019.

correspondence to physical reality safeguards anything from requiring an explanation: nothing is allowed to remain at the level of description. A bulk of philosophical debate happens with some assumptions and considerations for our generally observed reality to allow for clear discussion without dissolving into chaos, but a consequence of such is that there can be no progress (as in science) without holding these as fundamental axioms - an idea that is in direct contrast with the self-critical standard philosophy hold itself to.

It might be thought possible to logically come down to a single statement that we consider universally correct, as with Descartes' *cogito ergo sum* (I think therefore I am) that he inferred by extensive thought experimentation and questioning the validity of everything he could not prove in its whole certainty. But even such can be questioned. Philosophers such as Bernard Williams<sup>2</sup> and Søren Kierkegaard<sup>3</sup> have raised counter arguments to Descartes' claim noting his presupposition of an "I" at all.

Now, my claim here is essentially that progress in a subject cannot be made without axiomatic knowledge, and that philosophy by its nature cannot just assume something to be true. While the latter is universally accepted (and elaborated on extensively in the previous paragraph), the former claim has been contested by many. The argument proposed here is perhaps best represented by Hegel. Hegel's philosophy is difficult with many commentators differing as to its true interpretation, but I shall take here the one taken by a large number of people: his main thesis that "everything short of the Whole is obviously fragmentary, and obviously incapable of existing without the complement supplied by the rest of the world"4. The claim rests that any incomplete system of explanations is fraught with contradictions, and by careful examination of contradictions and the current incomplete system a better set of ideas can be developed that accounts for more than what was previously considered but that shall nevertheless remain incomplete provoking further enquiry; stepping stones in a a slow but sure logical process that would eventually yield a "complete theory". It is an appealing theory, the idea that a formal system of arguments can be self-sufficient logically. But one that can be disproven. There exist several critiques of Hegel's arguments on the same, but for ease of explanation I shall draw parallels to another formal system of study - mathematics.

Mathematics serves as a far more apt comparison to philosophy than the other sciences do due to their common grounding as formal systems. While much "progress" is made in math in lines with the likes of the natural sciences, there is an acknowledgement of the existence of axioms (such as Euclidean axioms for geometry) and the necessity for such. Several efforts have been made (particularly in the early 20th century) to create a consistent set of axioms by effective procedure in consistent systems such as arithmetic - Whitehead and Russell's *Principia Mathematica*<sup>5</sup> is a prominent example. But the quest for

<sup>&</sup>lt;sup>2</sup> "Descartes: The Project of Pure Enquiry." <a href="https://philpapers.org/rec/WILDTP-6">https://philpapers.org/rec/WILDTP-6</a>. Accessed 25 Jan. 2019.

<sup>&</sup>lt;sup>3</sup> "Kierkegaard's Writings, XII, Volume II: Concluding Unscientific ...." <a href="https://press.princeton.edu/titles/5068.html">https://press.princeton.edu/titles/5068.html</a>. Accessed 25 Jan. 2019.

<sup>&</sup>lt;sup>4</sup> "The Problems of Philosophy by Bertrand Russell - Free Ebook." 1 Jun. 2004, <a href="http://www.gutenberg.org/ebooks/5827">http://www.gutenberg.org/ebooks/5827</a>. Accessed 25 Jan. 2019.

<sup>&</sup>lt;sup>5</sup> "Principia Mathematica (Stanford Encyclopedia of Philosophy)." 21 May. 1996, https://plato.stanford.edu/entries/principia-mathematica/. Accessed 25 Jan. 2019.

completeness was ended by Godel and his famous incompleteness theorems. Employing a diagonal argument, he proved that a self consistent system would always have some statements that we say are true but are not provable from within the system itself. Following this were several other theorems by Church, Turing, and the like highlighting the limitations of formal systems. Thus, if we consider philosophy to be a formal system analogous to mathematics, then it too falls under the same limitations imposed on the rest.

It is not an entirely convincing argument however, due in part to my inability to draw a direct link between philosophy and other formal systems, but it serves (hopefully) as an intuitive understanding of the problem in Hegel's theory. For a more sound philosophical response, we turn again to Russell<sup>6</sup>. His entire treatment of the problem covers over two pages of text, but in summary highlights the fallacy of taking the knowledge of a thing that is necessarily a fragment to mean the entire nature of the thing and understand all of its varied relations to other things.

"... the fact that a thing has relations does not prove that its relations are logically necessary. That is to say, from the mere fact that it is the thing it is we cannot deduce that it must have the various relations which in fact it has. This only seems to follow because we know it already."

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Logic, as he expounds, is not a limiting factor as Hegel had proposed but is instead a liberator of ideas; the limitation imposed by Hegel lay in assumptions thought illogical but that when considered give rise to entirely logical systems that just aren't in direct correspondence with our reality.

Natural science and Philosophy aren't too far off in their methods of enquiry and criticism, but their difference lies in the pursuit. The sciences explain physical reality, so assumptions that correspond to the real world are taken a posteriori - and it works, for for its purpose this is sufficient at the time. Philosophy is not such a field of study, but its spirit of inquiry means that the methods used (and often subjects discussed) are just as applicable to science as they are to philosophy - in fact one of the reasons it can be said there's no progress in the subject is because the moment philosophical inquiry with assumptions corresponds to reality and "progresses" understanding it's separated out as a science. At the end of this all we can look at philosophy as a field that does progress, but as the means, not towards the end.

<sup>&</sup>lt;sup>6</sup> "The Problems of Philosophy by Bertrand Russell - Free Ebook." 1 Jun. 2004, <a href="http://www.gutenberg.org/ebooks/5827">http://www.gutenberg.org/ebooks/5827</a>. Accessed 25 Jan. 2019.