Review of: "Does Philosophy Matter? The Urgent Need for a Philosophical Revolution"

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Potential competing interests: No potential competing interests to declare.

I was pleased to review another manuscript focused on matters of philosophy. I am a physiologist and metabolic biochemist, yet I am widely read on scientific philosophy in the context of how it directs me to be a better scientist. I am also a university academic with experience across Australian and USA university structures, functions, and governance. As it turned out, I needed this knowledge, experience, and the wisdom both can provide to be able to review this manuscript.

To begin with and as an overview, I connected with the core message of the author; that the purpose of modern philosophy has deteriorated, that science needs to do better (not directly written about, but since science creates knowledge, the message is there), and that depending on which country you reside in, there has been an erosion of the core functions of a university that has compromised their purpose. Yet the author does not adequately, if at all, explain the historical narrative of these developments, often makes extreme interpretations of observations, and at times opinions, that replace rationale thinking and decision-making with overtly biased and unsubstantiated statements. The result is an overly reactionary effort to instigate change in each of philosophy, science, university function and society, which because of the extreme nature of the expression does little to nurture change or provide examples of the exact nature of the change that is needed and the multifaceted obstacles that oppose it. I will address these issues, and many more, in this review.

Abstract

The problem with the Abstract in current form is that it supports many items of the manuscript that I hope to document are naïve in construct, and embedded in a belief system where universities are empowered to oversee how knowledge is used in society. The latter, of course, is the role of government in a democratic society founded on the rights of education, freedoms, and self-determination. More is presented on these issues in the content to follow.

Restructure the sentence to "……for the revolution from knowledge-inquiry to wisdom-inquiry in our universities."

It Does Not Matter

Pages 1-2.

In science there needs to be a balanced account of arguments for and against a theory or data interpretation that addresses a problem. New experimentation and/or a re-evaluation of pre-existing data are compiled as empirical

evidence, combined with rationale interpretation, and then used to deduce a solution to the problem, or alternatively if a solution is not apparent, direct future research initiatives that may provide needed enlightenment on answers/solutions that are likely to correctly solve the problem. While the topic of this review is not conducive to the experimental arm of science, there is the capability to apply pre-existing knowledge to identity and solve a problem. I think this manuscript would have been better served by more detail of the exact problem, and its complexity, that the author attempts to identify.

I think the author was attempting to do this in these initial sections, but unfortunately the historical developmental narrative is missing. Perhaps a brief account of the historical development of philosophy is needed to show that during early times (pre-17th century) philosophy functioned at a high level. I think the content of Aristotle in his *Nichomachean Ethics* is proof of this, where Crisp (1) translated Aristotle to reveal a method to attempt to resolve problems from philosophical reasoning based on the following;

1. Decide on the topic of inquiry.
2. Seek different views on the topic from wise people.
3. Identify any puzzles (problems) that exist.
4. Resolve the problems to the best of one's ability.

Of course, the experimental arm of science is missing in this directive, but for topics like the focus of this manuscript, Aristotle's structure in the pursuit of philosophy remains relevant today (see comments for content of page 8). Regardless, there is a case to be made that after the 17th century, the gradual evolution of science (this is a slow process and remains in development to present time) within the epistemological branch of philosophy extracted the essence of the pre-scientific philosophy, leaving a rather empty shell with limited relevance and purpose. Yet here is where I think the author has greatest capability to critically confront contemporary philosophy. I have great frustration in modern scientific philosophy for failing to expand on Popper's (7) accounts of essential attributes of science, such as falsification, the harm of pseudoscience and attempts to define it, and the perils of Kuhn's 'normal' science, of which Popper made his views very clear;

"… the 'normal' scientist, as Kuhn describes him, is a person one ought to be sorry for. The 'normal' scientist …… has been badly taught. He has been taught in a dogmatic spirit: he is a victim of indoctrination. He has learned a technique which can be applied without asking for the reason why." (7; p.52, 53)

"I admit that this kind of attitude ('normal' science) exists …… among people trained as scientists. I can only say that I see a very great danger in it and in the possibility of it becoming normal……: a danger to science and, indeed, to our civilization." (7; p. 53)

"*I do admit that at any moment we are prisoners caught in framework of our theories; our expectations; our past experiences; our language.*" (7; p. 56).

As the three prior quotes reveal, Popper was even years ahead in his thinking and critical appraisal of the modern

university education of scientists which he viewed were nurturing normal science. Popper went even further in his understanding of this dilemma based on how our prior education, while in one can view it to be liberating, in many other ways it can be the cause of many of our problems as scientists and citizens of society. Yes, it is here that our schools and universities need to do a far better job of a balanced education that trains our students to question, challenge, and think differently to our predecessors; not think the same (2,3,6-9)!

Page 2, initial paragraph.

I think this content about concerns of the 'current' status of philosophy would have been better worded and delivered with more of the historical context I have provided. That said, I remain as frustrated as the author about how more contemporary scientific philosophers have been asleep at the wheel regarding the deterioration of numerous components of science in current time. Who and what systems exist to protect science and society from the destruction of Kuhn's 'normal science'? Today, depending on your discipline, we now have a system of journal dissemination of knowledge that requires the scientist to pay what can at times be exorbitant prices (>US$3,000) to publish their work as Open Access. Tracing the funds through the university operation process eventually tracks the dollars back to tax-payers and thus bares a yet to be accounted cost to science and society for open access, while stockpiling profit to the publishers. Most of our journals are now controlled by for-profit major publishers, where forces now exert themselves for pursuing profit ahead of science (knowledge) in the publication of science. If that isn't bad enough, added forces of human nature that fuel 'normal science' flourish within the pursuit of science to preserve convention instead of challenging it. But surely the responsibility also lies with the scientists who have let this happen. Who oversees science? The uncertainty over the answer should concern us all.

The core question concerning who is responsible for this dire development is where the author now directs his writing and ascribes both the discipline of philosophy and the institution of the university to be the sources of this dysfunction. There are considerable comments to direct to this content, and these will follow as my review progresses through the manuscript.

Philosophy Matters Profoundly

Page 2, initial paragraph.

But as explained prior, there is also a growing influence of 'bad' science, 'bad' journal editing and management, 'bad' politics, 'bad' sociology, 'bad' medicine, etc. Why are you solely focused on the discipline of philosophy? One could argue that if there was improved education, founded on philosophical procedures of 'more enlightened' problem solving, then there would be fewer problems. However, as the following content will reveal, the functions of a society, and indeed different societies from different countries when concerned with a global context, present a complex multifaceted problem that has no easy solution. This is especially true when the complexity of the problem has yet to be fully recognized, which as previously documented deviates from Aristotles core features of problems solving within philosophical reasoning (1), and of course, that now exists within the current pursuit of science.

Page 3, 5th paragraph.

"*A basic task would be intelligently conducted public education about what our problems are and what we need to do about them.*"

I doubt that this is a 'basic' task. Society has been, and will always be, slow in identifying the complexity of its problems. Kuhn (4) documented that it may take several decades for an incorrect paradigm to be replaced with a more correct one, regardless of the extent of the evidence that has accrued. Change moves slow, and the role of public education in this process is important, but not the only one and arguably not the cause of greatest resistance to change. A society is a complex mix of education, knowledge, culture, sociology, psychology, politics, economics and finance, military, religions, etc. When the problem of concern is a global one, then the enormity of the complexity of the problem becomes exponentially increased. Who gets to decide on what the 'problems' are and the priority list for their attention? What is the knowledge base that is used? Surely knowledge creation from science is core to this process, for without a scientific foundation to knowledge creation, it isn't really knowledge at all!

Next paragraph.

Yes, university education is a part of this complexity, but later you focus on universities to be the root cause of the major problems at hand. I agree that education is the core for any democracy. As has been argued by many, a democracy is only as good as the standard of education of the people. Thus, the remainder of this paragraph progressing to the top of page 4 is all very good.

Page 4, 2nd to 4th paragraphs.

But if knowledge-inquiry is so important and beneficial to wisdom, then I do not understand the fervor of your objection to university directed knowledge-inquiry. There are numerous societal forces at play that buffer the impact of university-directed knowledge (which also involves solutions to problems) in society. I remember my early university educated years (late 1970's) where I studied over-population, alternative energy sources to fossil fuels, resource depletion, species extinction, etc. However, there were also industry sponsored 'scientists' who presented opposing evidence. The fossil fuels and related petrochemical industries crafted their own 'science' to oppose the ravages of mining, air pollution and increased rates of cancers in regions surrounding coal-fired power stations. The problem wasn't the universities and their contributions to science. Fundamental economics governed the socio-political landscape, leaving short term issues and individual-centred arguments favouring 'business as usual' mentalities across politics and society. Given that most people within a given society are not blessed with a university education, then how is this a university-centred problem? Doesn't scientific research, of which universities complete a large share, become available to society, and it is then up to society for how to use it? There are many forces acting both within the university scientific enterprise, and external to it, that combine to thwart the detection of a problem and the best solutions for it.

You mention "the pursuit of a better world". Who defines this on each of local, regional, national and international levels? Case in point, we have known since the 1970's (perhaps earlier) that the deforestation of the Amazon rainforest is a bad development for Brazil and the global climate and should be stopped (or at least slowed). Similar evidence on a similar

time frame has been presented for the beginnings of climate change. Surely it is not solely the fault of university knowledge creation for why society refused to act on this early evidence. Why is it the fault of universities that despite all the acquired and communicated evidence that it took until 1921 (The Paris Agreement) for a binding agreement between countries to combat climate change? Of course, despite this positive action there are those who doubt such radical change is possible in the time frame needed (by 2030) to prevent increases in the global average temperature > 1.5 ˚C by the end of this century. To argue that this is solely due to university dysfunction and that of the constrained development and function of philosophy is a bit of a stretch!

4th paragraph.

In the face of all the obstacles I have already referred to, how can a university, of any given country, function to help humanity solve global problems beyond what it may already be doing to reveal the data-based knowledge of the problem, its severity, and the severity of its impact to the planet and humanity? Surely this directs attention to a needed revolution based on community action and political accountability to its electorate, combined (and this is essential) with a global responsibility that can do what humanity has yet to do, which is to render borders and the self-centered structures and functions they support as irrelevant, and to treat all humans as equals.

5th and 6th paragraphs.

Isn't the problem how to structure society so that university-inquiry can be given the respect it deserves? If so, then your detection of the problem to be university functions, as well as the deterioration of then discipline of philosophy, are misplaced.

Page 5, paragraph 2, last sentence.

Change to, "…. disastrous state of academia and its appalling ….."

Page 5, paragraph 4.

I find your views of the potential benefits of a proposed 'academic revolution' to be naïve, and as such unrealistic. As I have pointed out, and as you even indicate in this paragraph of your manuscript, it is the governments that must be changed to better listen to and act on the evidence revealed by the universities. In a way, this separation is important for all the reasons you stated previously, especially given the overwhelming evidence for how so much of mainstream science is far from ideal. Yet democracies are presently struggling with how to control governments from partisanship and extremism. It seems that control by a governing political party has become more important that bipartisan agreement for how to solve problems and improve society. If these circumstances do not change, then where is the leadership going to come from to improve university functions?

Page 5, paragraph 5.

Change to, "…. academic revolution is urgently needed."

End of page 5, start of page 6.

You should declare your prior scholarship on this topic (not really a conflict of interest) in the beginning of the manuscript.

Page 6, last paragraph

But wisdom requires knowledge. I agree that students should be taught how to apply their gained knowledge in a wise manner, and that current high school and university education systems do a poor job of this. Yet there would also need to be a social revolution where evidence-based rational thinking has social relevance. Nevertheless, the added problem here is that often it takes many decades to realize the correct interpretation of data, and especially when dealing with complex systems. The history of science clearly reveals that major discoveries are a slow process, where one scientist builds on the results of others until eventually there is a major breakthrough. Kuhn (4) does a great job of explaining this for the physical sciences. Thus, there is always a need for a balance between the preservation of the ruling dogma vs. radical change based on more recent evidence. Though, yes, this is where a healthy version of philosophy and a more empowered university sector could become more influential.

Page 7, first 2 paragraphs

I decided to read, as you requested, on your past work, as well as the final recommendation for the 1972 to 2021 narrative of university dysfunction (5). I found the content to be very similar to your current manuscript and was not further informed or more understanding of your views on this topic. Nevertheless, I did read with interest your critical views on Popper and science in general. I will leave my own cited scholarship on Popper's contributions to the understanding of science and a critical appraisal of Kuhn's contributions to reveal my opinions on this matter (8,9).

I think it is fair to comment that the volume of work is not as important as the relevance of the work. Yet in saying that, I am impressed and envious of your convictions to the need for change. I hope the collective of this review reveals the many ways I respect and agree with some of what you state.

Other Work Critical of Modern Science and Technology

Page 7, 3rd paragraph – last half.

I think what you should be commenting on is that too much of contemporary science is overly directed at pursuing science in a non-critical manner, resulting in a deficiency of new knowledge. It is not an over-emphasis on knowledge creation that is the problem of the human pursuit of science. Rather, it is the former where emphasis on the quality of the knowledge is far distant to the number of research outputs (published manuscripts). This enterprise that scientists have cultivated, in cohort with university supported government incentives and funding, fuels a short-term cycle of publication numeric, which becomes fueled by short-term structured research questions more geared around a scientist's career (numeric publication and grants record) than the actual beneficial impact of their research to society. This is, of course, a positive feedback loop, and this is devasting to society. In 1963, Forscher (2) wrote a clever and provocative manuscript expressing a metaphor of the human pursuit of science based on the terminology and function of the construction industry. I fear, in agreement with the author, that circumstances have become more dire than what was present in 1963.

There is also a need to comment on your view that all science can be treated as one entity. Rather, my career in science has taught me the hard way that it is best to view and define science as a noun and not a verb. In other words, science is a process by which a problem is identified, and methodology is crafted to test the problem in a way that increases the probability that the results reveal an answer that is likely to be true. The pursuit of science is not necessarily science, as the humans involved could be poorly trained, unable to exclude their biases, use incorrect methodology, and either subconsciously, or consciously, support convention rather than challenge it. As I have expressed, the core failure in this depiction is the inadequate education and training of our scientists, and prior content has also presented the disdain of Karl Popper to this reality.

Page 8, paragraphs 2 and 3

Perhaps a problem underlying your views of a wisdom-inquiry is that it must be founded in each country of the world, and despite this diversity of geography and culture (and so many other items) there is to be one view of what is a “good, wise civilized world”. Forgive me, but this crafts views in my mind of the colonial error of the British Empire, where the goal was to make the world more British for the very reason you are stating here based on an 18-19th century British view of a “good, wise, civilized world”. History clearly shows that between the ‘good’ of this error of British history, there was tremendous ‘bad’. Yet, when contemplating the layers of complexity for what you are stating, there is an interpretation where the relevance of my reply is a part of a wisdom-based inquiry, where unless we address these multi-cultural problems of the world order, we are avoiding a possible solution to the problems of the world order.

Implications and Action

Page 8, paragraph 1

This initial sentence assumes that a university has academic governance; where the academic branch of a university generates university policy and ensures it is acted upon. Not all countries of the world support this governance model, and it is fair to state that even in countries that do (e.g., North American model), there is a decline in the number of universities that govern this way. This is concerning as it prevents academics from having a more direct influence over political and societal change.

What are the four elementary rules of rationale problem solving you are referring to? Earlier I referred to four that were raised by Aristotle (1), and these have since been expanded to include the following 6 items which now also include links to science (implementation of an intervention and evaluation of the outcomes).

1. Identify and define the problem.
2. Generate possible solutions.
3. Evaluate alternatives.
4. Decide on a solution.
5. Implement the solution.
6. Evaluate the outcome.

Page 9, top sentences.

I am not sure what you are trying to express about physics and the other natural sciences. All are core to understanding matter and living systems. Maybe you are referring to their application to society in different ways, though aren't such concerns the topics of sociology? Conversely, are you implying that there is rational benefit and opportunity to inquire about the physical interaction between humans and the world they live in? If so, I agree, though this has been a large feature of ecology and conservation for many decades.

Page 9, initial large paragraph.

Who gets to decide on what these problems are? I would envision that citizens of many African countries would not care much at all about the problems of developed countries. Conversely, is the focus and investment of the western world largely causative to the restrained development of the developing world? Would a Pacific Islander care about keeping food shelves stocked in the grocery stores of Paris or Berlin when their land and homes are being washed away due to unprecedented sea level rise?

Regarding the following definition of wisdom, "… the capacity, active endeavor and desire to realize what is of value in life, for oneself and for others …."; I find this to be overtly and simultaneously Orwellian and utopian. This concern is especially true in the context of need for global change. Are you really proclaiming that wise individuals will all think and prioritize the same, regardless of race, ethnicity, religion, sex, age, country of residence, socio-economic status, etc.? The same concerns extend to your content of the last sentence of the main paragraph of page 10. Surely part of the mystique and wonder of humanity is the variety of what is valued. I would hope that with freedoms comes scope for creativity and discovery, which history shows often proceeds counter to contemporary thought and as such is initially opposed (despite being correct) for extended periods of time.

Final Feedback

I want to thank the author for his openness of the expression of his thinking towards needed change. This is an essential part of the epistemological enterprise of philosophy and science. Thanks to Qeios, there is a platform to share ideas and merge divergent thought towards what we hope to be a needed and correct outcome. The future of humanity is deeply founded in the capability for us to share ideas and during this process arrive at solutions that a collective of thought is more likely to discover as true than any one individual's enlightenment. Being passionate about topics, while potentially misleading, is also a necessity of human function that gives hope to the capability for change that allows for sustainable living on a finite resourced planet. Given the horrible historical record of human life on earth, I remain in search for evidence-based nurturing of hope. Hope is an essential feature of life for all.

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