

What is an answer?

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HY1001: Introduction to Philosophy

Assignment 5: Final essay

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What is a philosophical answer?

1. Mathematics: What is an answer?

In 1964, Willians published his formula for the prime numbers¹. It is his answer to the open problem in mathematics: "Is there a formula for prime numbers?"². Examining his formula, it does answer the question as it generates the Nth prime number. It is also mathematically sound because it utilises Wilson's theorem and Bertrand's Postulate, both of which are proven to be true³.

So, what is the issue?

In 1982, Wilf published a criticism of what should be a mathematical answer⁴. While it does not directly cite Willian's formula, the paper itself is about mathematical efficiency and does cite examples that sound like Willians' formula. The heart of the argument is: Should an answer be an answer if it takes an unreasonably long period to compute? That is, how efficient should an answer be in relation to the question?

¹ C. P. Willans, "On Formulae for the Nth Prime Number," *The Mathematical Gazette* 48, no. 366 (1964): 413.; Eric Rowland (Eric Rowland), "An Exact Formula for the Primes: Willans' Formula," YouTube, Video, Sep 23, 2022, 11:36. <https://youtu.be/j5s0h42GfvM>.

² Jeffrey Shallit, "No Formula for the Prime Numbers?," *Recursivity* (blog), January 07, 2013, <https://recursed.blogspot.com/2013/01/no-formula-for-prime-numbers.html>.

³ William L. Hosch, "Wilson's theorem," *Encyclopedia Britannica*, October 17, 2012. <https://www.britannica.com/science/Wilsons-theorem>.; Jonathan Sondow, Eric Weisstein, "Bertrand's Postulate," *MathWorld – A Wolfram Web Resource*, accessed November 12, 2022. <https://mathworld.wolfram.com/BertrandsPostulate.html>.

⁴ Herbert S. Wilf, "What is an Answer?," *The American Mathematical Monthly* 89, no. 5 (1982): 289.

Taking Wilf's argument, Willians' formula is not an answer because it is inefficient — it is easier and faster to count the prime numbers yourself or some other way, than to use Willians' formula.

The beauty of mathematics is that efficiency can be qualified. One can measure how inefficient an answer is by analysing its components. Unfortunately, this luxury does not exist for philosophy.

2. A philosophical analysis of Willians and Wilf

Examining Wilf's argument philosophically, he is arguing for functionalism — a mathematical answer must fulfil some criteria. His criterion is efficiency. However, Willians would argue that the criterion is the generation of a desired result; Any solution answers the question, and therefore every solution is a valid answer. Thus, whose definition is right?

Functionalism states that a thing is a thing because it functions as a thing⁵. A chair is a chair because one can sit on it. By being able to sit on something, it functions as a chair, and thus is a chair. Therefore, an answer is an answer if it gives a solution to the question. This definition is what Willians may argue for. Wilf argues that this definition is a necessary component, but insufficient as it lacks the efficiency qualifier. The problem with Wilf's definition is that the "efficiency qualifier" does not translate well into philosophy.

Functionalism grounds answers philosophically, but should it? What are the consequences of this grounding?

3. Clarifying the question

⁵ Janet Levin, "Functionalism," *The Stanford Encyclopedia of Philosophy* (Winter 2021 Edition), ed. Edward N. Zalta, December 21, 2021. <https://plato.stanford.edu/archives/win2021/entries/functionalism/>.

In this paper, I will discuss the nature and properties of answers within philosophy. I divide this question into four fundamental parts:

1. Do answers exist?
 2. What are the essential properties of answers?
 3. Can we know answers?
 4. What ought an answer be?
4. The role of answers in philosophy

To understand answers, one must consider and understand philosophy as a whole.

To Pythagoras and Cicero, philosophy is the love of wisdom⁶. Pythagoras argues that wisdom is only something that can be possessed by the Gods. Mortals can only desire it, never possess it. As such, a Pythagorean answer is not one of knowledge, but rather one that is limited by human construction and understanding. The problem is, if a Pythagorean answer is not knowledge, then what is it? I suppose it is the manifestation of desires directed at wisdom. Thus, every philosophical work Pythagoras produced is not knowledge, but rather consequences of desires.

However, there is a problem. We know Pythagoras' theorem is true⁷. In a contemporary lens, his mathematical works are mathematical truths, i.e. knowledge. Does

⁶ Li Chenyang, "HY1001 Chapter 1," (Lecture, Nanyang Technological University, Singapore, August 16, 2022), 5.; Maria Popova, "Pythagoras on the Purpose of Life and the Meaning of Wisdom," *The Marginalian* (blog), May 23, 2018, <https://www.themarginalian.org/2018/05/23/pythagoras-olympic-games/>; John Chaffee, *The Philosopher's Way: Thinking Critically About Profound Ideas* (4th ed.) (New York: Pearson, 2013), 6.

⁷ Rod Pierce, "Pythagoras' Theorem," *Maths Is Fun* (blog), accessed November 12, 2022. <https://www.mathsisfun.com/pythagoras.html>.

that mean his philosophical works are knowledge? Does that invalidate the claim that answers can be non-possession of knowledge, but rather manifestations of desires?

To Aristotle, philosophy begins with wondering⁸. He will probably argue that all answers are sound attempts at making sense of the world. In his case, answers are both functional and practical. It must be comprehensible and descriptive. However, who should it be comprehensible to? How descriptive must it be to count as an answer?

To Epictetus, philosophy begins with "conflicting views"⁹. To him, answers are opinions about the world and philosophy emerges from the conflict of differing opinions. Under this interpretation, is it possible for false, incoherent, or illogical opinions to generate philosophy?

To Plato, philosophy is the "science that considers the truth"¹⁰. He would argue answers are both assertions of truth and their relevant justifications. In his case, all sound arguments are valid answers.

To Perictione, philosophy is the contemplation of nature. Philosophy generates wisdom, which is the possession of the things that are around us. Thus, she would argue

⁸ Li Chenyang, "HY1001 Chapter 1," (Lecture, Nanyang Technological University, Singapore, August 16, 2022), 6.; Philip A. Pecorino, *Introduction to Philosophy: An online Textbook* (Online textbook, Queensborough Community College, New York, 2000), Chapter 1, https://www.qcc.cuny.edu/socialsciences/ppecorino/intro_text/CONTENTS.htm.

⁹ Li Chenyang, "HY1001 Chapter 1," (Lecture, Nanyang Technological University, Singapore, August 16, 2022), 9; Margaret Graver, "Epictetus," *The Stanford Encyclopedia of Philosophy* (Summer 2021 Edition), ed. Edward N. Zalta, June 21, 2021. <https://plato.stanford.edu/archives/sum2021/entries/epictetus/>.

¹⁰ Li Chenyang, "HY1001 Chapter 1," (Lecture, Nanyang Technological University, Singapore, August 16, 2022), 10; John Chaffee, *The Philosopher's Way: Thinking Critically About Profound Ideas* (4th ed.) (New York: Pearson, 2013), 6.

answers are our contemplations. Does that mean all contemplations count, regardless of their profoundness, originality, and significance?

To Kongzi, philosophy is fundamentally different. Kongzi wants to promote societal order in times of chaos¹¹, which led him down the path of philosophical inquiry. It was not the love of wisdom, nor the possession of knowledge that motivated him. He wanted answers. He was pragmatic. He wanted to find the fundamental truths on how to properly order society that will necessarily lead to harmony.

To Xunzi, the concept of philosophy as we know it did not exist as well. He questioned the nature of human nature and concluded it is bad not because he wanted to know, but because the end goal is society harmony¹². Concluding that human nature is bad allows him to introduce his model of transformation through rituals. Harmony can still arise from bad people who do good things.

To Zhuangzi, the concept of philosophy did not exist. He is primarily concerned with The Way¹³. His inquiries were on relativism, scepticism, epistemology and metaphysics, all contemporary issues. However, his true goal is the same as Kongzi and Xunzi: how to organise society such that societal harmony will necessarily arise?

The primary focus and discussions of Chinese Philosophy is "What is the best way to organise society?". Does that mean Chinese Philosophy does not count as true philosophy? Or are there multiple approaches and multiple desirable outcomes?

¹¹ Karyn Lai, *An Introduction to Chinese Philosophy* (Cambridge: Cambridge University Press, 2008), 4-5.

¹² Xunzi, *Xunzi*, trans. Eric L. Hutton (New Jersey: Princeton University Press, 2016), 246.

¹³ Zhuangzi, *The Complete Works of Chuang Tzu*, trans. Burton Watson (New York: Columbia University Press, 1968), 66.

5. Engaging with philosophy

To properly engage with philosophy, one must fulfil the following criteria: (1) take a philosophical position, (2) justify said position, (3) be consistent with acquired positions. The rationale behind this is to avoid fence-sitting, as it does not move the intellectual discussion forward. It also promotes constructive discussion as it follows the idea that one should examine their life to live a good life. It also forces people to consider positions in totality as cherry-picking actions situationally does not promote adherence to philosophical positions. As such, if one chooses to only engage with philosophy intellectually, but does not address logical contradictions while conducting one's life, it does not count as true philosophy.

This illuminates the underlying goals of philosophy. Philosophers use philosophy as both a means to the end, and for the inherent love of it. The underlying goal is to understand and make use of said understanding productively.

But why is philosophy framed in this manner?

6. "Who cares?"

The response: "Who cares?" appears within philosophical discussions. Indeed, it has repeatedly surfaced throughout this course.

To clarify, this response has two distinct meanings: (1) "Why should I care?" and (2) "This philosophical problem does not merit my/anyone's considerations.". (1) probes further, questioning the motivation behind a question. While sometimes useful, it is not the main focus of philosophy. After all, examining the motivation behind issues is a separate line of inquiry. (2) breaks a core aspect of philosophy. By taking (2) to be one's informed opinion, one disengages with philosophy.

So, why is "Who cares?" excluded as a sound answer and a valid position? Why can one not disregard a philosophical issue and live life as if it does not exist?

7. Unanswerable questions

Suppose there are unanswerable questions in philosophy. Any philosopher attempting to answer this question will never arrive at an answer, as by definition, the question has no answer. All attempts draw insights that are related to the question, but fail to answer the question. So what exactly is happening when one engages with such questions?

Consider the following question: "What is death?". By definition, death is a thing that cannot be experienced by the living. It is whatever comes after the end of life. While one is unable to experience it, and then report back one's findings to living philosophers, one can still rationalise it. This is because one is able to rationalise that which is not experienced. Just because a thing cannot be experienced, does not mean it is unknowable. Clearly, there is an answer. The problem is in the acquisition of knowledge. Suppose, one gets lucky and stumbles on the truth. However, it is unverifiable. This falls under the justified true belief conundrum, as the causal relation between one's proposition and evidence does not exist.

Consider the following question: "Why is there something, rather than nothing?". It follows the same logic as the above: there exists an answer, regardless of how absurd the answer might be. Perhaps God willed it. Perhaps there is an undiscovered quantum physics theory that explains the origin of existence.

Consider the following question: "Do unanswerable questions exist?". Regardless of the truth value of the answer, there is an answer. The answer could be yes, or no, or an answer residing in higher-order logic. The fact remains, there seems to be no dispute that there is an absence of an answer. Therefore, answers do exist.

However, that does not resolve the epistemological problem, nor a logical one.

What if all questions we consider as "unanswerable" are merely questions we cannot acquire knowledge-of? Is there truly no distinction between the lack of knowledge acquisition and the existence of answers?

Thus, the heart of this problem is in mapping. Can every question be mapped to one or more answers? Can every answer be mapped to one or more questions? Do standalone questions exist? Do standalone answers exist? What does the existence of these standalone questions and answers mean for philosophy?

8. Philosophical positions and answers

Arguments and counterarguments are at the heart of philosophy. To disagree with someone is to provide a counterargument, or at the very least, point out a flaw in someone's argument. However, there are two distinct types of flaws: reconcilable and irreconcilable.

If an attacker (i.e. someone who constructively criticises an argument) points out a reconcilable flaw, the argument can be strengthened. The argument was simply weaker. The author did not perceive the weakness. By doing so, the attacker promotes philosophical progress.

If an irreconcilable flaw is discovered, the argument is somehow weak or flawed critically. It no longer functions as an accurate or convincing explanation. This attack still counts as progress, as one progresses towards the truth. One is not blinded by falsities, or is otherwise convinced of a false belief. This, ideally, allows present and future philosophers to attempt to address issues instead of marking said issue as solved or adequately addressed.

It should be noted that truth and disproving an answer are not the same. Strengthening an argument and disproving an argument both count as progress, but is one more right than the other? Does one contribute to progress significantly more than the other?

9. Answers in relation to the truth

One understanding of answers is their relation with the truth. As philosophers are concerned with the truth, answers are truths. If something is not the truth, it is not an answer to a philosophical question. In this case, answers are truths.

This resolves the problem of mapping; There will always be a truth to be discovered or created. Thus, there will always be a complete mapping of questions to answers. But is this necessarily so?

The existence of unanswerable questions is problematic. Essentially, philosophical progress cannot be made in regard to such questions. It is deeply catastrophic as what then can philosophers do? All attempts for the truth will be inadequate. All attempts will not reach answers. All attempts will be just that — attempts.

The second direction of the problem of mapping is still not necessarily complete. If the existence of unanswerable questions is still disputed, so to is the existence of unquestionable answers — answers which have no corresponding question. Or is there?

"Unquestionable answers" is an incoherent concept. It is not a product of logic. Rather, it is a product of semantics. If an answer has no corresponding question, it is no longer an answer because it is inherently meaningless. Answers' existence is entirely dependent on their logical relation with their questions. This is not the same for questions. Questions can exist without the existence of answers.

Thus, answers are tied to questions. There will never be standalone answers, only standalone questions, i.e. mysteries, open questions, and unsolvable problems.

10. Answers in relation to philosophical progress

Another way of understanding answers is their relation with the progress of philosophy. Philosophical progress is the ultimate goal. As philosophy is the critical analysis of concepts and the things around us, the end of philosophy is the completion of criticism itself.

When every thought has been thought, when every argument has been scrutinised, when every criticism has been explored, philosophy is complete. All answers are now in the possession of every philosopher. There is no more work to be done.

Thus, answers are the acts that create progress. Answers are progressive. In this sense, answers are things of value. Philosophy values progress. Therefore, philosophy values insights, originality, clarity, and understanding. Progress is anything that contributes to this intellectual pursuit.

It should be noted that answers are not the only forms of progress within philosophy. New questions are progressive. New philosophers are progressive. New ideas, new concepts, new methods of thinking, and dare I say new logic is progressive. The sum of all substance is the sum of all progress within philosophy. Thus, answers are a central and necessary part of philosophy, but do not comprise it in totality.

Therefore, answers suffer from the same problem as value theory — is something inherently valuable, or do its observers assign value to it? Is an answer objectively valuable, or relatively so?

Tangentially, we ought to question the existential nature of answers. Do they exist independently from our perceptions and values? Or are they created?

Tangentially, we ought to question the acquisition of answers. If answers are knowledge, it suffers from the justified true belief conundrum (as stated in 7. Unanswerable questions). If answers are not knowledge, then what is it? If answers are our perceptions of the things around us, how can we value them? How can answers be transmitted from one person to the next, one generation to the next, one millennium to the next, one galaxy-limited species to the next? If answers are perceptions, does that mean aliens who perceive the world differently derive different answers from us? What does that mean for the inherent value of answers?

Suppose answers are universal truths. This allows anyone, including isolated civilisations, is it uncontacted tribes or uncontacted aliens, to reach the same answers. This also allows us to re-reach forgotten answers. Suppose a dead philosopher forgot to write an answer down. Under universal truths, we are still able to reach the same answer.

Suppose answers are objective perceptions. This means answers have some objective value, and thus progress and communication can be built on that.

But what if answers are relative, subjective? What if progress and communication cannot be built on a solid foundation?

Suppose civilisation A arrives at answers C, D, E. Suppose civilisation B arrives at answers F, G, H. Whose answers are right? Whose answers are complete? Does that mean the complete model or explanation is the one which accounts for all answers for all civilisations? Does that mean the complete philosophical explanation contains all possible generations of answers to a single problem?

11. Answers as discoveries or creations

I have avoided using the term "discovering answers" and "creating answers" because it is an open problem in meta-philosophy and the philosophy of mathematics.

Are answers created or discovered?

If answers are objective and external from its observers, then answers are discovered. If answers are subjective, then answers are created.

Perhaps, answers are both created and discovered. Answers are vast and broad. Who is to say all answers are created, or all answers are discovered?

12. Resolving questions posed throughout this essay

Throughout this essay, I have posed several questions. I shall now resolve them.

Section 2: As answers are viewed in relation to philosophical progress, Wilf's and Willians' responses are both answers. Therefore, a key functionality of answers is for progress. Thus, functionality should ground answers.

Section 3: The existence of answers depends on the nature of knowledge, truth, and philosophical progress. Answers have essential properties — they must be clear, concise, comprehensible, communicable, logical, and progressive. Regarding the acquisition of answers, if answers are knowledge, then whether we can acquire answers depends on whether we can acquire knowledge. If the justified true belief conundrum is resolvable, then yes, answers are acquirable. Answers ought to be valuable and useful. Answers ought to be only a part of philosophy, a tool which interacts with its peers to contribute to progress.

Section 4: I argue Pythagoras' contributions are all answers. Whether it is knowledge or not depends on the nature of truths and knowledge. Thus, it is possible for answers to be the result of desires.

Section 4: I argue that incoherent, false, or illogical answers are still valid answers as long as they contribute to philosophy's progress. A coherent philosopher may find value in understanding why something is incoherent, and thus develop a theory based on that insight. I also argue that all contemplation counts as answers as long as it contributes to philosophy's progress. In this manner, Chinese Philosophy is no less valuable nor insightful than other types of philosophy as it is all progress.

Section 5: Philosophy is framed as such as it is facing progress.

Section 6: Philosophers argue that "Who cares?" are not answers as it is detrimental to progress. By disengaging with a question, one does not contribute to progress. However, I argue it is a valid position and attitude, but fails to be an answer.

Section 7: When one engages with unanswerable questions, one contemplates and draws insights, regardless of the value, significance and coherency of said insight. Answers are not the sole driver of progress. Thus, while unanswerable questions may not feel progressive, there is progression.

Section 7: The existence of answers has no bearing on whether we can acquire it or not. This is an acquisition issue and an existence issue, two separate ones which need to be addressed separately.

Section 8: Perhaps one could come up with a utilitarian-esque approach to measuring philosophical progress. Perhaps an answer contributes 10 units of progress, while another contributes 1000. I suppose then, one answer is more valuable than the other, but who cares?

Progress is progress. We concern ourselves with progress itself, not a competition for who or what contributes the most progress.

13. Answers in relation to aesthetic experiences

I argue that answers are aesthetic objects. I argue that the interactions with answers are aesthetic experiences.

Philosophy concerns itself with the truth. A philosopher must not bring emotion into philosophy. One must not be convinced of a position, argument, or answer because one has an emotional attachment to it. If not, philosophy would be a choice game where one picks whatever agrees with them. It will no longer be focused on progress.

This is not to say emotions are entirely removed from philosophical considerations. After all, some ethical theories consider emotions. Utilitarianism is an ethical theory concerned with maximising happiness¹⁴.

I argue that answers have a dimension beyond logic and truth. It has an aesthetic dimension.

Aesthetic objects are things of beauty¹⁵. It ought to have a special property as we do not consider everything to be an aesthetic object. Aesthetic experiences are responses to aesthetic objects¹⁶.

¹⁴ Julia Driver, "The History of Utilitarianism," *The Stanford Encyclopedia of Philosophy* (Winter 2022 Edition), eds. Edward N. Zalta & Uri Nodelman, December 21, 2022, <https://plato.stanford.edu/archives/win2022/entries/utilitarianism-history/>.

¹⁵ Thomas Munro, Roger Scruton, "aesthetics," *Encyclopedia Britannica*, September 5, 2022. <https://www.britannica.com/topic/aesthetics>.

¹⁶ "Aesthetic Experience," *Encyclopedia of Philosophy*, *Encyclopedia.com*, November 8, 2022, <https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/aesthetic-experience>.

Answers can be beautiful. When one considers an answer's beauty, the aesthetic experience that arises is no different from the observation of traditional fine art.

This is to say not all properties of answers are essential. After all, aesthetic properties are arguably inessential. As such, the property of beauty has no relation to philosophical progress. It need not be.

If one only considers philosophy and its components in terms of progress, one will see the heart of philosophy, but one will also miss some aspects. While not essential, philosophers can consider the beauty of their work. By reflecting on this meta-level, one unintentionally contributes to philosophy as one considers its full extent of it. In this sense, philosophical progress is not confined to logic. It has its share of emotions, in aesthetics.

14. Open questions regarding answers

The nature of answers is a topic of great depth. There are many open questions that probe the heart of this line of inquiry.

Who should answers be comprehensible to? How comprehensible should an answer be? How descriptive must it be to count as an answer? Who should answers be useful to? How valuable should answers be to count as answers? Can answers be personal, or need they be strictly impersonal?

These questions are two-fold: they are of logic, and of aesthetics. A complete analysis of the nature of answers ought to cover both aspects.

There is an open problem that troubles me. If answers are incomprehensible to humans, but not to other creatures, it is a problem of the limits of humanity's knowledge. If there exist answers that are incomprehensible to every creature, do answers lose their

meaning? Or is this the limits of sentient creatures' knowledge? What are incomprehensible answers to us?

The resolution of these problems will no doubt shape our understanding and interactions with philosophy.

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<i>Assignment Submission Declaration</i>

<i>Name:</i>	Lo Min Choong Julian
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<i>Course and Code:</i>	HY1001: Introduction to Philosophy
<i>Lecturer/Tutor:</i>	Prof. Li Chenyang
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