

Topicnumber: 4

“And when we question whether the underlying object is such as it appears, we grant the fact that it appears, and our doubt does not concern the appearance itself but the account given of that appearance – and that is a different thing from questioning the appearance itself. For example, honey appears to us to be sweet (and this we grant, for we perceive sweetness through the senses), but whether it is also sweet in its essence is for us a matter of doubt, since this is not an appearance but a judgment about the appearance.”

Sextus Empiricus, *Outlines of Pyrrhonism*

Among the schools of Hellenistic philosophy, one of much interest for anyone with an interest in epistemology flourished. *Skeptics*, as they were called, combining the negative¹ arguments of the rivaling schools of Stoics and Epicureans, tried to disprove² the possibility of knowledge. One of the key works in the tradition of Hellenistic skepticism is Sextus Empiricus' “Outlines of Pyrrhonism.” As the title shows, in the work, Sextus Empiricus tries to outline the skeptical tradition started by Pyrrho.

In this essay, I am going to discuss a certain distinction made by Sextus Empiricus. The distinction is between what the philosopher calls *appearances* and *underlying objects* (D)³. I will try to comprehend the motivation for such a distinction and the logical consequences of it. However, I will try to give some arguments against this distinction, showing how the problems the distinction addresses can be dealt with in other ways.

I. Preliminary remarks

There are some definitions and clarifications we need to make before commencing. The definitions made here will be made so that they would, even if only loosely⁴, correspond with the views of Pyrrhonian skeptics. Thus, the statements made in this part of the essay won't be argued for, they will rather serve as our starting point.

First of all, we should elaborate on the distinction (D). As for now, let us hold that the word “appearance” is more or less synonymous with “sensation,” “sense perception,” “sense data,” etc. Though there might be more subtle differences between the terms, we won't discuss them now (though the differences might become important later in the essay). We will simply take “appearance” to mean something experienced.

The term “underlying object” is more interesting. I believe it would be better to introduce the term negatively; i. e. showing what it is not. “Underlying object” is anything that is not an appearance. For example, I can have a variety of appearances associated with honey: I can taste it, smell it, touch it, and see it. However, neither the appearance of sweetness when I'm tasting honey

¹ By “negative” I mean “meant to contest a position.”

² I am aware of the fact that there are no “proofs” in philosophy, though I often use the words “prove”/“disprove” as synonymous to “give arguments for”/“give arguments against”.

³ (D) will be used later in the essay to refer to this distinction

⁴ The loose correspondence is a result of the present conditions of writing (i. e. no reference books are available).

nor any other sensation associated with it is *honey itself*. Then, in this case, honey itself would be the underlying object.

As far as the epistemic status of appearances and underlying objects is concerned, we will at first consider appearances to be granted, incorrigibly true, whereas the existence/non-existence of underlying objects will be taken to be inferable from appearances.

The last concept to introduce is *language*. Though it is not directly referred to in the topic quote, it will be important throughout the essay. I will take language to be a set of sentences, which are structured according to the same rules. (What sentences or rules are, I am not going to explain just now.) A very important feature to stress is that the sentences constituting language ought to be comprehensible to human beings who are *linguistically competent* in that language. We will also postulate a certain quality of language:

Whatever isn't an appearance, can only be known through language, i. e. can only be known through sentences about it. (1)

(1) can be elucidated as follows. An appearance can be everything which we can experience, and what we can't experience, we can only get knowledge of linguistic form of. For example, I haven't experienced the turmoil of WW2, hence the only way to know it is to read or listen about it. (1) is the premise which validates the latter line of reasoning.

As we can see, language is important to our topic, because the only way to know about the underlying objects, according to the definition of underlying objects and (1), is through language. Then, all questions about the distinction we are contesting will in one way or another have to do something with language. So, in order to better understand the topic, we will have to touch some problems related to language and its nature.

II. Appearances and language

If everything which is not an appearance can only be known through language, it would be reasonable to ask whether appearances could also be known through language. An elementary sentence, such as "I fell pain!" would suggest that they can.

However, the claim that appearances can be known through language introduces many problems. First of all, if, for example, I say "I see a chair!", am I directly referring to an appearance? The question is problematic, because a tribesman, who hasn't seen a chair in his life and doesn't know what it is, wouldn't be able to say this exact sentence, though he might be in exactly the same place and have exactly the same appearance.

There are many more similar counterexamples to the view that we can have a decent linguistic knowledge of appearances. Consider a student of medicine, who is taking part in a course on X-ray photography. At the beginning of the semester, the student neither perceives what is captured in the photos nor understands the concepts the professor tries to explain. However, as the course progresses, the student becomes more and more fluent in the medical jargon of the professor and, in parallel, recognizes more and more of the objects depicted in the photos. This counterexample suggests that the appearances we might have are related to our linguistic competence. The latter fact threatens the solidity of (D), because it cuts the line between

appearances and linguistic knowledge, which is quite important (though not of paramount importance) for (D). The counterexample is not a solid argument, though.

However, it points us to a very important issue. People rarely speak in terms of sense perception or appearances, e. g. no one says "I have an appearance X and from that infer that what I see is a computer screen." On the contrary, people normally speak directly in terms of physical objects. Moreover, scientific theories also primarily speak about physical objects, not sense perception or appearances. Having in mind our ability to carry on with our daily tasks and, especially, the success of science, we ought to question the validity of the claim that appearances are epistemically prior to underlying objects.

The urge to object to the claim is strengthened by the possibility of the *simulation hypothesis* which is allowed if we postulate the epistemic primacy of appearances. The simulation hypothesis is the view that the whole reality is just a simulation, say, in a computer (though the nature of the simulator is not actually important). The hypothesis is allowed because we state that the existence or non-existence of underlying objects cannot be known directly and can only be inferred from appearances. If that is the case, there might be more than one possible inferable "underlying reality"⁵. In fact, it is possible that there are things we cannot know; neither in virtue of our appearances nor in virtue of inference from them, and one of such things might be a computer simulating all our reality, itself being in a reality similar to ours.

III. Putnam's premises and his argument

The simulation hypothesis was attacked by a contemporary analytic philosopher, Hilary Putnam⁶. Largely drawing from his argument, I am going to present a similar argument. However, the argument needs a huge number of premises, which I am now going to introduce. I am going to give arguments for each of the premises (or at least something similar to arguments).

Putnam begins by asking how one could distinguish arbitrary patterns from (linguistic) signs. How, for example, could I distinguish a worm's trace which is accidentally reminiscent of a word from the word?

We could say that signs are intentional, i. e. they are *about something*. However, accidental patterns, when we see them, could also remind us of something. Nevertheless, we could state not the receiver, but the producer of the sign is more important. Then, everything depends on whether there is a way of distinguishing between an intelligent and an unintelligent producer of signs.

The famous Turing's test was devised to measure whether a computer possessed artificial intelligence or not. Hence, if its premises are acceptable, it could also be used to find out whether a producer of signs is intelligent or not.

The idea of the test is simple. A linguistically competent person (the judge) speaks (via instant messenger) with a few computers and a few people. After the conversation, he has to state which of the conversationalists were real people and which were computers. If the judge mistakes a computer for a person, the computer is intelligent.

⁵ By "underlying reality" I mean "the totality of existing underlying objects". By "reality" I mean "underlying reality and appearances".

⁶ See "Brain in a vat" by Hilary Putnam.

The test is based on a number of premises. First of all, the judge has to be granted linguistic competence. This might seem to be a problem, because we want to use the test to measure intelligence, but linguistic competence is something different from intelligence: we can talk to people and determine if they are linguistically competent. Secondly, and perhaps more importantly, Turing claimed that, apart from linguistic competence, there was no way of distinguish between intelligent and unintelligent beings. This premise might be contested.

Putnam claims that a sign can be differentiated because of the fact that it refers. He illustrates that with an example. Imagine two computers, which are completely detached from the environment (i. e. they have no cameras, microphones and so on), talking to each other. Suppose they both are linguistically competent, that is, they are programmed to create sentences which seem to fit the occasion of the utterance and are grammatically correct. And suppose they are talking about an object X, which is in the room they are in. Suddenly, X disappears. Because of the fact that the computers are detached from their environment, they will carry on with their conversation about X as if nothing really happened. This is because of the fact that the language of the computer doesn't refer anywhere. So, perhaps the language of an intelligent being should also contain language-enter and language-exit rules? Isn't intelligence related to the ability to interact with the environment? And reference⁷ is essential for this to be possible. Accordingly, only the reference to the objects of reality is possible.

The latter remarks go strongly against the simulation hypothesis, because a relation of an intelligent being and its environment is postulated. Thus, accepting the conclusion of the latter somewhat loose line of thought, namely, that signs can be identified because of the fact that they refer, we can finally devise a more rigorous argument against the simulation hypothesis. Consider the sentence:

The supposed reality is actually a simulation in a computer. (2)

Let's analyze what (2) actually refers to. If Putnam is right, the word "computer" in (2) refers to a computer in the simulated reality. This is only given the fact that the simulation was a constant case, i. e. (a) the language the one uttering the sentence is using has developed in the simulated world and (b) the person uttering the sentence haven't been in the real world. If (a) and (b) are satisfied, (2) could be transformed into the following:

The supposed reality is actually a simulation in a computer, which is in the same simulation. (3)

But (3) is self-contradictory, thus, any version of the simulation hypothesis satisfying both (a) and (b) is incorrect.

The argument is based on a number of premises which all can be doubted. Nevertheless, I have tried to give all of the premises reasons to make the argument more convincing. All in all, the argument has some solidity and I will take that to be sufficient for the purposes of this essay⁸.

⁷ I am not specifying what kind of reference, I am simply using the term "reference" in the most general sense.

⁸ The simulation hypothesis is one of the more radical skeptical scenarios. Such skeptical scenarios might be used to disprove the possibility of infallible knowledge: we cannot know whether our arguments really make sense or we simply are insane, for example. However, they don't disprove the existence of knowledge per se.

IV. The relation between language and appearances

So, according to Putnam, language refers to the things of our environment. We should see at what way exactly. Exploring the latter theme will also help us to suggest a possible replacement for Empiricus' view exposed in the chapter I.

Let's observe that, in order to fully operate a sentence, I have to know a lot of contextual information. Namely, I have to know what to do with the sentence. Consider, for example, Newton's Law of Gravity:

$$F = G*(m1*m2)/(R^2) \quad (4)$$

In order to be able to operate, and thus fully understand, this law, one has to know which results of measurement to put in the place of each letter. But in order to put the results into the equation, one also has to know how to get those results, thus, know how to measure and use the measuring equipment. We can carry on with such a line of thought. The conclusion is clear: in order to understand a sentence of language, I have to understand the whole language or at least a substantially huge part of it. Moreover, certain ways of behavior (e. g. the ways of measurement) should also be known.

But then, if a statement of a scientific or any other theory is tested, the whole theory is tested with it. Thus, we come to *epistemic holism*. According to the view, statements are tested against experience (or appearances) not individually, but together with a huge part of the language they belong to.

Let's elaborate on the view we've come to a bit. Together with ways of acting come certain implicit premises⁹. Moreover, language comes with its own terms, e. g. "chair" or "computer", which also carry implicit forms of behavior with them (see the chapter II of the essay). We should also see that the object "chair", for example, doesn't exist objectively, it is just a construct of our culture. Nevertheless, there's a relation of reference between the word "chair" in this sentence and the chunk of matter I am sitting on right now.

Another conclusion following from the theory would be that linguistic knowledge of appearances is not possible in a strict sense, though it is possible in a weaker sense, where we recognize the mild influence language has on our experiences. Also, sentences can be understood only together with the whole language, and thus only taken together with the whole language can they refer – this is the specific they of their reference to the reality. Of course, we cannot refer to the reality directly, but the word "neutron" really has a relation to reality. Simply speaking, we end up becoming something like modest realists.

So, to finally generalize, what have we changed in Empiricus' theory about appearances? Though experiences are very relevant in the development of knowledge, they are relevant in a much

Fallible knowledge, such as scientific knowledge, is possible and evidently exists. If a set of statements leads me to a skeptical conclusion, I shouldn't accept the conclusion, but rather evaluate the probability of the truth of the premises once again and find the one I'm least willing to accept.

⁹ If an action is done as appropriate in a certain situation, there is an implicit premise about what is appropriate.

weaker sense. And the line between appearances or experiences and language is somewhat blurred, as we have seen. So we can now also see that the distinction (D) doesn't hold without modification.

V. Conclusions

We have evaluated Sextus Empiricus' distinction between appearances and underlying objects. We have also evaluated his claim that appearances have epistemic priority if compared to things known only through language. We have explained how Empiricus' views could lead to the simulation hypothesis, given an argument against that hypothesis. The view which we suggested as a replacement for Empiricus' views (as interpreted by us) was epistemic holism.

Of course, none of the proposed arguments were really conclusive, as often happens in philosophy. Also, we've grounded our conclusions on often quite weak premises. The order and clarity had to be sacrificed because of the lack of time.

* *

Plan:

1. Introduction (Sextus Empiricus, Pyrrhonism, skepticism). Stating the problem (the distinction between appearance and the underlying reality). The problem of skepticism.
2. Preliminary remarks.
 - a. The distinction between the underlying object and an appearance.
 - b. Appearance as something granted to us and the underlying reality as something inferable from the appearances.
 - c. Are different inferable realities possible?
 - d. Language and appearances. The introduction of *language*.
3. Appearances, sense *perception* and language.
 - a. The ways in which appearances might be related to language. ((b) and (c) will lead to (d)).
 - b. The X-ray photographs and medicine students.
 - c. The concept "chair" and its real existence.
 - d. The gap between sense perception and physical objects.
 - e. The introduction of the simulation argument?
4. Putnam's "Brain in a vat." What do we really mean when we are talking about the "true essence" of a thing? What makes our language to *refer* to something?
 - a. The distinction between arbitrary patterns and signs.
 - b. Turing's test and artificial intelligence (linguistic competence as the only way of distinguishing between intelligent and unintelligent beings).
 - c. The impossibility of reference for the language of a computer. Language-enter rules and language-exit rules. (If I am told to take a cup of tea, I can identify the cup of tea and take it.)
 - d. The conclusion that when we are talking about "the real reality," and claim that our world is just a simulation, (e. g. the sentence "We all are really a simulation in a computer"), we really refer to a simulated computer. However, we are not a simulation in a simulated computer. Therefore, the simulation argument must be false.

5. The gap between appearances (or sense perception) and language.
 - a. Linguistic competence and behavior.
 - b. Scientific formulas and the ways to use them, which scientists have to know.
 - c. Epistemic holism. Scientific theories are tested only as wholes.
 - d. The possibility of different ontologies "enveloping" equivalent scientific theories.
 - e. A modest and much weaker form of realism.
6. Conclusions. Skepticism is not an obstacle for rational reflection and investigation, though it forces rationalists to be a bit more modest.