

Psycho-Logical Account of Epistemic Curiosity

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Abstract—Epistemic curiosity is an intrinsic motivation to know. This paper investigates the problem of how we can be curious about something that we do not know. The question was first asked by Socrates within his famous dialog with Meno, which has been called Meno’s Paradox or the Paradox of Inquiry. There are different answers such as Recollection Theory, Partial Knowledge Theory and Inan’s Inostensible Referencing Theory. Our theory offers a comprehensive description of psychological and logical mechanisms that make possible the formulation of unknowns as intentional objects of epistemic curiosity. This theory relies on concepts borrowed from psychological research on curiosity such as reference point and information gap as well as world knowledge and logical symbol manipulation capacity.

Keywords—Epistemic curiosity, Meno’s Paradox, the Paradox of Inquiry, world knowledge, logical inferencing, reference point, information gap, inostensible concept, definite description

I. INTRODUCTION

In his famous dialog with Socrates, Meno asks the following question: “And how will you inquire, Socrates, into something when you don’t know at all what it is? Which of the things that you don’t know will you propose as the object of your inquiry? Or even if you really stumble upon it, how will you ever know that this is the thing which you didn’t know?” [1] Although the question seems to be trivial, Socrates’ response to it shows that there is a real complexity behind it: “I know, Meno, what you mean; but just see what an eristic argument you are introducing—that it is impossible for someone to inquire into what he knows or does not know; he wouldn’t inquire into what he knows, since he already knows it and there is no need for such a person to inquire; nor into what he doesn’t know, because he doesn’t know what he is going to inquire into.” [1] Ilhan Inan is the first philosopher to adapt this question to the question of curiosity [2]. He does this by replacing the verb “inquire into” with the verb “be curious about” and establishes the validity of the problem for curiosity. In his seminal book on the subject, *The Philosophy of Curiosity* [2], he criticizes the offered solutions of Plato scholars to the paradox and then offers his own solution. We will start the paper with a review of them and then suggest our own account.

II. OFFERED SOLUTIONS TO MENO’S PARADOX

One of the offered solutions of Plato and his scholars is

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Recollection Theory. The theory argues that our immortal and omniscient souls knew everything but has forgotten them. Therefore, we are recollecting knowledge rather than acquiring it from scratch. Inan objects to this argument by asking how we can know what we have recollected is the thing that we were inquiring about [2]. The second offered solution is the Partial Knowledge Theory. This theory argues that we must have some true beliefs about something to be able to inquire into it. Inan argues against this idea by pointing out that we cannot know whether our beliefs are true when our beliefs do not amount to knowledge [2]. As his own solution to the problem, he highlights the human capacity to construct mental representations of the unknown in the form of definite descriptions. A definite description is any expression in English that starts with “the.” His own example is the definite description of “the planet perturbing the orbit of Uranus.” This definite description represents an unknown object and it was formulated before the discovery of Neptun. Its object was then inostensible. It was not discovered or observed by anyone, but there was still a definite description of it. Inan calls any such description “inostensible referencing.” [2] There are two types of inostensible referencing. In one of them we do not know whether the expression refers to a fact and in the other one we do know that it refers to a fact but we are ignorant of that fact. Inan gives examples for both types: “The description “the closest planet to Earth on which there is intelligent life” is inostensible (most likely for all us) given that we do not know whether it has a referent, but the description “the cause of dinosaur’s becoming extinct” is also inostensible for anyone who does not know what it refers to even if they know that it must have a referent (given that they know that dinosaurs existed in the past, but no longer do so, and that it has a cause).” [3]

It is clear from Inan’s linguistic analysis that we can linguistically formulate intentional expressions pointing to the unknown. Inostensible referencing is the term for this capacity. However, although useful as a descriptive language, Inan’s account of the problem seems to replace the question of how we can be curious about what we do not know with the question of how we can refer to the inostensible. In other words, his work elegantly translates the problem into the terminology of philosophy of language, but does not bring about a description that encompasses psychological and cognitive aspects of it. His efforts are highly valuable since such a translation makes possible the transfer of many interesting questions and distinctions from the literature of philosophy of language such the difference between

‘propositional’ versus ‘objectual’ curiosity and the relationship between beliefs, certainty, fallibility, dogmatism and the possibility of curiosity. In our own account of the problem of epistemic curiosity, we will utilize these insights, but focus on psychological and logical mechanisms of cognition for a thorough description..

III. PSYCHO-LOGICAL ACCOUNT OF EPISTEMIC CURIOSITY

Human intentionality can point to the unknown. This pointing is expressed in the form of definite descriptions such as “the planet perturbing the orbit of Uranus.” We argue that the capacity to refer to the unknown relies on two mental factors: (1) world knowledge and (2) capability to make logical symbolic transformations [5]. We will analyze one of the definite descriptions mentioned in this paper in terms of the world knowledge it entails and the logical inference that leads to its formulation, which is “the planet perturbing the orbit of Uranus.” This definite description includes these beliefs: (1) There is a planet called Uranus, (2) all planets have orbits, (3) there is an observed perturbation in its orbit, (4) if there is a perturbation there must be a cause of it, (5) the cause of this perturbation is likely to be another planet. A comprehensive description of the world knowledge behind the formulation of this definite description of the unknown include each and every concept and logical construct involved in it. Knowledge representations from 1 to 5 can be reformulated in a more formal logical way such as (1) Uranus is a planet, (2) all planets have orbits, therefore (3) Uranus has an orbit. (4) All movements have a cause, (5) perturbation is a movement, therefore (6) perturbation has a cause. (7) There is perturbation in the orbit of Uranus, (8) perturbation in the orbit of Uranus is a perturbation, therefore (9) perturbation in the orbit of Uranus has a cause. The final question is the reference of this cause itself. In this example, the cause is the unknown, but it is not an absolute unknown. There are constraints that limit its alternative references. For example the cause of this perturbation cannot be a wind blowing from the earth as this is against all of our scientific world knowledge. The reason why “the planet” is mentioned within “the planet perturbing the orbit of Uranus” rather than just “the cause perturbing the orbit of Uranus” is that the available world knowledge presupposes that it must be a planet since there is no other known force in the solar system that can cause this given the laws of physics (which is part of the same set of world knowledge at work in this formulation of the unknown).

This account is in line with the Partial Knowledge account, therefore Inan’s arguments against this account might apply to our account as well. However, truth of the beliefs is not relevant to our account of the problem. We believe that truth is not a condition of formulating a description of the unknown and being curious about it. Consider the definite descriptions “the Hobbit that killed the Mobbitt” or “the wind on earth perturbing the orbit of Uranus.” Each of these definite

descriptions can instigate curiosity regardless of their having a real referent or not. In the end, world knowledge is a set of beliefs some of which might be true and some of which can be false. In our account, world knowledge can be replaced with world beliefs to avoid this criticism. Logical capacity enables the formulation of information gaps by operating on beliefs as well as true beliefs. The concept of ‘information gaps’ here is borrowed from the psychological theory of Loewenstein [4]. According to this theory, curiosity is made possible by a perceived gap between what one knows and what one wants to know, i.e. the person’s informational reference point. Logic or reasoning in a more general sense enables the formulation of information gaps that become the object of epistemic curiosity as informational reference points.

This account can also account for social occasions that instigate curiosity. Suppose a philosophy student has no prior curiosity about the concept of curiosity since he takes it for granted or did not think it would be a proper subject of research. He respects a particular professor’s knowledge level and sophistication and learns that he is opening a new course on the philosophy of curiosity. Such a situation itself can instigate curiosity about the concept of curiosity and the underlying world knowledge and logical inferencing would be: (1) the professor is a sophisticated and knowledgeable person, (2) a sophisticated and knowledgeable person would not open a course about an unsophisticated and simple subject, (3) the professor opened a course on the philosophy of curiosity, therefore (4) the concept of curiosity must be a sophisticated subject of inquiry. The opening of a course triggers such an inferencing in the mental background and changes the reference point of the person, which, in turn, instigates curiosity.

This account implies an interesting conclusion related to the social dynamics of curiosity. Our informational reference points are dependent upon to extent of our world knowledge. If we do not know that curiosity is the subject of a philosophy course in one part of the world, we might be deprived of the logical inferencing that might instigate our curiosity in that subject. This is related to the fact that internet and social media are introducing hitherto unknown curiosities to our lives. When we learn that a video has been watched by millions on YouTube or that there is a new conference to which many brilliant thinkers and academicians are participating every year, it is more likely that we will be curious about their contents. Accessibility of knowledge implies the augmented possibilities of curiosity. If we work on the subject of curiosity from the field of philosophy and do not follow the literature in the field of psychology, we might be deprived of a great insight that might help us formulate another information gap, which would further instigate our curiosity. This paper is an example of this. If a philosopher thinking about Meno’s Paradox is reading this paper, he might develop a curiosity about Loewenstein’s information gap theory, which he was not aware of.

IV. CONCLUSION

The question of how we can be curious about what we do not know has recently attracted attention from the field of philosophy. Our account focuses on world knowledge and logical inferencing as a description of this capacity. This approach also opens the doors for interesting questions from the effect of social dynamics to the effect of internet on our personal curiosities. We believe that research on curiosity will continue influencing other fields and further become a curiosity in itself.

REFERENCES

- [1] Plato, *Plato's Meno* (translated by G. M. Grub). Indianapolis: Hackett: Hackett Publishing Company, 1978.
- [2] I. Inan, *The Philosophy of Curiosity*. New York: Routledge, 2012.
<https://doi.org/10.4324/9780203128893>
- [3] I. Inan, "Afterthoughts on Critiques to The Philosophy of Curiosity (Periodical style)," *Croatian Journal of Philosophy*, Vol. XVI, No. 48, 2016.
- [4] G. Loewenstein, "The Psychology of Curiosity: A Review and Reinterpretation (Periodical style)", *Psychological Bulletin*, pp. 75-98, 1994.
<https://doi.org/10.1037/0033-2909.116.1.75>
- [5] A. Subasi, *The Mysterious Point of Epistemic Curiosity (Book style, submitted for publication)*.

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