Ways models may help or hinder the search for knowledge philosophy essay



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Q10. A model is a simplified representation of some aspect of the world. In what ways may models help or hinder the search for knowledge?

The search for knowledge is an ongoing process through which certain humans intend to find answers and confirmations to questions and statements which continually arise in our society. The use of models as representations may help this task; however these may come in many forms. Different people will have a different opinion on what can be considered a model. I believe the word 'model' implies people as role models of a community, recreation of happenings, exemplary of ideas and any possibly fitting set of information which can be made to represent something. These may be divided into categories such as physical, conceptual or mathematical amongst others depending on the way they have been brought together, what they represent and when and how they are used.

An Area of Knowledge in which models may be thought to help is in the Natural Sciences. Scientists try to prove laws and theories with them but there is a great jump between a model and the real life situation. For example, a few months ago I was doing the "capture/recapture" method estimating population size of an organism. In order to do this we used boxes to represent habitats and beans to represent specie. We tried to prove that the smaller the habitat the less percentage error as well as the greater the habitat the more specie found in it. This was the result expected, nevertheless we all had different ways of looking for the beans, some

students did not follow the rules and others had their box's side's flop out.

Consequently, our data was not accurate. The environment had been controlled and human fault made results less realistic. This model helped understand the concept and attain knowledge from its simulation but also hindered the latter as there was room for error.

Another example is maps. These are a representation of the world on paper; they transmit geographical information and specific characteristics. Maps guide and help to understand the placement of things on earth. They help the search for knowledge as they are easy to comprehend; they show clear and important objects through which an individual can know where he is standing or going to next visually. However, maps also hinder as roads may be added or changed and information is limited as if absolutely everything was to be drawn on them things would overlap each other and make the search for knowledge difficult rather than clear and easy. Interpreting symbols may be confusing, scales may not be accurate and maps may not always be updated. All these factors alter the quality of knowledge that this model provides.

Another example is when a company is to manufacture a product to launch onto the market. Before the real product is made, a ' prototype' is produced. This is the closest representation to the final product. It may be used to change functions or features like shape and colour. It is a base which offers knowledge on how the final product will be like and therefore allows people to work on it to achieve the desired result. This however can be limited by technology, scarcity of adequate resources or perception in the sense that it may not come across in the same way to different people. Some may think https://assignbuster.com/ways-models-may-help-or-hinder-the-search-for-knowledge-philosophy-essay/

the prototype is perfect while others may argue it is not exactly what they wanted.

Another important area of knowledge where models are used is in history. Historians try to reconstruct the past with sources such as books written at the time, pictures or other documents. They create models for events to acquire knowledge from an earlier period of time. Here we should question to what extent are models accurate and therefore reliable. For example, the plane crash into the Twin Towers on September 11th was not perceived by everyone in the same way. People who were inside the building and survived will give a different account to that of someone who just witnessed the event on the street or on the news. Based on perspective and emotion, these two people would provide a different re-enactment of what they claim to know. How do we know which one to trust? In this case the accuracy of media and its manipulation of language will also have to be an important factor in the search for knowledge for what really happened and how.

In addition, the use of ways of knowing is fairly important when attaining knowledge from a model. Are we using reason or emotion and whether this reason is deductive,

Everyone who eats chocolate is fat.

John eats chocolates.

Therefore, John is fat.

Or inductive,

All of the Spanish girls we have seen are brunettes.

All Spanish girls are brunettes.

The latter implies a generalization in which assumptions are problematic because truth is suggested but not ensured. Consequently, the conclusion reached may not be right and result in misleading knowledge which then may be preceded by a wrongful model.

Models are created by humans who are led by either language, reason, emotion or perception which make them somehow biased. Models have an input, a processor and an output. Hence, the way we intake information is vital as it will vary our way of seeing the model and detecting to what extent our findings are being hindered or helped.

The language in relation to models is also significant. We must examine whether 'professionals' in each field of the areas of knowledge would refer to models in the same way. Would an artist see a model and the information it provides with the same eyes a mathematician would? The same model may not be equally useful to both and the extent to which it hinders or helps what they are looking for may be different to each. This may depend on what they are seeking and what they already know. Take for example Mozart's music. If a mathematician and an artist where to listen to it, a mathematician may be finding a mathematical structure in terms of notes, beat or rhythm whereas the artist may be looking at the emotion the harmony provides. The model is the same, but they both look into it differently. We could think that if they were both to find the same specific information from it which was

more inclined to one area of knowledge than the other; one would obtain better results as he is more of an expert in it.

Another example of models helping the search and understanding of knowledge is in economics. Graphs, for example, help students understand trends and social behavior. However, these may not always be right as they tend to generalize. Not all people concerned with the study represented may have had a say in it so assumptions have been taken.

When thinking of models we should consider whether there are any for resolving ethical situations. Is there a model we can look at for moral direction? For example, if someone comes up to you and asks what they should do if a ship were sinking and they had to save either a relative on one side or a newborn on the other, Is there a model to which we can refer to, to solve this dilemma? We should consider whether models can tell us how to behave, if so, who is to design such models and can they really be universally trustworthy to lead us to a 'right' decision.

A table of results may be considered a representation of a community in some aspect. Take for example a set of data which shows a survey on whether the death penalty should be adopted in a country or not. This would help the search for knowledge of people's opinion on this. Similarly, it would hinder it as different people would have based their answers on different principles. How do we know that the methods used to obtain the results are precise? Can we be certain that it is a true reflection of the country's view on this topic? Have we considered people's backgrounds, culture or religious beliefs and if this affects the answer given?

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Likewise, stereotypes may be seen as role models. For example, Homer, a character from 'The Simpsons' may be seen as a white American stereotype. He is a negative example of what some people may think is the typical American; fat, lazy and not very bright. This may help to understand the qualities and characteristics an American may have, but is it right for people to prejudice a group of individuals on the image a series gives of them? Does this mean they are all like that? How do we know to what extent the series portrays the real American or provides a misleading view of it?

In conclusion, models are an important part of our daily life. They may be treated differently in the distinct areas of knowledge and may help or hinder to different extents. When looking at models some of the key factors are baring in mind assumptions, limitations, perspectives and reliability. Can we define the accuracy of knowledge? Probably not, but models do help attain a close representation of reality which contribute significantly to the search for knowledge.