“Is it better to "have questions that can’t be answered than answers that can’t be questioned" (adapted from Richard Feynman)? Discuss with reference to mathematics and one other area of knowledge.”

I can recall how I made my mother go through my odd questions all the time as a younger child, probably like many other curious children. After all, this is a frequent way of gaining knowledge also for grown-ups who try to make sense of the world: Questioning and finding answers help humanity develop. Finding answers may not be easy in the modern world, as well as it was not for me: My mother says that sometimes I asked hard questions that she did not even know the answer to. I remember that I would be confused and upset when I received answers such as “It is just the way things are.” or “It is just how God created that”. But would I prefer my mother to say she did not know? Maybe the non-questionable answers I obtained were an obstacle to my creativity and imagination, or maybe they were the best fit in such a situation. This essay title adapts my minor inconvenience to the modern world, actually “questioning” if non-questionable answers are better than no answer at all and vice versa. This essay will be examining different situations attributing to mathematics and human sciences.

Mathematics as an area of knowledge is similar to a building, there are some rules as the foundation of the building and every other finding is added on top of it like a brick. These initial rules are set as standard. For example, elementary arithmetic is of the first things we learn at a very young age; no background information is needed for them. Also, no one actually questions these basic foundations of mathematics anymore: The properties of addition and subtraction are accepted everywhere in the world. These are called “axioms”; they do not have to be proved but they are just true in that field. Another concept that is also at the core of mathematics is definitions. For example, we define weight, length measuring units and when we say 360 degrees, it is the same for everyone.

But why are these non-questionable facts needed in mathematics? These foundations are those which let further knowledge be found. They make further knowledge sensible. If we could not state that only one distinct line passes through two distinct points in Euclidian geometry; we could not construct triangles, find the areas of them and construct buildings, architectural knowledge would be meaningless just like a brick in a house with faulty foundation. If we did not all agree on that 1+1=2, we could not further dive into statistical mathematics. Without the definition of centimeters as a unit of measurement, there would be the confusion which non-standard measuring systems bring such as length of foot or width of finger.

The importance of these initial assumptions can also be seen, observing the situation where we do not assume that they are true. In Euclidian geometry, we know that two parallel lines cannot intersect. In elliptic geometry, however, this is untrue. This results in different findings in two geometry systems, elliptic geometry states that the sum of interior angles of triangles is greater than 180 degrees (Weisstein, n.d.-a).

These terms that everyone agrees on help mathematicians reach more useful rules. If we asked “why?” about an axiom or a definition we could not get any answers. Not only is this question meaningless, but also may harm the mathematics itself, starting a confusion in the community of knowers. Because of these answers that we should not be questioning, we can further dive into mathematics and find answers to more complex questions otherwise we could not find answers to.

However, this does not mean that no other findings are ever questioned. In fact, for a mathematical finding to be true it requires rigorous proof. If the proof is true, which means it is coherent with the mathematical axioms and every other finding that comes before it, it reaches certainty and is called a theorem. Why certainty is important in mathematics can be explained with the same brick-building analogy; any broken brick that is used in the building will harm the bricks on top of that, just like any wrongly-proved finding will be detrimental to other theorems using that -apparently wrong- finding. Therefore, it is encouraged to question any proof in maths. It is better to find no answer to the problem than finding a wrong answer.

Kurt Gödel's "incompleteness theorem" also supports this. It is stated that there is no system of axioms that true statements can always be proved. This says that any mathematical system/ any set of axioms is ever sufficient so not everything is provable (Weisstein, n.d.-b), while normalizing not being able to find "answers" to a "question" in mathematics.

Human sciences work on concepts related to human psychology, thoughts, beliefs and experiences. For this aim, human scientists make observations or get informed by the subject about these concepts. However, obtained information cannot be proved as the scientists observe "personal knowledge". Even though they are "non-questionable", they are needed. A simple example, which also concerns natural sciences and extends the perspective of this essay, can be my recent doctor's appointment about my stomachache. The doctor asked me to describe my pain level on a scale of 1-10. After I gave an answer, he had no other choice but believe me, since the answer was about my senses: Sense perception as a way of knowing cannot be questioned by the person themselves, let alone other people. I could have been deceived by my senses or even been lying in that situation, but he still preferred to have an answer which assured his action plan: prescribing medication to me. This means uncertain answers might be preferred in human sciences for obtaining personal knowledge.

The need for personal knowledge can be explained through social experiments too. In many experiments containing a questionnaire or an interview; the researcher cannot obtain other people's thoughts, experiences, and feelings directly; the source should be trusted for knowledge. For example, my school's counseling service gave every student a questionnaire to fill in when the school year ended. It was about everything related to school; including teachers, staff, equipment, and lectures. Our answers were requested and highly valued, even though they were obviously non-questionable since they were about our own experiences. In these cases which deal with personal knowledge, “answers that cannot be questioned” are preferred since they give a general understanding of the situation.

However, sometimes just like in mathematics, questions that cannot be answered in human sciences may encourage progress. This situation may lead researchers into investigating the subject more, creating more ideas in the area. For example, in philosophy not being able to find a definite answer to the question “Where did we come from?” leads many philosophers to comment and discuss on the topic, making the non-answerable questions more desirable.

For human sciences, the word “can” from the prompt should be questioned because there may be other reasons that there is no answer to a question other than trying to find an answer but not reaching one. Are there situations where we “cannot answer the question” because we should not actually be pursuing answers? For this, we need to look into ethics and see how the scope of human sciences should be restricted in some cases. For example, human sciences should be considerate of the situations where prejudice and discrimination could be raised in the society. Studies that investigate a statement and its correlation with races could potentially create a bias or enhance an already-existing discrimination within the society. So, should we try to know the answers to such question? There may also be some psychological experiments that potentially harm the people that took part in the study. An example is the Bobo Doll Experiment, in which the children are observed to see if they show indications of violence after being witnessed to abuse towards the doll. It is stated that large number of children did perform similar violence towards the doll (*Bobo Doll Experiment | Simply Psychology*, n.d.); but was this experiment ethical, concerning the long-term psychological effects on those children? For such unethical questions, science might consider preferring “no answer” over a non-questionable answer.

This essay's prompt is worth discussing as it directly relates to the knowledge seeking process in our lives, also investigating the relationship between answers and questions. Before this investigation, I could realize how important it was to be able to "question" statements that are made concerning both human sciences and mathematics. As I pointed out, for many cases this is crucial for the sake of development in the field, also rejecting a dogmatic point of view. However, I figured that there were also some notable cases where questioning is less important than having an answer. I saw that axioms/ definitions do not really need questioning as they are undoubtedly accepted in the system. For further knowledge, mathematics does not value any theorems without proof -any answers without questioning- however, in human sciences sometimes a non-questionable answer is needed for a better understanding of a situation, like answers from questionnaires. This also points out an important difference between the AoK about reaching certainty: mathematics seek absolute certainty, human sciences seek the most suitable answer. Investigating the essay title from a different point of view within human sciences, I realized that some answers can raise ethical considerations unlike mathematics. This meant that "questions that cannot be answered" should be preferred when the answers should not be pursued.

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