TOK ESSAY

Question 4: With reference to two areas of knowledge discuss the way in which shared knowledge can shape personal knowledge

SUBJECT: TOK

WORD COUNT: 1587

Michel Eyquem de Montaigne once stated, "It is good to rub, and polish our brain against that of others." ("Michel de Montaigne Quotes"). One's individual understanding interacts with shared knowledge belonging to and based upon the contributions from multiple individuals, which may change over time as methods of research and attitudes in society evolve. Shared knowledge generally consists of public knowledge that is either freely accessible or only available under certain conditions and may be disclosed as part of society as a whole or within smaller communities of various beliefs, cultures, or religions. Contrastingly, personal knowledge belongs to one individual and is generally procedural knowledge gained through experience, practice, or habit, sometimes difficult to communicate. This varies according to personal traits and experiences, culture, beliefs or values. Shared and personal knowledge may differ in their ways of knowing as personal knowledge tends to involve intuition and emotion which vary across individuals, while shared knowledge often relies on reason and sense perception, which can be shared amongst a larger number of people. Shared and personal knowledge can be linked across various areas of knowledge, such as ethics and the natural sciences ("Knowledge in TOK"). One aspect of this interaction may be that shared knowledge provides a database from which personal knowledge may be gained, shaping the views, perception and understanding of individuals.

Shared ethical knowledge, such as established guidelines on ethical concepts that are generally accepted around the world, for example medical ethics, can shape the personal morals of individuals. Ethics studies the principles that dictate moral guidelines, which are defined by knowledge authorities and accepted by

the members of a group they are shared with, becoming personal knowledge of each individual ("Ethics: A General Introduction"). One example of a knowledge authority is the General Medical Council (GMC), dictating the 'duties of a doctor' in the UK. One of the medical ethical guidelines set by the GMC is that doctors must "recognize and work within the limits of [their] competence" ("Duties of a Doctor"). This understanding is shared amongst doctors in the UK and influences the personal knowledge of each doctor through their learning and application of the guidelines, via a set of skills learned in the form of procedural knowledge.

From a personal standpoint, I took part in the UK Clinical Aptitude Test (UKCAT) where I was required to obtain a general sense of the GMC guidelines and apply them to ethical scenarios, utilizing the shared knowledge to develop skills as part of my personal knowledge, which was difficult to explain to others who learned and viewed the shared knowledge differently.

From this the knowledge question "To what extent does the interpretation of shared knowledge into personal knowledge vary between individuals?" arises.

Some shared guidelines can be vague or open-ended. For example, when recognizing the limits of one's competence, each doctor must set personal limits according to their contrasting morals and principles and apply the shared knowledge learned in keeping with their expertise and own personal morals, which can vary between individuals. Furthermore, shared knowledge of ethics may change over time. For example, although medical ethical principles set up by Hippocrates around 400 BC are still used today, many of his guidelines are now outdated and it is not compulsory for doctors to swear the Hippocratic oath ("Ideals and the Hippocratic"). The GMC guidelines provide an updated version

of ethical regulations, indicating the change over time of the shared knowledge. This implies that the personal knowledge acquired may also evolve as time progresses. Thus a way in which shared knowledge influences personal knowledge in regards to ethics is by establishing fundamental guidelines to direct the behavior of individuals.

Personal knowledge of the physical world can arise from shared knowledge of the natural sciences, a branch of science dealing with variables in nature using scientific methods, including the fields of biology, chemistry and physics (Ledoux 34). It is associated with sense perception through direct observation and reason. Individuals rely on knowledge authorities for complex scientific concepts outside of the realms of their personal understanding. For example, much of the comprehension of the universe comes from NASA, focusing on specific areas, such as astrophysics, and is able to use technology to enhance sense perception. The Hubble telescope, for example, showed the expansion of the universe by locating supernovae and their distance to galaxies. This becomes shared knowledge when it is put on a public domain such as the NASA website ("Breakthroughs in Cosmology"). It then influences personal knowledge through the learning of individuals, but understanding of this knowledge will differ according to how much personal knowledge the individual previously possessed in the field. Personally, I am studying two sciences in the IB diploma, which has greatly improved my personal knowledge of both fields, because I am able to create links between the two. For example, the reasons for the functions of macromolecules studied in biology were explained to me in chemistry in terms of bond formation. I have thereby gained understanding through existing, shared

scientific theories communicated to me by my teachers.

One knowledge question, which can be extracted is "Can we rely on shared knowledge of the natural sciences?" As it relies heavily on sense perception and reason, comprehension of the natural sciences may be flawed. Our senses can be deceived, as shown by visual illusions, for example, whilst reason does not provide us with evidence but merely a predicted, logical outcome or theory. Technology used to gather scientific data may also malfunction or contain errors and limitations, which may hinder scientific knowledge. However, shared knowledge may also be viewed as more reliable, as it is agreed upon by multiple people, resulting in validation of theories.

In contrast, shared knowledge may, to an extent, be shaped by personal knowledge. When scientific theories are created, they are often a result of individual contributions of information, which together create a database of knowledge. The Australian scientists Marshall and Warren worked on proving the theory that stomach ulcers are caused by the bacteria Helicobacter pylori. Previous to this research, it was believed that it was impossible for organisms to live in the acidic environment of the stomach and ulcers were a result of high stress levels. In 1985 Marshall deliberately exposed himself to the bacteria and induced a gastric illness in his own body to prove the bacterial theory (Connor). Hereby, he gained personal knowledge about the effects of the bacteria on the stomach through experience. It took over a decade for the bacterial theory as a cause for stomach illness to be accepted due to its controversial nature. It can therefore be argued that personal knowledge must arise first, as each

contributor of shared knowledge must have first gained understanding themselves prior to being able to add it to the shared knowledge pool.

From this, the knowledge question "To what extent is the change over time of shared and personal knowledge parallel?" arises. As evidenced above, personal knowledge may exist prior to shared knowledge and may therefore be the first to change over time leading to a difference in progression of the two types of knowledge. The creator of a theory may nowadays also resist sharing their understanding to protect against theft, as it is continuously viewed as property from which profit can be made, extending the gap between shared and personal knowledge (Brown). Furthermore, the question: "To what extent does social pressure have an effect on the change in shared knowledge over time?" should be considered. The bacterial theory stomach ulcers took over a decade to be accepted, due to the views of society being resistant to the creation of a new paradigm.

Another perspective may be to consider individuals who have had little access to shared knowledge, such as children. Personal ethical knowledge may be present even without the influence of shared knowledge. As Friedrich Nietzsche argued, "Morality is the herd-instinct in the individual." ("Friedrich Nietzsche Quotes"). This emphasizes the idea that moral principles are not a result of thought and reason, but rather instinct and intuition, or immediate knowledge, which is gained without the use of reason ("Intuition: A Special Way of Knowing"). Children largely rely on intuition, as their use of reasoning is limited and they are unlikely to have had much access to shared knowledge including ethical

guidelines. I have personally experienced such an intuitive act by observing my two-year-old cousin try to rescue a fallen bird by feeding him and keeping him warm. Although she did not have a large foundation of ethical principles as she would have gained only a limited understanding by the age of two, she knew to act in a way helping the animal unconsciously through intuition, creating personal moral principles. This suggests that shared knowledge may not influence the personal knowledge of individuals, as often ways of knowing such as intuition and emotion may be used which are linked specifically to each person and are unable to be shared.

In conclusion, a bidirectional relationship between personal and shared knowledge can be established, as each influences the other. An individual would have little understanding without the contributions from others whilst a shared foundation of knowledge would not exist without contributions from the personal knowledge of individuals. In response to the ways in which shared knowledge may shape personal knowledge, it can be established that shared knowledge is able to ascertain guidelines by which to act, as demonstrated by the GMC 'duties of a doctor' as well as provide us with a database from which to draw knowledge, as is the case for scientific theories. It is a vital part in education, the creation of guidelines and our understanding of the world, and therefore has a large influence on the personal knowledge gained by individuals.

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