***“The production of knowledge is always a collaborative task and never solely a product of the individual.”* Discuss this statement with reference to two areas of knowledge.**

Knowledge can be regarded as a relevant piece of information produced under the scope of one or more epistemological fields. Production refers to a focused process that makes use of an input to originate a specific output. In the context of epistemology, each area has its own ways of producing relevant knowledge in order to create a suitable knowledge framework. In Natural Sciences, knowledge is produced under the solid guidelines of the scientific methodology, which uses primarily reason and sense perception as ways of knowing. Conversely, in Religious Knowledge Systems, even though there is no specific way of producing knowledge (owing to the fluidity present in this field), a common groundwork is established among different religions by using faith, language and memory as ways of knowing. Collaborative tasks, in contrast to the individual ones, are only fulfilled by the collective work and effort of the people willing and able to pursue them. Is the production of knowledge in a field always a collaborative work? There is no easy answer for this primary knowledge question since it depends on the area of knowledge we are looking at. When focusing on Natural Sciences, there are lots of scientific communities around the world, each one specialized in its own discipline; scientists work together to achieve a common goal in the pursuit of knowledge, and sometimes they resort to a different area of knowledge in order to broaden their way of interpreting the produced knowledge. However, to what extent is the production of knowledge in Natural Sciences intrinsically dependent on the collaborative work of scientists? Monotheism is the religious doctrine that defends the existence of an only and unique God. Monotheist religious knowledge systems commonly have the figure of a prophet or messenger who is in charge of receiving the revelation from God and then passing it on to other people in the religious community. But are these religious knowledge systems always a product of the individual revelation from the divine?

Among Natural Sciences, knowledge is often produced as an output of the collaborative tasks undergone by many scientists (the knowers) involved in the process. For instance, in Chemistry, the construction of each atomic model was not isolated from each other and, therefore, older atomic models served not only as an influence source to the more recent ones, but also as a catalyzer of newer discoveries in science. Thomson’s atomic model presented the atom as being made of a gelatinous positive mass, in which electrons were incrusted, similarly to a plum pudding. The next atomic model was proposed by Ernest Rutherford, who was aware about Thomson’s model and even expressed agreement with it at first. What actually led to the development of Rutherford’s atomic model was an inconsistency that his lab crew (Marsden and Geiger) found out when doing an experiment involving (positive) alpha particles and a thin gold foil. The fact that some particles were able to target gold atoms and then come straight back towards the source was an indicator of the existence of a positively charged and mass dense region in the atom – a nucleus. About the experiment, Rutherford once stated: “It was as if you had fired a 15in artillery shell at a piece of tissue paper and it came back and hit you”[[1]](#footnote-0). Here, the work developed within the scientific community through the construction (and reformulation) of reasonable laws, models and theories for the atomic structure was key to build up the current knowledge we have today about how atoms work, which constitutes the basic layer of Chemistry as a discipline.

Some people might argue that in Natural Sciences the production of knowledge could happen suddenly as an outcome of the individual effort of a scientist who is strongly committed to a new theory. This situation would be aggravated if the community knowledge threatened the development of the new ideas – the consolidation of prior knowledge is posing a hindrance to the production of further knowledge, which is born from the individual curiosity of knowers. For example, the English naturalist Charles Darwin proposed a revolutionary theory with respect to the origin of species in the Earth; after studying the ways mutations can be expressed and developed in a specific biological population (such as finches populations), he suggested that species are not fixed as people in his time thought they were. Indeed, Darwin’s Theory of Evolution has been found consistent with the evidences discovered after years of research, despite the little acceptance it had when Darwin first proposed his theory to the scientific community of that time. However, even if we assume that Darwin came up with the Theory of Evolution by himself, it would not currently be a consolidated theory among biologists without the collaborative efforts within the scientific community to show the reliability of Darwin’s ideas. In conclusion, the relevance of the knowledge produced in Natural Sciences is intrinsically dependent on the way the scientific community assesses its value since the community is the entity responsible for spreading the produced knowledge among general people.

Moving on towards Religious Knowledge Systems, specifically the main monotheistic branches (Christianity, Judaism, and Islam), the production of knowledge is defined very subjectively and involves several ways of knowing – faith, language (from the Scripture), and memory (traditions passed over generations) are some examples. Primarily, religion is thought to be a product of the divine revelation given to specific people, the prophets or messengers, who are in charge of transmitting the word of God forward to the people, be it orally (e.g. prayers, songs, poems, hymns, etc.) or written (Scriptures, books, letters, papyri).

Even though Holy books (Scripture) were written by individuals in the past, they are considered a source of knowledge that comes from God to instruct/orientate the creditors in terms of their behaviors and attitudes, personal morals, and social standards. The structure of these texts is mostly static since textual changes are not admitted, with the claim that God is immutable and so is their message. The role played by the prophets was therefore very valuable in terms of the production of primary religious knowledge since they were able to communicate with the divine. Here, an essential individual task has clearly been undertaken by prophets, leading to the further development of religious knowledge among the community who receives the word of God from them.

Someone could argue that the production of knowledge in religious knowledge systems is also dependent on the collective effort of the community involved in a given religion since collaborative tasks are also present in this kind of epistemological field. For example, faithful usually gather together at church/mosque/synagogue to praise God and to be part of spiritual activities such as studying the Holy book, singing hymns, celebrating blessings, praying for a specific purpose. However, no new relevant knowledge is being produced from scratch in such situations; basically, all of these are ways for an individual to practice their religion in a collaborative manner, within their community. Moreover, it is worth remembering that, in monotheistic religious knowledge systems, the knowledge groundwork is not restricted to the use of Scripture, but it also ranges the personal experience that emerges as an outcome of the religion practice. Acknowledging this, I would say that personal knowledge is not relevant in religion because everyone has different ways of practicing their religion and learning from their experiences in terms of religious manifestations; the interpretation of the actual meaning of the religious message is, again, an individual task and very subjective. Therefore, the production of knowledge in monotheistic religious knowledge is individual, but its interpretation, applicability, and diffusion are commonly collaborative tasks, undertaken by the various religious members.

In conclusion, the production of relevant knowledge in a field can be considered an outcome either of the collaborative work or of the individual effort, depending on the area of knowledge we are referring to. The setting of relevant knowledge can also vary accordingly, matching the purposes of the area. For Natural Sciences, the collaborative work of knowers is a pivotal input in the production of knowledge; the knowledge that comes from the scientific community plays an important role as the most reliable and safest source of knowledge. As a counterclaim, if a scientist is singularly the responsible for the formulation of a specific theory (like Charles Darwin and his Theory of Evolution), this could supposedly be seen as evidence for the existence of individual tasks in the production of knowledge within Natural Sciences. But I would argue back that knowledge in Natural Science only becomes relevant after its consolidation and acceptance among the scientific community, the entity which is responsible for demonstrating its reliability. Alternatively, in monotheistic Religious Knowledge Systems, the production of knowledge is considered most an individual task, given that prophets are the individuals in charge of receiving the revelation from God and transmitting it to general people. As discussed earlier, the knowledge transmission could take place by both oral and written means; Scripture is the main example of a written means that is solely a product of the individual task undertaken by specific religious agents (prophets, messengers, apostles, etc.). Even though the production of knowledge in monotheistic religions is individual, the religious interpretation, applicability, and diffusion are very often products of collaborative tasks, which does not deny the main claim since no new relevant knowldge is being produced. In the end, we can conclude that knowledge can be produced under the effort either of individuals or communities, depending on the setting of relevant knowledge and the knowledge framework that is intrinsic to a given area of knowledge.

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**Bibliography**

<https://dictionary.cambridge.org/dictionary/english/monotheism>

<https://chem.libretexts.org/Textbook_Maps/Introductory_Chemistry/Book%3A_Introductory_Chemistry_(CK-12)/04%3A_Atomic_Structure/4.12%3A_Thomson's_Atomic_Model>

<https://www.britannica.com/science/Rutherford-atomic-model>

<https://www.livescience.com/474-controversy-evolution-works.html>

<https://dissentfromdarwin.org/resources-for-students/why-is-darwinian-evolution-controversial/>

Lagemaat, Richard van de. (2015). Theory of Knowledge for the IB Diploma. Cambridge University Press, 2nd edition. Chapter 18: Religion (pp. 510-535). Cambridge, United Kingdom.

1. http://science.jrank.org/pages/621/Atomic-Models-first-atomic-models.html [↑](#footnote-ref-0)