

*How does the social context effect the questions and results of the scientific enterprise?*

Social context has quite a significant effect on the questions and results of the scientific enterprise. This is because scientific research has always been largely affected by society, as it is society that often controls what is researched in science. A lot of what is researched depends on what people want to know, and what they believe in. There have often been restraints on what is researched due to social factors such as religion, government, and even the general public.

One factor that has always had a large effect on the questions and results of the scientific enterprise is religion. Throughout history, there has always been an ongoing conflict between religion and science. Charles Darwin's theory of evolution, for example, came into direct conflict with several religions, namely those of Christianity and Islam. This was, of course, because of the challenge Darwin's theory of evolution proposed to the Creation stories in both religions. Scientists tend to disagree with the *Tower of Babel* story in the Biblical book of Genesis that describes precisely how humanity abandoned a single language and separated into many different cultures, consisting of various languages – this disagreement has, in the past, angered the conservative wing of Christianity. There are many similar disagreements between science and religion, but the cause of such disagreements remains somewhat the same. Science revolves around the study of nature, its processes, forces, and development. Most importantly, however, it is based on the analysis of evidence and assumes that processes and events happen due to natural causes, and not through divine intervention. Religion, on the other hand, deals

with matters of faith. The majority of the faith groups believe in the existence of one or more deities who created the universe and continue to play a crucial role in managing it, often doing so by bypassing the laws of nature in order to create miracles. Such vast differences between the faiths of religions as opposed to the teachings of sciences have often put a strain on scientific research, and continue to do so even today. One such example of the past would be the role of the Church in Italy – because the Church, at a certain time period, had a large effect on what Italian society was exposed to, scientific research would often be censored to fit the teachings of the Church. Any research that would challenge the teachings of the Church would be banned. Even today, there are many countries where scientific research is kept at a reserved level due to religion. This particularly occurs in countries that are deeply affected by religious organizations. There are many areas in which modern scientific research is not even allowed if it will challenge the religious beliefs of the region – usually these regions are largely populated or controlled by religious extremist organizations.

Politics and the government also affect the kind of research carried out by the scientific enterprise. In countries that are still running under some sort of authoritarian/dictatorial regime, society is kept hidden from much of the scientific research that takes place. This way, the dictatorship in question can maintain its authority over the public. Even non-dictatorial governments have a significant effect on scientific research. The government's permission is usually required when carrying out and publicizing the scientific research that is currently taking place. The government often bans research that it feels can harm the public or is too 'revolutionary'. There are also

frequent requests to scientists regarding their research when it comes to technological issues and warfare. The militaristic side of the government will make special requests to researchers regarding the building of weapons of combat, such as nuclear bombs.

Pharmaceutical companies do much of their scientific research on their own, and that too for the benefit of the company. Such companies are continuously doing their own medical research in order to enable themselves to issue a successful drug or medicine. Their main goal is naturally to make money, and in order to do so they have to issue a successful drug, for which endless hours of research is required. Medical research, for that matter, influences much of the scientific research that goes on today. Of course all the motives behind such research are not economical, but also humanitarian.

Medical research touches upon what is perhaps the most dominant factor in determining the questions and results of scientific research – the society itself. Much of scientific research is based on urgency – on what people think is important. The current Sars phenomenon is once such example, not to mention innumerable other diseases that have come into light in the last few years. With Sars spreading so rapidly around the world and taking its toll on peoples' lives, medical researches have been frantically trying to find some sort of cure or at least some way to alleviate its effects. Sars is currently the 'urgent' case for scientific research, as was HIV/AIDs in the 1980s. A large portion of India and Pakistan's scientific research is directed towards nuclear war testing, a result of their 55-year conflict with one another. At the moment, their war with each other is what both countries deem as 'urgent' and, therefore, worth the extra amount of research.

Urgency is not the only way in which the people who inhabit a society influence the scientific research that takes place. Human wants is another overriding factor that affects the kind of research that is carried out. Humans carry with them infinite wants and, whether those wants are material or immaterial, they almost always require a great deal of scientific research. Nowadays everyone wants the latest cellular phone, the most hi-tech DVD player, the most upgraded computer, the most modern television set, and the most mechanically advanced car. All of these require one constant feature – technology. Technology is one of the most controlling factors of scientific research in the modern world. Societies are no longer built upon simplicity. What interests people is the latest technological advances and how they can get their hands on the latest technological device. Producers are aware of society's hunger for technology, and therefore invest a large sum of their money in technological research to lure consumers into purchasing their products.

In conclusion, social context largely affects the questions and results of the scientific enterprise. The questions are mostly based on what people think are important, what the government thinks is important, including situations of urgency such as disease and war. Religion has an important relationship with science because of the overlapping beliefs involved. Many people prefer to know only what they believe in, and therefore societies centered on religion may not be so interested in research that collides with their own beliefs. It is most often ultimately the people themselves who decide what questions are asked and what sort of research is carried out by the scientific enterprise. They can do

so both directly, by clearly stating what research they would like to see carried out, or indirectly, such as sending signals to producers about what sort of technology interests them. Social context is, therefore, essential when concerning the questions and results of the scientific enterprise. It is society that is affected by the research that is carried out at the end of the day, and therefore social context is an element of research that simply cannot be overlooked.