

## **Science and society**

John Scales Avery (2016) Science and Society. World Scientific. ISBN-13 978-9813147713 (paperback).

<https://plato.stanford.edu/entries/scientific-knowledge-social/>

### **Why science?**

The Enlightenment forever changed the culture of Western societies. Science and technology (which came first?) have ever since played principal and indispensable roles. What happened and why is science still generally held in the highest esteem?

### **Who does research?**

Universities aren't the only place where research is done. Research and development departments are ubiquitous in the industry, and civil authorities and all administrative levels, institutes, and political and other think tanks do research.

But can science be done outside the universities? What is the difference science and research, if any?

### **Who gives the mandate and who pays?**

Most universities are public and therefore ultimately under control by the people. The people also pays for it all.

Other universities are private but usually under various degrees of governmental control.

Funds for doing research come from the government (or other public bodies) and are the taxpayers money. Private foundations and trusts also fund research and so does the industry.

Should we worry about from where the money comes?

### **Responsibilities**

How are we responsible for the methods we use in science? Can we do research however we want, can every possible problem be investigated by any means? Laws and regulations tell us "no". Why?

How are we responsible for the results from our research. Is it the individual researcher's responsibility? The funding agency, the university? Are responsibilities the same regardless of the results and the possible consequences from them?

### **What are the "products" of science?**

What are the results of science? Understanding, knowledge, innovations, culture, world views?

Should certain methods, results and discoveries not be publicly disclosed?

### **“Basic” vs. “applied” science**

Is there a distinction and if so, it is important? Does applied and basic science play by different rules?

Where in the triangular space between “l’art pour l’art”, “profit”, and “critique” do we typically find ourselves? Science in general? What is desirable?

### **Scientism and advocacy**

Should every aspect of the society be permeated by the world view of the natural sciences. Does science have an answer to all questions and aspects of human life? If not, where do we draw the line and why?

It has been argued that advocacy is a scientist’s duty. Should or shouldn’t scientist engage politically or in e.g., NGOs in their professional capacity? Are there possible conflicts of interest? What is the scientist’s role in society?