

**[F74] F Feynman, Richard P. (1974). “Cargo Cult Science”. *Engineering and Science*, 1974.**

The author begins by providing a short history how science evolved: by debunking myths. Science as a method to test if certain isolated ideas work or not. He decided to investigate why people believed in witch doctors and alike and found out, that none of those phenomena actually work.

The question “what else is there what we believe?” arises: how to treat criminals, how we educate and various other pseudo-sciences. The author introduces the term “Cargo Cult Science” describing sciences that are actually not scientific and practices that don’t work.

Futhermore, the question how to be scientific is answered. Provide all the information to judge or value a contribution, not just the information that you would like to provide and concludes that we don’t actually teach this scientific integrity in class.

He advises that we should not fool the layman or one seeking advice from us. Always be honest and conduct experiments unbiased. This involves making all results public, not just those we want to in order to achieve something such as reputation or alike. Sometimes, this scientific integrity or utter honesty is disallowed by political issues or other challenges in life and sometimes even laziness.

**[H+04] Denning, Peter J. (2005). “Is Computer Science a Science?” *CACM* vol. 48, no. 4 (April 2005), pp 27-31.**

In his paper “Is Computer Science Science?”, Peter J. Denning tries to answer the question whether computer science is an actual scientific field. The rationale behind the question is easily explained: all sciences are about fundamental laws of nature whereas the subject of computer science is man-made.

The author explains that computer science is a blend of three disciplines: computing science, engineering and mathematics. As any other science, it proposes hypotheses and test them through experiments. However, computing science does not study man-made objects. It studies information processes. The computers — as in many other fields such as physics or chemistry — are just the tools for conducting efficient research.

Depending on which research area in computing people come from, they have different opinions whether computer science is a science or an art. The author concludes that there it is both. He then questions if computer science has elements other scientific areas have: depth, a future and credibility.

Depth meaning computer science has fundamental principles: it has; a future: yes, since it combines with other disciplines to create new research areas. The problem of credibility however is self-inflicted. Too many times the field of computer science has claimed to be able to do something but ultimately failed to deliver (i.e. artificial intelligence). This kind of marketing however does not adhere to the scientific standard. Fortunately, this problem is fading away, as younger scientists enter the field.