Popularizing Science

Popularization of science is what Resonance is all about. Carl Sagan (1934-1996) was an American astronomer. His book Cosmic Connection introduced the results of researches in astronomy to wider audiences. His later works The Dragon of Eden and Broca’s Brain have done the same for recent advances in the theory of evolution and neurophysiology. In a further work, Cosmos (1980), based on a major TV series, Sagan traced the history of physics and astronomy. The book stayed on the New York Times bestseller list for over 100 weeks and sold more copies than any other science book ever published. So famous did he become that a ‘Sagan Effect’ took hold in science.

Loosely stated, it implied that one’s popularity with the general public was inversely proportional to the quality and quantity of real science being done. Harvard University’s refusal of Sagan’s bid for tenure, and the National Academy of Science’s rejection of the nomination of Sagan for membership, were both a direct effect of this Sagan effect. Michael B Shermer has evaluated that Sagan’s total career publications were 500 versus S J Gould’s 779, E Mayr’s 714 and E O Wilson’s 388 – all three were Harvard dons. Plotting Sagan’s rate of publishing popular articles versus scientific papers revealed that the latter was unaffected by the former, even after he attained superstardom after 1980. Then why did the scientific community entertain a belief in a Sagan effect, which obviously did not exist? It is because of the widely held erroneous principle that only those who cannot do science are reduced to writing about it (as G H Hardy said of mathematics). May be this is why we do not have more D D Kosambis, Jayant Narlikars and Madhav Gadgils. A pity for publications like Resonance.

1M B Shermer, This view of science: Stephen J Gould as historian of science and science historian, popular scientist and scientific popularizer, Social Studies of Science, 32/4, pp. 489-524, 2002.