Science & Superstition

THE history of science is littered with sterile theories and theories which were ultimately proved to be wrong. It is necessary to make a distinction between the two types. The former types, without any observable predictions, did not contribute to the growth of science. The latter types may have been considered viable for a while and prompted experiments which eventually led to their disproof. But, in this process, the scientist was also able to advance his knowledge.

Indeed, the modern scientist knows that no scientific theory, however right it may seem to be at present, will be entirely correct. Sooner or later, some new experiment will be designed which will disprove some crucial prediction of the theory. For a while this may lead to an apparent breakdown of law and order in the regime of science; but experience has shown that a new enriched order eventually emerges. Thus the disproof of a well-established scientific theory is regarded as a very exciting event by the scientist. It means that nature has considered man to have matured enough to appreciate yet one more of her bag of secrets.

However, the scientific outlook need not be the prerogative of the scientist alone. After all, it owes its origin to human curiosity about nature and as such every one of us, whether a scientist or not, is entitled to it. Indeed, just as in the case of science, progress could be achieved only when the scientific outlook prevailed over innate conservatism, so in the case of a society of human beings this outlook acts as an antidote to the evils of prejudice and superstitions.

Superstitions are born out of ignorance of how nature functions. Science is dedicated to the unravelling of the mysteries of nature. As one particular mystery is solved, we should expect the superstitions based on it to disappear. Yet, this does not always happen in practice because of the lack of scientific outlook in the typical human being. — Jayant V. Narlikar in *Mainstream*.