Star of Superstition

UGC has its Head in the Clouds

By JAYANT V NARLIKAR

NANA Phadnavis, the shrewd and able administrator of the Peshwa rulers of the Maratha empire in the 18th century, once decided to build a bridge at Karmanaki, near Kashi. The pundits in Kashi did 'anushthan' to ensure that the project succeeds. Unfortunately, the efforts to find firm footings in the river failed despite repeated attempts and rituals by the priests. When Nana heard of this, he put a stop to all rituals and contacted a British engineer named Baker, and entrusted the job to him. Baker brought pumps to remove water and when they proved inadequate, brought additional machinery from Calcutta. With his equipment he got the job done.

The reason for digging this episode out of the pages of history is because its lesson appears sorely needed today. As we enter the 21st century, it is not the rituals but the methods of science and technology that will see us through all the developmental projects we undertake.

Take the recent launch of the GSLV. The first attempt failed. The causes of failure were looked for and identified. After making suitable corrections, the launch was tried again, and it succeeded. No appeasement of Saturn or Mars nor looking for auspicious times of launch dictated by planets would have helped. What one needs in the country today is this spirit of science, where you examine your failures pragmatically and take corrective action dictated by rational thinking.

Unfortunately, the recent decision of the University Grants Commission to introduce new departments of Vedic astrology in our universities as well as courses in religious rituals, takes us backward in time. More so, an attempt is made to project astrology as a science by calling the course 'jyotirvigyan'.

Is astrology a science? The question has often been posed to scientists and answered also by them in abundantly clear words. The answer is a resounding 'no'. In order to qualify for being called a science a subject has to conform to the discipline of science. The discipline requires a statement of basic assumptions in clear and unambiguous terms. It then requires objective experimentation where results do not depend on who performs the experiment. Finally, it has a continuing sequence of theory and experiments where the former makes predictions which are tested by the latter. In order to command credibility, a theory must make testable predictions. Karl Popper set a very stringent criterion for this purpose, namely that the prediction must be disprovable.

Astrology does not meet any of these criteria. Its basic assumptions are vaguely worded and are not unique. Its predictions are not testable in the Popperian sense. Nevertheless, wherever possible, controlled experiments have been performed to test astrological claims and the claims have invariably failed the tests. Considerable literature exists on these studies; yet it has not reached the common man, nor, it appears has it reached the UGC.

As far back as the mid-1970s, 186 top scientists including 18 Nobel laureates had signed a statement stating why astrology is not a science and why its practice is harmful to society. They said, among other things, "Why do people believe in astrology? In these uncertain times, many long for the comfort of having guidance in making decisions. They would like to believe in a destiny predetermined by astral forces beyond their control. However, we must all face the world, and we must realise that our futures lie in ourselves, and not in the stars."

IN BRIEF

- The decision to introduce astrology in universities takes us backward in time
- Astrology does not meet scientific criteria
- The UGC should encourage studies in traditional fields like Ayurveda and yoga
- Support for pseudo-sciences could send out wrong signals

That these scientists took the unusual step of signing a statement objecting to astrology shows how seriously they viewed its threat, even though in the West, it remains on the fringe. In India, where it occupies an important place and is taken seriously by people from all strata of society, the need for its debunking is all the more compelling. Lest it is thought that only western science condemns astrology, let me recall that even great minds in India like Buddha and Vivekananda have spoken against it in unequivocal terms. It is saddening, therefore, that the subject has received the stamp of respectability from our premier body of higher education.

The UGC circular to universities extols Vedic astrology as a subject 'that makes us familiar with time, its nature and feature and its effects on human life and other events and that way it helps us to manage and make optimal utilisation of time'. This description reads like a sales-talk for some commodity, and coming from a respected organisation like the UGC, will seem to have credibility. But a discerning buyer is entitled to ask if any of these claims have indeed been proved by facts. To my admittedly limited knowledge, these claims are unsubstantiated.

Having said that, let me be the first to admit that there is a large untapped treasure lying in our ancient storehouse of knowledge. The successful fight against a foreign patent for turmeric has shown that many of our traditional streams of knowledge are very valuable. Rather than westerners telling us what is important, we need to research them ourselves. Challenging opportunities thus exist in Ayurveda, as do in the studies of yoga for the health of the mind and body. A large number of ancient manuscripts gathering dust in major libraries is a common sight. If the UGC actively encourages studies in these neglected areas, it will have done a lot for asserting our national pride for the past. Support for pseudo-sciences instead is sending the wrong signals.

At its headquarters, the UGC proudly displays a statement by Jawaharlal Nehru: "A university stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search of truth. It stands for onward march of the human race for still higher objectives. If the universities discharge their duties adequately, then it is well with the nation and the people..."

Indeed in its nearly five decades of existence, the UGC can rightly boast of several laudable attempts for improving higher education and research both in the humanities and the sciences. With a limited budget, it has still managed to support excellence in universities and has more ambitious plans for doing so in the future. Its experiment with inter-university centres has proved a great success. Against this enlightened tradition, the recent decision to set up studies in *jyotirvigyan* and *karmakanda* makes one ask the question if all is well with the UGC.