An unscientific way to bury astrology

I am disturbed by a recent editorial of *Current Science* (2000, 79, 1139–1140) in which, there is an unreasonable comparison between the removal of references to evolution in the teaching curriculum by Kansas State Board of Education (KSBE) and the efforts by the Government of India (and of the UGC) to introduce teaching astrology and palmistry in the Indian universities. The decision by the KSBE to remove evolution from the curriculum is indeed a myopic attempt to curtail the freedom of the students to gain access to certain form of knowledge and hence undoubtedly calls for an unambiguous condemnation by the scientific community. But that of introducing astrology and palmistry into the university curriculum in India cannot be equated to this. It is an attempt to separate the students from learning certain body of information that was for a long time available to many. Steps taken by KSBE are perhaps driven by religious motivation to cleanse the culture through education, at the cost of blocking the freedom of the students to gain access to certain accumulated knowledge. On the contrary, the initiative by the UGC and the government of India to introduce new courses clearly represents an open-minded attitude for the perusal of the unexplored domains of a body of knowledge accumulated at a time when the present practice of the science had not taken its roots. In this sense, this initiative, should be viewed as an open-ended opportunity offered to access the scientific worth, logical basis and social relevance if any, of these subjects that are perhaps dying due to neglect by guardians of the new schools of knowledge. Before we hit the last nails on the coffins of these subjects, we need to consider the possibilities of salvaging anything that may be of worth, from these areas.

Let us ask ourselves – how many hours have been spent in assessing the truth or otherwise of these areas? I recall a talk by C. R. Rao in Jawaharlal Nehru Auditorium at Bangalore in which he brought out a strong correlation between the life span and length of the life line in a reasonably large set of the human samples. Similarly it has been shown that ‘Among 3,458 soldiers, Jupiter is to be found 703 times, either rising or culminating when they were born. Chance predicts this should be 572. The odds here: one million to one’ (Gauquelin, Michel, Sphere of Influence, *Psychology Today*, Britain, October 1975, pp. 22–27; Reprinted in *Philosophy of Science and the Occult*, New York Press, State University, Albany, 1990). While it is true that such few and occasional examples that are not well examined do not make a strong case for astrology and palmistry, I am also not aware of equally strong data sets to reject the claims made by these subjects. In fact there is a strong defense by the proponents of astrology that certain areas of science are providing strong evidence for astrological principles and that in this sense ‘scientists are undercover astrologers’ and ‘intellectual land grabbers’ of a territory belonging to astrology (Vaughan, V., 1996. The acceptance of astrology in the real world: Revival or renovation? *The Mountain Astrologer* (Dec). Revised version at http: www.onereed.com/articles/revise.html; Vaughan, V., 1998, Debunking the debunkers: Lessons to be learned. *The Mountain Astrologer* (August/September, complete version at: http://www.onereed.com/articles/debunk.html). It is true that commonsense and logic of science as being practiced now do go against these subjects but science itself is best evidence to demonstrate that what is immediately obvious and commonsensical may not be always true. In this sense opposing these areas merely because they do not have their rooting in the soil where the present day science has emerged from, is not perhaps a good mannerism of science. Thus if, as called for by the editor, the scientific committee opposes the introduction of these subjects in the curriculum, it would perhaps expose the hidden fundamentalism of the scientists in trying to safeguard their own façade and beliefs as much as the religious lots have been doing.

The *Current Science* editorial calls for a strong opposition to the introduction of these subjects just as American Association for the Advancement of Science (AAAS), has committed to oppose the decision by the KSEB. But we need to emulate AAAS in its spirit of fighting for providing the opportunity to the students to learn, be it evolution or theology or any such subject. I do not think AAAS would stand up to oppose introduction of Vedic science as a subject by any university. Similarly, there are several scientists in the western universities working hard to evaluate the sense and nonsense of astrology (example see Kelly, I. W., *Modern Astrology: A critique*, *Psychological Reports*, 1997, 81, 1035–1066; Kelly, I. W., Why Astrology does not work. *Psychological Report*, 1998, 82, 527–546). AAAS does not intervene in their freedom. Doesn’t it appear that the initiative of our government speaks much more of its openness than some of us the scientists? One of the strong reasons used by the ‘rationalists’ for opposing the introduction of astrology and palmistry is that it is non-scientific. Even considering that it is unscientific (which I am not sure has been scientifically proven beyond doubt), why should anyone hesitate to study astrology? Is history scientific? Are art and literature scientific? But have we not readily accepted them in our curriculum? I do not understand how a chapter on European history would be much more useful to a student in India than understanding his father’s routine comments on his horoscope. With an understanding of how good and/or bad the art of writing the horoscope is, he would be better placed to ward off the psychological pressures he has to face every day due to his horoscope. One of my close colleagues has an extra ‘α’ than usual in his name added by his father due to numeric and astrological reasons. It is a pity that he does not know and hence cannot explain to others the logical and/or illogical basis of including this plasmid in his name.

Astrology and palmistry are also bodies of information. The question is whether it is a body of sensible knowledge? But when a body of information has grown it could not have on random steps. It should be on issues of certain equations or regulations or thumb-rules.
The Inter-Academy forum for biomedical sciences

Never before in the history of mankind has science had such a major impact on our daily lives. The food we eat today, the ways by which intractable diseases of the past can now be treated, the increase in our longevity and finally the way in which we can reproduce are all a result of the scientific advances made during the recent past. Our environment is rapidly changing because of the technological development that accompanies scientific progress. Global warming and pollution are some of the inevitable and undesirable consequences of technological over-use. Added to this there is the bombardment of information from the sky into the living rooms of almost anyone who can afford a television. Information is now freely available on any subject that one cares to inquire about.

We are faced with a situation that requires administrative decision making to be based on scientific advice that covers a whole gamut of cross-cultural needs of the pluralistic society of India. On a much larger scale, issues that affect mankind at large also require similar advice from a core group of scientific advisors. The recent formation of the Inter-Academy Panel and Inter-Academy Council has brought together several scientific academies to work together and advise international decision makers on aspects that affect mankind at large (Tandon, P. N., Curr. Sci., 2000, 79, 266-268).

Given the current scenario in our country, there is need for the various science academies of the country to come together and identify problems of national interest and concern, debate on them and submit a well-considered recommendation to the Government on what can and needs to be done and what the catastrophic consequences would follow if these concerns are not addressed in time.

Recently, Fellows of the Bangalore Chapter of the National Academy of Medical Sciences voluntarily took the initiative to form an Inter-Academy forum for biomedical sciences. This Forum will initially comprise Fellows of the Bangalore Chapters of the National Academy of Medical Sciences, the Indian Academy of Sciences and the Indian National Science Academy. Membership to the Forum will also be open to those who are not Fellows of any of the Academies but are actively involved in the biomedical sciences including the pharmaceutical industry. This Forum is scheduled to be inaugurated on 31 March this year by N. K. Ganguli, President of the National Academy of Sciences.

The objectives of this Forum are to:
1. Take up serious scientific issues concerning the Nation, consider these in depth and make specific recommendations to the National Academies for further implementation.
2. To create greater public awareness on recent science developments so that a well-informed public is better equipped to get involved in the political decision making process of a democratic government.

The purpose of this letter is to draw the attention of as many people who would be interested in this endeavour and to join this Forum as members;