

Astrology, navratnas and gemmology

It was quite interesting to go through the editorial, 'The astrology fallout' (*Curr. Sci.*, 2001, **80**, 1085–1086) and the correspondence 'Astrology and science' (*Curr. Sci.*, 2001, **80**, 1088–1089). I had, however, ignored an earlier editorial (*Curr. Sci.*, 2001, **79**, 1139–1140) and the letter by K. N. Ganeshaiah (719–720). In this letter, I wish to give my opinion on the influence of astrology on the selling of precious stones. I had briefly discussed about Hindu astrology on assigning nine gems to the nine major planets (navratnas), as well as the birthstones listed by Retail Jewellers Association and American Gem Society in my book *Gems and Gem Industry in India* (2000, Mem. 45, Geological Society of India, Bangalore, p. 3 and p. 375 respectively). Although there is great progress in science and technology, it is surprising to note that there is a great demand for 'stones that bring luck' or 'stones that satisfy/pacify/tranquilize (fools?)' a planet positioned unfavourably in one's horoscope! Till mid-1980s there was only a meagre demand for 'yellow sapphire' – the *pushyaraga* or *pucraj* that governs

the planet Jupiter, erroneously called topaz (misled by the ancient term 'oriental topaz'). The price of this not-so-attractive 'coloured stone', the yellow sapphire, has increased manifold in recent times, as the belief in astrology has increased. The *pucraj*, according to the astrology, is a 'safe stone' under any circumstances as it does not harass the wearer. What about other stones? If the stone assigned to Saturn (blue sapphire) or Sun (ruby) or Venus (diamond) does not suit the wearer, it brings bad luck to him/her! The beautiful stone has to tolerate abuses before being discarded or resold.

It is ridiculous to note that the navratnas are known better by their 'governors', the planets. Yellow sapphire (*pucraj*) is called the 'Guru stone' (*Guru-ka-nung* or just *Guru*). Similarly, the *Sani* – blue sapphire – the most feared of all stones. The flawless 'Kashmiri Sani' is the most expensive (because it has the most appropriate lovely colour that Saturn demands?). Burmese or Ceylon Sanis are fine, but African or Australian Sanis are looked down upon as their colour tone is too dark, etc.

All the above statements appear strange, but this is the fact in the Indian gem market. In fact, the study of gemmology was never taken seriously as a science in India, in ancient times. Before the beginning of the Christian era, Kautilya described gemstones as objects of beauty and earners of revenue to the king's treasure (Murthy, S. R. N., *Gemmological Studies in Sanskrit Texts*, Rashtrathana Mudranalaya, Bangalore, 1990, p. 103). In later stages, however, astrologers and merchants took over the study of precious stones as objects of luck!

As P. Balaram rightly reproduced in the above mentioned editorial (p. 1086), 'if Vedic astrology is to be promoted as a subject relevant to our heritage, it could be included as a part of ancient Indian studies, rather than projecting it as science'. Gemmology, however, is a part of mineralogy (science), not a fable.

R. V. KARANTH

*Department of Geology,
Faculty of Science,
M.S. University of Baroda,
Vadodara 390 002, India*

Astrology – Hype, hope and future

The academia is divided into two groups, for and against introduction of Vedic astrology in Indian universities. For the common man, any subject that is taught in universities should be job-oriented, the inherent principle of Human Resource Development. Here we would like to place some points for consideration.

Almost 60% (roughly) of the Indian population prefer to go to an astrologer for many events, right from birth of a child to the death of an individual. Astrology has been a guiding principle for most of them in distressed and confused moments. In spite of the efforts by reformists, revolutionaries, atheists and anti-superstition campaigners, our people are still behind the local jyothir vigyaniks. This shows the belief people have in the subject, irrespective of cast, creed, race

and region in India. Nowadays most of the dailies and magazines, irrespective of geographical area, publish astrology columns. Almost all the ISPs in the net offer astrology, tarot cards, numerology, etc. Most of the successful industrialists and politicians believe in astrology.

Some may argue that astrology ignores planets like Uranus, Neptune and Pluto. Astrology would not have warranted the necessity to include them in its predictions. Our epics tell us that most of the wars were won as a result of astrological calculations and most of the temples are built according to *vaasthu* and astrological principles. One may brush them aside as obsolete and useless in the present context and point to their recalcitrant nature to absorb the new inventions, as perceived by some scientists. It is our res-

ponsibility to praise the science of astrology for surviving over the years. The *Panchangams*, the astrological almanacs, could predict the day, date and time of eclipse traditionally, without the advanced gadgets available now. The Western scientific influence and advancements are only 300 to 400 years old. But the science of astrology has survived for centuries without the aid of any advancements and criticism. There has been loss of information and techniques because the practitioners did not divulge the information to strangers and also because there were no schools, colleges or institutions to sustain the subject through documentation.

Presently, there is a hype among most of the Indian population hailing the practice of traditional and ethnomedicine. Of

late, whether useful to the community or not, the ethno and traditional medicinal data-mining and compilation have been given top priority. They are seen preaching in the fora to cash in on the traditional/ethno value in the name of Intellectual Property Rights. If so, why cannot there be some consideration for astrology, as our traditional way of belief. With such an argument we are not blindly supporting the subject, but would

like to point out that even with most of our advanced scientific efforts, we fail to predict correctly natural disasters like the cyclones, earthquakes, etc.

Accepting astrology as an Indian art/science of predicting nature, would result in development of quality astrologers, at least to satisfy the mass and to get rid of spurious practitioners and quacks from the arena. This would also pave the way for advancements in this discipline. If not

successful, this would also die in due course.

S. SESHADRI
K. KATHIRAVAN

*Entomology Research Institute,
Loyola College,
Chennai 600 034, India
e-mail: tsvisesh@hotmail.com*

Research impact vs economic impact

The letter by E. Vivekanandan (*Curr. Sci.*, 2001, **80**, 118–119) makes a very important point about differentiating between research impact as reflected in journal impact factors, and the economic impact of particular research projects.

He points out that certain research reported in the *Indian Journal of Fisheries* has led to significant impact on the Indian economy. He does not provide the evidence that would be needed to demonstrate the long path from the research reported to the actual technological accomplishments in the Indian fishing industry.

In his letter he cites nine relevant publications but due to *Current Science's* unfortunate policy of omitting the titles of cited papers, it is extremely difficult for the reader to determine exactly what discoveries are involved. One would need access to the original articles just

to begin to determine the connection between the research cited and the activity in industry. Research impact (meaning impact on the scientific research community) is quite different from economic impact, a subject which is of great interest to the US advocacy organization called Research!America. This has played a significant role in gaining support for biomedical research from the US Congress. Edwin Manfield and other economists have demonstrated the economic impact of research^{1,2}. This type of information ought to influence legislators in every country.

Vivekanandan refers to the 'philosophy of Garfield' – presumably an essay published in 1979. The citation's documentation is ambiguous. I believe he intended to cite my essay in *Current Contents*³ (<http://www.garfield.library.upenn.edu/essays/v4p313y1979-80.pdf>). I think this

further illustrates the potential confusion that arises from the archaic policy of omitting titles from cited references.

It is marvellous that your journal is now available on the web. Hopefully this means you can correct this inadvertent error – in the web version, at least.

1. Mansfield, E., *Res. Policy*, 1991, **20**, 1–12.
2. Salter, A. J. and Martin, B. R., *Res. Policy*, 2001, **30**, 509–532.
3. Garfield, E., *Current Contents*, #46, 12 November 1979, pp. 5–10; Reprinted in *Essays of an Information Scientist*, 1979–1980, vol. 4, pp. 313–318.

EUGENE GARFIELD

*Institute for Scientific Information,
Philadelphia, PA 19104 USA
e-mail: garfield@codex.cis.upenn.edu*

Facts that are ignored in academic recognition-making

One would fully agree with the correspondence 'Recognition of contribution of a person should be one-time affair' (*Curr. Sci.*, 2001, **80**, 321) of Bharati Mittal and add that all is not well with the mechanism of recognition or award-making for academic excellence by different institutions. The exercise is not simple, but there is lot of scope for improvement in the mechanism by which the recognition is made. Since the number of areas in a subject in which research is being done in the country is very large, there is a likelihood that one or more

committee members of recognition-making bodies may not be aware of the top workers in a particular field who may deserve to be recognized. The mechanism is subjective too because which area attracts the attention/interest of the award making or committee members, also matters. Thus many scientists escape (I emphasize 'escape') recognition because their areas of research are not appropriately recognized.

There is yet another aspect of the mechanism of recognition-making. Outstanding or extraordinary work is well

known and people seldom fail to recognize it, but the quality and recognition of the work, which is good but second to top ranking, is always a matter of opinion. In such a case, if the person and his work have to be considered for recognition, at least one member of the committee has to know the person and be familiar with his work. This can happen only when the member works in the same area or belongs to the same department of the institution in which the person works. If one is permitted to stretch the point a little further, recogni-