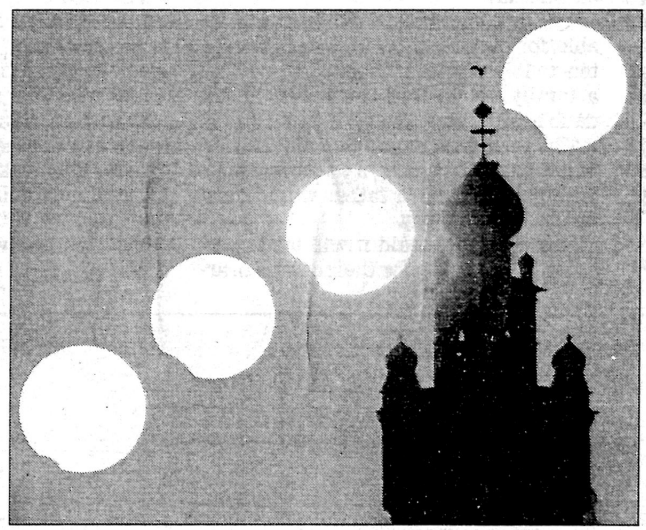
Darkness At Noon

Astrology, superstition prevail over scientific temper

By JAYANT NARLIKAR

When someone accosts me as an astronomer and asks my view on whether planets govern our destinies, I am dismayed. The questioner is usually not an illiterate villager; he is a mobile-touting, educated citizen of India. Is he unaware that scientists no longer take astrology seriously?

The idea that planets rule human destinies seems to date back to Babylonian and Greek cultures. There is no reference to planetary astrology in the Vedas, by the way. Night-sky watchers had noted that across the well-regulated, celestial framework of stars a few bodies had motions that seemed irregular, sometimes going backward, sometimes forward. The Greeks called these bodies planets, in their language wanderers. Why did planets wander? Scientifically inclined observers followed Aristotle and tried to place planetary motion in a geometrically defined framework that would reveal the pattern behind the wanderings.



Those who were not in this select group assumed that planets wandered on account of their will power. From that assumption, they concluded that the will power of planets was also exercised on mortals on earth. This belief blossomed into a large system that came to be called astrology. It spread far and wide, and found a very positive reception in India.

The scientific approach went through several hiccups, but eventually the works of Copernicus, Galileo and Kepler discovered the real pattern behind planetary motions. Kepler's findings in the first half of the 17th century led Isaac Newton to the discovery of the law of gravitation. Today, we know why planets wander. They do not have any will power. Rather, they are inert systems that move in mathematically determined orbits round the sun.

Today, space technologists can launch spaceships that rendezvous with planets at the precisely calculated times and at precisely calculated places. So, not only has the mystique surrounding the planets disappeared, but they are studied as physical objects which form part of our solar system. Given this background, it is bizarre that people should raise questions on planetary influence on human affairs.

Astrology is as deeply rooted in the Indian mindset as the caste system. I have travelled to more than 40 countries and delivered talks on astronomical topics. India is the only country where, after my talk, one of the questions asked is invariably about astrological beliefs. Although newspaper columns in many countries carry forecasts related to the zodiac signs, it is only in India that these forecasts are taken seriously. When should you move from your old house into a new one? What is an auspicious time to undertake travel? Is the present period alright for buying a car or a two-wheeler? Whether it is matching horoscopes to decide on marital compatibility, or a chief minister arranging the swearing-in of the cabinet, planets become a point of reference.

One could argue on behalf of my questioners that there might exist an unknown physical link through which planets control different human beings selectively according to when they were born. After all, modern science never claims to know everything at any given time. Even if one grants this possibility, one can still do an empirical study of the claimed planetary influences. Scientists have carried out controlled experiments of this kind, only to find no positive signal supporting the hypothesis that planets influence humans. Look at the astrological forecasts given by different newspapers of the same date. They will not agree with one another.

Science progressed because it adopted a rational approach towards hypotheses or theories. For a theory to be taken seriously, its predictions must be consistent with all the observed facts. A theory may fulfil this criterion today, but may fail to explain some new fact in the future. In that case the theory will have to be modified or replaced by a new one. This protocol, which has worked so well for the progress of science, can be followed in everyday life by all of us, even if we are not scientists. If we are told to believe in certain ideas just because tradition so dictates, we should rebel and investigate any factual evidence in support of those ideas. This is scientific temper. Astrology examined with a scientific temper does not survive.

In his Discovery of India, Jawaharlal Nehru advocated scientific temper. He deplored the fact that we were overwhelmed by tradition, and that critical faculties of intelligent people often cease to function. His hope that political freedom would change all that has been belied. Six decades after Independence, ignorance and superstition continue to flourish.

Recall the irrational response to the news that Ganesha idols were drinking milk. It is only in India that TV channels reporting on international cricket present tarot-card readers with veteran players to predict the outcome of a match. Belief in astrology, miracles of godmen and vastu shastra is on the rise, rather than decline as Nehru had hoped.

Nehru's vision of scientific temper has fallen by the wayside. Do we live in the 21st century or the 18th?

The writer is an astrophysicist.