

prepared 17-page paper outlining his case against the monopole claim ("Analysis of a Reported Magnetic Monopole," Lawrence Berkeley Laboratory report 4260, Sept. 16, 1975, unpublished) Alvarez concludes on a tone of commendable civility:

"I wish to thank Buford Price for his complete openness and obvious desire to have all the facts in the case made known. This is my first appearance in the role of 'open critic', and what otherwise might have made for a tense situation—no one really likes to have his firmly held conclusions questioned—was ameliorated by the fact that Buford and I are friends and long-time respected colleagues [ironically, both are at Berkeley]. I hope that if any of you ever finds himself in the situation I'm in today, you also have the good fortune to have as your 'debating partner' someone who was raised in the tradition of the 'Southern gentleman.'"

—Kendrick Frazier

Geography lessons

Question: What is the easternmost state of the United States? Answer: Alaska. The U.S. Geological Survey notes that if the Greenwich Prime Meridian System of Western and Eastern Hemispheres is considered, Alaska is both the westernmost and easternmost state. Semisopchnoi Island in the Aleutians, at longitude 179 degrees 36 minutes east, is in the Eastern Hemisphere and is thus the easternmost point, although it is only about 65 miles from the westernmost point, Amatignak Island, at longitude 179 degrees 6 minutes west. The occasion for pointing out this East-West business is publication by USGS of its new 50-state map, its first to show Alaska and Hawaii in their proper size and position relative to the other 48 states. The map should make Alaskans and Hawaiians happy, but it sure puts the rest of us contiguous-48'ers in our place: squinched into the map's lower-right quadrant.

* * * *

This geographical pseudorevisionism recalls the recent Smithsonian Institution disclosure that Everest is far from the world's highest mountain, if you measure from the center of the earth. That distinction goes to Mount Chimborazo, 20,556 feet above sea level in the Andes. Because it lies on the earth's equatorial bulge, its peak is 20,946,233 feet from the earth's center, exceeding Everest by 7,058 feet.

—K.F.

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LETTERS

Science vs astrology

The anti-astrology arguments of the "186 prominent scientists" "Science vs astrology: New battle, old war" (SN: 9/13/75) unaccountably omit the most telling condemnation of astrology: its ignorance of modern astronomy and of the "precession of the equinoxes" which even in the century of the Greek Ptolemy (the 2nd century, B.C.) had been noticed by the greatest astronomer of ancient Greece, Hipparchus. That means the twelve Houses of the Zodiac have "precessed" or slipped backwards by about *one whole House* since antiquity! When the modern astrologer (looking at his out-of-date astronomical charts) tells you that you were born under Capricorn, you were actually born under Sagittarius (by actual observation of the sky). That makes absurd nonsense of the character traits associated with each House, and hence of all astrological pronouncements. This argument ought to carry far more weight with intelligent young people than any "argument from authority," even prominent scientific authority.

John Spillman Jones
Santa Monica, Calif.

The booboisie, as Mencken called them, have long shown an instinctive preference for fraud; for the cosmology of a Velikovsky over that of a Fred Hoyle, for the anthropology of a Robert Ardrey over that of a Louis Leakey, for the medical insights of a Mary Baker Eddy over those of the brothers Mayo or for the gibberish of an L. Ron Hubbard over common sense. Regardless of what the "186 leading scientists" have to say, they will continue to entrust their money, health and minds to the first handy Bernie Cornfeld, Vic Tanney, Timothy Leary or Oral Roberts and, of an evening, having first solved their emotional problems via Ann Landers, will turn the paper to the astrology column for more comprehensive guidance.

The 186 leading scientists might better spend their time tending their cabbages—or their laboratories.

Charles B. Johnston
Evanston, Ill.

As one who has been both disturbed and puzzled by the recent rise in the popularity of astrology, I certainly applaud the efforts of scientists to take an open stand against it. I must, however, take exception to Bart J. Bok's statement that "Ptolemy . . . could not have known . . . that stars were unimaginably far away." Ptolemy's *Almagest*, Book I, chapter 5 states that, "The earth, in relation to the distance of the fixed stars, has no appreciable size and must be treated as a mathematical point," and goes on to give the arguments leading to this statement. Ptolemy was ignorant of many points of modern astronomy, but this, at least, was not one of them.

Robert W. McAdams
Parsippany, N.J.

Although I am not an apologist for astrology, I see a crucial reason for its increasing popularity, a reason that seems to have escaped the scientists, leaving their attack less effective than it could be. The reason for astrology's popularity is that it offers people what science does not; a psychologically meaningful link between the *individual* and the cosmos.

As an architect, I have been following the work of Gerald Hawkins, Fred Hoyle, and others who are involved with the astronomical alignments and computations of Stonehenge, Mayan temples, the Great Pyramid, and American stone circles, etc. These ancient megalithic works served not only as scientific instruments, but as sites for ritualistic festivals and ceremonies as well. Thus ordinary people *participated* in astronomy and cosmology as an organic part of their religious life and the natural cycles of the seasons, harvesting and planting.

To dismiss astrology, for instance, as "superstition" shows a serious lack of understanding of the primordial psychological need for a "meaningful relationship" with the cosmos, a need which has been part of the structure of the human psyche since the first extant traces of human life.

By not acknowledging people's basic archetypal quests for meaning, and therefore not offering alternative responses to them, scientists have not begun to understand the magnitude of the challenge put to them by astrology and other "superstitions." It is a call for cognitive frames which describe not only the order of the universe, but also give the individual a sublime sense of participation in that order.

Mimi Lobell
Professor of Architecture
Pratt Institute
Brooklyn, N.Y.

I have never had a horoscope cast, and I wholly agree that the popular conception of astrology and its relevance to an individual's life is incorrect.

The more discerning individuals give consideration to astrological principals in the same spirit as those who ascribe meaning to theological concepts and principals. These people recognize that the practical application of astrology is questionable, but no more so than is the practical application of theology—that is, religion. And who could successfully defend the position that the concepts of theology are groundless because of the inconsistencies of religion?

Many young people today (as well as others not so young) are searching for assurance that life does have relevance. The traditional providers of this kind of information, the institutionalized religions, are failing to provide reasonable answers for our era—it seems that science is failing also. Thus many turn to esotericism.

James F. Leavy
San Diego, Calif.

In reference to objections to astrology, I suppose you felt it necessary to note the existence of a document so elegantly sponsored, but I really think it could have been ignored.

Attacking superstition is like attacking a taste in women—unwarrantedly personal and so crucially pointless.

Anna Long, Palmist
Shamokin Dam, Pa.