

An open letter to Dr. Sheldon Cooper of “The Big Bang Theory” concerning the scientific basis of astrology.

by Jon Hassinger

Dear Dr. Cooper,

Because I am an enthusiastic fan of the very well written and incredibly funny television series “The Big Bang Theory,” I have had occasion to hear you repeatedly say that astrology is nonsense or, as you would put it, hokum.

Your claim is as fictitious as you are. In fact the problem is not that astrology is unbelievable, but that the scientific community hasn’t caught up with it yet. There are many scientific studies indicating the validity of astrology, some of which I will list for you. But more importantly, the results point to the need for much more scientific research.

And when it comes to proof, even the definition of the word “proof” is often in hot contention within the very community that criticizes astrology as being without proof! By “proof,” I personally mean the chemist’s definition in which an experiment is routinely repeated thousands of times, then the results published in a hesitant manner with a shy, squeaky voice and subjected to the inquisition of scowling peer review over a long period of time, and with so much argument and egos banging and pounding against each other, that everyone involved secretly gets a little ill when the study is even mentioned.

All of this takes decades, of course, unless we are at war or have some other wildly important need, in which case lots of money and a great many people get involved and conclusions are much more quickly reached.

To demonstrate with an example, suppose you wanted to set up a very simple experiment testing astrology scientifically. In a few old, musty books on the subject, astrology claims the sign Cancer is “very fruitful” meaning that crops planted when the moon is in this astrological sign will sprout and grow vigorously. Aries, on the other hand, is referred to as “barren” and will result in fewer and less enthusiastic crops when planting occurs with the moon in that sign.

Simple enough. So is there any statistically verifiable truth to this claim? You, Dr. Cooper, decide to sprout some grass seed and see (perhaps you became bored with your luminous goldfish).

To begin with, an enclosed room is required, equipped with heating and air conditioning that will keep the temperature and humidity constant, a non-varying light source, noise blocking, and all else that will eliminate variables that could affect the experiment. Using a large pile of Petri dishes, you would carefully count out grass seed into the dishes, then add an exact amount of distilled water, which is exactly at room temperature, at the exact moment the moon enters the sign Aries, and more Petri dishes and seed, doing it again when the moon enters Cancer. Of course your grass seed would be previously frozen to reduce aging and be thoroughly stirred before being randomly selected to put into the dishes. After an exact length of time, the sprouted seeds would be photographed, removed, counted, measured, and the results recorded.

After twenty or thirty years of doing this (I am not exaggerating), suppose you found a significant difference; that the seeds watered with the moon in Aries yawned and shrugged, but the seeds “planted” with the moon in Cancer made big plans to push the lid off the Petri dish by growing like crazy? You would present your findings in a paper to the scientific community for critical review, so others could perform the same experiment and see if they got the same results.

In your lifetime, Dr. Cooper, it might be acknowledged, though never proven conclusively, that perhaps grass seed does seem to sprout more vigorously and with a higher germination rate when the moon is in Cancer, than when in Aries. This is assuming the scientific community pays any attention at all to your findings.

Basically, this critical review of findings is how science works and I find no fault with being rigorous before announcing to the world that you think you have a discovery.

However, Dr. Sheldon Cooper, you as a theoretical physicist and a Ph.D. clad scientist have shamed yourself in not applying this same scientific scrutiny to astrology before stating as absolute fact that it is “hokum.”

Further, there are some real people out there, not made up characters in a television series, who have indeed engaged in science in relation to astrology and have found startling evidence (see below) pointing to the fact that astrology has validity.

You are wrong. Astrology is not “hokum.”

Scientific Studies in Relation to Astrology

Adderley, E.E. and Bowen, E.G. “Lunar component in precipitation.” *Science*, 1962, 137, 749—751.

Andrews, E.J. “Moon Talk.” *Journal of the Florida State Medical Association*, 1961, 46 1362—1366.

Barry, H. “Month of Birth as related to psychiatric conditions. A.M.A. Archives of Neurology and Psychiatry, 1956, 37—38.

Barry, H. and Barry, J. “Season of Birth. An epidemiological study in psychiatry.” *Archives of General Psychiatry*, 1961, 5, 100—108.

Bailar, J.C. and Gurian, J. “Congenital malformations and season of birth.” *Eugenics Quarterly*, 1965, 12, 146—153.

Bigg, E.K. “Influence of the planet mercury on sunspots.” *Astronomical Journal*, 1967, 72, 463—468.

Bradley, D. Woodbury, M. and Brier, G. “Lunar synodical period and widespread precipitation.” *Science*, 1962, 137, 748—749.

Brown, F.A. “Propensity for lunar periodicity in hamsters and its significance for biological clock theories.” *Proceedings of the Society for Experimental Biology and Medicine*, 1965, 120, 792—797.

Brown, F.A., Webb, M.M. and Bennett, M.K. “Proof for an endogenous component in persistent solar and lunar rhythmicity in organisms.” *Proceedings of the National Academy of Sciences*, 1955, 41, 93—100.

Burr, H.S. “Electromagnetic studies in women with malignancy of cervix.” *Science*, 1947, 105, 209.

Burr, H.S. *The Fields of Life* (N.Y., 1973).

Burrows, W. “Periodic spawning of pablo worms in Pacific waters.” *Nature*, 1945, 155, 47—48.

Charles, E. “The Hour of Birth.” *British Journal of Preventative Social Medicine*, 1953, 7, 43—59.

Clayton, H.H. "Auroras and Sunspots." *Terrestrial Magnetism and Atmospheric Electricity*, 1940, 45, 13—17.

Cowgill, Y.M. "Season of birth in man." *Ecology*, 1966, 47, 614—618.

Cowgill, Y.M., Bishop, A., Andrew, R.J., Hutchinson, G.E. "An apparent lunar periodicity in the sexual cycle of certain prosimians." *Proceedings of the National Academy of Sciences*, 1962, 48, 232—241.

Dahlen, Per. "Month of birth and schizophrenia." *Acta psychiatrica Scandinavia*, 1968, 203, 55—60.

Davis, A.R. and Rawls, W.C. *Magnetism and its Effects On The Living System* (N.Y., 1974).

Dewey, E.R. *Cycles* (N.Y., 1971).

Dewey, E.R. "A possible key to sunspot-planetary relationships." *Journal of Interdisciplinary Cycle Research*, 1975, 6, 175—184.

Edwards, J. "Season and rate of conception." *Nature*, 1938, 148, 357.

Fox, H.M. "Lunar periodicity of reproduction." *Nature*, 1932, 130, 23.

Friedman, I., Becker, R. and Bachrnan, C. "Geomagnetic parameters and psychiatric hospital admissions." *Nature*, 1963, 200, 626—627.

Gauquelin, M. *The Cosmic Clocks* (Chicago, 1967).

Gauquelin, M. *The Scientific Study of Astrology* (N.Y., 1969).

Gribbin, J. "Planetary alignments, solar activity and climatic change." *Nature*, 1973, 246, 403—405.

Gribbin, J.R. and Plagemann, S.H. *The Jupiter Effect* (N.Y., 1974).

Hare, E.H. and Price, J.S. "Mental disorder and season of birth: Comparison of psychoses with neuroses." *British Journal of Psychiatry*, 1963, 115, 533—540.

Hare, E.H., Price, J.S. and Slater, E. "Schizophrenia and season of birth." *British Journal of Psychiatry*, 1972, 120, 124—125.

Hare, E.H., Price, J.S., and Slater, E. "Mental disorder and season of birth." *Nature*, 1973, 241, 480.

Hare, E., Price, J. and Slater, E. "Mental disorder and season of birth. A national sample compared with the general population." *British Journal of Psychiatry*, 1974, 124, 81—86.

Hawkes, J. *Man and the Sun* (N.Y., 1962).

Hughes, D.W. "The inconstant sun." *Nature*, 1977, 226, 405—406.

Huntington, E. *Civilization and Climate* (New Haven, 1924).

Huntington, E. *Season of Birth. Its Relation to Human Abilities* (N.Y., 1938).

James, W.H. "Schizophrenia and season of birth." *British Journal of Psychiatry*, 1971, 119, 229—230.

James, W.H. "Social class and season of birth." *Journal of Biosocial Science*, 1971, 3, 309—320.

Johansson, B.W. "Myocardial infarction in Malmo." *Acta Medica Scandinavica*, 1972, 191, 505—515.

King, J.W. "Solar radiation changes and the weather." *Nature*, 1973, 137, 433—444.

King, J.W. "Weather and the Earth's Magnetic Field." *Nature*, 1974, 247, 131—134.

Knobloch, H. and Pasamanick, B. "Seasonal variation in the birth of the mentally deficient." *American Journal of Public Health*, 1958, 48, 1201—1206.

Koebler, K. and Jacoby, C. "Season of birth and Schneider-Oriented diagnosis of schizophrenia." *Archives für Psychiatrie und Nervenkrankheiten*, 1976, 223, 69—75.

Kolisko, L. *The Moon and The Growth of Plants. Anthroposophical Agricultural Foundation* (Brag-on-Thames, 1936).

Krupinski, J., Stoller, A. and King, D. "Season of birth in schizophrenia: An Australian study." *Australian and New Zealand Journal of Psychiatry*, 1976, 10, 311—314.

Lester, D., Brockopp, G.W. and Priebe, K. "Association between a full moon and completed suicide." *Psychological Reports*, 1969, 25, 598.

Lieber, H.L. and Sherin, C.R. "Homicides and the lunar cycle." *American Journal of Psychiatry*, 1972, 129, 69—74.

Lilienfeld, D.M. "Lunar effect on mental illness." *American Journal of Psychiatry*, 1969, 125, 1454.

Malek, J., Greich, J. and Maly, V. "Characteristics of the daily rhythm of menstruation and labor." *Annals of the New York Academy of Sciences*, 1962, 98, 1042—1046.

McCartney, J.L. "Seasonal variation in psychiatric illness." *Psychosomatics*, 1962, 3, 312—316.

Menaker, W. and Menaker, A. "Lunar periodicity in human reproduction." *American Journal of Obstetrics and Gynecology*, 1959, 78, 905—909.

Mills, C.A. *Medical Climatology* (Springfield, Ill., 1939).

Milstein, V., Small, J.G., Shelbourne, D. and Small, J.F. "Manic depressive illness: Onset diurnal temperature and season of birth." *Diseases of Nervous System*, 1976, 37, 373—375.

Norris, A.S. and Chowning, J.R. "Season of birth and mental illness." *Archives of General Psychiatry*, 1962, 7, 206—212.

Odegard, O. "Season of birth in the general population and in patients with mental disorder in Norway." *British Journal of Psychiatry*, 1974, 125, 397—405.

Osborn, R.D. "The moon and the mental hospital." *Journal of Psychiatric Nursing*, 1962, 6, 88—93.

Ossekopp, K.P. and Ossenkopp, M.D. "Self-inflicted injuries and the lunar cycle." *Journal of Interdisciplinary Cycle Research*, 1973, 4, 337—348.

Ott, J. *Health and Light* (N.Y., 1976).

Parker, C. and Neilson, M. "Mental disorder and season of birth—a Southern hemisphere study." *British Journal of Psychiatry*, 1976, 129, 355—361.

Pasamanick, B. and Knobloch, H. "Seasonal variation in the births of the mentally deficient—a reply." *American Journal of Public Health*, 1960, 50, 1737—1742.

Piccardi, G. *The Chemical Basis of Medical Climatology* (Springfield, Ill., 1962).

Pile, W.J. "A study of the correlation between dementia praecox and month of birth." *Virginia Medical Monthly* 1951, 78, 438—440.

Ravitz, J. J. "Electrodynamic field theory in psychiatry." *Southern Medical Journal*, 1953, 46, 650—660.

Ravitz, L.J. "Comparative clinical and electrocyclic observations in twin brothers." *Journal of Nervous and Mental Diseases*, 1955, 121, 72—87.

Rippmann, E.G. "The moon and the birth rate." *American Journal of Obstetrics and Gynecology*, 1957, 74, 148—150.

Rosenberg, R.L. and Colman, F.J. "27-day cycle in the rainfall at Los Angeles." *Science*, 1974, 250, 481—483.

Rush, A.K. *Moon, Moon* (Berkeley, Cal., 1976). 186

Sarton, C. "Lunar influences on living things." *Isis*, 1939, 30, 498—507.

Schnurman, A.G. "The effect of the moon on childbirth." *Virginia Medical Monthly*, 1949, 76, 78.

Schuster, A. "The influence of planets on the formation of sunspots." *Proceedings of the Royal Society of London*, 1910, 85, 309.

Shimura, M., Nakamura, I. and Miura, T. "Season of birth of schizophrenics in Tokyo, Japan," *Acta psychiatrica Scandinavica*, 1977, 55, 225—232.

Soyka, F. and Edmonds, A. *The Ion Effect* (N.Y., 1977).

Sterling, T.D. "Seasonal variations in the birth of the mentally deficient." *American Journal of Public Health*, 1960, 50, 955—965.

Stetson, H.T. *Sunspots in Action* (N.Y., 1947).

Tchijevsky, A.L. "Physical factors of the historical process." *Cycles*, 1971, 22, 11—21.

Tempkin, O. *The Failing Sickness* (Baltimore, 1971).

Tromp, S.W. and Weihe, H. (eds.) *Biometeorology* (N.Y., 1967).

Videbeck, T., Weeke, A. and Dupont, A. "Endogenous psychoses and season of birth." *Acta Psychiatrica Scandinavica*, 1974, 50, 202—218.

Volland, F.T. "Can sunspots influence our weather?" *Nature*, 1977, 269, 409—410.

Watson, L. *Supernature* (London, 1974).

Winkless, N. and Browning, I. *Climate And The Affairs of Men* (N.Y., 1975).

Wood, K.D. "Sunspots and planets." *Nature*, 1972, 240, 91—92.

Woodrugg, R.A., Guze, S.B. and Clayton, P.J. "Psychiatric illness and season of birth." *American Journal of Psychiatry*, 1974, 131, 925—926.