

Book Reviews

The Moon and Madness by Niall McCrae

250 Pages Price £17.95 Publisher Imprint Academic Exeter 2011

Niall McCrae describes to us, how Lunacy became a legal category in the 18th century, with judges earlier making a basic distinction between lunacy and other types of madness. McCrae in this book is asking whether he can find any kind of evidence, or perhaps 'scientific evidence' for this view? He reviews the sequence of modern publications on the topic, mostly sceptical: 'One cannot say with confidence that the Moon is responsible for the temporal patterns observed by researchers.' (p.177) We are not, after all, puppets of the Moon.

He ends up an agnostic, wondering: 'Beans spurt, sea urchins bulge, worms glow, clams open, wolves howl. What theoretical obstacle precludes human sensitivity to the perturbations of our satellite?' That sounds rather like Plutarch's observation: 'The moon showeth her power most evidently even in those bodies which have neither sense nor lively breath.'

We are treated to quite an excursus of historical events and opinions not always relevant, and maybe this reflects the difficulty of finding a proper focus or way of approaching this topic. Permit me to suggest that, if our Author wanted to do a book which reached *gnosis*, knowledge, rather than *a-gnosis*, agnosticism, it might proceed as follows. Firstly, Chris Knight's '*Blood Relations*' the anthropology text which argued and I suggest established that in prehistory womankind in human societies really did bleed in tune with the Moon. That's 'why' the mean female menstrual cycle is between 29-30 days. That has a huge effect in mythology, ethnology, folklore and fairytale, as the synchrony gradually broke down once 'civilised' life began. That gives us a basic human view of the difference between Full Moon, more for celebrating and feasting, versus the New Moon, when women would be put into separate groups as they were bleeding.

For example, my study of Samaritan phone calls to which McCrae alludes (p.110) but shows no sign of having read found that female calls peaked dramatically at New Moon, whereas male calls were more the other way round, with a much weaker peak at Full Moon. I suggest that ancient pattern of the new and full moon versus the female cycle, and the structuring of society which resulted from that, can account at a quite subliminal level for such stress-experience.

Next, I suggest Dr McCrae should review studies showing that, when isolated from solar signals concerning day or night, ie lacking normal time-signals, people repeatedly tend to adapt to lunar time, they naturally adapt to the 24.8 hour lunar day rather than the 24 hour solar time. That is the lunar day, not the month.

Then Dr McCrae surely ought to have used and based his argument upon the findings of Harry Rounds (Wichita State University, Kansas), concerning stress in mice and men. He found that 'cardioacceleratory hormones' were produced more with bimonthly tidal-type peaks a day or two after the Full and New moons. That is a tidal rhythm, for the tides peak just after such syzygy positions. This surely gives us some kind of model or biochemical basis for expecting stress to have some lunar component.

Dr McCrae does discuss the vitally relevant work of Jeremy Ravetz, who found that millivolt differences between head and chest in his patients would sometime vary with the lunar month. He was a student of Harold Saxton Burr, at Duke University School of Medicine. Burr developed the technique of measuring small millivolt potentials across living organisms. All of Ravetz' groups displayed a tidal rhythm with syzygy peaks, but his seriously maladjusted patients displayed the biggest electrical swings in this respect. Ravetz found that he could use these fortnightly swings to predict when his disturbed conditions would be experienced by his patients.

These results were comparable to what Burr and another student of his found with tree electric potentials whereby they displayed fortnightly lunar-tidal rhythms, and I suggest if anyone wanted to develop a scientific approach to this subject such an analogy between tree and human electric tidal potentials would be a good start.

This fascinating but elusive topic is or should be a study of rhythms, however 'results' in this area tend to be expressed in terms of four boxes, as data is grouped by the lunar quarters – described in McRae's chapter 4, 'Eclipsed by mental science'. Somebody publishes a positive result with a peak in one of the four boxes, then a few years go by and then someone else publishes a negative result. The negative results one typically ends up with, mean that we are forever in the situation where the public - including policemen on duty and nurses in wards etc - believe that there is some lunar influence, whereas 'science' is held to show the contrary. Or we should rather say that science has failed to show that there is a significant influence, as one cannot prove a negative.

As McRae tells us, in 2007 Brighton police were putting more officers on patrol over the summer Full Moons, owing to a trend graph of crime in the area, prepared by Inspector Andy Parr (report: The Telegraph, 'More police to patrol on Full Moons').

McRae recommends the two books *Electrodynamic Man* 2002 by Jeremy Ravitz, and Becker's *Body Electric: Electromagnetism and the Foundations of Life* 1985; to these I'd like to add, *Electromagnetic Man* by Simon Best and Smith 1990. The story of lunar influence is intertwined with subtle magnetic-electric fields as these several books have recognised. McRae might wish to peruse the last of these, as advocating use of the nodal cycle, whereby Full Moons are deemed to be strong or weak in their effect according to their celestial latitude. There is an analogy here with monthly perturbation of the Earth's geomagnetic field by the Moon which I won't go into. McRae evaluates claims about the apogee-perigee cycle – where the archetypal case had to be Othello, after murdering his true-love Desdemona, blames the Moon for coming to close – 'She comes more near the Earth than she is wont, and makes men mad' - however it could be that the nutation or node cycle is here of a greater relevance.

The most important omission from this opus has to be Alexandre Dubrov's *Human Biorhythms and the Moon*, New York 1996 (a follow-on to his masterly but deeply-ignored *The Geomagnetic Field and Life*, trans. from the Russian in 1978). The Russian work described here describes the subtle interconnections between the GMF response and lunar cycles.

To quote just one result from Dubrov's book, human colour sense varies with the lunar month, with a better red perception at the Full Moon and more blue perceived at New Moon. This is a simply testable result - never replicated by any British psychology lab for obvious reasons. For comparison, sea-creatures show a shift in colour perception between the two ends of syzygy, with fish showing a more intense yellow perception around the time of the Full Moon, and then a better perception of violet around the time of the New.¹

The blurb on McCrae's book says it offers 'a critical examination of the evidence,' but I have doubt whether a hypothesis has been formulated in this book, enabling any evidence to be thus examined. If the question is, 'Does the Moon make people mad?' then that can be answered in one word, 'No.' McCrae writes that his book has examined 'the fundamental question of whether Moon affects mind.' (p.172) I may not know what is meant by 'mind' in this context, and doubt whether a question formulated in these terms is testable. I suggest that in this area quite a lot depends upon first formulating a question that is capable of being answered.

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¹ Dubrov, *Human Biorhythms and the Moon*, p.26; for more biological phenomena see K. Endes and W. Schad, *Moon Rhythms in Nature*, 2001.