**Lunacy and the Full Moon**

Does a full moon really trigger (ПОБУЖДАЕТ) strange behavior?

“It is the very error of the moon.She comes more near the earththan she was wont. And makesmen mad.”  
—William Shakespeare, Othello

**ACROSS THE CENTURIES**, many a person has uttered (ПРОИЗНЕСЛИ) the phrase “There must be a full moon out there” in an attempt to explain weird happenings at night. Indeed, the Roman goddess (БОГИНЯ) of the moon bore a name that remains familiar to us today: Luna, prefix of the word “lunatic.” Greek philosopher Aristotle and Roman historian Pliny the Elder suggested that the brain was the “moistest” (ВЛАЖНЫЙ) organ in the body and thereby (И ТАКИМ ОБРАЗОМ) most susceptible (ВОСПРИИМЧИВЫЙ) to the pernicious influences (ПАГУБНОЕ ВЛИЯНИЕ) of the moon, which triggers the tides (ПРИЛИВЫ И ОТЛИВЫ). Belief in the “lunar lunacy effect,” or “Transylvania effect,” as it is sometimes called, persisted (СОХРАНИЛОСЬ) in Europe through the Middle Ages, when humans were widely reputed (СЧИТАЛОСЬ) to transmogrify (ПРЕВРАЩЕНИЕ) into werewolves or vampires during a full moon.

Even today many people think the mystical powers of the full moon induce (ВЫЗЫВАЕТ) erratic (СТРАННОЕ) behaviors, psychiatric hospital admissions, suicides, homicides, emergency room calls, traffic accidents, fights at professional hockey games, dog bites and all manner of strange events. One survey revealed (РАСКРЫЛ) that 45 percent of college students believe moonstruck humans are prone to unusual behaviors (ЛУНАТИКИ СКЛОННЫ К НЕОБЫЧНОМУ ПОВЕДЕНИЮ), and other surveys suggest that mental health professionals may be still more likely than laypeople to hold this conviction (МОЖЕТ БЫТЬ ЕЩЕ БОЛЕЕ ВЕРОЯТНО ЧЕМ МИРЯНЕ ПРИДЕРЖИВАЮТЬСЯ ЭТОГО УБЕЖДЕНИЯ). In 2007 several police departments in the U.K. even added officers on full-moon nights in an effort to cope with presumed higher crime rates. (В ПОПЫТКАХ СПРАВИТЬСЯ С ПРЕДПОЛАГАЕМЫМ БОЛЕЕ ВЫСОКИМ УРОВНЕМ ПРЕСТУПНОСТИ)

**Water at Work?**  
Following Aristotle and Pliny the Elder, some contemporary (СОВРЕМЕННЫХ) authors, such as Miami psychiatrist Arnold Lieber, have conjectured (ВЫСКАЗАЛ ПРЕДПОЛОЖЕНИЕ) that the full moon’s supposed effects on behavior arise from its influence on water. The human body, after all, is about 80 percent water, so perhaps the moon works its mischievous magic (ВРЕДНАЯ МАГИЯ) by somehow disrupting the alignment of water molecules in the nervous system.

But there are at least three reasons why this explanation doesn’t “hold water,” pardon the pun (ПРОСТИТЕ ЗА КАЛАМБУР).

First, the gravitational effects of the moon are far too minuscule (ОЧЕНЬ МАЛЕНЬКИЙ) to generate any meaningful effects on brain activity, let alone behavior (НЕ ГОВОРЯ УЖЕ О ПОВЕДЕНИИ). As the late astronomer George Abell of the University of California, Los Angeles, noted, a mosquito sitting on our arm exerts a more powerful gravitational pull on us than the moon does. Yet to the best of our knowledge, there have been no reports of a “mosquito lunacy effect.”

Second, the moon’s gravitational force affects only open bodies of water, such as oceans and lakes, but not contained sources of water, such as the human brain.

Third, the gravitational effect of the moon is just as potent during new moons (ТАКОЙ ЖЕ МОЩНЫЙ ВО ВРЕМЯ НОВЫХ ЛУН) —when the moon is invisible to us—as it is during full moons.

There is a more serious problem for fervent (ПЫЛКИХ) believers in the lunar lunacy effect (ЭФФЕКТ ЛУННОГО БЕЗУМИЯ): no evidence that it exists. Florida International University psychologist James Rotton, Colorado State University astronomer Roger Culver and University of Saskatchewan psychologist Ivan W. Kelly have searched far and wide for any consistent (СОГЛАСОВАНИЯ) behavioral effects of the full moon. In all cases, they have come up empty-handed. By combining the results of multiple studies and treating them as though they were one huge study—a statistical procedure called  meta-analysis—they have found that full moons are entirely unrelated to a host of events (СОВЕРШЕННО НЕ СВЯЗАНО С МНОЖЕСТОВОМ СОБЫТИЙ), including crimes, suicides, psychiatric problems and crisis center calls. In their 1985 review of 37 studies entitled “Much Ado about the Full Moon,” which appeared in one of psychology’s premier journals, Psychological Bulletin, Rotton and Kelly humorously bid adieu (С ЮМОРОМ СМИРЕННО ПРОЩАЮТСЯ) to the full-moon effect and concluded that further research (ПРИШЛИ К ВЫВОДУ ЧТО ДАЛЬНЕЙШИЕ ИССЛЕДОВАНИЯ) on it was unnecessary.

Persistent (УПОРНАЯ) critics have disagreed with this conclusion, pointing to a few positive findings that emerge in scattered studies (КОТОРЫЕ ПОЯВЛЯЮТСЯ В ОТДЕЛЬНЫХ ИССЛЕДОВАНИЯХ). Still, even the handful of research claims (ГОРСТКА ИССЛЕДОВАТЕЛЬСКИХ ПРЕТЕНЗИЙ) that seem to support full-moon effects have collapsed (РАЗВАЛИЛСЯ) on closer investigation (РАЗБОРЕ). In one study published in 1982 an author team reported that traffic accidents were more frequent on full-moon nights than on other nights. Yet a fatal flaw marred (РОКОВОЙ НЕДОСТАТОК ОМРАЧИЛ) these findings: in the period under consideration (РАССМОТРЕНИЯ), full moons were more common on weekends, when more people drive. When the authors reanalyzed their data to eliminate this confounding (СТАВЯЩИЙ В ТУПИК) factor, the lunar effect vanished (УСТРЕМИЛСЯ К НУЛЮ).

**Where Belief Begins**  
So if the lunar lunacy effect is merely (ПРОСТО НАПРОСТО) an astronomical and psychological urban legend, why is it so widespread? There are several probable reasons. Media coverage (ОСВЕЩАЕТСЯ В МЕДИА) almost surely plays a role. Scores of Hollywood horror flicks (КИНО) portray full-moon nights as peak times of spooky occurrences such as stabbings (ЖУТКИЕ ЯВЛЕНИЯ ТАКИЕ КАК НАПАДЕНИЯ К КОЮЩИМ/РЕЖУЩИМ ОРУЖИЕМ), shootings and psychotic behaviors.

Perhaps more important, research demonstrates that many people fall prey (СТАНОВЯТСЯ ЖЕРТВАМИ) to a phenomenon that University of Wisconsin–Madison psychologists Loren and Jean Chapman termed “illusory correlation”—the perception (ВОСПРИЯТИЕ) of an association that does not in fact exist. For example, many people who have joint pain (БОЛИ В СУСТАВАХ) insist (НАСТАИВАЮТ) their pain increases during rainy weather, although research disconfirms this assertion (ОПРОВЕРГАЕТ ЭТО УТВЕРЖДЕНИЕ). Much like the watery mirages (ВОДЯНИСТЫЕ МИРАЖИ) we observe on freeways (АВТОСТРАДАХ) during hot summer days, illusory correlations can fool us into perceiving (ВОСПРИЯТИЕ) phenomena in their absence (ПРИ ИХ ОТСУТСТВИИ).

Illusory correlations result in part from our mind’s propensity (НАКЛОННОСТИ) to attend to—and recall—most events better than nonevents. When there is a full moon and something decidedly odd happens, we usually notice it, tell others about it and remember it. We do so because such co-occurrences fit (СОВПАДЕНИЯ ПОДХОДЯТ) with our preconceptions (ПРЕДУБЕЖДЕНИЯ). Indeed, one study showed that psychiatric nurses who believed in the lunar effect wrote more notes about patients’ peculiar (СВОЕОБРАЗНОЕ) behavior than did nurses who did not believe in this effect. In contrast, when there is a full moon and nothing odd (СТРАННОЕ) happens, this nonevent quickly fades (СТИРАЕТСЯ) from our memory. As a result of our selective recall, we erroneously perceive (НЕУМЕЛО ВОСПРИНИМАЕМ) an association between full moons and myriad bizarre (БЕСЧИСЛЕННОЕ МНОЖЕСТВО СТРАННЫХ) events.

Still, the illusory correlation explanation, though probably a crucial (КЛЮЧЕВОЙ) piece of the puzzle, does not account for how the full-moon notion got started (ПОНЯТИЕ НАЧАЛОСЬ). One intriguing idea for its origins comes to us courtesy (УЧТИВОСТЬ) of psychiatrist Charles L. Raison, now at Emory University, and several of his colleagues. According to Raison, the lunar lunacy effect may possess (ОБЛАДАТЬ) a small kernel of truth in that it may once have been genuine. Raison conjectures (ДОГАДЫВАЕТСЯ) that before the advent of outdoor lighting (ПОЯВЛЕНИЕ НАРУЖНОГО ОСВЕЩЕНИЯ) in modern times, the bright light of the full moon deprived people who were living outside—including many who had severe mental disorders—of sleep. Because sleep deprivation often triggers erratic behavior in people with certain psychological conditions, such as bipolar disorder (formerly called manic depression), the full moon may have been linked to a heightened rate of bizarre behaviors in long-bygone eras (ПОВЫШЕННЫЙ УРОВЕНЬ СТРАННОГО ПОВЕДЕНИЯ В ДАВНО МИНУВШИХ ЭПОХАХ). So the lunar lunacy effect is, in Raison and his colleagues’ terms, a “cultural fossil.” (КУЛЬТУРНОЕ ИСКОПАЕМОЕ)

We may never know whether this ingenious (ИЗОБРЕТАТЕЛЬНОЕ) explanation is correct. But in today’s world at least, the lunar lunacy effect appears to be no better supported than is the idea that the moon is made of green cheese.

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