Moods and the Muse

A new study reappraises the link between creativity and mental illness

By BRUCE BOWER

The 19th-century poet Lord Byron endured what he called "savage moods." From childhood on, he careened between periods of wretched despondency and fiery, increasingly irrational urges and thoughts. His volatile temperament frequently set off sparks of poetic imagination, inspiring him at one point to write of "the apostle of affliction, he who threw enchantment over passion, and from woe wrung overwhelming eloquence."

Byron expresses a widespread intuition that creativity and genius feed off mental turmoil. The ancient Greeks, for instance, believed in divine forms of madness that inspired mortals' extraordinary creative acts or performances. Modern scientists have conducted more than a dozen studies documenting a higher rate of mental disorders, particularly disturbances of mood such as depression and manic depression, in painters, poets, musicians, and novelists.

An editorial in the April AMERICAN JOURNAL OF PSYCHIATRY, written by psychiatrists Peter C. Whybrow of the University of Pennsylvania in Philadelphia and Nancy C. Andreasen of the University of Iowa Hospitals and Clinics in Iowa City, cites this evidence as supporting an association between mood disorders and creativity.

Some researchers take this argument further, arguing that mood disorders sometimes enhance or otherwise add punch to creativity (SN: 5/7/94, p.302). Yet they acknowledge that individuals who navigate relatively calm emotional waters can also wash onto the shores of artistic greatness.

Even with that caveat, the linking of mood disorders to innovative thinking relies on a view of creative eminence that exaggerates its tie to mental maladies, argues Arnold M. Ludwig, a psychiatrist at the University of Kentucky Medical Center in Lexington. New data indicate that emotional stability typifies innovative people in certain disciplines, such as architecture and the sciences, and occurs in a good many people in artistic fields as well, Ludwig asserts. Byronic sufferings engender creative breakthroughs only when accompanied by a particular suite of personal attributes and circumstances, he says.

Ludwig describes this "template for greatness" in *The Price of Greatness: Resolving the Creativity and Madness Controversy* (1995, Guilford Press).

"Mental illness is not the price people pay for their creative gifts," the Kentucky psychiatrist holds. "While mental disturbances may provide individuals with an underlying sense of unease that seems necessary for sustained creative activity, these disturbances are not the only source for inner tension."

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Roulin's Baby *(1888), oil on canvas by Vincent van Gogh.*

Ludwig derives his argument from a 10-year investigation in which he gathered extensive biographical information on 1,004 deceased men and women who had lived during the 20th century and gained prominence in the arts, the sciences, public office, the military, business, or social activism.

Ludwig developed a creative achievement scale to measure the relative eminence of each person in the sample. The scale contains 11 items, some of them carrying more weight than others. Key elements of eminence include recognition and reputation after death, worldwide appeal of creative works, the setting of new directions and demonstration of foresight in a field, influence over colleagues and the public, originality in creative efforts, and the extent of innovative accomplishments over a lifetime.

Ludwig avoided the temptation to diagnose specific psychiatric disorders from written accounts of people's lives. Instead, he used biographical information to classify certain broad categories of symptoms as "definite" or "probable." These included alcohol- and drug-related problems, depression, mania, incapacitating anxiety, bizarre delusions and other psychotic symptoms, bodily preoccupations, and suicide attempts.

About one-third of the eminent poets, musical performers, and fiction writers in Ludwig's study suffered from serious psychological symptoms of some kind as teenagers, a rate that ballooned to about three-quarters when they reached adulthood. Teenagers destined for other arenas of creative achievement usually displayed good mental health. As adults, however, psychological disturbances affected one-half to two-thirds of eminent artists, composers, nonfiction writers, actors, directors, musical performers, social scientists, architects, and athletes.

Prominent natural scientists, politicians, explorers, soldiers, and businesspeople had the lowest rates of adult mental conditions among those studied, ranging from one-quarter to one-third.

In particular, 46 to 77 percent of poets, fiction and nonfiction writers, painters, and composers encountered periods of serious depression, at least twice the rate observed in persons in other fields. Mania appeared most often in actors, poets, architects, and nonfiction writers, with lifetime rates ranging from 11 to 17 percent. The severe mood swings that make up manic depression afflict a little less than 1 percent of the general population.

Some professions draw out emotional turmoil, while others tamp it down, Ludwig contends. Fields that tolerate ambiguity and flexibility in creative expression, such as painting, poetry, and fiction writing, more readily accept practitioners with mental disorders and allow them to wrestle with their inner demons in their art. Fields that emphasize accumulated knowledge and structured means of exploration, such as

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The Tragedy *(1903), oil on wood by Pablo Picasso.*

science, attract and promote people with calmer temperaments.

As a case in point, Ludwig notes that 28 percent of eminent representatives of artistic fields in his study suffered from symptoms of serious psychological conditions—often mania or excessive alcohol or drug use—at the time their careers first took off. Although this finding implies that such disturbances benefited creativity, the same pattern characterized only 3 percent of eminent scientists, whose lifetime creative accomplishments reached the same heights as those of the artistic group.

To discriminate among the ingredients blended into a life of creativity and innovation, Ludwig compared the 250 most eminent and 249 least eminent members of his sample. The "upper elite," essentially the superstars of their fields, consists of people such as painter Pablo Picasso, playwright Tennessee Williams, physicist Albert Einstein, and architect Le Corbusier. The "lower elite," comprising champions and innovators who had less profound influences within and outside their fields, includes businessman J.P. Morgan, writer Dorothy Parker, baseball player Jackie Robinson, and philosopher-anthropologist Pierre Teilhard de Chardin.

More than half of the upper elite suffered from pronounced symptoms of mental disorder, particularly depression, excessive alcohol use, extreme reactions to stress, and bodily preoccupations, compared to about one-third of the less eminent. However, a statistical model based solely on the length and severity of these symptoms during a person's lifetime correctly placed only 63 percent of people into the appropriate upper and lower elite groups, according to Ludwig.

A more elaborate model that incorporated eight personal characteristics accurately sorted out 92 percent of the creative superstars from the less eminent. The presence of these eight elements of eminence greatly boosts a person's chances of achieving lasting fame, Ludwig maintains, although poorly understood social and historical forces probably decide whether one's full creative potential is realized.

Truly great creative achievers, in Ludwig's model, usually

- display special talents or abilities as children;
- receive support for developing those qualities from parents, who often have creative or aesthetic bents as well as emotional difficulties of their own;
- harbor an ingrained contrariness and opposition to established beliefs, which frequently antagonizes other people;
- possess a capacity for solitude and self-reliance;
- face physical trials early in life, often a life-threatening illness or physical disability;
- emblazon their works and achievements with a personal and distinctive style;
- exhibit an unyielding drive for dominance and supremacy in their chosen discipline;
- experience a restless, driven state of psychological unease that finds relief through creative problem solving.

Euphoric, energizing bouts of mania or other signs of mental disorder that are not too severe or incapacitating may provide the psychological unease associated with creativity, the Kentucky psychiatrist points out. Eminent people who stay free of emotional troubles apparently stir up a sense of psychological unease when they feel the need for creative tension. This tactic may pleasantly jolt mood and behavior, much as mild mania does, according to Ludwig.

The existence of a multifaceted template of creative greatness raises important questions, he adds. These include the extent to which innate talent shapes stellar achievements and the role played by early physical illness and disability in the lives of eminent people.

"Given the presence of the rest of the template, chronic physical ailments may give someone a heightened sense of urgency to leave a mark on the world and achieve immortality through creative greatness," Ludwig speculates.

Ludwig's focus on creativity in a broad array of endeavors strikes a responsive chord in researchers who consider studies only of painters, poets, and fiction writers to be limited.

"This is the first well-done, properly controlled study on this issue," contends Robert S. Root-Bernstein, a biologist and historian of science at Michigan State University in East Lansing. "It shows that mental illness is not a necessary precursor or concomitant of creative eminence."

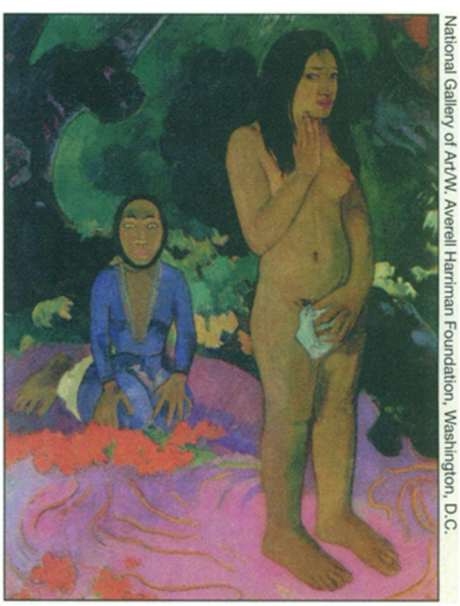
In his book *Discovering* (1989, Harvard University Press), Root-Bernstein argues that psychological unease and creative tension often stem from a piercing awareness of a mismatch between conventional wisdom or a predominant theory and one's own observations. Those who become eminent in a field grapple with and take inspiration from such insights, he argues.

The tendency of highly creative painters and writers to work on their own, with little or no emotional support from colleagues and friends, may accentuate their symptoms of mental disorder over time, Root-Bernstein believes. In contrast, scientists often work in groups and receive a fair amount of encouragement.

However, the emotional downside of scientific eminence comes with age, the Michigan State researcher says. Scientific productivity usually peaks by young or middle adulthood, and the decline thereafter can be steepest for the most eminent investigators. Moreover, scientists have a hard time dealing with the loss of power and social contacts that accompanies retirement, according to Root-Bernstein.

He thus find it no surprise that Ludwig's investigation documents a sudden, steep rise in the suicide rate of all eminent scientists (from the superstars to the lower elite) at age 60 that stays elevated through age 70. The proportion of suicides by older scientists slightly exceeded that of their same-age counterparts in the arts.

Much remains unknown about the extent to which mood disorders such as manic depression, which can lead to



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Parau na te Varua ino (Words of the Devil) *(1892), oil on canvas by Paul Gauguin.*

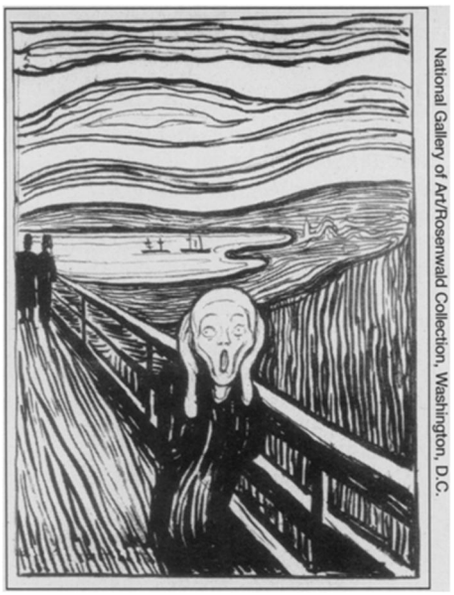
suicide, affect topflight scientists and other highly creative people outside the arts, remarks Kay R. Jamison, a psychiatrist at Johns Hopkins University School of Medicine in Baltimore.

Jamison finds the results of Ludwig's study intriguing but suspects his biographical method may miss many instances of mild manic depression at the highest levels of eminence, especially in fields outside the arts. In her book *Touched With Fire: Manic-Depressive Illness and the Artistic Temperament* (1993, Free Press), Jamison refers to manic depression as "occasionally an exhilarating and powerfully creative force, more often a destructive one."

Mild episodes of mania boost the fluency and frequency of thoughts, she argues. For instance, mildly manic patients spontaneously use unusual words and creative sound associations, such as rhymes and alliteration, more often than emotionally healthy controls. And in written drills, manic patients show a heightened facility for listing synonyms and performing other word associations.

Mania produces other effects conducive to creative accomplishment, Jamison notes, such as the ability to work long hours without sleep, to focus on ideas intensely, to maintain bold and restless attitudes, and to experience deeply a variety of emotions.

"The manic-depressive temperament is, in a biological sense, an alert, sensitive system that reacts strongly and swiftly," the Baltimore scientist contends. "This is important for creativity in the arts, the sciences, and leadership."



Geschrei (The Scream) *(1895), lithograph by Edvard Munch.*

Mild mood fluctuations seem to benefit everyday creativity as well, asserts Ruth Richards, a psychiatrist at the University of California, San Francisco.

In one study, Richards and her coworkers found an abundance of everyday creativity in people who suffer from mild mood swings, as well as in mentally healthy relatives of manic-depressives (SN: 9/3/88, p.151). Creativity dropped in people with full-blown manic depression, but it still exceeded that for healthy controls with no family history of mood disorders.

Levels of everyday creativity were assessed from the quality and quantity of innovative accomplishments at work, at home, and in hobbies.

Genes involved in manic depression may have been preserved through natural selection because they give carriers of the condition's milder form the advantage of enhanced creativity, adaptability, and work output, Richards theorizes.

"I wouldn't be surprised if many of the highly eminent people Ludwig studied, including the scientists, had a family history of mood disorders," Richards remarks. "But he's done away with the notion that all eminent people have some form of psychopathology."

Available evidence indicates that alcoholism, mild mania, and depression indeed occurred often in the mothers, fathers, and siblings of the eminent individuals in Ludwig's sample who also suffered from those conditions. But plenty of room remains for the influence of other factors on great creative feats, Ludwig asserts.

"There are 10,000 ways to get to originality," Jamison notes. "Some people just have incredible imaginations. That doesn't mean they have a mental disorder." □