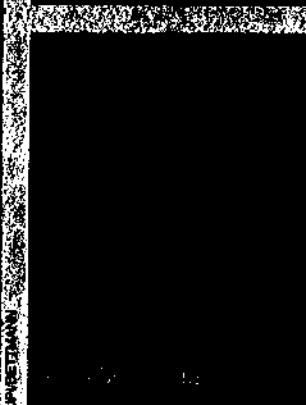
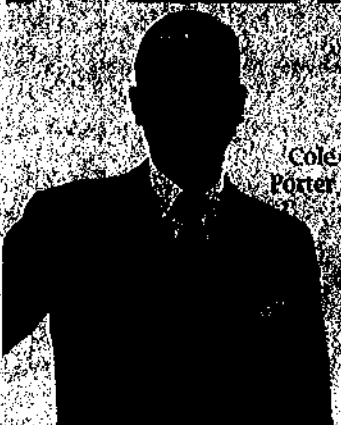
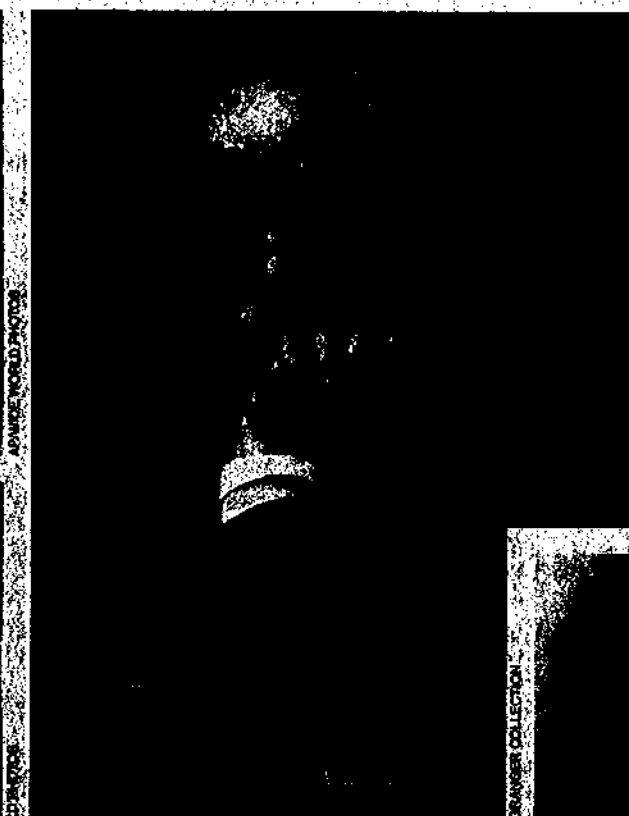


Manic-Depressive Illness and Creativity

*Does some fine madness plague great artists?
Several studies now show that creativity
and mood disorders are linked*

by Kay Redfield Jamison



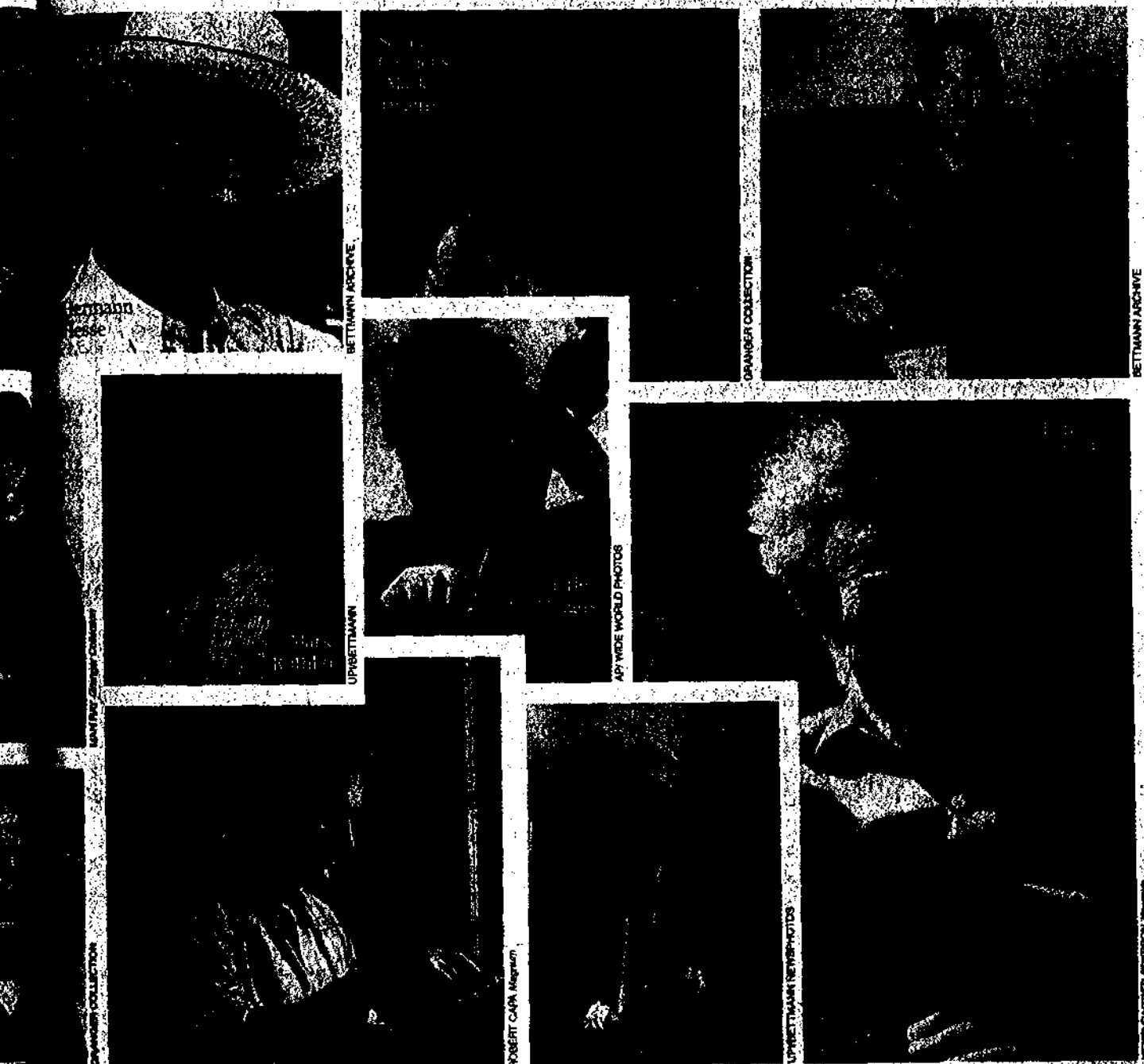
Men have called me mad," wrote Edgar Allan Poe, "but the question is not yet settled, whether madness is or is not the loftiest intelligence—whether much that is glorious—whether all that is profound—does not spring from disease of thought—from moods of mind exalted at the expense of the general intellect."

Many people have long shared Poe's suspicion that genius and insanity are entwined. Indeed, history holds countless examples of "that fine madness." Scores of influential 18th- and 19th-century poets, notably William Blake, Lord Byron and Alfred, Lord Tennyson, wrote about the extreme mood swings they

endured. Modern American poets John Berryman, Randall Jarrell, Robert Lowell, Sylvia Plath, Theodore Roethke, Delmore Schwartz and Anne Sexton were all hospitalized for either mania or depression during their lives. And many painters and composers, among them Vincent van Gogh, Georgia O'Keeffe, Charles Mingus and Robert Schumann, have been similarly afflicted.

Judging by current diagnostic criteria, it seems that most of these artists—and many others besides—suffered from one of the major mood disorders, namely, manic-depressive illness or major depression. Both are fairly common, very treatable and yet frequently lethal diseases. Major depression induces intense melancholic spells, whereas manic-depression, a strongly genetic disease,

WRITERS, ARTISTS AND COMPOSERS shown in this montage all most likely suffered from manic-depressive illness or major depressive illness, according to their letters and journals, medical records and accounts by their families and friends. Recent studies indicate that the temperaments and cognitive styles associated with mood disorders can in fact enhance creativity in some individuals.

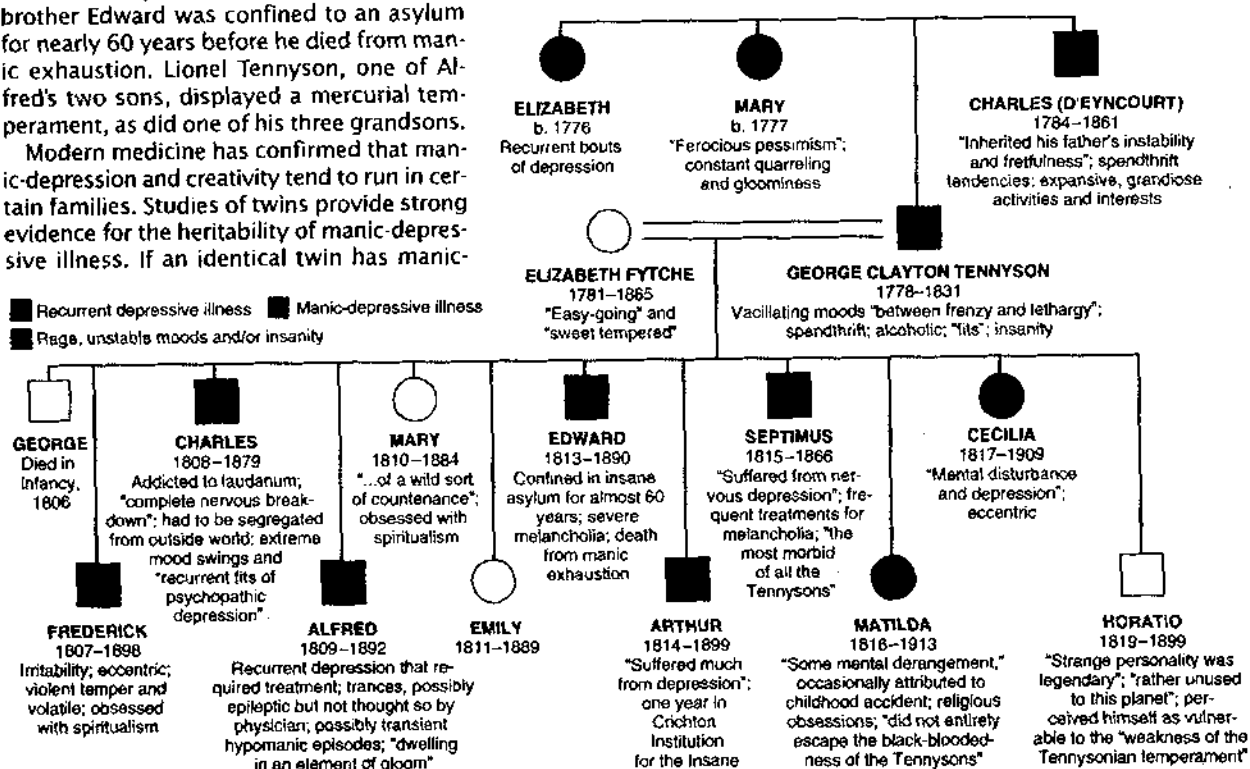


The Tainted Blood of the Tennysons

Alfred, Lord Tennyson, who experienced recurrent, debilitating depressions and probable hypomanic spells, often expressed fear that he might inherit the madness, or "taint of blood," in his family. His father, grandfather, two of his great-grandfathers as well as five of his seven brothers suffered from insanity, melancholia, uncontrollable rage or what is today known as manic-depressive illness. His brother Edward was confined to an asylum for nearly 60 years before he died from manic exhaustion. Lionel Tennyson, one of Alfred's two sons, displayed a mercurial temperament, as did one of his three grandsons.

Modern medicine has confirmed that manic-depression and creativity tend to run in certain families. Studies of twins provide strong evidence for the heritability of manic-depressive illness. If an identical twin has manic-

depressive illness, the other twin has a 70 to 100 percent chance of also having the disease; if the other twin is fraternal, the chances are considerably lower (approximately 20 percent). A review of identical twins reared apart from birth—in which at least one of the twins had been diagnosed as manic-depressive—found that two thirds or more of the sets were concordant for the illness.



SOURCE: Adapted from *Touched with Fire: Manic-Depressive Illness and the Artistic Temperament*; based on biographies, autobiographical writings and letters.

itches patients repeatedly from depressed to hyperactive and euphoric, or intensely irritable, states. In its milder form, termed *cyclothymia*, manic-depression causes pronounced but not totally debilitating changes in mood, behavior, sleep, thought patterns and energy levels. Advanced cases are marked by dramatic, cyclic shifts.

Could such disruptive diseases convey certain creative advantages? Many people find that proposition counterintuitive. Most manic-depressives do not possess extraordinary imagination, and most accomplished artists do not suffer from recurring mood swings. To assume, then, that such diseases usually promote artistic talent wrongly reinforces simplistic notions of the "mad genius." Worse yet, such a generalization trivializes a very serious medical condition and, to some degree, discredits individuality in the arts as well. It would be wrong to label anyone who is unusually accomplished, energetic, intense,

moody or eccentric as manic-depressive.

All the same, recent studies indicate that a high number of established artists—far more than could be expected by chance—meet the diagnostic criteria for manic-depression or major depression given in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*. In fact, it seems that these diseases can sometimes enhance or otherwise contribute to creativity in some people.

Diagnosing Mood Disorders

By virtue of their prevalence alone, it is clear that mood disorders do not necessarily breed genius. Indeed, 1 percent of the general population suffer from manic-depression, also called bipolar disorder, and 5 percent from a major depression, or unipolar disorder, during their lifetime. Depression affects twice as many women as men and most often, but not always, strikes later in

life. Bipolar disorder afflicts equal numbers of women and men, and more than a third of all cases surface before age 20. Some 60 to 80 percent of all adolescents and adults who commit suicide have a history of bipolar or unipolar illness. Before the late 1970s, when the drug lithium first became widely available, one person in five with manic-depression committed suicide.

Major depression in both unipolar and bipolar disorders manifests itself through apathy, lethargy, hopelessness, sleep disturbances, slowed physical movements and thinking, impaired memory and concentration, and a loss of pleasure in typically enjoyable events. The diagnostic criteria also include suicidal thinking, self-blame and inappropriate guilt. To distinguish clinical depression from normal periods of unhappiness, the common guidelines further require that these symptoms persist for a minimum of two to four weeks and also that they significantly interfere

with a person's everyday functioning.

During episodes of mania or hypomania (mild mania), bipolar patients experience symptoms that are in many ways the opposite of those associated with depression. Their mood and self-esteem are elevated. They sleep less and have abundant energy; their productivity increases. Manics frequently become paranoid and irritable. Moreover, their speech is often rapid, excitable and intrusive, and their thoughts move quickly and fluidly from one topic to another. They usually hold tremendous conviction about the correctness and importance of their own ideas as well. This grandiosity can contribute to poor judgment and impulsive behavior.

Hypomanics and manics generally have chaotic personal and professional relationships. They may spend large sums of money, drive recklessly or pursue questionable business ventures or sexual liaisons. In some cases, manics suffer from violent agitation and delusional thoughts as well as visual and auditory hallucinations.

Rates of Mood Disorders

For years, scientists have documented some kind of connection between mania, depression and creative output. In the late 19th and early 20th centuries, researchers turned to accounts of mood disorders written by prominent artists, their physicians and friends. Although largely anecdotal, this work strongly suggested that renowned writers, artists and composers—and their first-degree relatives—were far more likely to experience mood disorders and

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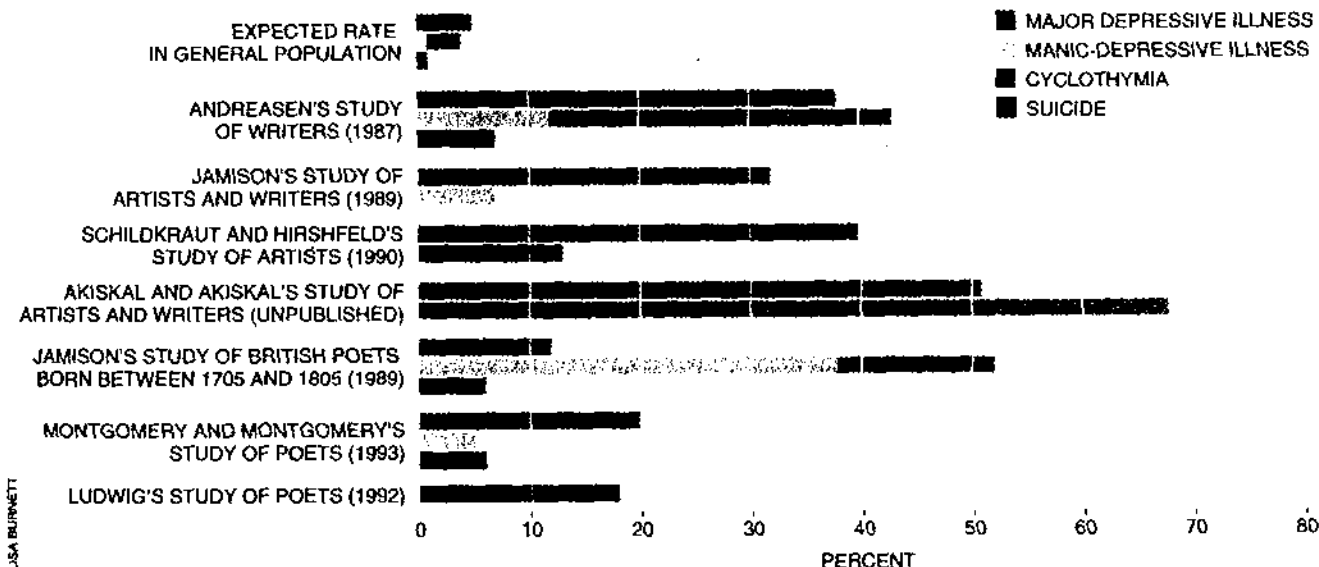
to commit suicide than was the general population. During the past 20 years, more systematic studies of artistic populations have confirmed these findings [see illustration below]. Diagnostic and psychological analyses of living writers and artists can give quite meaningful estimates of the rates and types of psychopathology they experience.

In the 1970s Nancy C. Andreasen of the University of Iowa completed the first of these rigorous studies, which made use of structured interviews, matched control groups and strict diagnostic criteria. She examined 30 creative writers and found an extraordinarily high occurrence of mood disorders and alcoholism among them. Eighty percent had experienced at least one episode of major depression, hypomania or mania; 43 percent reported a history of hypomania or mania. Also, the relatives of these writers, compared with the relatives of the control subjects, generally performed more creative work and more often had a mood disorder.

A few years later, while on sabbatical in England from the University of California at Los Angeles, I began a study of 47 distinguished British writers and visual artists. To select the group as best I could for creativity, I purposefully

chose painters and sculptors who were Royal Academicians or Associates of the Royal Academy. All the playwrights had won the New York Drama Critics Award or the Evening Standard Drama (London Critics) Award, or both. Half of the poets were already represented in the *Oxford Book of Twentieth Century English Verse*. I found that 38 percent of these artists and writers had in fact been previously treated for a mood disorder; three fourths of those treated had required medication or hospitalization, or both. And half of the poets—the largest fraction from any one group—had needed such extensive care.

Hagop S. Akiskal of the University of California at San Diego, also affiliated with the University of Tennessee at Memphis, and his wife, Karen Akiskal, subsequently interviewed 20 award-winning European writers, poets, painters and sculptors. Some two thirds of their subjects exhibited recurrent cyclothymic or hypomanic tendencies, and half had at one time suffered from a major depression. In collaboration with David H. Evans of the University of Memphis, the Akiskals noted the same trends among living blues musicians. More recently Stuart A. Montgomery and his wife, Deirdre B. Montgomery, of St.



INCREASED RATES of suicide, depression and manic-depression among artists have been established by many separate studies. These investigations show that artists experience up

to 18 times the rate of suicide seen in the general population, eight to 10 times the rate of depression and 10 to 20 times the rate of manic-depression and cyclothymia.

Mary's Hospital in London examined 50 modern British poets. One fourth met current diagnostic criteria for depression or manic-depression; suicide was six times more frequent in this community than in the general population.

Ruth L. Richards and her colleagues at Harvard University set up a system for assessing the degree of original thinking required to perform certain creative tasks. Then, rather than screening for mood disorders among those already deemed highly inventive, they attempted to rate creativity in a sample of manic-depressive patients. Based on their scale, they found that compared with individuals having no personal or family history of psychiatric disorders, manic-depressive and cyclothymic patients (as well as their unaffected relatives) showed greater creativity.

Biographical studies of earlier generations of artists and writers also show consistently high rates of suicide, depression and manic-depression—up to 18 times the rate of suicide seen in the general population, eight to 10 times that of depression and 10 to 20 times that of manic-depressive illness and its milder variants. Joseph J. Schildkraut and his co-workers at Harvard concluded that approximately half of the 15 20th-century abstract-expressionist artists they studied suffered from depressive or manic-depressive illness; the suicide rate in this group was at least 13 times the current U.S. national rate.

In 1992 Arnold M. Ludwig of the University of Kentucky published an extensive biographical survey of 1,005 famous 20th-century artists, writers and other professionals, some of whom had been in treatment for a mood disorder. He discovered that the artists and writers experienced two to three times the rate of psychosis, suicide attempts, mood disorders and substance abuse than did comparably successful people in business, science and public life. The poets in this sample had most often been manic or psychotic and hospitalized; they also proved to be some 18

times more likely to commit suicide than is the general public. In a comprehensive biographical study of 36 major British poets born between 1705 and 1805, I found similarly elevated rates of psychosis and severe psychopathology. These poets were 30 times more likely to have had manic-depressive illness than were their contemporaries, at least 20 times more likely to have been committed to an asylum and some five times more likely to have taken their own life.

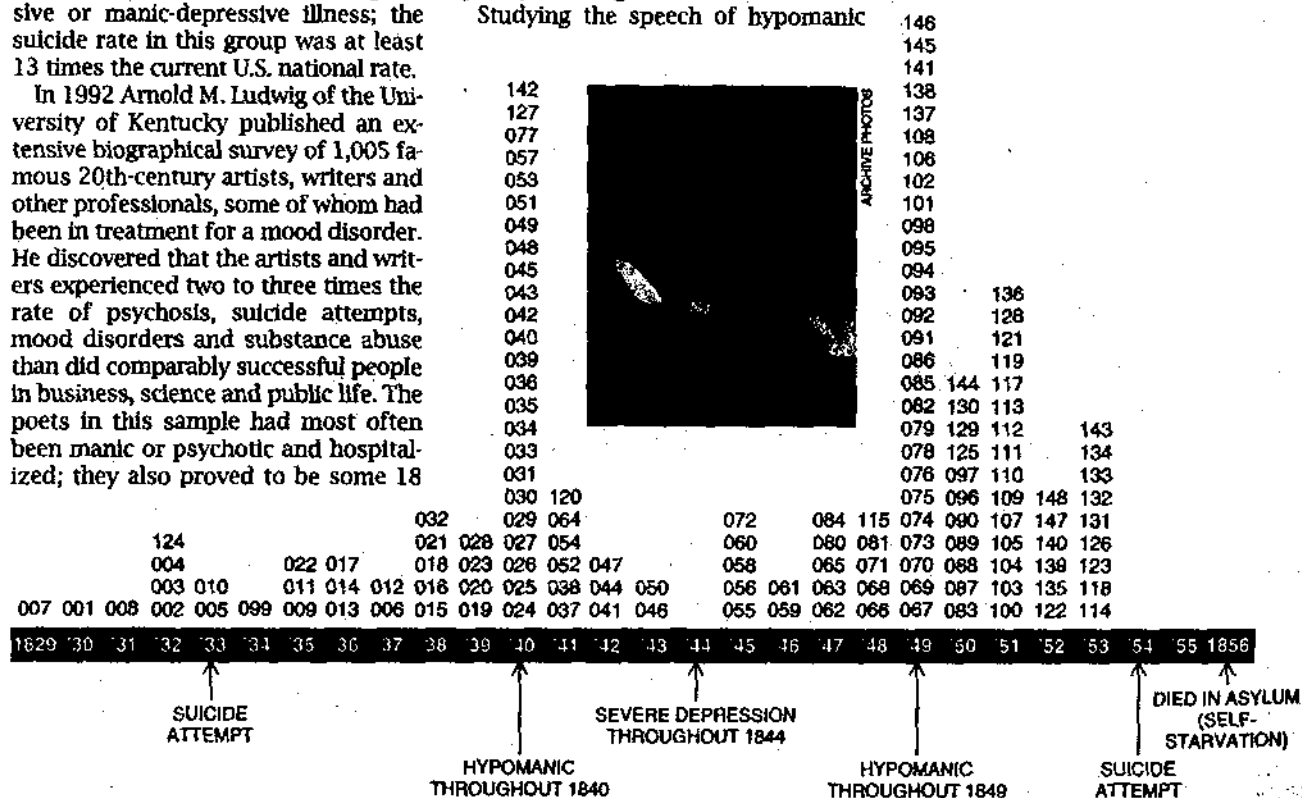
Cycles of Creative Accomplishment

These corroborative studies have confirmed that highly creative individuals experience major mood disorders more often than do other groups in the general population. But what does this mean for their work? How does a psychiatric illness actually contribute to creative achievement? First, the common features of hypomania seem highly conducive to original thinking; the diagnostic criteria for this phase of the disorder include "sharpened and unusually creative thinking and increased productivity." And accumulating evidence suggests that the cognitive styles associated with hypomania (namely, expansive thought and grandiose moods) can lead to increased fluency and frequency of thoughts.

Studying the speech of hypomanic

patients has revealed that they tend to rhyme and use other sound associations, such as alliteration, far more often than do unaffected individuals. They also use idiosyncratic words nearly three times as often as do control subjects. Moreover, in specific drills, they can list synonyms or form other word associations much more rapidly than is considered normal. It seems, then, that both the quantity and quality of thoughts build during hypomania. This speed increase may range from a very mild quickening to complete psychotic incoherence. It is not yet clear what causes this qualitative change in mental processing. Nevertheless, this altered cognitive state may well facilitate the formation of unique ideas and associations.

Manic-depressive illness and creative accomplishment share certain noncognitive features: the ability to function well on a few hours of sleep, the focus needed to work intensively, bold and restless attitudes, and an ability to experience a profound depth and variety of emotions. The less dramatic daily aspects of manic-depression might also provide creative advantage to some individuals. The manic-depressive temperament is, in a biological sense, an alert, sensitive system that reacts strongly and swiftly. It responds to the world

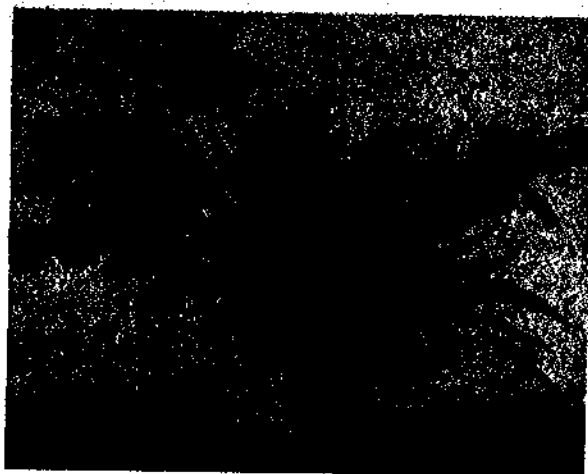


ROBERT SCHUMANN'S MUSICAL WORKS, charted by year and opus number (above), show a striking relation between his mood states and his productivity. He composed the most when hypomanic and the least when depressed. Both of Schu-

mann's parents were clinically depressed, and two other first-degree relatives committed suicide. Schumann himself attempted suicide twice and died in an insane asylum. One of his sons spent more than 30 years in a mental institution.

The Case of Vincent van Gogh

Many clinicians have reviewed the medical and psychiatric problems of the painter Vincent van Gogh posthumously, diagnosing him with a range of disorders, including epilepsy, schizophrenia, digitalis and absinthe poisoning, manic-depressive psychosis, acute intermittent porphyria and Ménière's disease. Richard Jed Wyatt of the National Institute of Mental Health and the author have argued in detail that van Gogh's symptoms, the natural course of his illness and his family psychiatric history strongly indicate manic-depressive illness. The extent of the artist's purported absinthe use and convulsive behavior remains unclear; in any event, his psychiatric symptoms long predate any possible history of seizures. It is possible that he suffered from both epilepsy and manic-depressive illness.



Irises, 1889

METROPOLITAN MUSEUM OF ART, GIFT OF ADLE R. LEVY, 1968

with a wide range of emotional, perceptual, intellectual, behavioral and energy changes. In a sense, depression is a view of the world through a dark glass, and mania is that seen through a kaleidoscope—often brilliant but fractured.

Where depression questions, ruminates and hesitates, mania answers with vigor and certainty. The constant transitions in and out of constricted and then expansive thoughts, subdued and then violent responses; grim and then ebullient moods, withdrawn and then outgoing stances, cold and then fiery states—and the rapidity and fluidity of moves through such contrasting experiences—can be painful and confusing. Ideally, though, such chaos in those able to transcend it or shape it to their will can provide a familiarity with transitions that is probably useful in artistic endeavors. This vantage readily accepts ambiguities and the counteracting forces in nature.

Extreme changes in mood exaggerate the normal tendency to have conflicting selves; the undulating, rhythmic and transitional moods and cognitive changes so characteristic of manic-depressive illness can blend or harness seemingly contradictory moods, observations and perceptions. Ultimately, these fluxes and yokings may reflect truth in humanity and nature more accurately than could a more fixed viewpoint. The "consistent attitude toward life," may not, as Byron scholar Jerome J. McGann of the University of Virginia points out, be as insightful as an ability to live with, and portray, constant change.

The ethical and societal implications of the association between mood disorders and creativity are important but poorly understood. Some treatment strategies pay insufficient heed to the

benefits manic-depressive illness can bestow on some individuals. Certainly most manic-depressives seek relief from the disease, and lithium and anticonvulsant drugs are very effective therapies for manias and depressions. Nevertheless, these drugs can dampen a person's general intellect and limit his or her emotional and perceptual range. For this reason, many manic-depressive patients stop taking these medications.

Left untreated, however, manic-depressive illness often worsens over time—and no one is creative when severely depressed, psychotic or dead. The attacks of both mania and depression tend to grow more frequent and more severe. Without regular treatment the disease eventually becomes less responsive to medication. In addition, bipolar and unipolar patients frequently abuse mood-altering substances, such as alcohol and illicit drugs, both of which can cause secondary medical and emotional burdens for manic-depressive and depressed patients.

The Goal of Treatment

The real task of imaginative, compassionate and effective treatment, therefore, is to give patients more meaningful choices than they are now afforded. Useful intervention must control the extremes of depression and psychosis without sacrificing crucial human emotions and experiences. Given time and increasingly sophisticated research, psychiatrists will likely gain a better understanding of the complex biological basis for mood disorders. Eventually, the development of new drugs should make it possible to treat manic-depressive individuals so that those aspects of temperament and cognition that are essen-

tial to the creative process remain intact.

The development of more specific and less problematic therapies should be swift once scientists find the gene, or genes, responsible for the disease. Prenatal tests and other diagnostic measures may then become available; these possibilities raise a host of complicated ethical issues. It would be irresponsible to romanticize such a painful, destructive and all too often deadly disease. Hence, 3 to 5 percent of the Human Genome Project's total budget (which is conservatively estimated at \$3 billion) has been set aside for studies of the social, ethical and legal implications of genetic research. It is hoped that these investigations will examine the troubling issues surrounding manic-depression and major depression at length. To help those who have manic-depressive illness, or who are at risk for it, must be a major public health priority.

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