

The Illness of Vincent van Gogh

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Vincent van Gogh (1853–1890) had an eccentric personality and unstable moods, suffered from recurrent psychotic episodes during the last 2 years of his extraordinary life, and committed suicide at the age of 37. Despite limited evidence, well over 150 physicians have ventured a perplexing variety of diagnoses of his illness. Henri Gastaut, in a study of the artist's life and medical history published in 1956, identified van Gogh's major illness during the last 2 years of his life as temporal lobe epilepsy precipitated by the use of absinthe in the presence of an early

limbic lesion. In essence, Gastaut confirmed the diagnosis originally made by the French physicians who had treated van Gogh. However, van Gogh had earlier suffered two distinct episodes of reactive depression, and there are clearly bipolar aspects to his history. Both episodes of depression were followed by sustained periods of increasingly high energy and enthusiasm, first as an evangelist and then as an artist. The highlights of van Gogh's life and letters are reviewed and discussed in an effort toward better understanding of the complexity of his illness.

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Vincent van Gogh's life has become a legend. Within the short span of 10 years, he persevered to overcome many struggles and failures to accomplish, through often feverish but always disciplined efforts, his goal to create exceptional works of art for the people. This study of the illness of Vincent van Gogh is based chiefly on Gastaut's article on the topic (1), monographs about the artist (2–4), and van Gogh's own letters (5, 6).

The Life of van Gogh

Origins

Vincent van Gogh's ancestry includes Dutch preachers, art dealers, and artisans. Both his father and paternal grandfather were preachers; his paternal great-grandfather was a gold wiredrawer who also was a catechism teacher. No incidences of mental illness are recorded among van Gogh's ancestors. His mother married at the age of 31, had a stillborn first son, and 1 year later gave birth to Vincent. Vincent was a moody child, self-willed, and often annoying. At the age of 12, he was sent to a boarding school for the next 4 years. A photograph of Vincent as an adolescent and later self-portraits suggest a significant craniofacial asymmetry. Gastaut (1) submitted that this physical feature and early temperamental changes suggest that Vincent had suffered an early brain injury, probably at birth. His intense emotionality, which was evident early and became frequently unbearable in his adult life, is set forth in his own statement: "I am a man of passion, capable and prone to undertake more or less foolish things which I happen to repent more or less" (3).

Vincent had five younger siblings, three sisters and two brothers. The steadfast support of his brother Theo made Vincent's work possible; Theo died 6 months after Vin-

cent's suicide. After a failed marriage, Cornelis, the youngest sibling, enlisted as a volunteer in the Boer army in South Africa; he may have committed suicide or been killed in battle. The youngest sister, Wilhelmina, to whom Vincent wrote a series of letters, was interned in a psychiatric asylum at the age of about 35, a few years after Vincent's death; she was said to suffer from schizophrenia and died in the asylum at the age of 79. His mother, with whom Vincent exchanged occasional letters, lived to the age of 87, surviving not only her husband but all of her sons. Her three sons all died in their 30s, while the three daughters lived into their 70s.

Failed Careers and Beginnings as an Artist

At the age of 16, Vincent began to work as an apprentice for an art dealer in a firm founded by an uncle. After 4 years near his family in The Hague, he was transferred to London, where he stayed for 2 years. During that time, he suffered a severe disappointment in his first amorous infatuation and became deeply depressed. For months he remained gloomy, renounced any social life, and communicated little with his family. His thoughts turned increasingly toward religion. As he became more passionately involved in religion, he lost all interest in his job as an art dealer, the financial aspects of which he disdained, and was dismissed by his firm. He devoted the next 4 years to his calling as a preacher. He failed to obtain a formal theology degree and eventually worked as an evangelist in a miserably poor mining district in Belgium. There, he shared his last belongings with his brethren and soon looked dirt poor and black faced himself. His extreme charitable behavior was viewed by his superiors as incompatible with the dignity of an ecclesiastic position. When he refused to moderate his deportment, van Gogh was dis-

missed by the church; he again suffered a marked depression. To the great distress of his parents, he abandoned the religious beliefs that had sustained him and began to adhere to socialist ideals and agnostic views. "Though I have changed, I am the same," he wrote in a letter to Theo (6). "My only anxiety is, how can I be of use in the world?" At the age of 27, he resolved to become an artist with the passion to produce works of art for the people.

Largely on his own, van Gogh pursued his new career with singular intensity. He was able to persevere in spite of lack of recognition, thanks to the unfailing financial and moral support from his brother Theo, who had become an art dealer in Paris. The life of van Gogh is well documented through a steady flow of letters to Theo (5) and others (6). He experienced his second passionate and ill-fated infatuation with an ardent and incredibly stubborn pursuit of his recently widowed cousin Kee, who scorned him. He then alienated most of his family by living with a prostitute and her two children for over a year. Theo warned Vincent that their father planned to put him in a lunatic asylum. After he returned to live with his parents for a period, Vincent and his father quarreled frequently and violently. He painted *Still Life With Bible*, in which next to an open bible was the novel *La Joie de Vivre*, written by the socialist and agnostic Emile Zola. In 1885, his father died suddenly at the door of their home when returning from a walk. Vincent's devotion to art remained intense all the while.

Paris: Onset of Illness

After 6 years as an artist in the Netherlands and Belgium, Vincent joined Theo in Paris for 2 years (1886–1888). There he met many painters who were to become famous, Paul Gauguin among them, and was strongly influenced by the impressionist movement. While in Paris, he began to suffer from minor paroxysms consisting of episodes of sudden terror, peculiar epigastric sensations, and lapses of consciousness. Observers reported occasions of an initial tonic spasm of the hand and a peculiar stare, followed by a confusional-amnesic phase. His use of absinthe, an alcoholic beverage with convulsant properties favored by French artists, appears to have played a crucial role in the precipitation of van Gogh's illness. He tended to be untidy and quarrelsome; his irascible temper caused many unpleasant scenes and rendered him an undesirable in a number of places. He lived with his brother and often kept him up much of the night with endless disputes. Theo remained sympathetic, yet increasingly felt his brother's presence a burden. Theo described Vincent in a letter to their younger sister as follows: "It seems as if he were two persons: one, marvelously gifted, tender and refined, the other, egotistic and hard hearted. They present themselves in turns, so that one hears him talk first in one way, then in the other, and always with arguments on both sides. It is a pity that he is his own enemy, for he makes life hard not only for others but also for himself" (3). All along, Vincent persisted in perfecting his art.

Provence: A Major Illness Unfolds

When van Gogh left for Arles in southern France early in 1888, he was an accomplished artist, although not recognized and still dependent on regular financial support from Theo, who believed in his genius. He would now create perhaps the most intense paintings ever produced; yet in Arles his illness evolved and reached psychotic dimensions for the first time before the end of 1888.

Vincent wrote after his arrival in Arles, "I was surely about to suffer a stroke when I left Paris. It affected me quite a bit when I had stopped drinking and smoking so much, and as I began to think instead of knocking the thoughts from my head. Good heavens, what despair and how much fatigue I felt at that time" (5). Yet he soon resumed his former habits of using absinthe and cognac. He explained in a letter how he was coping with his state of heightened emotionality: instead of thinking of disastrous possibilities, he would throw himself completely into his work, and "if the storm within gets too loud, I take a glass more to stun myself" (5). He became more disturbed. Feverish creative activity alternated with episodes of listlessness to the point of exhaustion. Unpredictable mood shifts of dysphoria alternating with euphoria or with "indescribable anguish" became more frequent. Excerpts of letters written after his first breakdown best document his mental states that before had been present to a lesser degree. "I am unable to describe exactly what is the matter with me; now and then there are horrible fits of anxiety, apparently without cause, or otherwise a feeling of emptiness and fatigue in the head....and at times I have attacks of melancholy and of atrocious remorse" (6). "There are moments when I am twisted by enthusiasm or madness or prophecy, like a Greek oracle on the tripod. And then I have great readiness of speech" (5). He became more prone to violent rages and noticed an increasing lack of sexual arousal. He frequently complained of feeling faint and of having "poor circulation" and a "weak stomach." He continued to write to Theo, often daily, reporting on the creation of his works in precise detail. And he kept painting. When he announced to Theo his first painting of a starry night, he wrote, "It is good for me to work hard. But that does not keep me from having a terrible need of—shall I say the word—yes, of religion. Then I go out at night to paint the stars" (6). Indeed, in a zeal reminiscent of his selfless efforts as an evangelist, he relentlessly devoted himself to create works of art for the people.

Vincent felt lonely in Arles and with Theo's help persuaded Gauguin to join him in the fall of 1888 to establish together a "Studio of the South." The relationship of the two artists became increasingly quarrelsome, and Vincent wrote, "Our dispute is at times excessively animated like with electricity, at times we end up with tired and empty heads, like an electric battery after discharge" (5). Gauguin's visit lasted only 2 months and ended in catastrophe. On Christmas Eve 1888, after Gauguin already had announced he would leave, van Gogh suddenly threw a glass

of absinthe in Gauguin's face, then was brought home and put to bed by his companion. A bizarre sequence of events ensued. When Gauguin left their house, van Gogh followed and approached him with an open razor, was repelled, went home, and cut off part of his left earlobe, which he then presented to Rachel, his favorite prostitute. The police were alerted; he was found unconscious at his home and was hospitalized. There he lapsed into an acute psychotic state with agitation, hallucinations, and delusions that required 3 days of solitary confinement. He retained no memory of his attacks on Gauguin, the self-mutilation, or the early part of his stay at the hospital.

His murderous gesture directed against Gauguin was reported by the intended victim in his memoirs. The scandalous event in the house of prostitution and van Gogh's subsequent hospitalization were recorded in the local press. Some plausible explanations later were offered for the strange happenings. Already psychotic, van Gogh may have carried out the attack on Gauguin driven by hallucinatory command voices and may have cut off part of his own ear in self-punishment for his offensive voices. This psychotic logic was perhaps influenced by van Gogh's knowledge of the bullfight ritual, in which the matador presents a cut-off ear of the killed bull to a fair lady of his choice.

At the hospital, Felix Rey, the young physician attending van Gogh, diagnosed epilepsy and prescribed potassium bromide. Within days, van Gogh recovered from the psychotic state. About 3 weeks after admission, he was able to paint *Self-Portrait With Bandaged Ear and Pipe*, which shows him in serene composure. At the time of recovery and during the following weeks, he described his own mental state in letters to Theo and his sister Wilhelmina: "The intolerable hallucinations have ceased, in fact have diminished to a simple nightmare, as a result of taking potassium bromide, I believe." "I am rather well just now, except for a certain undercurrent of vague sadness difficult to explain." "While I am absolutely calm at the present moment, I may easily relapse into a state of overexcitement on account of fresh mental emotion." He also noted "three fainting fits without any plausible reason, and without retaining the slightest remembrance of what I felt" (5, 6).

After 2 weeks in the hospital, van Gogh was still followed by Dr. Rey but evidently was not sufficiently warned to abstain from absinthe. He suffered another two psychotic episodes with brief hospitalizations. Following the humiliation of being taunted publicly by juveniles and confined to the hospital for the fourth time upon the demand of concerned citizens, van Gogh voluntarily entered the asylum at Saint-Rémy in May 1889. During the full year he remained there, he experienced three psychotic relapses with prominent amnesia, at least twice upon leaves to Arles with resumption of his use of absinthe in the company of old friends and Rachel. Dr. Peyron, an old-fashioned physician who had served in the French navy, was the medical director at Saint-Rémy; he maintained Dr.

Rey's diagnosis of epilepsy but failed to continue treatment with potassium bromide. The last psychotic episode was the most protracted, lasting from February to April 1890; van Gogh experienced terrifying hallucinations and severe agitation. Upon recovery, he complained bitterly of the religious content of his episodes and wished to get away from the nuns who cared for him. While at Saint-Rémy, he produced some 300 works of art, among them several copies of religious scenes by older masters and the transcendental masterpiece *Starry Night*, which was painted in June 1889.

Auvers: The Suicide

Theo became engaged toward the end of 1888, married 4 months later, and became a father in early 1890. Each event coincided with an exacerbation of van Gogh's condition; he may have been drinking more whenever he felt that his unique bond with Theo was threatened. Shortly before entering the asylum at Saint-Rémy, Vincent had written to his brother, "And without your friendship I would be driven to suicide without pangs of conscience—and as cowardly as I am, I would finally do it" (6). Theo had continued to support his brother without fail. Suicidal gestures by Vincent, reported at the time of his initial hospitalization in Arles and during his stay at the asylum, had consisted of ingesting turpentine, paint, or lamp oil and were carried out in a confusional state. Such an episode was described by the painter Signac (who had been permitted to take van Gogh from the hospital in Arles to visit his studio). Signac described van Gogh as being entirely rational until after suffering a minor attack, at which point he put a bottle of turpentine to his mouth and had to be brought back to the hospital.

At discharge from the asylum in May 1890, van Gogh was judged cured by his physician. The artist then moved north of Paris to Auvers-sur-Oise, where he spent the last 10 weeks of his life. Theo had recommended Auvers, where van Gogh could live near Paul Gachet, a physician and friend of the artists. He abstained from drinking by now and remained free from seizures and confusional episodes. His art was beginning to gain recognition, and a painting had been sold. But further financial support became uncertain as Theo's health began to fail. There were some bitter words between the brothers, and Vincent felt himself to be a burden. Still, he worked at a furious pace, completing 70 paintings and 30 drawings during his 70 days at Auvers. The heavenly bodies, so luminous in the past, now were absent from his skies, except for a single peculiar occasion (*The White House at Night With Figures and a Star*). He painted immense fields of wheat under dark and stormy skies, commenting, "It is not difficult to express here my entire sadness and extreme loneliness" (6). In one of his last paintings, *Wheat Field With Crows*, the black birds fly in a starless sky, and three paths lead nowhere. He borrowed a gun from his innkeeper "to scare the crows away" when he was painting. There still was another episode of

fury directed at Dr. Gachet, who had failed to frame a painting by Guillaumain as van Gogh had demanded. Vincent gestured toward the gun in his pocket, but he walked away. In his last letter sent to Theo, he mentioned that he wanted to replenish his stock of paint and asked for help to this end. Three days later, on a Sunday, Vincent shot himself in the lower chest or upper belly in a field outside Auvers. "I couldn't stick it any longer, so I shot myself," he told a friend (3). He died 2 days later with Theo next to him. It has been assumed that his *Field With Stacks of Wheat*, a bright picture of grain harvested and sheaved, may have been his very last—a symbol of work completed (3).

Theo died 6 months after his brother, reportedly from a kidney disease with uremia and a prolonged delirious state. His widow made sure the treasure of art Theo had collected from Vincent and kept mostly unframed in their home was passed on to posterity. Within a few years after his death, Vincent van Gogh was acknowledged as one of the famous artists of modern times.

Epilogue

An analysis of van Gogh's illness and emotionality must not obscure the fact that the great artist also had great strengths (4). Apart from distinct episodes of madness when he used absinthe and had seizures, he maintained a remarkable degree of lucidity during his stormy life, as is well documented in his letters.

Vincent remained marvelously creative until his death. He did not paint during his major crises except during the last prolonged episode at Saint-Rémy. There he painted, before full recovery, a few canvases from memory, which he referred to as "reminiscences of the North." Jan Hulsker (3) pointed out that these paintings are the only works of his entire voluminous oeuvre to show signs of a transient mental collapse.

Almost invariably, van Gogh drew and painted from nature. The influence of his exceptional emotional and spiritual intensity on his art is most evident when van Gogh deviated from the depiction of natural scenes, particularly in the rendering of the sky, in several of his masterpieces. He had confessed to a "terrible need for religion" when he painted his first picture of a starry night (over the river Rhone) in September 1888. *Starry Night*, painted in June 1889 at Saint-Rémy, is undoubtedly van Gogh's most mysterious picture. The artist, usually so verbal, never revealed the origin of his scene of a spectacularly transfigured sky. Tralbaut (2) commented on *Starry Night*, "The fire that smoldered within him and broke out in hallucinations of the senses has here been set down on canvas in a most striking fashion." With this painting, van Gogh may have immortalized his memory of a particularly haunting and perhaps recurrent vision of apocalyptic dimension experienced during a twilight state. The vision is set in the familiar surroundings of the soft hills and flame-shaped cypresses of Provence, and yet the village with its church

spire is reminiscent of van Gogh's native Brabant. He seems to be telling us, "This is where I come from, this is where I am now, and here is my universe of overpowering storms."

Discussion

The illness of van Gogh has perplexed 20th-century physicians, as is evident from the nearly 30 different diagnoses that have been offered, from lead poisoning or Ménière's disease to a wide variety of psychiatric disorders. Many writers have acknowledged the epilepsy but considered the psychiatric disorder an independent mental illness. Monroe (7, 8) recognized the unique episodicity of van Gogh's mental changes, the role of absinthe in his illness, and an underlying epileptoid limbic dysfunction that was associated with his creativity but also, if overly intense, would render him ill. Earlier, in an exceptionally well-documented study, Gastaut (1) reasoned that the artist's psychiatric changes were based on temporal lobe epilepsy produced by the use of absinthe in the presence of an early limbic lesion.

Earlier in his life, van Gogh experienced two prolonged episodes of reactive depression. Both episodes were followed by a prolonged period of hypomanic or even manic behavior: first as evangelist to the poor miners in Belgium and then as the quarrelsome and overly talkative artist in exciting Paris. The major illness of his last 2 years developed in the presence of seizures, and its nature has remained controversial. The known details of his psychiatric illness will be reviewed together with what is known about the psychopathology of individuals with epilepsy, and differential diagnostic considerations will follow.

Views of Gastaut and the Earlier French Physicians

Felix Rey, the young physician who attended van Gogh in Arles and diagnosed his epilepsy, was familiar with the psychiatric aspects of epilepsy as they were taught in France during the second half of the 19th century. In fact, Aussoleil, a medical school companion of Felix Rey, wrote a dissertation on larvate epilepsy and worked nearby when van Gogh was admitted to the hospital in Arles (1). In 1860, Morel (9) listed the symptoms that were to be so prominent in van Gogh's illness:

Under the term larvate epilepsy I have described a variant of epilepsy which does not reveal itself by the actual minor or major attacks, but on the contrary by all the other symptoms which accompany or precede ordinary epilepsy characterized by seizures, that is: periodic alternation of excitement and depression; manifestations as it were of sudden fury without sufficient grounds and for most trivial reasons; a usually most irritable disposition; amnesia, as usually occurs in epilepsy, of dangerous acts carried out during momentary or transient rages. Some epileptics of this type have even experienced genuine auditory and visual hallucinations.

Morel had already recognized the highly conscientious (hypersocial) disposition of such patients that contrasted strikingly with their proneness to outbursts of violent anger.

Gastaut (10) pointed out that premodern psychiatrists who had studied institutionalized patients with epilepsy chiefly had observed individuals with mesial temporal sclerosis, as documented by their neuropathologic studies. His findings linked premodern psychiatric views of epilepsy to modern epileptology. Gastaut published his study of van Gogh in 1956, after he had conducted a series of investigations on carefully selected groups of patients with different forms of epilepsy. He documented that certain behavioral and emotional changes among patients with epilepsy were specifically related to mesial (limbic) temporal lobe epilepsy: episodic irritability contrasting with an otherwise hypersocial disposition, slow-adhesive (viscous) personality traits, and a global hyposexuality (11–13). This temporal lobe syndrome associated with epilepsy was manifest in van Gogh.

Gastaut pointed out that the three major interictal behavior changes of patients with mesial temporal lobe epilepsy—heightened emotionality (with enhanced anger, moods, and fear), viscosity (adhesiveness), and hyposexuality—represent the very opposites of the Klüver-Bucy syndrome observed after bilateral temporal lobe resections in animal experiments—placidity, flighty attention span, and hypersexuality (14, 15). He noted that this was not a surprising finding considering that interictally, because of the effects of the irritative lesion, patients with temporal lobe epilepsy present a state of excitation of the temporal limbic system as opposed to a state of depression after the ablation experiment. While viscosity and hyposexuality tend to be relatively persistent, the heightened emotionality tends to appear in a highly labile or alternating pattern.

Gastaut recognized the crucial role of absinthe in the manifestation of van Gogh's major psychiatric symptoms. By his own confession, van Gogh required "a glass too much" to numb his inner storms when they became too intense. The artist was not known to become intoxicated and may not have been drinking more than many of his contemporaries, but he was particularly vulnerable to the epileptogenic properties of absinthe, the favorite drink of the French artists of his time. Oil of wormwood (from the herb *Artemisia absinthium*) constitutes the toxic principle of the alcoholic drink absinthe. Wormwood oil contains the terpene compound thujone, a structural isomer of camphor. Both thujone and camphor induce convulsions and were used during the 1920s and 1930s in the study of models for epilepsy; von Meduna considered the use of thujone for the convulsive therapy of schizophrenia before using camphor (16, 17). In 1873, Magnan (18) described for the first time what he termed *épilepsie absinthique*, and later neurologic textbooks of the period referred to the relationship of absinthe and epilepsy. In the early part of

the 20th century, absinthe became outlawed in most countries because of its psychotoxic effects.

During his stay in Paris, where he was introduced to absinthe, van Gogh developed complex partial seizures with gradual accentuation of partially preexisting emotional and behavioral changes. In most patients with temporal lobe epilepsy, psychiatric changes tend to occur only gradually and in a less violent form. In van Gogh, perhaps because of an early temporal-limbic lesion, these changes became fully evident soon, characterized by heightened emotionality with the opposite poles of irritability and hyperethical or hyperreligious trends, by meticulous attention to detail and stubborn persistence in speech and writing (viscosity), and by hyposexuality (11–13). His seizures and his psychotic episodes were precipitated by the use of absinthe and stopped once he abstained.

Modern Concepts of the Neuropsychiatric Disorders of Epilepsy

The presence of seizures, the intermittent and pleomorphic symptoms of the interictal phase, the prolonged amnesic-confusional psychotic episodes at the height of van Gogh's illness, and, finally, the profile of his personality traits all suggest a diagnosis of epilepsy-related illness.

While in Arles, van Gogh developed an interictal dysphoric disorder with the near complete range of its intermittent and pleomorphic (affective-somatoform) symptoms: irritability, depressive and euphoric moods, anxiety, anergia, insomnia, and pains. The artist probably also had a fear of heights, but phobic symptoms cannot be considered a well-established symptom of dysphoric disorder. Interictal dysphoric disorder was well recognized by premodern psychiatrists from the German language area as the most common psychiatric disorder (*Verstimmungs-zustand*) associated with epilepsy (19, 20). The validity and the importance of this diagnostic concept have been affirmed (21–24). At least three of its seven symptoms need to be present, each to a troublesome degree, to meet the diagnostic criteria for interictal dysphoric disorder. In his letters, van Gogh referred to his dysphoric symptoms as "attacks of melancholy," "moments of enthusiasm or madness," "fits of anxiety," or a transient "feeling of emptiness and fatigue," rendering a lucid picture of highly episodic mental states that clearly are more intermittent and pleomorphic than those experienced by an individual with the more sustained mood changes of manic-depressive illness. He also reported insomnia and stomach pains but was not outspoken about his frightening outbursts of rage, which were well documented by Gauguin and many others. While his stomach pains are of uncertain origin, van Gogh clearly reported six of the seven cardinal symptoms of interictal dysphoric disorder.

Interictal dysphoric disorder, not recognized in its entirety by Gastaut, represents a refinement of the description by early French psychiatrists that included only the most striking features of the disorder: periodic alternation

of excitement and depression and episodes of fury (9). The validity of interictal dysphoric disorder as a diagnostic entity is confirmed by its specific etiology, phenomenology, course, and its response to specific psychotropic medication (24, 25). The disorder tends to appear interictally during predominance of seizure-suppressing inhibitory mechanisms. This phenomenon was termed “forced normalization” by Landolt, who observed that dysphoric moods, as well as psychotic episodes, tend to be associated with EEG normalization (26, 27). Dysphoric symptoms also tend to be present in the prodromal and particularly in the postictal phase, when they seem to result from the acute engagement of inhibitory responses at the time of seizure events. It is assumed that still poorly defined inhibitory mechanisms exert psychotoxic effects in both the interictal and the peri-ictal phases of epilepsy (23, 24).

Severe dysphoric disorders may become readily associated with psychotic symptoms (19, 20, 28). At the height of his illness, van Gogh became hallucinatory, paranoid, and delusional with confusional-amnestic features, all known to occur in psychosis due to epilepsy. Psychosis due to epilepsy may follow a flurry of seizures (i.e., postictal psychosis), appearing often but not invariably with amnestic-confusional features. Alternatively, the psychosis may occur during the interictal phase, in the absence of clouded consciousness, particularly when seizure activity has become suppressed. In both instances, psychosis, like the dysphoric symptoms, seems to result from excessive inhibitory activity that has become either acutely engaged in the postictal phase by the preceding seizure activity or predominant in the interictal phase. A third type of epilepsy-associated psychosis, termed para-ictal psychosis (29), occurs with ongoing frequent seizure activity and combines features of both the postictal and the interictal psychoses; this type of psychosis is now rare because of the advent of effective antiepileptic medication. The psychotic symptoms seen in van Gogh apparently were precipitated by the epileptogenic absinthe, but no modern experience with this substance exists. From what is known, his psychotic episodes neither followed a flurry of seizures nor occurred at times when his seizures had diminished, and his prolonged psychotic episodes may be best classified as para-ictal. While interictal psychoses require psychotropic medication, para-ictal psychoses respond to improved antiepileptic medication (28), and van Gogh was probably correct when he recognized a beneficial effect on his psychosis from Dr. Rey's prescription of potassium bromide. Recurrences followed the initial episode, when he relapsed into using absinthe, and were perhaps more prolonged when he was not treated with potassium bromide during his year in the asylum.

There has been fair agreement among experts about the personality traits observable among patients with epilepsy (19, 20, 30–33). Vincent's viscosity was manifest by his intense clinging to people he loved, his persevering on details, and a tendency to debate endlessly and to write ex-

cessively. Gastaut viewed viscosity as the characteristic core trait of an individual with temporal lobe epilepsy (11, 13). Gastaut also pointed out how van Gogh's hypersocial, spiritual, and even hyperreligious personality contrasted sharply with his episodes of anger to the point of fury (1), a conflict that other authors have considered the dynamic core issue in patients with epilepsy and heightened emotionality (34).

Before becoming an artist, van Gogh had been devoted to a religious career for years and had served as an utterly selfless evangelist; religious motives later reemerged in his artwork. Yet his episodic rages are well documented, became notorious once he used absinthe, and reached a peak with his acute illness and the murderous gesture directed at Gauguin. He represents an example of the heightened conflict between fury and atonement—good and evil forces—that has so often been noted among individuals afflicted with epilepsy. Paroxysmal episodes of irritability to the point of rage on the one hand and a (remorseful) highly ethical, selfless, helpful, and often hyperreligious disposition on the other had been noted by observers before Gastaut, from Morel and Kraepelin to Freud and Szondi.

In his essay “Dostoevsky and Parricide,” Freud (35) rendered a coherent picture of the contradictory personality of this great author who had epilepsy. Elements seen in Dostoevsky's life and novels included experiencing the threat of repeated uncontrollable acts of violence, feeling guilt and the need for atonement, seeking forgiveness and help from God, attempting to adhere to a strict moral code, and proving oneself to be the mildest, kindest, most helpful person possible. In Szondi's genetically based system of human drives (24, 34, 36), the tendency to accumulate and discharge crude affects (anger, hate, vengeance, envy, or jealousy) is paired with the opposite tendency to make amends (repentance, tolerance, kindness, helpfulness, or piety). These two tendencies determine ethical behavior and appear most pronounced in epilepsy.

Suicidal attempts infrequently may be carried out in a state of acute postictal depression (37, 38). The artist's earlier suicide attempts probably had been of this nature and were not consciously planned. In patients with interictal dysphoric disorder, the moods of euphoria tend to be brief, their depressive moods more prominent. With the latter comes a suicidal risk that is 4–25-fold higher among patients with epilepsy over the rate in the general population and is particularly associated with chronic temporal lobe epilepsy (39). Suicide tends to occur, peculiarly, at a time when a long-standing seizure disorder has been brought into remission and often comes as a surprise (37, 40).

Supported by his brother Theo, van Gogh had lived for his art. Theo was the one person in his life who had faith in Vincent's extraordinary accomplishments and had been, in fact, the lifeline throughout his career as an artist. With Theo's support threatened, the storm within became less bearable. When considering the forward-looking tone of his last letter to Theo, Hulsker had no doubt that the sui-

cidal act resulted from a momentary impulse (3). For the last few months of his life, van Gogh had abstained from absinthe and was free from both seizures and psychosis. Depressive moods were more prevalent, although not persistent. His productivity had been unbroken in Auvers, and his suicide was not anticipated by those who knew him. It seems to have occurred with a final attack of melancholy, resulting from a still persistent dysphoric disorder. One needs to remember, however, that van Gogh had experienced marked depressive episodes before his seizure disorder.

Differential Diagnostic Considerations

Several authors have offered a tentative diagnosis of schizophrenia for van Gogh. In view of both the absence of any of the fundamental symptoms of the disorder and the presence of psychotic episodes with amnestic-confusional features and complete recovery, this diagnosis appears improbable, in spite of the fact that late-onset schizophrenia was diagnosed in one of his sisters.

The diagnosis of neurosyphilis has to be considered in view of van Gogh's lifestyle (he was treated for gonorrhea in 1882), the prevalence of the disease at the time, and its diverse symptoms. However, none of the relatively specific symptoms of the disease was ever noted. Above all, this diagnosis is unlikely, since he did not show any persistent impairment of mental or somatic functions.

Following two major disappointments (an unrequited early love and a failed career as an evangelist), van Gogh clearly experienced prolonged episodes of depression; both events preceded major career changes. He also experienced sustained periods of hypomania or mania. His career as an evangelist ended when he developed a sort of altruistic religious mania. A bipolar history of prolonged periods of extremely high levels of energy, enthusiasm, and productivity alternating with episodes of depression is not uncommon among writers and artists, and the hypomanic phase is often not identified (41). The artist's increasingly elevated mood during his exciting stay in Paris probably was a factor in his use of absinthe, the substance that precipitated his second major illness.

Vincent experienced seizures only after his use of absinthe with its convulsant property. He never experienced generalized seizures but had only partial seizures, suggesting the presence of a latent epileptogenic zone, most likely in the mesial-temporal area, that was activated by his use of absinthe. As postulated by Gastaut, a perinatal brain lesion may have resulted in van Gogh's severe reaction to absinthe: the partial seizures, the marked interictal dysphoric disorder, and the psychotic episodes with prominent amnesia. When he became increasingly ill during the last 2 years of his life, van Gogh did not experience any of the sustained mood changes characteristic of bipolar disorder. Instead, he experienced sudden and brief changes of depressive mood, elation, anxiety, or fury, and his intense artistic efforts were frequently disrupted by episodes of

listlessness; these intermittent pleomorphic changes developed after onset of seizures and are specific for the dysphoric disorder of epilepsy.

While interictal dysphoric disorder and psychosis tend to become manifest after an interval of years following onset of epilepsy, there are also patients with dysphoric or epileptoid traits in the absence of overt seizures; these patients often have identifiable subtle brain lesions (24, 42). The existence of an epileptoid temperament analogous to schizoid or cyclothymic temperaments, before or independent of the respective major illness, was often debated in the premodern psychiatric literature when epilepsy was a major topic (20). The early intense emotionality of van Gogh, with the contrasting poles of explosive irritability on the one hand and goodness and religiosity on the other, may be considered an expression of this temperament independent from his cyclothymic disposition.

Vincent van Gogh's suicide may have been an unexpected event, perhaps precipitated by a dysphoric mood; remission of the seizures may have favored the final depressive event. But when he had recovered from his severe illness upon discharge from the asylum, the support from his brother, upon whom he had depended totally for his career as an artist, had become seriously threatened. Although the artist had been able to remain productive, a depressive mood had become more evident. In the past, he had reacted to crucial losses with marked depression, and this illness probably was the main factor in his death.

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References

1. Gastaut H: La maladie de Vincent van Gogh envisagée à la lumière des conceptions nouvelles sur l'épilepsie psychomotrice. *Ann Méd Psychol (Paris)* 1956; 114:196-238
2. Tralbaut ME: Vincent van Gogh. Lausanne, Switzerland, Edita SA, 1969
3. Hulsker J: The Complete van Gogh. New York, Harrison House/Harry N Abrams, 1977
4. Nagera H: Vincent van Gogh: A Psychological Study. New York, International Universities Press, 1979
5. Van Gogh-Bongers JG (ed): Vincent van Gogh's Briefe an seinen Bruder. Frankfurt am Main, Germany, Insel Verlag, 1988
6. The Complete Letters of Vincent van Gogh. Minnetonka, MN, Bullfinch Press, 2000
7. Monroe RR: The episodic psychoses of Vincent van Gogh. *J Nerv Ment Dis* 1978; 166:480-488
8. Monroe RR: Another diagnosis for Vincent van Gogh? (letter). *J Nerv Ment Dis* 1991; 179:241
9. Morel BA: D'une forme de délire, suite d'une surexcitation nerveuse se rattachant à une variété non encore décrite d'épilepsie: l'épilepsie larvée. *Gazette Hebdomadaire de Médecine et de Chirurgie* 1860; 7:773-775, 819-821, 836-841

10. Gastaut H: Etat actuel des connaissances sur l'anatomie pathologique des épilepsies. *Acta Neurol Psychiatr Belg* 1956; 56:5–20
11. Gastaut H, Roger J, Lesèvre N: Différenciation psychologique des épileptiques en fonction des formes électrocliniques de leur maladie. *Rev Psychol Appl* 1953; 3:237–249
12. Gastaut H, Collomb H: Etude du comportement sexuel chez les épileptiques psychomoteurs. *Ann Méd Psychol (Paris)* 1954; 112:657–696
13. Gastaut H, Morin G, Lesèvre N: Etude du comportement des épileptiques psychomoteurs dans l'intervalle de leurs crises. *Ann Méd Psychol (Paris)* 1955; 113:1–27
14. Gastaut H: Interpretation of the symptoms of psychomotor epilepsy in relation to physiological data on rhinencephalic function. *Epilepsia* 1954; 3:84–88
15. Klüver H, Bucy PC: Preliminary analysis of functions of the temporal lobes in monkeys. *Arch Neurol Psychiatry* 1939; 42:979–1000
16. Arnold WN: Vincent van Gogh and the thujone connection. *JAMA* 1988; 260:3042–3044
17. Arnold WN: Absinthe. *Sci Am* 1989; 260:112–117
18. Magnan V: Recherches de physiologie pathologique avec l'alcool et l'essence d'absinthe—épilepsie. *Archives de Physiologie Normale et Pathologique* 1873; 5:115–142
19. Kraepelin E: *Psychiatrie*, 8th ed. Leipzig, Germany, Barth, 1923
20. Bleuler E: *Lehrbuch der Psychiatrie*, 8th ed. Berlin, Springer, 1949
21. Himmelhoch JM: Major mood disorders related to epileptic changes, in *Psychiatric Aspects of Epilepsy*. Edited by Blumer D. Washington, DC, American Psychiatric Press, 1984, pp 271–294
22. Blumer D, Montouris G, Hermann B: Psychiatric morbidity in seizure patients on a neurodiagnostic monitoring unit. *J Neuropsychiatry Clin Neurosci* 1995; 7:445–456
23. Blumer D, Altshuler L: Affective disorders associated with epilepsy, in *Epilepsy: A Comprehensive Textbook*. Edited by Engel J Jr, Pedley TA. Philadelphia, Lippincott-Raven, 1997, pp 2083–2099
24. Blumer D: Dysphoric disorders and paroxysmal affects: recognition and treatment of epilepsy-related psychiatric disorders. *Harv Rev Psychiatry* 2000; 8:8–17
25. Blumer D: Antidepressant and double antidepressant treatment for the affective disorder of epilepsy. *J Clin Psychiatry* 1997; 58:3–11
26. Landolt H: Serial electroencephalographic investigations during psychotic episodes in epileptic patients and during schizophrenic attacks, in *Lectures on Epilepsy*. Edited by Lorentz de Haas AM. Amsterdam, Elsevier, 1958, pp 91–133
27. Trimble MR, Schmitz B (eds): *Forced Normalization and Alternative Psychoses of Epilepsy*. Bristol, Pa, Wrightson Biomedical, 1998
28. Blumer D, Wakhlu S, Montouris G, Wyler A: Treatment of the interictal psychoses. *J Clin Psychiatry* 2000; 61:110–112
29. Schmitz B, Wolf P: Psychoses in epilepsy, in *Epilepsy and Behavior*. Edited by Devinsky O, Theodore WH. New York, Wiley-Liss, 1991, pp 97–128
30. Waxman SA, Geschwind N: The interictal behavioral syndrome of temporal lobe epilepsy. *Arch Gen Psychiatry* 1975; 32:1580–1586
31. Geschwind N: Behavioural changes in temporal lobe epilepsy. *Psychol Med* 1979; 9:217–219
32. Blumer D: Personality disorders in epilepsy, in *Neuropsychiatry of Personality Disorders*. Edited by Ratey JJ. Boston, Blackwell Sciences, 1995, pp 230–263
33. Blumer D: Evidence supporting the temporal lobe epilepsy personality syndrome. *Neurol* 1999; 53(suppl 1):S9–S12
34. Szondi L: *Schicksalsanalytische Therapie*. Bern, Switzerland, Hans Huber, 1963
35. Freud S: Dostoevsky and parricide (1928 [1927]), in *Complete Psychological Works*, standard ed, vol 21. London, Hogarth Press, 1961, pp 177–196
36. Szondi L: *Schicksalsanalyse*, 3rd ed. Basel, Switzerland, Schwabe, 1965
37. Blumer D: Epilepsy and suicide: a neuropsychiatric analysis, in *The Neuropsychiatry of Epilepsy*. Edited by Trimble MR, Schmitz B. Cambridge, UK, Cambridge University Press (in press)
38. Blumer D: Postictal depression: significance for the treatment of the neurobehavioral disorder of epilepsy. *J Epilepsy* 1991; 5: 214–219
39. Barraclough BM: The suicide rate of epilepsy. *Acta Psychiatr Scand* 1987; 76:339–345
40. Taylor DC, Marsh SM: Implications of long-term follow-up studies in epilepsy: with a note on the cause of death, in *Epilepsy, The Eighth International Symposium*. Edited by Penry JK. New York, Raven Press, 1977, pp 27–35
41. Goodwin FK, Jamison KR: *Manic-Depressive Illness*. New York, Oxford University Press, 1990
42. Blumer D, Herzog AG, Himmelhoch J, Salgueiro CA, Ling FW: To what extent do premenstrual and interictal dysphoric disorder overlap? significance for therapy. *J Affect Disord* 1998; 48:215–225